

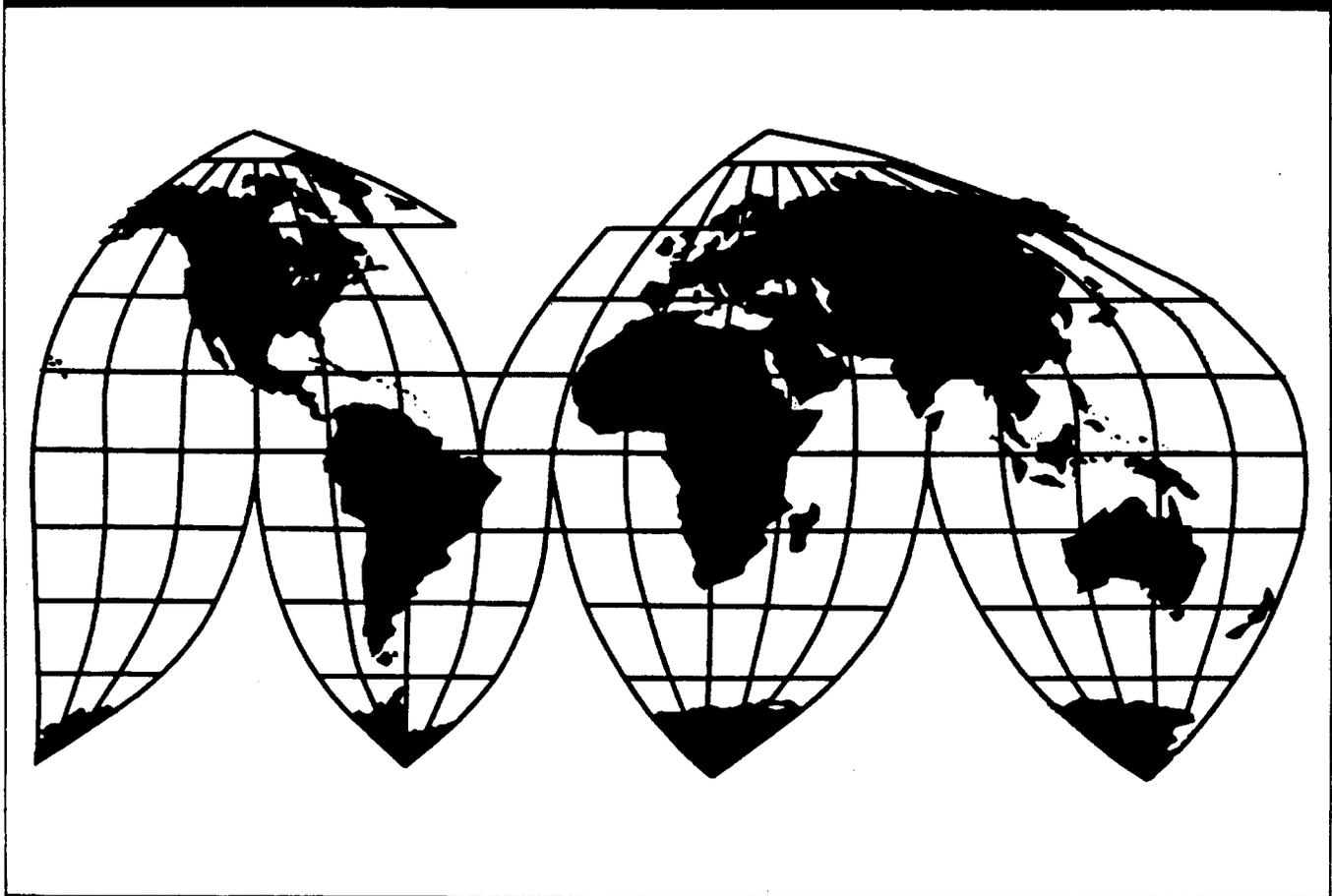
*In the Matter of*  
**Certain Lens-Fitted Film Packages**

Investigation No. 337-TA-406

Publication 3219

August 1999

**U.S. International Trade Commission**



Washington, DC 20436

# **U.S. International Trade Commission**

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**Address all communications to  
Secretary to the Commission  
United States International Trade Commission  
Washington, DC 20436**

# **U.S. International Trade Commission**

Washington, DC 20436

## *In the Matter of* **Certain Lens-Fitted Film Packages**



**Publication 3219**

**August 1999**



UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, DC 20436

OFFICE OF THE SECRETARY  
US INT'L TRADE COMM  
99 JUN -2 P2:38

In the Matter of  
  
CERTAIN LENS-FITTED FILM  
PACKAGES

Inv. No. 337-TA-406

RECEIVED JUN 2 1999

**NOTICE OF ISSUANCE OF GENERAL EXCLUSION ORDER  
AND CEASE AND DESIST ORDERS; TERMINATION  
OF THE INVESTIGATION**

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission determined to reverse-in-part the presiding administrative law judges (ALJ's) initial determination (ID) of February 24, 1999, in the above-captioned investigation and determine that the design patents in issue are infringed by the respondents. The Commission also determined that the correct standard for the burden of proof on the repair/reconstruction issue is a preponderance of the evidence. The Commission also determined to correct certain technical errors in the ID's infringement findings. Having found a violation of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, the Commission issued a general exclusion order and cease and desist orders directed to 20 domestic respondents, and terminated the investigation.

FOR FURTHER INFORMATION CONTACT: Jean Jackson, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-205-3104. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). Hearing-impaired persons are advised that information on the matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

SUPPLEMENTARY INFORMATION: This investigation was instituted on March 25, 1998, based on a complaint by Fuji Photo Film Co., Ltd. (Fuji) of Tokyo, Japan. 63 Fed. Reg.

14474. Fuji's complaint alleged unfair acts in violation of section 337 in the importation and sale of certain lens-fitted film packages (*i.e.*, disposable cameras). The complaint alleged that 27 respondents had infringed one or more claims of 15 patents held by complainant Fuji. On October 23, 1998, the Commission determined not to review two IDs finding a total of eight respondents, *viz.*, Boshi Technology Ltd., Fast Shot, Haichi International, Innovative Trading Company, Labelle Time, Inc., Linfa Photographic Ind. Co. Ltd., Forcecam, Inc., and Rino Trading Co. Ltd., in default for failure to respond to the complaint and notice of investigation. An evidentiary hearing was held November 2-13, 1998. Eight respondents participated in the hearing, *viz.*, Achiever Industries Limited, Argus Industries, China Film Equipment, Dynatec International Inc., Jazz Photo Corp., OptiColor Camera, P.S.I. Industries, and Sakar International, Inc. (the participating respondents). On December 4, 1998, the Commission determined not to review an ID granting complainant's oral motion to withdraw a single claim of one patent from the investigation. 63 *Fed. Reg.* 67918 (December 9, 1998). Ten respondents that had filed responses to the complaint and notice of investigation failed to appear at the hearing, *viz.*, Ad-Tek Specialties Inc., AmerImage, Inc. d/b/a/ Rainbow Products, Boecks Camera LLC, BPS Marketing, E.T. Trading d/b/a Klikit, Penmax, Inc., PhilmEx Photographic Film, T.D.A. Trading Corp., Vantage Sales, Inc., and Vivitar Corp.

On February 24, 1999, the ALJ issued his final ID, finding a violation of section 337 by 26 of 27 named respondents. (Complainant Fuji admitted at closing argument that one named respondent, Opticam Inc, was not violating section 337). He found that Fuji had not carried its burden of proof in showing infringement of three design patents. The ALJ also issued his recommendations on remedy and bonding. He recommended that the Commission issue a general exclusion order directing that disposable cameras that infringe the claims in controversy of the 12 utility patents at issue be excluded from entry into the United States. He also recommended that cease and desist orders be issued directed to the 21 domestic respondents found in violation of section 337. Finally, he recommended a 100 percent bond during the period of Presidential review.

On March 8, 1999, the participating respondents, complainant Fuji, and the Commission investigative attorney (IA) filed petitions for review of the ID. Upon considering the petitions, the Commission, on April 19, 1999, determined to review the following issues: (1) the standard for the burden of proof applied in the ID for establishing repair versus reconstruction of a patented product, (2) the ID's determination that the design patents asserted in this investigation were not infringed, (3) infringement issues insofar as necessary to correct certain clerical errors brought to the Commission's attention by the IA. 64 *Fed. Reg.* 20324-25 (April 26, 1999).

The Commission received written submissions from the parties that addressed the form of remedy, if any, that should be ordered, the effect of a remedy on the public interest, and the amount of bond that should be imposed during the 60-day Presidential review period.

Having reviewed the record in this investigation, including the written submissions of the parties, the Commission determined (1) to reverse the ALJ's finding that Fuji failed to carry its burden of proof on the issue of design patent infringement; (2) to correct the standard of the burden of proof on the repair/reconstruction issue to be proof by a preponderance of the evidence; and (3) to correct technical errors in the ID's infringement findings. The Commission further determined that the appropriate form of relief is a general exclusion order prohibiting the unlicensed entry for consumption of lens-fitted film packages that infringe the claims in issue of the 15 patents asserted by Fuji in this investigation. The Commission also determined to issue 20 cease and desist orders directed to domestic respondents Fast Shot, Haichi International, Innovative Trading Company, Labelle Time, Inc., Forcecam, Inc., Argus Industries, Dynatec International Inc., Jazz Photo Corp., OptiColor Camera, P.S.I. Industries, Sakar International, Inc., Ad-Tek Specialties Inc., AmerImage, Inc. d/b/a/ Rainbow Products, Boecks Camera LLC, BPS Marketing, E.T. Trading d/b/a Klikit, PhilmEx Photographic Film, T.D.A. Trading Corp., Vantage Sales, Inc., and Vivitar Corp. Respondent Penmax made a credible showing that it has no remaining inventory of infringing products, and the Commission therefore determined not to issue a cease and desist order against Penmax.

The Commission also determined that the public interest factors enumerated in subsections (d) and (f) of section 337 do not preclude the issuance of the aforementioned general exclusion order and cease and desist orders, and that the bond during the Presidential review period shall be in the amount of 100 percent of the entered value of the articles in question.

Copies of the Commission's orders, the public version of the Commission's opinion in support thereof, the public version of the ID, and all other nonconfidential documents filed in connection with this investigation, are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street S.W., Washington, D.C. 20436, telephone 202-205-2000.

This action is taken under the authority of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, the Administrative Procedure Act, 5 U.S.C. §§ 551 *et seq.*, and sections 210.45-210.51 of the Commission's Rules of Practice and Procedure, 19 C.F.R. §§ 210.45-210.51.

By order of the Commission.



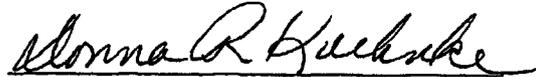
Donna R. Koehnke  
Secretary

Issued: June 2, 1999



CERTIFICATE OF SERVICE

I, Donna R. Koehnke, hereby certify that the attached **EXCLUSION ORDER AND CEASE AND DESIST**, was served on the following parties via first class mail, and air mail where necessary on, **June 2, 1999**.



Donna R. Koehnke, Secretary  
U.S. International Trade Commission  
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Page Three

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Washington, D.C. 20229

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

In the Matter of

CERTAIN LENS-FITTED  
FILM PACKAGES

Inv. No. 337-TA-406

99 JUN -2 P 2:38

OFFICE OF THE SECRETARY  
US INT'L TRADE COMM

GENERAL EXCLUSION ORDER

The Commission has determined that there is a violation of section 337 of the Tariff Act of 1930 (19 U.S.C. §1337) in the unlawful importation and sale of certain lens-fitted film packages, also known as one-time use cameras, single use cameras, and disposable cameras, that infringe certain claims of one or more of the following 15 patents: U.S. Letters Patent 4,833,495, 4,855,774, 4,884,087, 4,954,857, 4,972,649, 5,063,400, 5,235,364, 5,361,111, 5,408,200, 5,381,200, 5,436,685, Re. 34,168, Des. 345,750, Des. 356,101, and Des. 372,722.

Having reviewed the record in this investigation, including the written submissions of the parties, the Commission has made its determination on the issues of remedy, the public interest, and bonding. The Commission has determined that a general exclusion from entry for consumption of articles is necessary to prevent circumvention of an exclusion order limited to products of named persons because there is a pattern of violation of section 337 and it is difficult to identify the source of infringing products. Accordingly, the Commission has determined to issue a general exclusion order prohibiting the unlicensed importation of infringing lens-fitted film packages.

The Commission has also determined that the public interest factors enumerated in subsections (d) and (f) of section 337 do not preclude the issuance of the general exclusion order and that the bond during the Presidential review period shall be in the amount of one hundred (100) percent of the entered value of the articles in question.

Accordingly, the Commission hereby **ORDERS** that:

1. Lens-fitted film packages ("LFFPs"), also known as one-time use cameras, single use cameras and disposable cameras, covered by one or more of the following claims of the following patents:

claims 1, 5, 6, 9, and 11 of U.S. Letters Patent 4,833,495;  
claims 14 and 15 of U.S. Letters Patent 4,855,774;  
claims 1, 7, 8, and 15 of U.S. Letters Patent 4,884,087;  
claims 1, 19, and 22 of U.S. Letters Patent 4,954,857;  
claims 1 and 9 of U.S. Letters Patent 4,972,649;  
claim 14 of U.S. Letters Patent 5,063,400;  
claims 1 and 11 of U.S. Letters Patent 5,235,364;  
claim 1 of U.S. Letters Patent 5,361,111;  
claims 1, 15, 23, and 25 of U.S. Letters Patent 5,381,200;  
claims 1 and 7 of U.S. Letters Patent 5,408,288;  
claims 1 and 28 of U.S. Letters Patent 5,436,685;  
claims 1 and 13 of U.S. Letters Patent Re. 34,168;  
the claim of U.S. Letters Patent Des. 345,750;  
the claim of U.S. Letters Patent Des. 356,101; or  
the claim of U.S. Letters Patent Des. 372,722

are excluded from entry for consumption into the United States for the remaining terms of those patents, except under license of the patent owner or as provided by law.

2. For the purpose of assisting the U.S. Customs Service in the enforcement of this order, and without in any way limiting the scope of the order, which is defined by the patent claims listed in paragraph 1, the Commission has identified as infringing products unlicensed LFFP Types 1 through 6, and Types 7, 7A, 8, and 8A, as set forth and discussed in the complaint filed by the complainant in this action on February 13, 1998, and in the Initial and Recommended Determination filed by the presiding administrative law judge on February 24, 1999. Diagrams of these ten "Types" of LFFPs, as included in the evidentiary record in this investigation, are attached to this order.

3. Notwithstanding paragraphs 1 and 2 of this Order, the aforesaid lens-fitted film packages are entitled to entry for consumption into the United States under bond in the amount of one hundred (100) percent of the entered value of such articles, from the day after this Order is received by the President, pursuant to subsection (j) of section 337 of the Tariff Act of 1930, as amended, until such time as the President notifies the Commission that he approves or disapproves this action, but no later than 60 days after the receipt of this Order by the President.
4. Notwithstanding paragraphs 1, 2, and 3 of this Order, the aforesaid lens-fitted film packages are entitled to entry for consumption into the United States, without payment of bond, if upon importation they accompany a person arriving in the United States and are for the arriving person's personal use, or which are otherwise imported into the United States in such small quantities and under such circumstances so as to reasonably indicate to the satisfaction of the U.S. Customs Service that they are being imported for personal use rather than for commercial purposes.
5. In accordance with subsection (l) of section 337, the provisions of this Order shall not apply to lens-fitted film packages imported by and for the use of the United States, or imported for, and to be used for, the United States with the authorization or consent of the Government.
6. The Commission may modify this Order in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.76).
7. The Secretary shall serve copies of this Order upon each party of record in this investigation, and upon the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and the U.S. Customs Service.
8. Notice of this Order shall be published in the *Federal Register*.

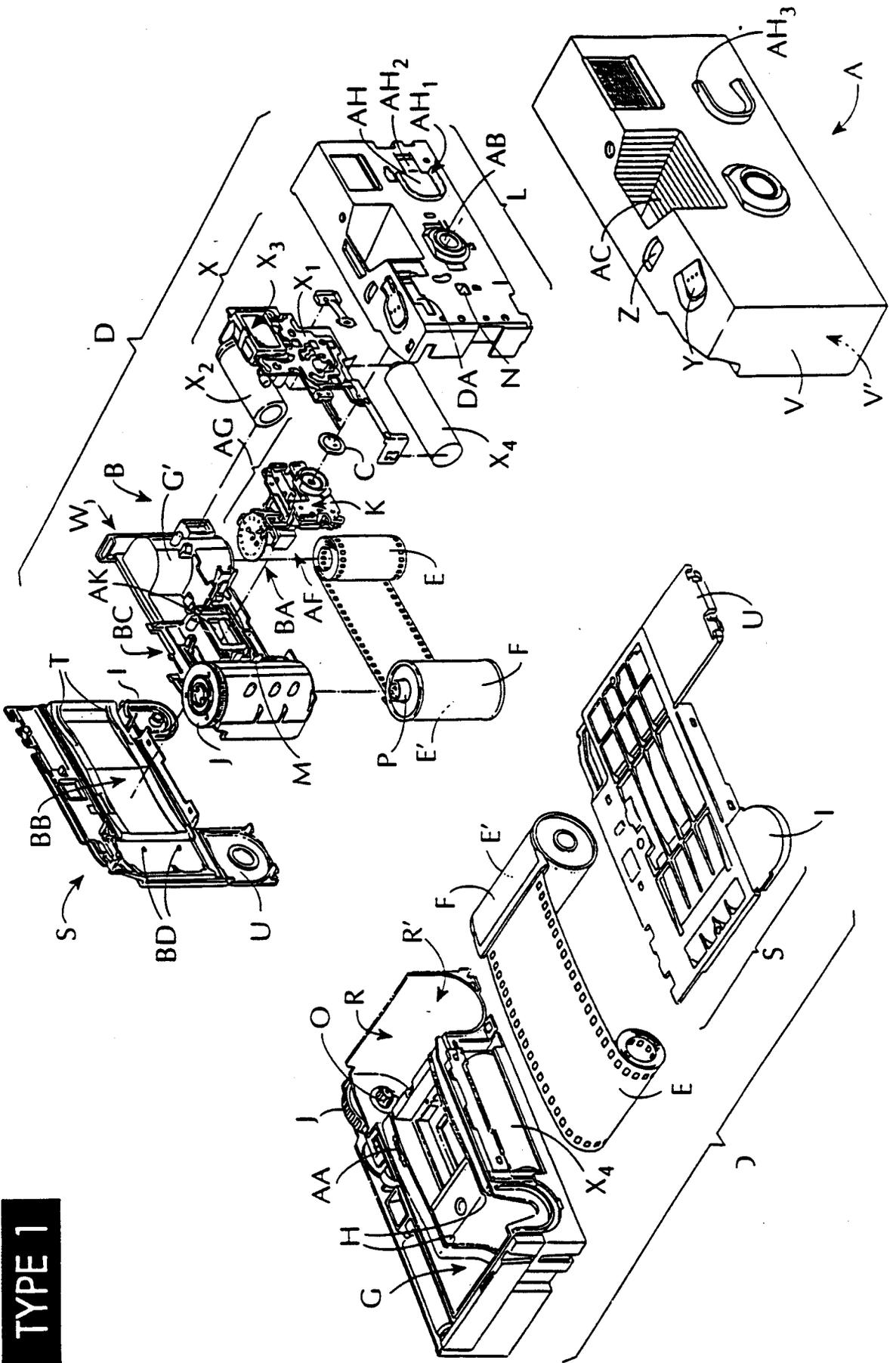
By order of the Commission.



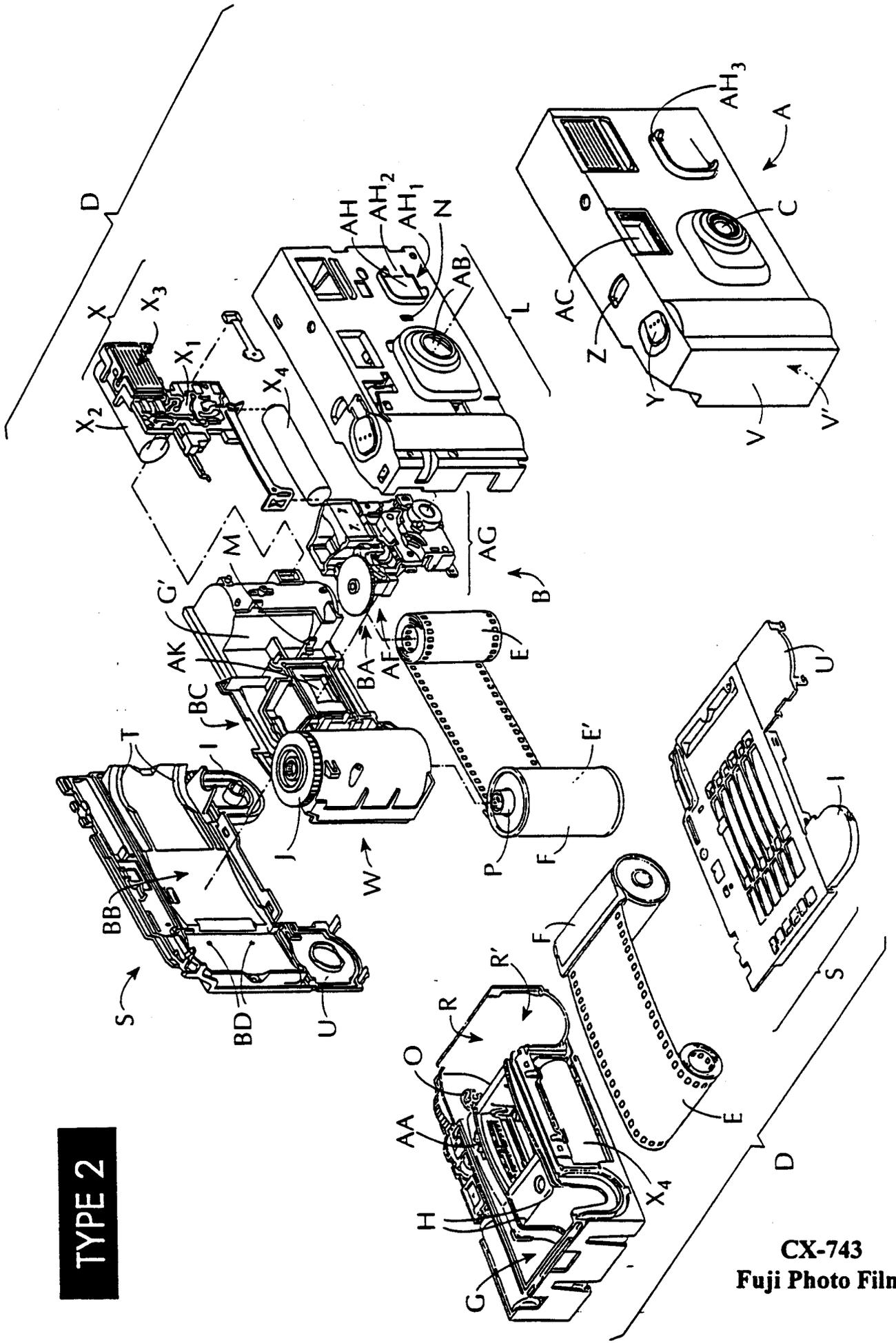
Donna R. Koehnke  
Secretary

Issued: **June 2, 1999**

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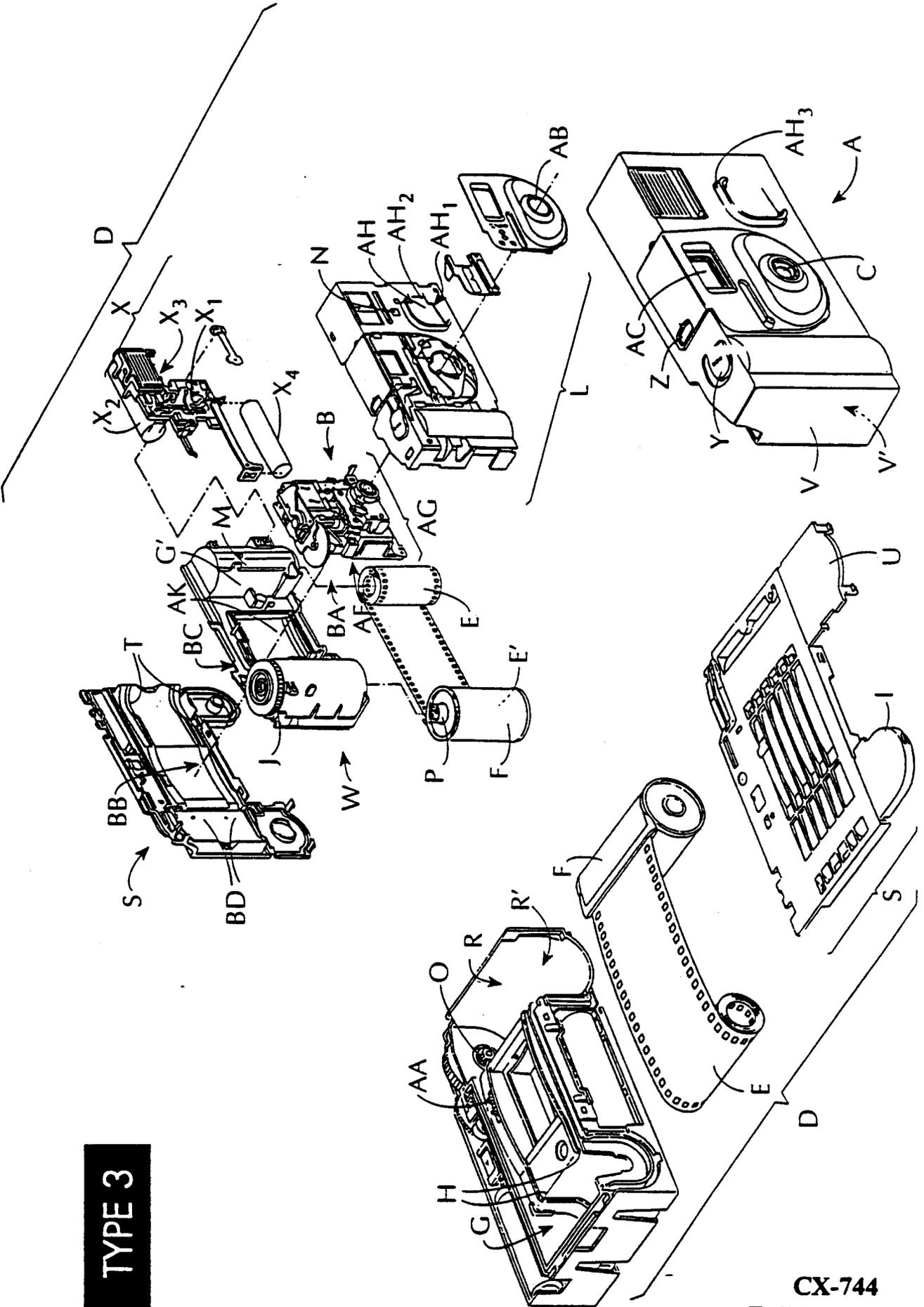


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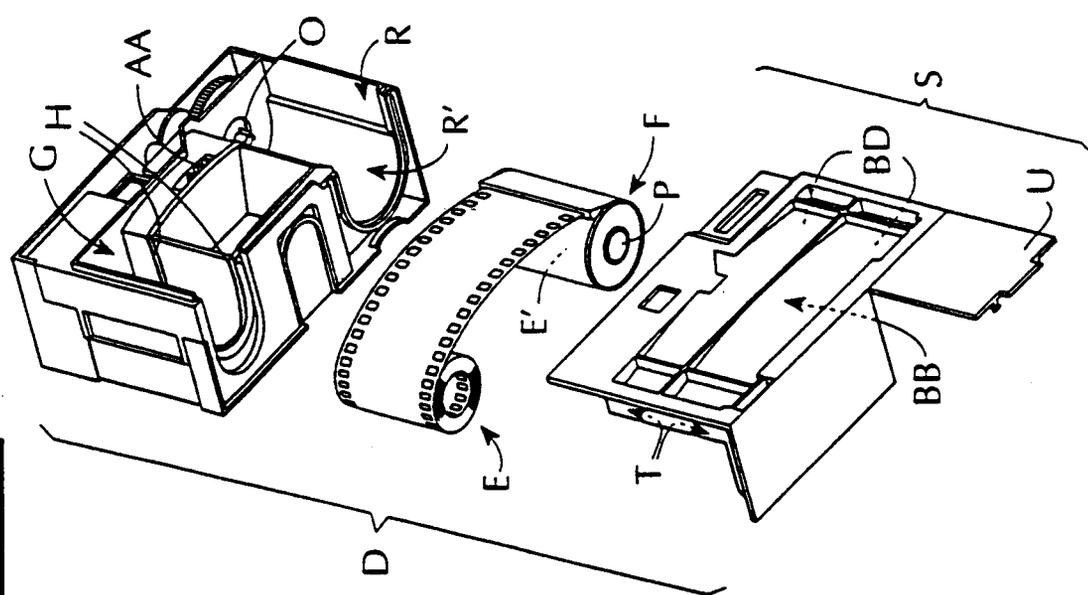
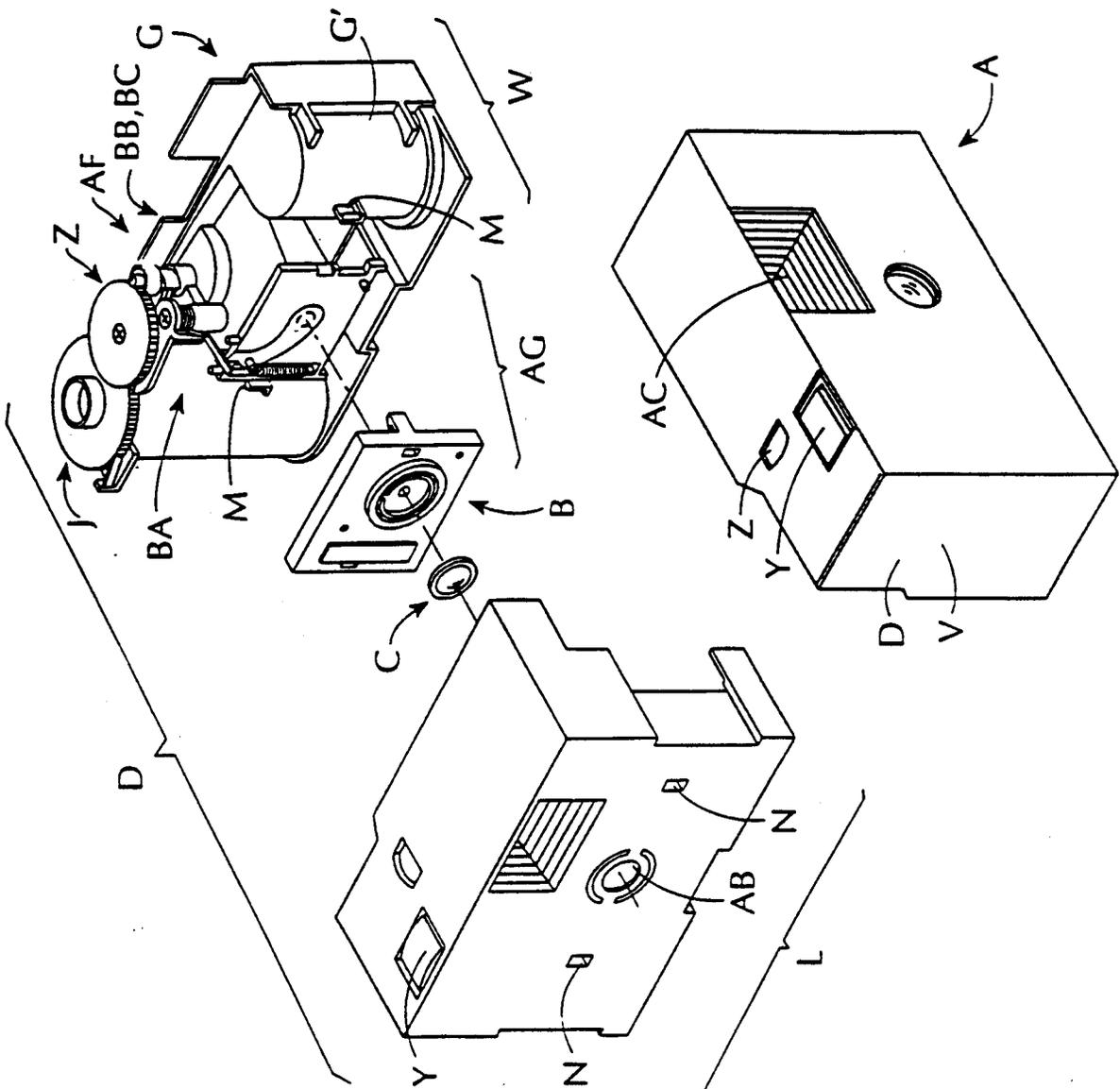
**CX-743  
Fuji Photo Film**

**TYPE 3**



**CX-744  
Fuji Photo Film**

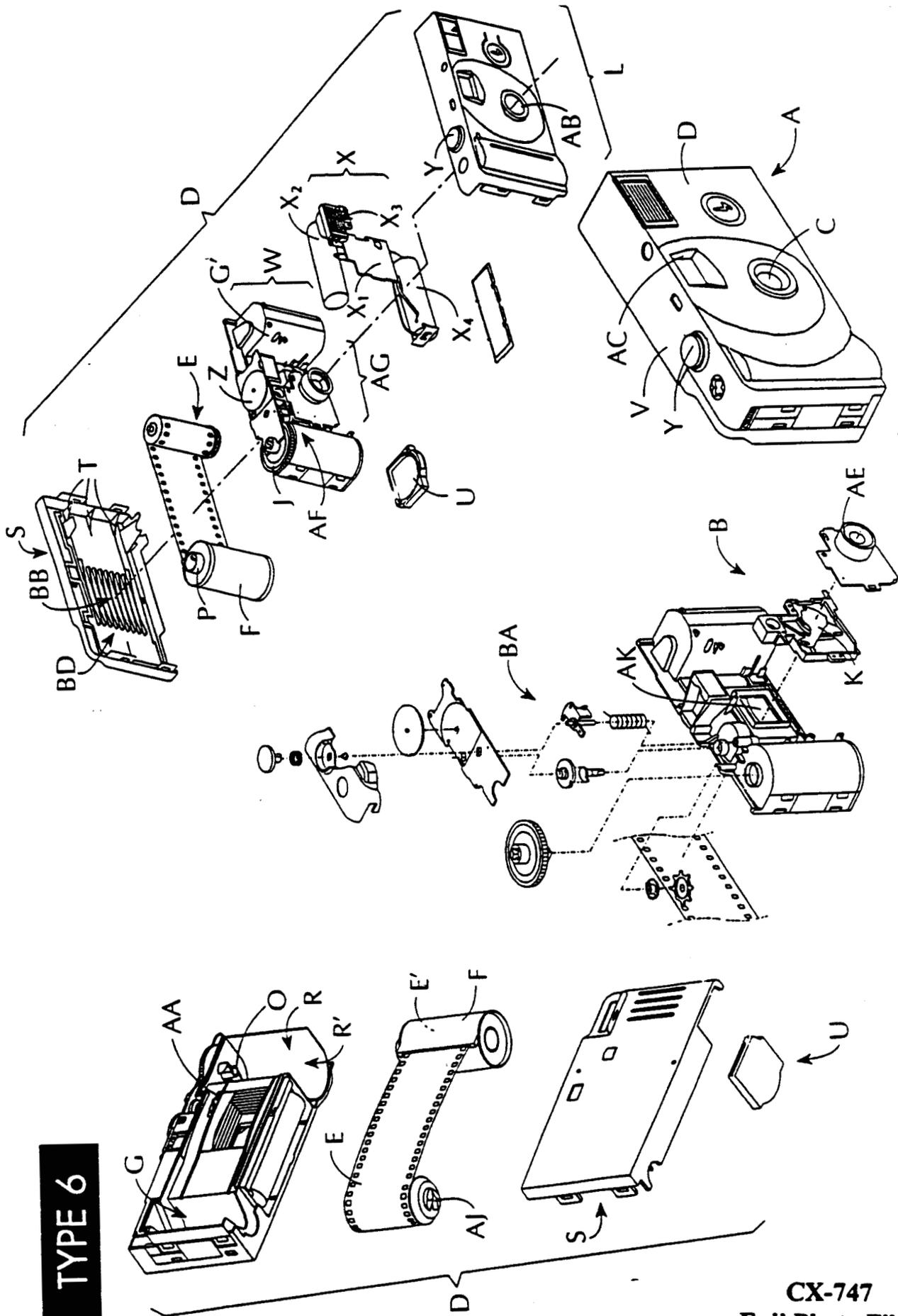




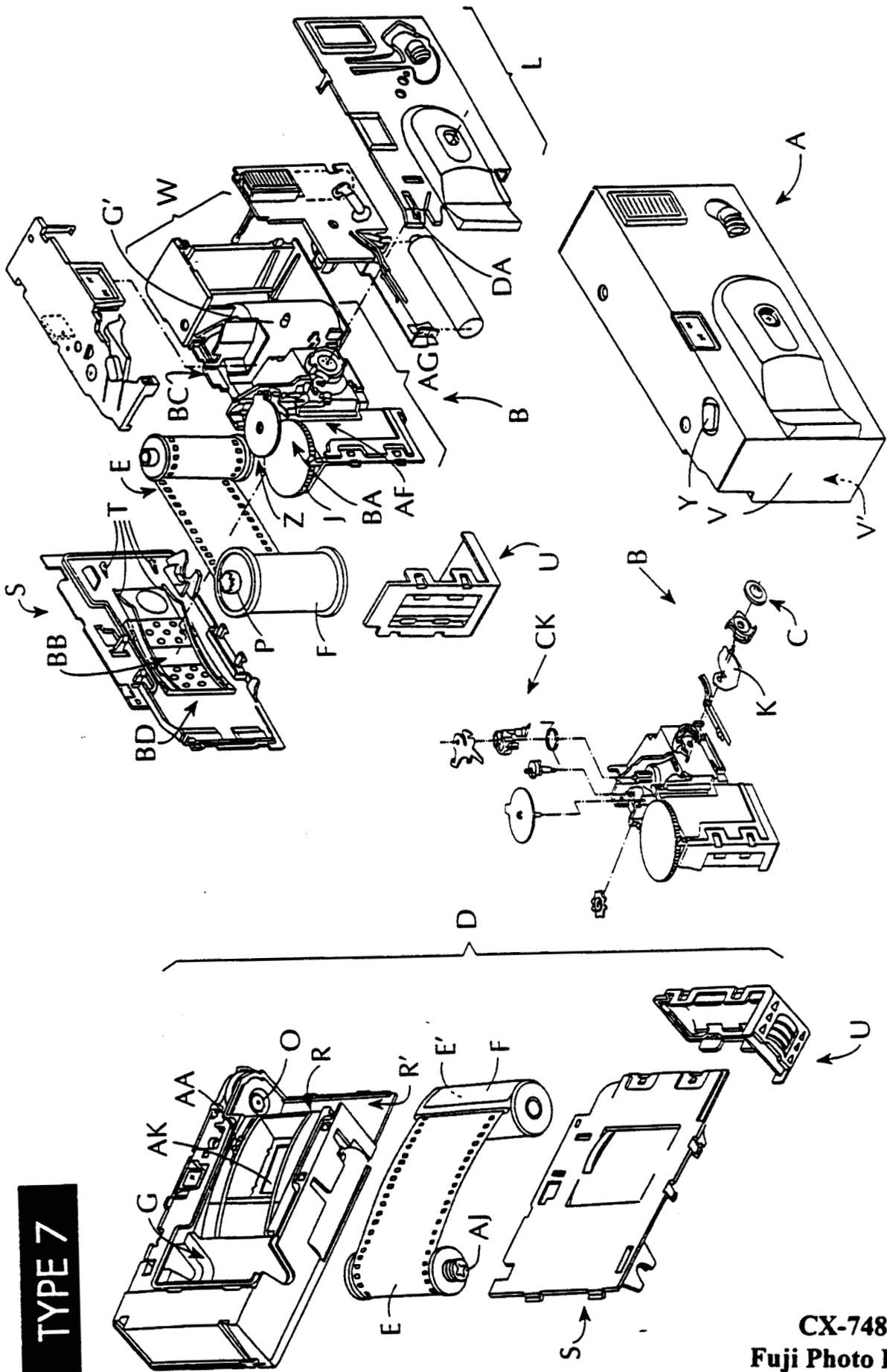
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**CX-746  
Fuji Photo Film**

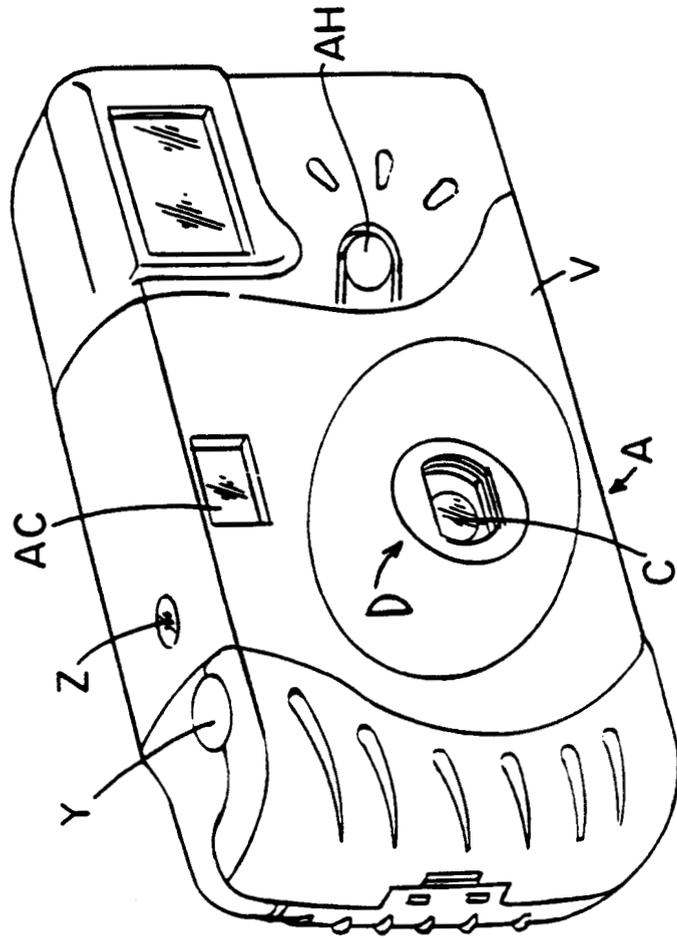
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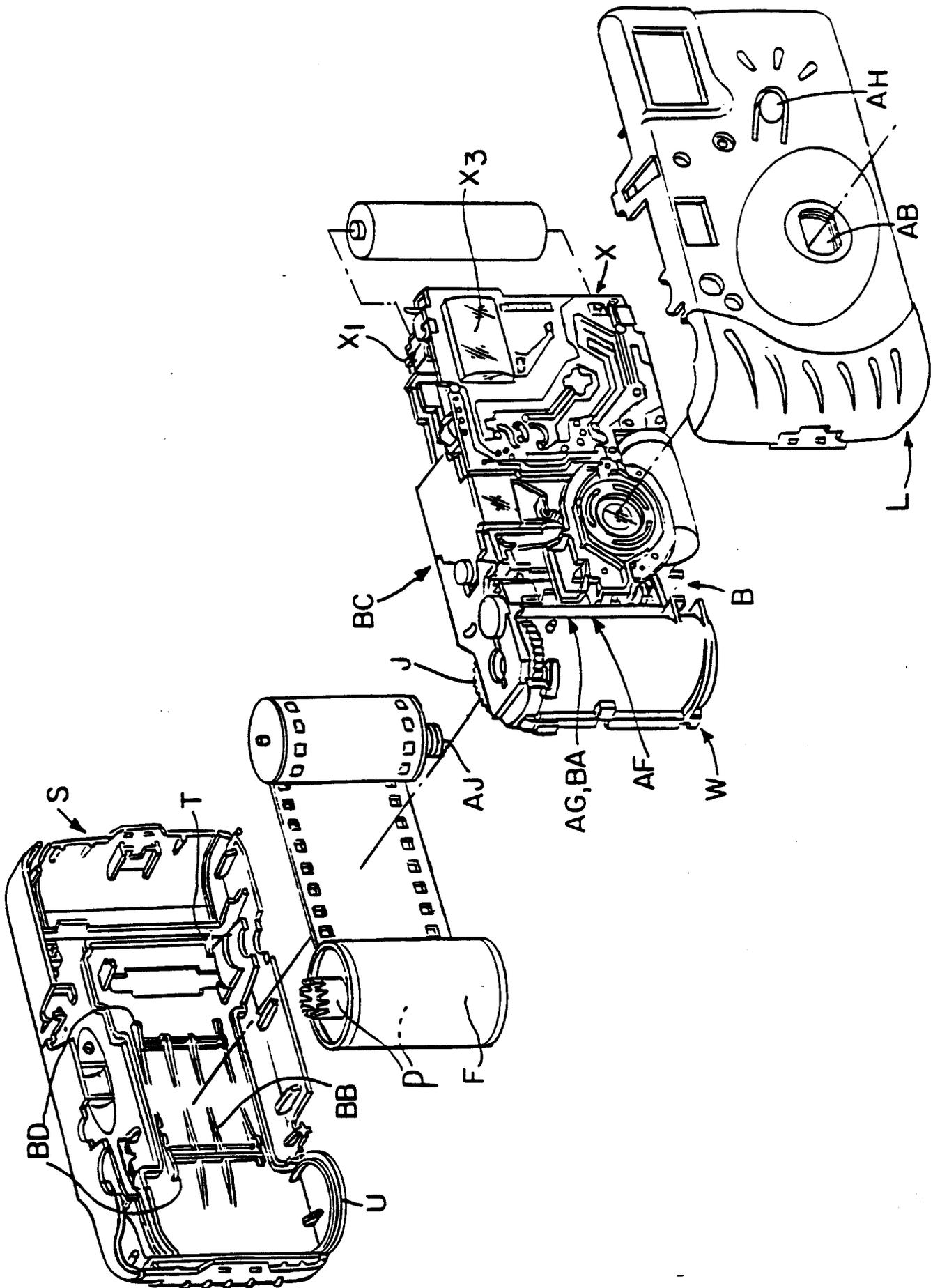
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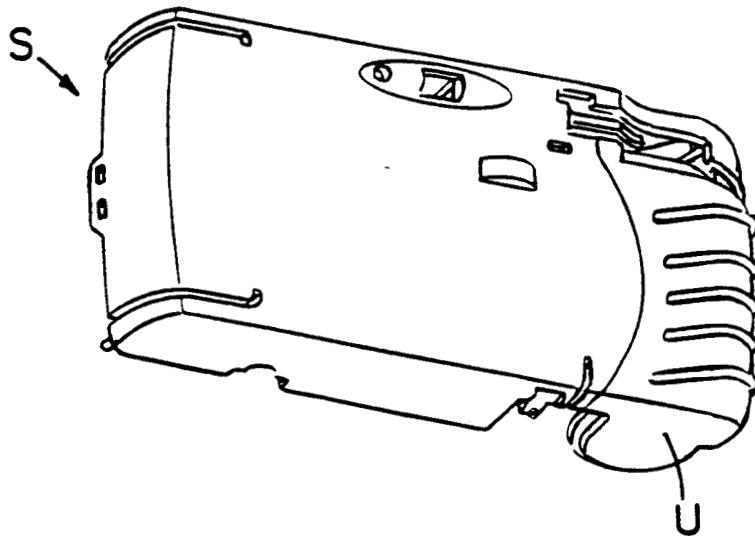
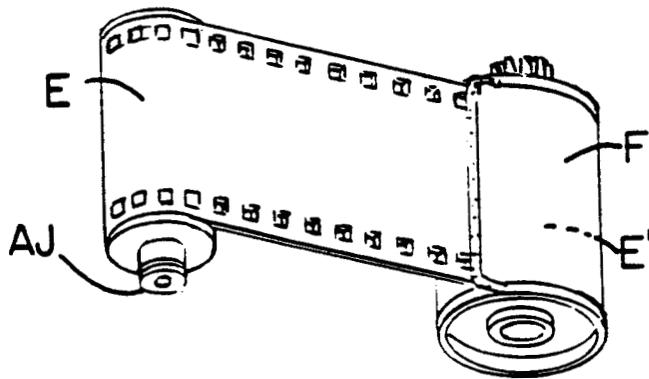
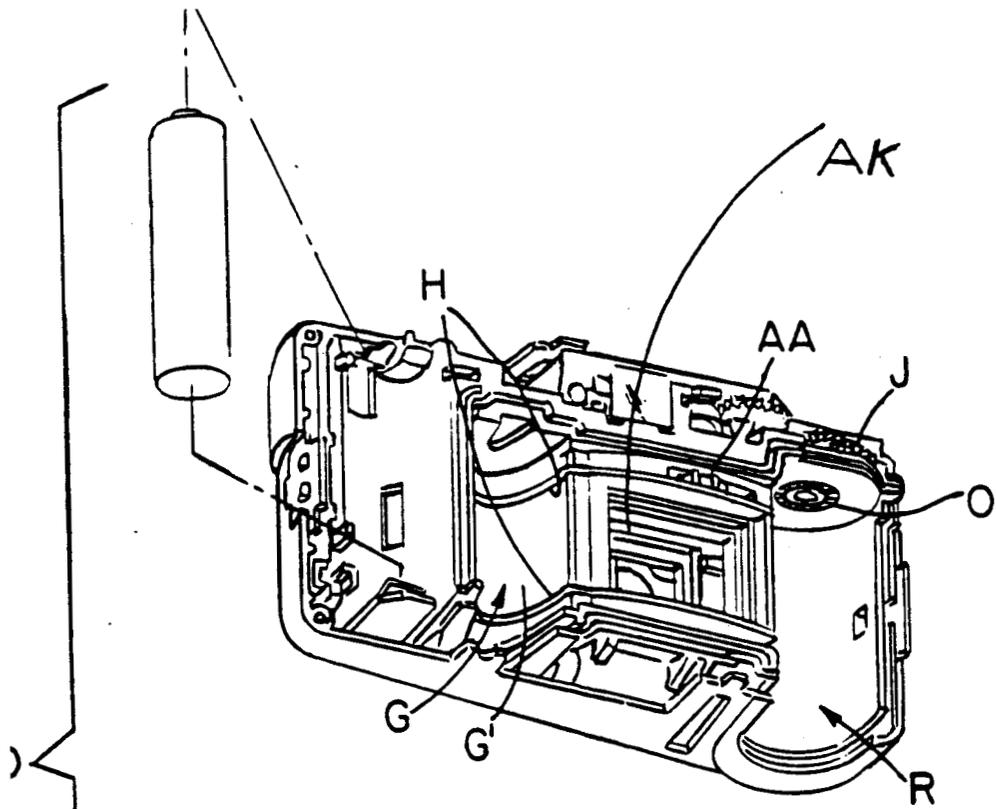


**CX-748**  
**Fuji Photo Film**

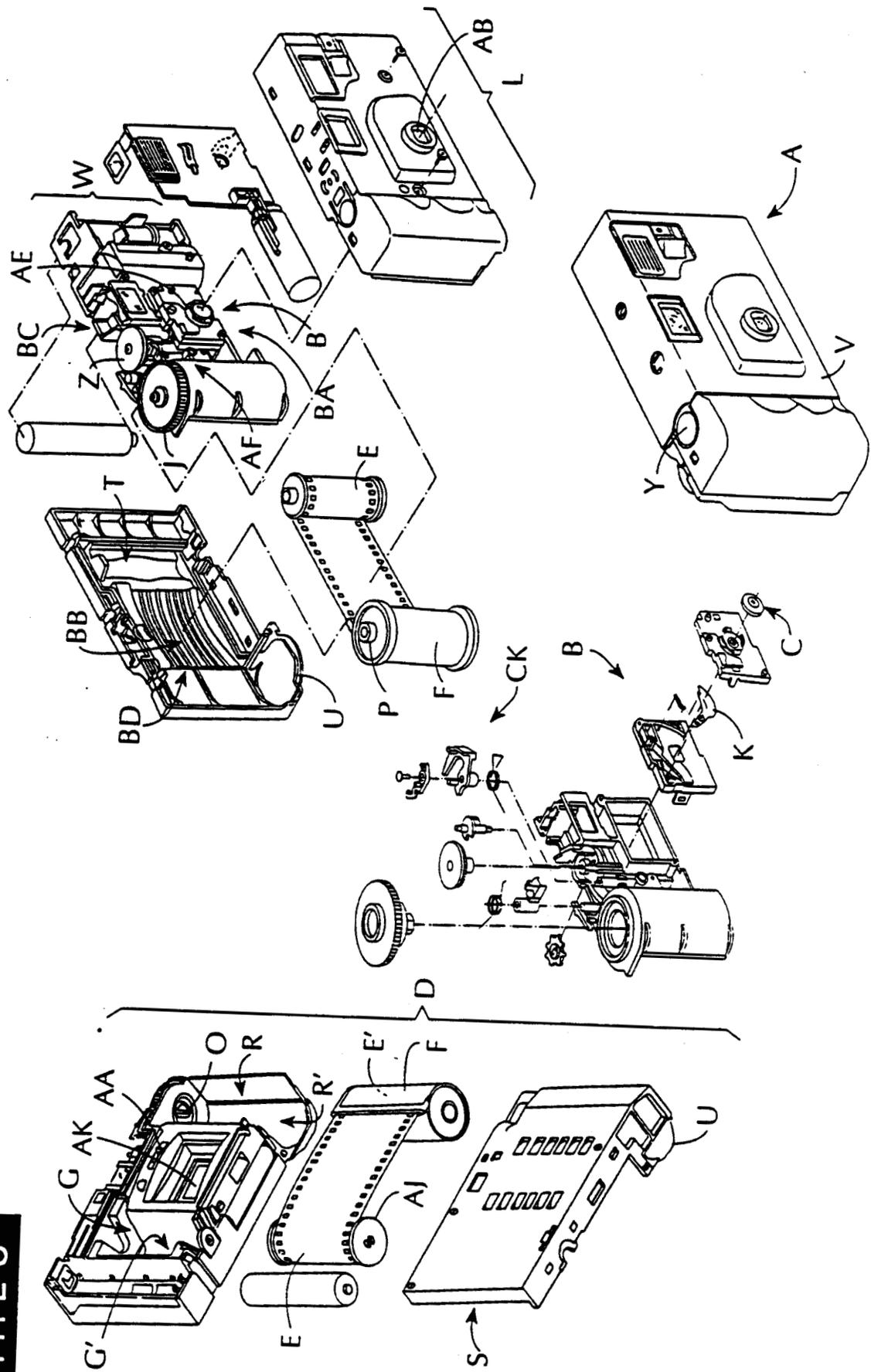


CX-748A  
FUJI PHOTO FILM



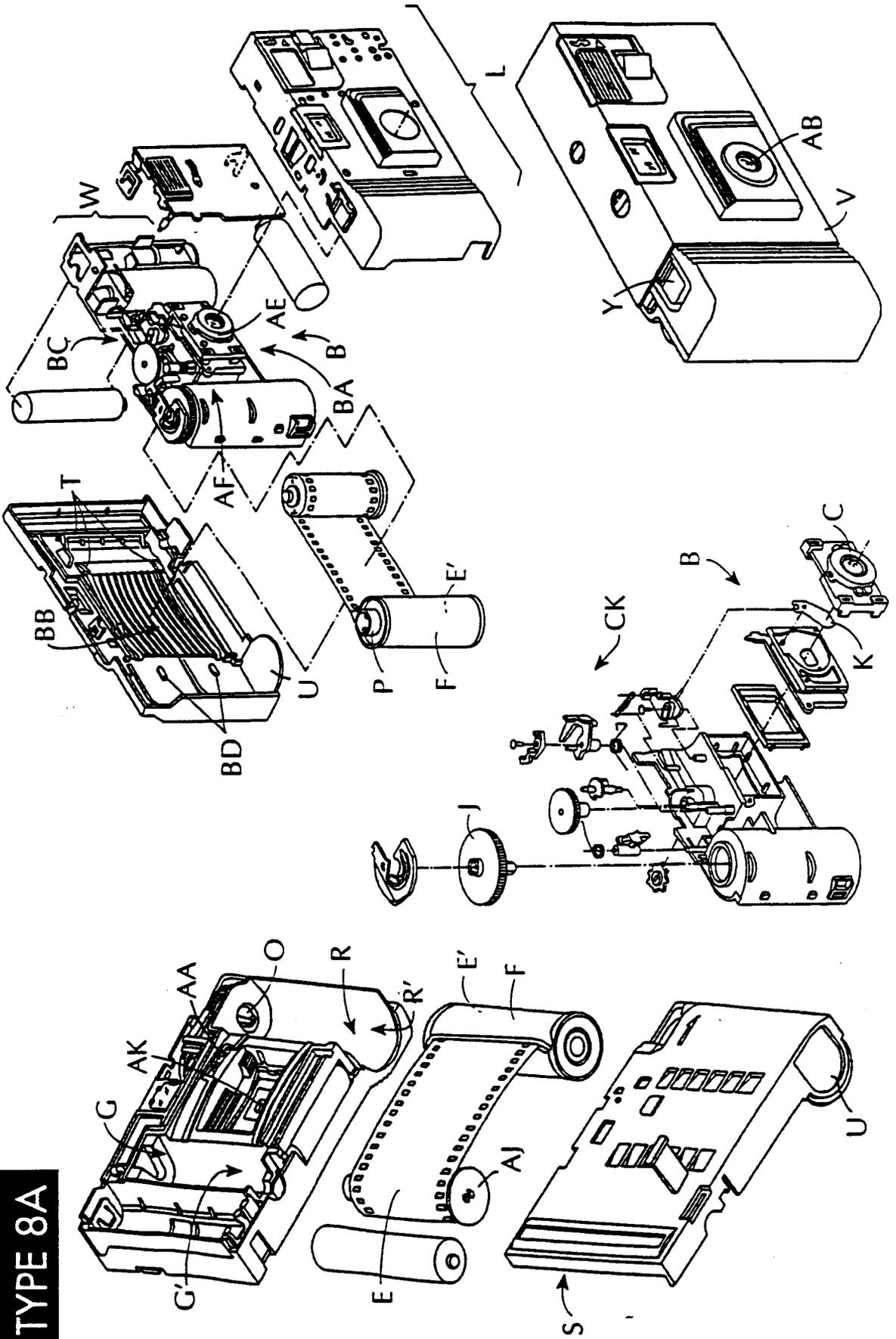


**TYPE 8**



**CX-749  
Fuji Photo Film**

**TYPE 8A**





# EXEMPLARY ORDER

UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of

CERTAIN LENS-FITTED

FILM PACKAGES

Inv. No. 337-TA-406

## ORDER TO CEASE AND DESIST

IT IS HEREBY ORDERED THAT Respondent cease and desist from conducting any of the following activities in the United States: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), or soliciting U.S. agents or distributors for certain lens-fitted film packages, also known as one-time use cameras, single use cameras, and disposable cameras, in violation of Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337.

### I.

#### (Definitions)

As used in this Order:

(A) "Commission" shall mean the U.S. International Trade Commission.

(B) "Complainant" shall mean Fuji Photo Film Co., Ltd. of Tokyo, Japan, complainant in this investigation, and its successors and assigns.

(C) "Respondent" shall mean [a named respondent]

(D) "Person" shall mean an individual, or any nongovernmental partnership, firm, association, corporation, or other legal or business entity other than the Respondent or its majority owned or controlled subsidiaries, their successors, or assigns.

(E) "United States" shall mean the fifty states, the District of Columbia, and Puerto Rico.

(F) "Covered Product" shall mean imported lens-fitted film packages, also known as one-time use cameras, single use cameras, and disposable cameras, that infringe one or more of the following claims of one or more of the following patents:

claims 1, 5, 6, 9, and 11 of U.S. Letters Patent 4,833,495;  
claims 14 and 15 of U.S. Letters Patent 4,855,774;  
claims 1, 7, 8, and 15 of U.S. Letters Patent 4,384,087;  
claims 1, 19, and 22 of U.S. Letters Patent 4,954,857  
claims 1 and 9 of U.S. Letters Patent 4,972,649;  
claim 14 of U.S. Letters Patent 5,063,400;  
claims 1 and 11 of U.S. Letters Patent 5,235,364;  
claim 1 of U.S. Letters Patent 5,361,111;  
claims 1, 15, 23, and 25 of U.S. Letters Patent 5,381,200;  
claims 1 and 7 of U.S. Letters Patent 5,408,288;  
claims 1 and 28 of U.S. Letters Patent 5,436,685;  
claims 1 and 13 of U.S. Letters Patent Re 34,168;  
the claim of U.S. Letters Patent Des. 345,750;  
the claim of U.S. Letters Patent Des. 356,101; or  
the claim of U.S. Letters Patent Des. 372,722

(G) The terms "import" and "importation" refer to importation for entry for consumption under the Customs Laws of the United States.

## II.

### (Applicability)

The provisions of this Cease and Desist Order shall apply to Respondent and any of its principals, stockholders, officers, directors, employees, agents, licenses, distributors, controlled (whether by stock ownership or otherwise) and/or majority owned business entities, successors, and assigns, and to each of them, insofar as they are engaging in conduct prohibited by Section

III, *infra*, for, with, or otherwise on behalf of Respondent.

III.

(Conduct Prohibited)

The following conduct of the Respondent in the United States is prohibited by the Order.

The Respondent shall not:

- (A) import or sell for importation into the United States covered product except under license of the patent owner;
- (B) market, distribute, offer for sale, sell, or otherwise transfer (except for exportation) in the United States imported covered product except under license of the patent owner;
- (C) advertise covered product except under license of the patent owner;
- (D) solicit U.S. agents or distributors for covered product except under license of the patent owner; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, transfer, or distribution of covered product, except under license of the patent owner.

IV.

(Conduct Permitted)

Notwithstanding any other provision of this Order, specific conduct otherwise prohibited by the terms of this Order shall be permitted if, in a written instrument, Complainant licenses or authorizes such specific conduct, or such specific conduct is related to the importation or sale of covered product by or for the United States.

## V.

### (Reporting)

For purposes of this reporting requirement, the reporting period shall commence on July 1 of each year and shall end on the subsequent June 30. However, the first report required under this section shall cover the period from the date of issuance of this Order through June 30, 2000. This reporting requirement shall continue in force until such time as the Respondent will have truthfully reported, in two consecutive timely filed reports, that it has no inventory of covered product in the United States.

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission the quantity in units and the value in dollars of foreign-made covered product that Respondent has imported and sold in the United States during the reporting period and the quantity and value of covered product that remains in inventory at the end of the reporting period.

Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this order and may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. §1001.

## VI.

### (Record Keeping and Inspection)

(A) For purposes of securing compliance with this Order, Respondent shall retain any and all records to the sale, offer for sale, marketing, or distribution in the United States of covered product made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of two (2) years from the close of the fiscal year to which they pertain.

(B) For the purposes of determining or securing compliance with this Order and for no

other purpose, and subject to any privilege recognized by the federal courts of the United States, duly authorized representatives of the Commission upon reasonable written notice by the Commission or its staff, shall be permitted access and the right to inspect and copy in Respondent's principal offices during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, both in detail and in summary form as are required to be retained by subsection VI(A) of this Order.

## VII.

### (Service of Cease and Desist Order)

Respondent is ordered and directed to:

(A) Serve, within fifteen (15) days after the effective date of this Order, a copy of this Order upon each of its respective officers, directors, managing agents, agents, and employees who have any responsibility for the marketing, distribution, or sale of covered product in the United States;

(B) Serve, within fifteen (15) days after the succession of any persons referred to in subparagraph VII(a) of this Order, a copy of the Order upon each successor; and

(C) Maintain such records as will show the name, title, and address of each person upon whom the Order has been served, as described in subsections VII(A) and VII(B) of this Order, together with the date on which service was made.

The obligations set forth in subsections VII(B) and VII(C) of this order shall remain in effect until the expiration date of the last to expire of the patents specified in Section I herein.

VIII.

(Confidentiality)

Any request for confidential treatment of information obtained the Commission pursuant to Sections V and VI of the Order should be in accordance with section 201.6 of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 201.6. For all reports for which confidential treatment is sought, Respondent must provide a public version of such report with confidential information redacted.

IX.

(Enforcement)

Violation of this Order may result in any of the actions specified in section 210.75 of the Commission's Rules of Practice and Procedure, 19 C.F.R. §210.75, including an action for civil penalties in accordance with section 337(f) of the Tariff Act of 1930, 19 U.S.C. §1337(f), and any other action as the Commission may deem appropriate. In determining whether Respondent is in violation of this Order, the Commission may infer facts adverse to Respondent if Respondent fails to provide adequate or timely information.

X.

(Modification)

The Commission may amend this Order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 210.76.

XI.

(Bonding)

The conduct prohibited by Section III of this Order may be continued during the sixty

(60) day period in which this Order is under review by the President pursuant to section 337(j) of the Tariff Act of 1930, 19 U.S.C. §1337(j), subject to Respondent posting a bond in the amount of one hundred (100) percent of the entered value of the articles in question. This bond provision does not apply to conduct that is otherwise permitted by Section IV of this Order. Covered product imported on or after the date of issuance of this Order is subject to the entry bond as set forth in the general exclusion order issued by the Commission simultaneously herewith, and is not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders (19 C.F.R. § 210.68). The bond and any accompanying documentation is to be provided to and approved by the Commission prior to the commencement of conduct which is otherwise prohibited by Section III of this Order.

The bond is to be forfeited in the event that the President approves, or does not disapprove within the Presidential review period, this Order, unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses the Commission final determination and order as to Respondent on appeal, or unless Respondent exports the products subject to this bond or destroys them and provides certification to that effect satisfactory to the Commission.

The bond is to be released in the event the President disapproves this Order and no subsequent order is issued by the Commission and approved, or not disapproved, by the President, upon service on Respondent of an order issued by the Commission based upon

application therefor made by Respondent to the Commission.

By Order of the Commission.

A handwritten signature in cursive script, reading "Donna R. Koehnke".

Donna R. Koehnke  
Secretary

Issued: June 2, 1999

**PUBLIC VERSION**

**UNITED STATES INTERNATIONAL TRADE COMMISSION**  
Washington, DC 20436

In the Matter of

**CERTAIN LENS-FITTED FILM  
PACKAGES**

Inv. No. 337-TA-406

**COMMISSION OPINION**

**INTRODUCTION**

On February 24, 1999, the presiding administrative judge (ALJ) issued his final initial determination (ID) in the above-captioned investigation. He found a violation of section 337 by 26 respondents in the importation and sale of lens-fitted film packages (LFFPs), products more commonly known as disposable, or single use cameras. He found that each respondent infringed six or more of the claims of the 12 utility patents at issue, but that complainant had failed to carry its burden in proving that respondents had infringed the three design patents at issue.

On April 19, 1999, the Commission determined to review portions of the ID. Specifically, the Commission determined to review (1) the standard of proof applied by the ALJ in deciding whether respondents had engaged in infringing reconstruction rather than permissible repair, (2) the ALJ's determination that complainant had failed to carry its burden in proving design patent infringement, and (3) the ALJ's determination on utility patent infringement insofar as necessary to correct certain clerical errors in the ID's infringement findings and conclusions of law. 64 Fed. Reg. 20324 (April 26, 1999). The Commission also requested and received written submission on the issues of remedy, the public interest, and bonding.

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### DISCUSSION

#### I. Background

##### A. The Products

The products at issue in this investigation are inexpensive, disposable, single use cameras, technically referred to as "lens-fitted film packages" or "LFFPs." LFFPs are generally constructed of a shell made of a plastic material such as polystyrene. They are equipped with a button-activated shutter, a lens, a viewfinder, a film advance mechanism, and optional flash units and buttons. An outer cardboard cover, containing printed information such as branding and instructions, encases the shell. LFFPs are preloaded with film and a film cartridge. When pictures are taken, the exposed film winds into the film cartridge. After taking pictures, a typical consumer brings the entire LFFP to a film processor to have the film developed and receives back only negatives and prints, not the LFFP shell and its contents.

Two broad categories of cameras were at issue in this investigation: (1) newly-manufactured LFFPs made by respondent Achiever Industries Limited (Achiever), an entity located in Hong Kong, and imported by respondent P.S.I. Industries, (PSI); and (2) "remanufactured" LFFPs supplied by several Asian firms and imported by domestic respondents other than PSI. The remanufactured LFFPs are made using LFFP shells that were manufactured by Fuji or its licensees, Eastman Kodak Company and Konica Corporation, and obtained from film processors after the original film was developed.

##### B. Procedural History

This investigation was instituted on March 25, 1998, based on a complaint by Fuji Photo Film Co., Ltd. (Fuji) of Tokyo, Japan. 63 Fed. Reg. 14474. Fuji's complaint alleged unfair acts in violation of section 337 in the importation and sale of certain LFFPs. The complaint alleged that 27 respondents had infringed one or more claims of 15 patents held by Fuji, *viz.* --

- (1) claims 1, 5, 6, 9, or 11 of U.S. Letters Patent 4,833,495 (the '495 patent);
- (2) claims 14 or 15 of U.S. Letters Patent 4,855,774 (the '774 patent);
- (3) claims 1, 7, 8, or 15 of U.S. Letters Patent 4,884,087 (the '087 patent);
- (4) claims 1, 19, and 22 of U.S. Letters Patent 4,954,857 (the '857 patent);
- (5) claims 1 or 9 of U.S. Letters Patent 4,972,649 (the '649 patent);
- (6) claims 14 or 16 of U.S. Letters Patent 5,063,400 (the '400 patent);
- (7) claims 1 or 11 of U.S. Letters Patent 5,235,364 (the '364 patent);
- (8) claim 1 of U.S. Letters Patent 5,361,111 (the '111 patent);
- (9) claims 1, 15, 23, or 25 of U.S. Letters Patent 5,381,200 (the '200 patent);

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- (10) claims 1 or 7 of U.S. Letters Patent 5,408,288 (the '288 patent);
- (11) claims 1 or 28 of U.S. Letters Patent 5,436,685 (the '685 patent);
- (12) claims 1 or 13 of U.S. Letters Patent Re 34,168 (the Re '168 patent);
- (13) the claim of U.S. Letters Patent Des. 345,750 (the D'750 patent);
- (14) the claim of U.S. Letters Patent Des. 356,101 (the D'101 patent); and
- (15) the claim of U.S. Letters Patent Des. 372,722 (the D'722 patent).

The Commission determined to institute an investigation of Fuji's complaint and referred the complaint to an ALJ for an evidentiary hearing, the issuance of an ID on violation, and a recommended determination (RD) on remedy and bonding.

On October 23, 1998, the Commission determined that eight respondents (Boshi Technology Ltd., Fast Shot, Haichi International, Innovative Trading Company, Labelle Time, Inc., Linfa Photographic Ind. Co. Ltd., Forcecama, Inc., and Rino Trading Co. Ltd.) were in default for failure to respond to the complaint and notice of investigation. An evidentiary hearing was held November 2-13, 1998. Ten respondents that had filed responses to the complaint and notice of investigation (Ad-Tek Specialties Inc., AmerImage, Inc. d/b/a/ Rainbow Products, Boecks Camera LLC, BPS Marketing, E.T. Trading d/b/a Klikit, Penmax, Inc. PhilmEx Photographic Film, T.D.A. Trading Corp., Vantage Sales, Inc., and Vivitar Corp.) failed to appear at the hearing.

Eight respondents (the participating respondents) appeared at the evidentiary hearing, viz., Achiever, Argus Industries (Argus), China Film Equipment (China Film), Dynatec International Inc. (Dynatec), Jazz Photo Corp. (Jazz), OptiColor Camera (OptiColor), P.S.I., and Sakar International, Inc. (Sakar). On December 4, 1998, the Commission determined not to review an ID granting complainant Fuji's oral motion to withdraw claim 16 of the '400 patent from the investigation. 63 *Fed. Reg.* 67918 (Dec. 9, 1998).

On February 24, 1999, the ALJ issued his final ID, finding a violation of section 337 by 26 of the 27 named respondents.<sup>1</sup> The ALJ also issued his RD on remedy and bonding.<sup>2</sup> Petitions for review of the ID were filed by complainant Fuji, the Commission investigative attorney (IA), and the participating respondents. On April 19, 1999, the Commission determined to review the issues of (1) whether the ALJ had applied the proper standard for the burden of proof on the repair/reconstruction issue, (2) whether the ALJ had correctly

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<sup>1</sup> Fuji admitted at closing argument that one named respondent, Opticam Inc, was not violating section 337.

<sup>2</sup> The ALJ issued his RD on remedy and bonding under Commission rule 210.42(a)(1)(ii), 19 C.F.R. §210.42(a)(1)(ii), as part of his final ID.

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determined the issue of design patent infringement, and (3) other infringement issues insofar as necessary to make certain technical corrections. 64 Fed. Reg. 20324 (April 26, 1999). The remainder of the ID became the Commission's determination pursuant to Commission rule 210.42(h), 19 C.F.R. § 210.42(h). The Commission requested and received written submissions on the issues of remedy, the public interest and bonding.

### IV. Violation Issues Under Review

#### A. Standard of Proof on the Repair/Reconstruction Issue

##### 1. The ID

The ID stated at page 96:

The doctrine of permissible repair is an affirmative defense, *see Dana Corporation v. American Precision Company*, 827 F.2d 755, 758 (Fed. Cir. 1987). The party asserting an affirmative defense must prove the facts that establish that defense by clear and convincing evidence, *see RCA Corp. v. Applied Digital Data Systs., Inc.* 221 USPO 385, 387 (Fed. Cir. 1984); *see also Symbols Tachs v. Option, Inc.*, 935 F.2d 1569, 1580 (Fed. Cir. 1991). Thus respondents involved in the alleged "remanufacture" have the burden to prove by clear and convincing evidence that their actions are a permissible repair rather than an impermissible reconstruction.<sup>3</sup>

In holding respondents to the standard of clear and convincing evidence in order to show permissible repair, the ALJ relied on two cases, *RCA Corp.* and *Symbols Tachs*, that involved the affirmative defense of patent invalidity. Because of the statutory presumption of validity contained in 35 U.S.C. § 282, the facts establishing the affirmative defense of invalidity must be supported by clear and convincing evidence. *S.S.I.H. SA v. USITC*, 718 F.2d 365, 375. However, we are aware of no cases that impose the clear and convincing evidence standard of proof in license defense cases. To the contrary, *Technical Development Corp. v. United States*, 597 F.2d 733, 746 (Ct. Cl. 1979), holds that an infringer bears the burden of proving a license defense by a preponderance of the evidence. Accordingly, we determine that respondents were required to carry their burden by a preponderance of the evidence.

The ALJ, however, did not rule against respondents merely because they had failed to

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<sup>3</sup> The ID repeated this standard at page 164.

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carry their burden of proof on permissible repair. Rather, the ID contains detailed findings on the activities of some of the remanufacturing respondents' suppliers, and concluded that those respondents "are effectively recreating the patented single use camera of complainant and its licensees, and hence are involved in impermissible reconstruction." ID at 164. Thus, the ALJ affirmatively found that those respondents were engaged in impermissible reconstruction of a patented good. He found that the other remanufacturing respondents were infringing Fuji's patents because they obtained their LFFPs from factories where Fuji was not allowed to inspect their remanufacturing processes. ID at 133. Since there was insufficient information in the record about the processes employed by their suppliers, *id.*, those respondents failed to carry their burden of proof, regardless of the standard of proof that was imposed. Accordingly, we determine that application of the correct standard of proof to the ALJ's findings does not affect his conclusions on the repair/reconstruction issue.<sup>4</sup>

### B. Infringement of Design Patents

#### 1. The ID

The ALJ found that Fuji had not sustained its burden of establishing that the three design patents in issue are infringed by respondents. ID at 81. His determination was based on (1) his interpretation of the case law to require evidence from someone other than an expert, and (2) the fact that the accused LFFPs are sold with outer cardboard covers that in some instances have a private label, and in other instances identify the source. *Id.* He found it significant that the purchaser never removes the outer cardboard cover. *Id.*

The ALJ acknowledged the testimony of Fuji's expert, Mr. Bellows, who compared the ornamental design illustrations of the D'750 patent with a sample of the imported Type 1 LFFP without flash, and found them to be substantially identical.<sup>5</sup> He compared the ornamental design illustrations of D'101 with samples of the Type 1 LFFPs with flash, and found them to be substantially identical. Mr. Bellows also compared the ornamental design illustrations of the D'722 patent with samples of the imported Type 4 LFFPs with flash and found them to be substantially identical. Mr. Bellows concluded that the Type 1 LFFPs with flash of respondents Ad-Tek, Fast Shot, and Linfa are substantially identical to the claim of the D'101

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<sup>4</sup> The Commission did not review the ALJ's findings and conclusions of law on the repair/reconstruction issue. Hence, the ALJ's findings and conclusions of law on that issue became part of the Commission's final determination under Commission rule 210.42(h), 19 C.F.R. § 210.42(h).

<sup>5</sup> There were many models of accused LFFPs in this investigation. The remanufactured models that use Fuji shells were referred to as Types 1-5. LFFP Type 6 were newly-manufactured by respondent Achiever. LFFP Types 7 and 7A were remanufactured using Kodak shells, and LFFP Types 8 and 8A were remanufactured using Konica shells.

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patent; and that the Type 4 LFFPs with flash of respondents Boecks, China Film, Dynatec, Forcecam, Jazz, Klikit, OptiColor, Penmax, PhilmEx, Rino, and Sakar are substantially identical to the claim of the D'722 patent. Mr. Bellows testified that he compared the ornamental design illustrations of D'750 with a sample of the Type 1 LFFP without flash, and found them to be substantially identical. ID at 80.

The ALJ correctly stated that, under *ODDzOn Products, Inc. v. Just Toys, Inc.*, 122 F.2d 1396, 1405 (Fed. Cir. 1997), design patent infringement is a question of fact that the patent holder must prove by a preponderance of the evidence. He also noted that the requisite similarity between the patented design and the accused article is determined by the *ordinary observer test*, which the Supreme Court first articulated over a hundred years ago in *Gorham M.G. Co. v. White*, 81 U.S. (14 Wall.) 511 (1872). He interpreted *Gorham* to hold that identity cannot be tested through the eyes of an expert, but must be tested by an “ordinary observer,” quoting:

if, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, and if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other. [81 U.S. (14 Wall.) at 528].

Thus, the ALJ interpreted *Gorham* to require that the comparison between the accused and patented designs must be made not by an expert, but by an ordinary observer. Since Mr. Bellows was an expert in mechanical engineering, camera manufacturing, and camera design, the ALJ found that he was not “an ordinary observer” and, therefore, that Fuji failed to carry its evidentiary burden. ID at 81.

We believe that the ALJ erred in his interpretation of *Gorham M.G. Co. v. White*. The Supreme Court stated in *Gorham*:

Experts therefore are not the person to be deceived. Much less than that which would be substantial identity in their eyes would be indistinguishable in the eyes of men generally, of observers of ordinary acuteness, bringing to the examination of the article upon which the design has been placed the degree of observation which men of ordinary intelligence give. It is persons of the latter class who are the principal purchasers of the articles to which designs have given novel appearance, and if they are misled, and induced to purchase what is not the article they suppose it to be ... the patentees are injured, and the advantage of the market that the patent was granted to secure is destroyed.

*Gorham*, 81 U.S. (14 Wall.) at 528.

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Thus, the Supreme Court did not state that expert testimony cannot be used to prove infringement, but rather that expert testimony, which is a more exacting level of proof, is not required to prove design patent infringement. Accordingly, we determine that the burden of proof on design patent infringement can be carried by expert testimony.

The analysis of design patent infringement first requires the fact-finder to determine whether the patented design as a whole is substantially similar in appearance to the accused design. *ODDzOn Prod. Inc. v. Just Toys, Inc.* 122 F.2d at 1405. Mr. Bellows testified that he reviewed the drawings of the D'750, D'101, and D'722 patents and compared them to the accused cameras, and determined that the designs were substantially identical. His testimony was not challenged by respondents. Indeed, respondents have never disputed substantial similarity of design, either before the ALJ or in their submissions to the Commission. To the contrary, respondents' counsel admitted on the record at the pretrial conference that respondents were using Fuji LFFP shells that were covered by the asserted design patents.<sup>6</sup>

We have compared the accused LFFPs with the designs claimed in the asserted design patents and have determined that the accused Type 1 LFFPs with flash (*e.g.*, CPX 173, CPX 195, CPX 204) are substantially identical to the design claimed in D'101, that the accused Type 4 LFFPs with flash (*e.g.*, CPX 186, CPX 187, CPX 188) are substantially identical to the design claimed in D'722, and that Linfa (CX 266) and Vantage (CX 487C) sales brochures depict LFFPs that are substantially identical to the design patent claimed in D'750.<sup>7</sup> *See Avia Group Int'l. Inc. v. L.A. Gear Cal., Inc.*, 853 F.2d 1557, 1565 (Fed. Cir. 1988)(affirming a trial court holding that "one needs only to look at the two . . . [products] to see that infringement exists.")

We also determine that, as a matter of law, respondents cannot avoid infringement by affixing a different design or logo to the cardboard cover of the LFFP or by packaging their LFFP in an outer carton. Under *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1126 (Fed. Cir. 1993), "[d]esign patent infringement relates solely to a patented design and does not require proof of unfair competition in the marketplace [citation omitted], or allow avoidance of infringement by labeling." Furthermore, the drawings in the D'101, D'722, and D'750 patents show that each of the claimed designs consists of a rectangular body with certain camera features (*e.g.*, lens, viewfinder) in particular locations. There is no feature in the patented designs that is not visible in respondents' reloaded Type 1 and Type 4 LFFPs, even

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<sup>6</sup> See Prehearing Tr. 130-35, 141-46 (November 2, 1998).

<sup>7</sup> Commissioner Crawford did not base her determination on a comparison of the accused LFFPs and the designs claimed in the asserted design patents.

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with the cardboard cover in place. Thus, the cardboard covers on respondents' LFFPs do not cover over the claimed design.

Based on our own observation of the accused LFFPs, the testimony of Mr. Bellows, and the failure of respondents to contest the allegations of design patent infringement, we determine that Fuji has carried its burden of proof in establishing infringement of its three design patents.<sup>8</sup> Accordingly, we reverse the ALJ's contrary finding.

### C. Clarification of Certain Aspects of the ID

There were a few technical mistakes in the ID, which we determine to correct on review. Based on the stipulation between respondent Achiever, Fuji, and the IA,<sup>9</sup> we find that Achiever Type 6 LFFPs infringe claim 15 of the '087 patent. We find no infringement of claim 16 of the '400 patent, given that Fuji withdrew claim 16 of the '400 patent from the investigation during the evidentiary hearing.<sup>10</sup> Finally, we find respondents Labelle and Innovative in violation of section 337. The ALJ omitted making a conclusion of law concerning whether these respondents, who had been found in default, had violated section 337. The ALJ's findings of fact support a finding of violation, ID at pp. 218-19, 221-23, FF 18, 27, 28, 33, 34, and we accordingly conclude that Labelle and Innovative have violated section 337.

### V. Remedy, the Public Interest, and Bonding

When the Commission finds a violation of section 337, as it has here, it must consider the issues of remedy, the public interest, and bonding. 19 U.S.C. §§ 1337 (d), (f), and (j)(3).

#### A. Remedy

##### 1. General Exclusion Order

The ALJ recommended that we issue a general exclusion order in this investigation.

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<sup>8</sup> Based on the testimony of Mr. Bellows and the failure of respondents to contest the allegations of design patent infringement, Commissioner Crawford determines that Fuji has carried its burden of proof.

<sup>9</sup> SX-1, p. 5, ¶ 12

<sup>10</sup> *Notice of Commission Determination Not to Review an Initial Determination Amending the Complaint and Notice of Investigation* (December 4, 1998).

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We adopt that recommendation.<sup>11</sup> The Commission has long held that a general exclusion order is appropriate when there is proof of (1) a widespread pattern of unauthorized use of the patented invention, and (2) certain business conditions from which one might reasonably infer that foreign manufacturers other than respondents to the investigation may attempt to enter the U.S. market with infringing products. *Certain Airless Paint Spray Pumps and Components Thereof*, Inv. No. 337-TA-90, USITC Pub.1199 at 17 (1981) (*Spray Pumps*). In 1994, statutory standards for issuance of general exclusion orders were codified in section 337(d), which provides:

(2) The authority of the Commission to order an exclusion from entry of articles shall be limited to persons determined by the Commission to be violating this section unless the Commission determines that --

(A) a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to products of named persons; or

(B) there is a pattern of violation of this section and it is difficult to identify the source of infringing products.

19 U.S.C. § 1337(d)(2); see also Commission rule 210.50(c). These statutory standards “do not differ significantly” from the *Spray Pumps* standards. *Certain Neodymium-Iron-Boron Magnets*, Inv. No. 337-TA-372, Commission Opinion, USITC Pub. No. 2964 at 5 (1996) (*Magnets*).

The Commission has established the following factors as relevant in demonstrating whether there is a “widespread pattern of unauthorized use”---

- (1) a Commission determination of unauthorized importation into the United States of infringing articles by numerous foreign manufacturers;
- (2) the pendency of foreign infringement suits based upon foreign patents which correspond to the domestic patent at issue; and
- (3) other evidence which demonstrates a history of unauthorized foreign use of the patented invention.

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<sup>11</sup> We also adopt the ALJ’s findings in support of his recommendation.

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*Spray Pumps*, USITC Pub. 1199 at 31-32.

Based on the record in this investigation, we determine that there has been a widespread pattern of unauthorized use of Fuji's patents. There have been imports or sales by 26 of the 27 respondents named in Fuji's complaint. ID at 208, FFs 6-53. Respondents identified over ten suppliers located in Korea and China. ID at 208, FF 347, FF 348. In addition to the 26 respondents in the business of importing, exporting, or selling infringing LFFPs and the ten LFFP manufacturers and remanufacturers in Korea and China, Fuji's complaint named an additional 16 companies believed to be in the business of selling infringing LFFPs, but for which there was insufficient evidence of importation for them to be named as proposed respondents when the complaint was filed. ID at 209, FF 349, FF 351. The volume of imported infringing products and the number of entities involved in importation has increased greatly over the last few years. ID at 209, FF 352, FF 353. Moreover, it is often difficult to trace the origin of the imported LFFPs because imported LFFPs often do not identify the manufacturer on their packaging. ID at 209, FF 350.

The Commission has established the following factors as relevant in establishing "certain business conditions" --

- (1) an established market for the patented product in the U.S. market and conditions of the world market;
- (2) the availability of marketing and distribution networks in the United States for potential foreign manufacturers;
- (3) the cost to foreign entrepreneurs of building a facility capable of producing the patented article;
- (4) the number of foreign manufacturers whose facilities could be retooled to produce the patented article; and
- (5) the cost to foreign manufacturers of retooling their facility to produce the patented article.

*Spray Pumps*, USITC Pub. 1199 at 31-32.

In this investigation, substantial sales of LFFPs in the United States clearly demonstrate an established market for the patented product in the U.S. market, and in fact, throughout the world. ID at 209, FF 337, FF 352, FF 354. The success of respondents in distributing their LFFPs in the premium and retail markets demonstrates the availability of marketing and

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distribution networks in the United States for potential foreign manufacturers. ID at 209, FF 352, FF 353. Furthermore, we determine that additional LFFP remanufacturing facilities can be set up at minimal cost. ID at 209, FF 355, FF 356.

We deny Fuji's request that the general exclusion order and/or cease and desist orders include a requirement that all persons importing LFFPs into the United States who contend that their products do not infringe the asserted claims of the utility patents in issue be required to report this fact to the Commission and to the U.S. Customs Service (Customs) at the time of seeking entry, along with an analysis of why the LFFPs sought to be imported do not infringe Fuji's patents. Such a provision is unprecedented and may be beyond the Commission's authority under section 337, which authorizes only the exclusion of imported products found in "violation of this section," 19 U.S.C. § 1337(d). In any case, Fuji has not demonstrated a need for such a provision or explained how it would benefit Fuji. In our view, requiring such analyses would impose burdens on the Commission and Customs that would likely outweigh any benefits to Fuji. Customs can determine whether imported goods infringe Fuji's utility patents by disassembling the imported LFFPs.<sup>12</sup> Our decision to issue cease and desist orders to a large number of domestic respondents, which we discuss below, will likely reduce the level of imports, and therefore diminish the burden on Customs of disassembling and examining imported LFFPs.

Fuji and the IA believe that it is appropriate for the exclusion order to identify particular types of LFFPs found to infringe Fuji's claims as non-limiting examples of infringing LFFPs. They have identified exhibits depicting diagrams of LFFPs found to be infringing in this investigation, *i.e.*, CX-742 through CX-748, CX-748A, and CX-749. We agree that it would be helpful to Customs to have this information, and therefore have attached these diagrams to the general exclusion order. We emphasize, however, that the examples are non-limiting and that LFFPs that infringe any of the claims listed in the general exclusion order are covered by the general exclusion order.

Fuji requests that the general exclusion order not be limited to entries for consumption. It contends that even entries for re-exportation, warehousing, or other purposes injure the domestic industry, which exports millions of LFFPs per year to foreign markets. In *Certain Devices for Connecting Computers Via Telephone Lines*, Inv. No. 337-TA-360, Commission Opinion at 11-12 (December 2, 1994), the Commission determined that section 337 authorizes it to exclude all types of entries, not just entries for consumption. However, the Commission

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<sup>12</sup> We note that Fuji, the IA, and respondents Achiever and PSI stipulated that one cannot determine whether any claim of any utility patent asserted by Fuji against respondents Achiever and PSI is or is not infringed merely by examining the exterior of a camera made by respondent Achiever in the form in which it is imported into the United States. (SX-2)

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also determined that, because it exercises its authority to exclude in “measured fashion,” it would not exclude entries other than for consumption in most cases. The Commission stated:

In future investigations, types of entry other than “entry for consumption” may be restricted as appropriate in light of the facts of a given case. A complainant that seeks exclusion of other types of entry should present evidence that activities by respondents involving other types of entry either are adversely affecting it or are likely to do so.

*Id.* at 13.

In this case, Fuji has made only generalized allegations of possible injury to its foreign sales from entries for re-exportation, transshipment, or other purposes, and has not provided evidence of any particular adverse effect that is now occurring or likely to occur in the future. Fuji has not provided any information regarding the volume of these other types of entries that are currently occurring or are likely to occur once a general exclusion order is entered, and does not identify any country in which its products are suffering from competition from infringing products that have been shipped via the United States. Since Fuji has failed to make an adequate showing that the order should cover entries other than for consumption, we deny its request.

Finally, Customs has indicated that a provision exempting LFFPs brought into the United States for personal use would be important in avoiding potential problems in the administration of the general exclusion order.<sup>13</sup> Fuji supports such an exemption.<sup>14</sup> Accordingly, the general exclusion order contains a provision exempting LFFPs brought into the United States for personal use from coverage by the order.

## 2. Cease and Desist Orders

Section 337(f) permits the Commission to issue, in lieu of or in addition to an exclusion order, a cease and desist order directing persons found to have violated section 337 “to cease and desist from engaging in the unfair methods or acts involved.” 19 U.S.C. § 1337(f). Cease and desist orders are warranted with respect to domestic respondents that maintain commercially significant U.S. inventories of the infringing product. *See, e.g., Certain Crystalline Cefadroxil Monohydrate*, Inv. No. 337-TA-293, USITC Pub. 2391 at 37-42 (June

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<sup>13</sup> Letter from T. Spence Chubb of the Office of Unfair Import Investigations to the Commission dated May 7, 1999.

<sup>14</sup> Letter from Fuji’s counsel to the Commission, dated May 10, 1999.

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1991) (*Cefadroxil*). Domestic respondents who have defaulted are presumed to maintain significant inventories of infringing products in the United States and are likewise subject to cease and desist orders. *Certain Agricultural Tractors Under 50 Power Take-Off Horsepower*, Inv. No. 337-TA-380, USITC Pub. 3026 at 32, n.124 (March 1997)(*Tractors*). Where respondents have failed to provide contrary information, the Commission infers the existence of commercially significant inventories. *Cefadroxil*, USITC Pub. 2391 at 41-42.

The ALJ found that in this investigation several respondents, including at least AmerImage, Argus, Boecks Camera, BPS Marketing, China Film, Dynatec, Jazz, OptiColor, Penmax, PhilmEx, PSI, Sakar, TDA, Vantage, and Vivitar, provided information as to their inventory levels, all of which he found to be commercially significant. ID at 210, CX-830. The remaining respondents were either found in default or did not supply contrary information. Accordingly, the ALJ recommended that cease and desist orders be issued against each of the domestic respondents.

Respondent Penmax asks that it not be subject to a cease and desist order because it no longer has a commercially significant inventory, having depleted its inventory during the investigation. Penmax includes an affidavit from its president, Mr. Yuan, which states that it has liquidated its stock of unlicensed LFFPs, has no unlicensed inventory, and has ceased buying any LFFPs that are not licensed by Fuji.<sup>15</sup> The Commission has traditionally issued cease and desist orders during the period of Presidential review only to respondents that have, or can be inferred to have, a commercially significant inventory. *Cefadroxil*, USITC Pub. 2391 at 37-42. We find that Penmax has made a credible showing that it has no remaining inventory, and therefore will not issue a cease and desist order against Penmax. Accordingly, we determine to issue cease and desist orders against the following 20 domestic respondents: Ad-Tek, Argus, Boecks, BPS, Dynatec, Fast Shot, Forcecam, Haichi, Innovative, Jazz, Klikit, Labelle, OptiColor, PhilmEx, PSI, Rainbow, Sakar, TDA, Vantage, and Vivitar.<sup>16</sup>

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<sup>15</sup> Affidavit of Mr. Victor Yuan, President, Penmax, Inc., dated May 5, 1999.

<sup>16</sup> We adopt the findings made by the ALJ in support of his recommendation regarding cease and desist orders.

Fuji's complaint named an entity called Fast Shot at 7250 Harwill Dr., Suite O, Houston, Texas 77036. On March 18, 1998, the Commission served a copy of the complaint on an entity named Fast Shot by certified mail at the address listed in the complaint. Although the Commission received a signed return receipt for delivery of the complaint, it did not receive a response to the complaint from an entity named Fast Shot. Accordingly, on August 20, 1998, the ALJ issued an order to an entity named Fast Shot directing it to show cause why it should not be found in default. The show cause order was served by certified mail at the address listed in the complaint. The Commission received a signed return receipt for delivery of the show cause order, but no response to the order. Accordingly, the

## PUBLIC VERSION

The cease and desist orders prohibit the twenty domestic respondents from importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), or soliciting U.S. agents or distributors for certain LFFPs, in violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337. The orders require respondents to report the quantity in units and the value in dollars of foreign-made LFFPs that they have imported and sold in the United States during a one year reporting period, and the quantity and value of covered LFFPs that remains in inventory at the end of the reporting period. The reporting requirement continues in force until the respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory of covered LFFPs in the United States.

### B. REQUESTS FOR STAY OF THE COMMISSION'S REMEDIAL ORDERS

The participating respondents asked that the Commission stay any remedy order pending the outcome of the anticipated appeal of the Commission's determinations to the U.S. Court of Appeals for the Federal Circuit (Federal Circuit). Respondents Jazz and Dynatec argue that a stay is justified under *Standard Havens Products Inc. v. Gencor Industries, Inc.*, 897 F.2d 511, 512 (Fed.Cir. 1990). Respondents Argus, China Film, and Sakar do not rely on the *Standard Havens* analysis but simply contend that the Commission should allow importation and market presence by the remanufacturers "until and unless the appellate court(s) determine in favor of any wholesale removal of" the remanufactured LFFPs.<sup>17</sup> Respondent PSI requests "temporary relief" from any cease and desist order for a period of six months so that it can dispose of its inventory. In its reply submission, OptiColor joined in PSI's request for a

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Commission found an entity named Fast Shot in default on October 23, 1998.

On May 6, 1999, the Commission received a letter from an entity named Fastcam Enterprise Corp. at 7250 Harwin Dr., Suite N, Houston, Texas 77036, stating that it believes it may be the same entity referred to as Fast Shot in Fuji's complaint. While the name and address for Fastcam and Fast Shot are similar, Fastcam was not named in the complaint and was not properly served with the complaint or the show cause order. Since the Commission strictly adheres to proper procedures before holding an entity in default, we did not find Fastcam in default or issue a cease and desist order to Fastcam. Nevertheless, since an entity named Fast Shot was properly found in default, the Commission determined to issue a cease and desist order to an entity named Fast Shot at 7250 Harwill Dr., Suite O, Houston, Texas 77036.

<sup>17</sup> The arguments of Argus, China Film, and Sakar on remedy, the public interest, and bonding are based upon the proposition that the Commission erred in adopting the ALJ's determination that the respondent remanufacturers' activities constituted impermissible reconstruction rather than permissible repair. Respondents made these arguments in their petitions for review, and we find them no more persuasive now.

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temporary stay.

Under *Standard Havens*, the Federal Circuit considers the following factors in determining whether to stay a remedial order pending appeal: (1) whether the stay applicant has made a strong showing that it is likely to succeed on the merits; (2) whether the applicant will be irreparably injured absent a stay; (3) whether issuance of the stay will substantially injure the other parties interested in the proceeding; and (4) where the public interest lies. While all factors must be considered, they need not be given equal weight. *Id.* The Commission has the authority to stay its remedial orders under 5 U.S.C. § 705. The Commission has adopted the basic framework set forth in *Standard Havens* for considering whether to stay the effectiveness of its orders. *Certain Agricultural Tractors Under 50 Power Take-Off Horsepower*, Inv. No. 337-TA-380, *Commission Opinion Denying Respondent's Petition for Reconsideration and Motion for Relief Pending Appeal* at 9-10 (April 24, 1997) (*Tractors Opinion Denying Motion for Relief Pending Appeal*). However, rather than requiring a showing of likelihood of success on appeal, the Commission determined that it need only find that it has ruled on "an admittedly difficult legal question." *Id.* at 10.

Jazz argues that it has demonstrated a strong likelihood of success on the merits in its petition for review of the ID where it pointed out errors it believes were made by the ALJ in deciding the repair/reconstruction issue. Dynatec submits that the likelihood of success factor supports and justifies a stay because the repair/reconstruction issue is an issue of law that the Federal Circuit will review *de novo*, and because "when harm to the applicant is great enough, a court will not require a 'strong showing' that the applicant is 'likely to succeed on the merits.'" *Standard Havens*, 897 F.2d at 513.

Only Jazz contends that it will be irreparably harmed unless the Commission stays its remedial orders pending appeal, arguing that if the exclusion order is not stayed, its business is likely to become "extinct." It notes that in *Standard Havens*, the Federal Circuit found that a movant demonstrates irreparable harm where enforcement of an order pending appeal would result in employee layoffs, immediate insolvency, and possible extinction. *Standard Havens*, 897 F.2d at 515.

Jazz argues that the harm to Fuji if a stay were granted cannot be considered irreparable since Fuji's own witnesses testified that Fuji has been aware of the reloading activity since the early 1990s. Given that fact, Jazz argues that a stay pending appeal would not substantially harm Fuji. Respondent Dynatech similarly submits that a stay is justified in this case because Fuji admitted that it knew that its cameras were being reloaded years ago. Since Fuji delayed for years before bringing this action, and allowed the reloading industry to grow, Dynatech argues, Fuji should not be heard to complain that the period of appeal will result in any significant prejudice.

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OptiColor's submission on remedy argues that there would be no significant injury to Fuji if the orders are not imposed before Federal Circuit review of the Commission's determination and that Fuji's own conduct is incompatible with any claim that it will be significantly harmed if the sale of recycled LFFPs is not immediately halted. OptiColor states that Fuji has watched the recycled LFFP industry grow to major size and significance since 1992, but took no legal action to stop it until 1998. OptiColor observes that since the reloading industry began, there has been steady growth in the volume of recycled LFFPs, [ ]].

Jazz argues that the public has become accustomed to a choice between new LFFPs and lower-priced used LFFPs, both of which have been available for nearly ten years. It contends that since Fuji allowed the remanufacturing to go on for so long, thousands of U.S. jobs are at stake. Thus, Jazz contends that the public interest will be harmed by excluding the remanufactured LFFPs before the Federal Circuit can consider the issue on the merits. It also argues that the public interest in preserving the environment is served by allowing the remanufacturers to continue to recycle used LFFPS. Dynatech argues that the public interest is served by allowing consumers an opportunity to purchase legally repaired items.

We deny respondents' requests for a stay of the Commission's remedial orders pending appeal to the Federal Circuit. Such a stay would be unprecedented and unwarranted under the *Standard Havens* analysis, which the Commission adopted in *Tractors*. Respondents have failed to demonstrate that there is "an admittedly difficult legal question" involved in this investigation. As indicated by the Commission's decision not to review the ALJ's finding on the repair/reconstruction issue, we believe that the ALJ's decision on that issue is correct. The ALJ's determination on repair/reconstruction is based on two leading decisions by the Federal Circuit, *Sandvik Aktiebolag v. E.J. Company*, 121 F.3d 669, 673 (Fed. Cir. 1997), *cert. denied*, \_\_\_ U.S. \_\_\_, 118 S.Ct. 1337 (1998); *Hewlett-Packard v. Repeat-O-Type*, 123 F.3d 1445, 1452 (Fed. Cir. 1997), *cert. denied*, \_\_\_ U.S. \_\_\_, 118 S.Ct. 1304 (1998). Those cases, as well as earlier Supreme Court precedent, were considered by the ALJ who found that the *facts* of this investigation are more closely akin to reconstruction cases like *Sandvik* than to repair cases like *Hewlett-Packard*. Although resolution of the repair/reconstruction issue presents a question of law that the Federal Circuit will review *de novo*, *Sandvik*, 121 F.3d at 672, its resolution is highly dependent on the facts of the particular case.

As for the irreparable harm factor, only Jazz contended that it would be irreparably harmed, absent a stay pending appeal. However, Jazz cited no evidence to support its assertion that it would become "extinct" during the appeal process. While Jazz claims that thousands of jobs will be lost, it has cited no evidence to support its statement. We note that the imported LFFPs are manufactured or remanufactured in Asia and that the domestic respondents' sales and warehousing operations require relatively few employees. Moreover,

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the domestic respondents may be able to continue their operations, if they wish, with non-infringing goods.

Opticolor's submission [

]. Fuji has suffered the loss of these sales, and has also suffered from price erosion caused by respondents' lower-priced LFFPs. We reject respondents' argument that a stay will not cause significant harm to Fuji because of Fuji's purported delay in seeking relief from imported LFFPs. Rather, Fuji will be irreparably injured by a stay that denies its patents the full term to which they are entitled. See *Tractors Opinion Denying Motion for Relief Pending Appeal Tractors* at 16 (“[a] stay pending appeal prejudices the complainant by depriving it, in this case potentially for a year or more, of the relief to which it is statutorily entitled under section 337”).

The public interest generally favors the protection of intellectual property rights. *Id.* at 17 (citing and quoting from S. Rep. No. 100-71 at 128-29 (1987)). The fact that a large number of suppliers and dealers have been successful in the businesses of importing and selling cheap, infringing remanufactured LFFPs does not outweigh the public interest in protecting the intellectual property rights that are being infringed by those goods. While respondents argue that recycling activities benefit the public, their argument does not compel a finding that the public policy favoring recycling should override the public policy favoring protection of intellectual property rights. In any case, Fuji and its licensees recycle LFFP parts in the United States, and respondents fail to explain why their suppliers' recycling activities, which take place in Asia, are more in keeping with the public interest than the recycling efforts of Fuji and its licensees. Furthermore, the remedial orders are directed to new infringing LFFPs, as well as remanufactured LFFPs.

PSI asserts that the unique nature of its “Message Camera,” which uses double image film to present messages such as “Happy Birthday” along the bottoms of developed photographs, justifies a six month postponement in the enforcement of the cease and desist order against its products. Because the “Message Camera” is an occasional novelty item, most often sold in speciality retail stores such as party and card stores, PSI submits that it does not directly compete with Fuji's or its licensees' traditional single-use cameras, and that allowing PSI to deplete its current inventory will have a *de minimis* effect on Fuji and its licensees. PSI maintains that its request is fair given that there are other single use camera distributors in the United States that were not named as respondents in this investigation by Fuji, and therefore will not be subject to specific cease and desist orders. It argues that continued sales by such nonrespondent companies will more significantly affect Fuji's market share than any transitional depletion of non-competing cameras by PSI.

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We reject PSI's argument that its Message Camera does not compete with Fuji's products. As Fuji points out, if a consumer buys a "Message Camera," he is in fact choosing not to buy a "traditional" single use camera. More importantly, allowing a transitional period to deplete inventory is contrary to the Commission's policy of issuing cease and desist orders to prevent sales from inventory. Providing a transitional period to deplete inventory may also encourage respondents to import heavily during the period of Commission investigations. Respondents have been on notice since at least the filing of the ALJ's RD on February 24, 1999, that the issuance of remedial orders was a distinct possibility. Respondents could have taken protective steps to avoid having large inventories. *See Tractors Opinion Denying Motion for Relief Pending Appeal Tractors*, at 14 n.7.

### C. The Public Interest

Under sections 337(d) and (f), the Commission must provide a remedy if it has found a violation of section 337 unless, after considering the effect of any remedy on (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) the U.S. production of articles that are like or directly competitive with those which are the subject of the investigation, and (4) U.S. consumers, it finds that a remedy should not be issued. 19 U.S.C. §§ 1337(e) and (f). There have been only three investigations in which consideration of the public interest factors has prevented issuance of a remedy. The Commission denied relief in *Certain Automatic Crankpin Grinders*, Inv. No. 337-TA-60, USITC Pub. 1022 (1979), because it found an overriding national policy in maintaining and increasing the supply of fuel efficient automobiles and that the domestic industry was unable to supply domestic demand. In *Certain Inclined Field Acceleration Tubes*, Inv. No. 37-TA-67, USITC Pub. 1119 (1980), the Commission denied relief because of the overriding public interest in continuing basic atomic research with the imported acceleration tubes, which were deemed to be of higher quality than the domestic industry's product. In *Certain Fluidized Supporting Apparatus*, Inv. No. 337-TA-182/188, USITC Pub. 1667 (1984), relief was denied because the domestic producer could not supply demand for hospital beds for burn patients within a reasonable time, and there were no therapeutically comparable substitutes available.

We do not believe that respondents have raised any public interest concerns that should prevent the issuance of remedial orders in this investigation. We do not find that the general health and welfare are implicated in the distribution of LFFPs, and there is no evidence that the U.S. demand for LFFPs could not be supplied by Fuji or its licensees. The fact that some retailers and consumers may have to pay a higher price for LFFPs does not justify a determination that the public interest in protecting intellectual property rights is in any way outweighed. *See, e.g., Certain Telecommunications Chips*, USITC Inv. No. 337-TA-337, Comm'n Op. at 40-41, USITC Pub. 2670 (August 1993); *Cefadroxil* at 40-41, USITC Pub. 2391 at 46-47.

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### B. Bonding

Section 337(j) provides for the entry of infringing articles and sales of such articles from inventory upon the payment of a bond during the 60-day Presidential review period. The bond is to be set at a level sufficient to "protect complainant from any injury" during the Presidential review period. 19 U.S.C. §1337(j). *See also* 19 C.F.R. § 210.50(a)(3) (1998). The ALJ found that the compilation of price information based on answers to interrogatories received from respondents as of October 27, 1998 (CX-830), indicated that the accused LFFPs have a wide price range. Evidence cited by the ALJ supports his finding. ID at 212-213. The ALJ found that, in view of the price variations, it was impossible to calculate what level of bond based on price differentials will protect complainant from any injury. Therefore, he recommended a bond of 100 percent of entered value, citing *Magnets*, USITC Pub. No. 2964 at 15 (May 1996)("[where] it is impossible ... to calculate what level of bond based on price differentials will protect a complainant from any injury, it is appropriate to issue a bond of 100 percent of entered value ... of the goods in question"). We adopt the ALJ's recommendation that bond during the period of Presidential review be set at 100 percent of entered value as well as his findings in support of his recommendation.

We reject respondents' various proposals that the bond be a lump sum payment based upon a royalty rate Fuji receives from a particular licensee. We find that this royalty rate would not protect Fuji from "any injury." Moreover, since the record contains adequate pricing information, we see no reason to resort to royalty rates in setting the bond rate. *Cf. Acid-Washed Denim Garments and Accessories*, Inv. No. 337-TA-324 (1992) (bond rate based on royalty rate where complainant did not object, and the record did not contain adequate pricing information). In any case, a lump sum bond is *inappropriate where there is no way of knowing what the volume of infringing importations and sales will be during the 60-day Presidential review period*. We also reject Fuji's proposal that bond be set at 300 percent. That proposal is apparently based on the lowest reported sales prices for infringing LFFPs.



UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, DC 20436

In the Matter of

CERTAIN LENS-FITTED FILM PACKAGES

Inv. No. 337-TA-406

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OFFICE OF THE SECRETARY  
US INTL TRADE COMM

**NOTICE OF COMMISSION DETERMINATION TO REVIEW-IN-PART A  
FINAL INITIAL DETERMINATION FINDING A VIOLATION OF  
SECTION 337; SCHEDULE FOR WRITTEN SUBMISSIONS ON REMEDY,  
THE PUBLIC INTEREST, AND BONDING**

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to review-in-part the final initial determination (ID) issued by the presiding administrative law judge (ALJ) on February 24, 1999, finding a violation of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, in the above-captioned investigation. Specifically, the Commission has determined to review the standard for the burden of proof applied in the ID for establishing repair versus reconstruction of a patented product and the ID's determination of no infringement of the design patents asserted in this investigation. The Commission has also determined to review the infringement issues insofar as necessary to correct certain clerical errors brought to the Commission's attention by the Office of Unfair Import Investigations.

**FOR FURTHER INFORMATION CONTACT:** Jean Jackson, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-205-3104. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). Hearing-impaired persons are advised that information on the matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

**SUPPLEMENTARY INFORMATION:** This investigation was instituted on March 25, 1998, based on a complaint by Fuji Photo Film Co., Ltd. (Fuji) of Tokyo, Japan. 63 Fed. Reg. 14474. Fuji's complaint alleged unfair acts in violation of section 337 in the importation and sale of certain lens-fitted film packages (*i.e.*, disposable cameras). The complaint alleged that 27 respondents had infringed one or more claims of 15 patents held by complainant Fuji. On October 23, 1998, the Commission determined not to review two IDs finding a total of eight respondents, *viz.*, Boshi Technology Ltd., Fast Shot, Haichi International, Innovative Trading Company, Labelle Time, Inc., Linfa Photographic Ind. Co. Ltd., Forcecama, Inc. and Rino Trading Co. Ltd., in default for failure to respond to the complaint and notice of investigation. An evidentiary hearing was held November 2-13, 1998. Eight respondents participated in the hearing,

Achiever Industries Limited, Argus Industries, China Film Equipment, Dynatec International Inc., Jazz Photo Corp., Opticolor Camera, P.S.I. Industries, and Sakar International, Inc. On December 4, 1998, the Commission determined not to review an ID granting complainant's oral motion to withdraw a single claim of one patent from the investigation. 63 *Fed. Reg.* 67918 (December 9, 1998). Ten respondents that had filed responses to the complaint and notice of investigation failed to appear at the hearing, viz., Ad-Tek Specialties Inc., AmerImage, Inc. d/b/a/ Rainbow Products, Boecks Camera LLC, BPS Marketing, E.T. Trading d/b/a Klikit, Penmax, Inc., PhilmEx Photographic Film, T.D.A. Trading Corp., Vantage Sales, Inc. and Vivitar Corp.

On February 24, 1999, the ALJ issued his final ID, finding a violation of section 337 by 26 of 27 named respondents. (Complainant Fuji admitted at closing argument that one named respondent, Opticom Inc, was not violating section 337). He found that Fuji had not carried its burden of proof in showing infringement of three design patents. The ALJ also issued his recommendations on remedy and bonding. The ALJ recommended that the Commission issue a general exclusion order directing that disposable cameras that infringe the claims of the 12 utility patents at issue be excluded from entry into the United States. He also recommended that cease and desist orders be issued to the 21 domestic respondents found in violation. Finally, he recommended a 100 percent bond during the period of Presidential review.

On March 8, 1999, the eight respondents that appeared at the hearing, complainant Fuji, and the Commission investigative attorney (IA) filed petitions for review of the ID. On March 15, 1999, the private parties filed responses. The IA filed his response to the petitions on March 17, 1999.

Having examined the record in this investigation, including the ALJ's final ID, the petitions for review, and the responses thereto, the Commission has determined to review: (1) the standard for the burden of proof applied in the ID for establishing repair versus reconstruction of a patented product, and (2) the ID's determination that the design patents asserted in this investigation were not infringed. The Commission has also determined to review the infringement issues insofar as necessary to correct certain clerical errors brought to the Commission's attention by the Office of Unfair Import Investigations. The Commission requires no further briefing on these issues.

In connection with the final disposition of this investigation, the Commission may issue (1) an order that could result in the exclusion of the subject articles from entry into the United States, and/or (2) cease and desist orders that could result in respondents being required to cease and desist from engaging in unfair action in the importation and sale of such articles. Accordingly, the Commission is interested in receiving written submissions that address the form of remedy, if any, that should be ordered. If a party seeks exclusion of an article from entry into the United States for purposes other than entry for consumption, the party should so indicate and provide information establishing that activities involving other types of entry either are adversely affecting it or likely to do so. For background, see *In the Matter of Certain Devices for Connecting Computers via Telephone Lines*, Inv. No. 337-TA-360, USITC Pub. No. 2843 (December 1994) (Commission Opinion).

If the Commission contemplates some form of remedy, it must consider the effects of that remedy upon the public interest. The factors the Commission will consider include the effect that an exclusion order and/or cease and desist orders would have on (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) U.S. production of articles that are like or directly competitive with those that are subject to investigation, and (4) U.S. consumers. The Commission is therefore interested in

receiving written submissions that address the aforementioned public interest factors in the context of this investigation.

If the Commission orders some form of remedy, the President has 60 days to approve or disapprove the Commission's action. During this period, the subject articles would be entitled to enter the United States under a bond, in an amount determined by the Commission and prescribed by the Secretary of the treasury. The Commission is therefore interested in receiving submissions concerning the amount of the bond that should be imposed.

**WRITTEN SUBMISSIONS:** The parties to the investigation, interested government agencies, and any other interested parties are encouraged to file written submissions on remedy, the public interest, and bonding. Such submissions should address the February 24, 1999, recommended determination by the ALJ on remedy and bonding. Complainant and the Commission investigative attorney are also requested to submit proposed remedial orders for the Commission's consideration. The written submissions and proposed remedial orders must be filed no later than close of business on April 29, 1999. Reply submissions must be filed no later than the close of business on May 6, 1999. No further submissions on these issues will be permitted unless otherwise ordered by the Commission.

Persons filing written submissions must file with the Office of the Secretary the original document and 14 true copies thereof on or before the deadlines stated above. Any person desiring to submit a document (or portion thereof) to the Commission in confidence must request confidential treatment unless the information has already been granted such treatment during the proceedings. All such requests should be directed to the Secretary of the Commission and must include a full statement of the reasons why the Commission should grant such treatment. See section 201.6 of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 201.6. Documents for which confidential treatment by the Commission is sought will be treated accordingly. All nonconfidential written submissions will be available for public inspection at the Office of the Secretary.

This action is taken under the authority of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, and sections 210.45-210.51 of the Commission's Rules of Practice and Procedure, 19 C.F.R. §§ 210.45-210.51.

Copies of the public version of the ID, and all other nonconfidential documents filed in connection with this investigation, are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street S.W., Washington, D.C. 20436, telephone 202-205-2000.

By order of the Commission.



Donna R. Koehnke  
Secretary

Issued: April 19, 1999



**PUBLIC VERSION**

**UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.**

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In the Matter of )

CERTAIN LENS-FITTED )  
FILM PACKAGES )

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Investigation No. 337-TA-406

**Final Initial and Recommended Determinations**

Pursuant to the Notice of Investigation (63 Fed. Reg. 14474, 14475), this is the administrative law judge's final initial determination, under Commission rule 210.42. The administrative law judge, after a review of the record developed, finds that a violation of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337) by certain respondents has occurred.

This is also the administrative law judge's recommended determination on remedy and bonding, pursuant to Commission rule 210.42(a)(1)(ii). The administrative law judge recommends that the Commission issue cease and desist orders directed to certain domestic respondents and a general exclusion order and further recommends a bond of 100% of entered value during Presidential review.



## APPEARANCES

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## ABBREVIATIONS

ABr	Respondent Achiever Post Hearing Brief
ARBr	Respondent Achiever Post Hearing Rebuttal Brief
JOBr	Respondents' Jazz & OptiColor Posthearing Brief
JORBr	Respondents' Jazz & OptiColor Rebuttal Brief
CBr	Complainant's Posthearing Brief
CFF	Complainant's Finding Of Fact
CRBr	Complainant's Posthearing Rebuttal Brief
FF	Administrative Law Judge's Findings Of Fact
SBr	Staff's Posthearing Brief
SRBr	Staff's Rebuttal Posthearing Brief
DBr	Respondent Dynatec's Posthearing Brief
DRBr	Respondent Dynatec's Posthearing Rebuttal Brief
ACSB	Respondents' Argus, Sakar, and ChinaFilm Post Hearing Brief
ACSRBr	Respondents' Argus, Sakar & ChinaFilm PostHearing Rebuttal Brief
PSIBr	Respondent PSI Post Hearing Brief
SX	Staff Exhibit
CX	Complainant Exhibit
CPX	Complainant Physical Exhibit
RXPSI	Respondent PSI Exhibit
RPXPSI	Respondent PSI Physical Exhibit

RXACH Respondent Achiever Exhibit

RPXACH Respondent Achiever Physical Exhibit

ROCX Respondent Opticolor Exhibit

PROCX Respondent Opticolor Physical Exhibit

RDYNA Respondent Dynatec Exhibit

RPDYNA Respondent Dynatec Physical Exhibit

RJZX Respondent Jazz Exhibit

RPJZX Respondent Jazz Physical Exhibit

Tr. Transcript Of Prehearing Conference, Hearing And Closing Arguments

DFF Respondent Dynatec's Finding of Fact

DOCFD Respondent Dynatec's Objections to Complainant's Findings of Fact

CORDFD Complainant Fuji's Objections to Respondent Dynatec's Finding of Fact

DOSFF Respondent Dynatec's Objections to Staff Findings of Fact

CRRDFD Complainant Fuji's Rebuttal to Respondent Dynatec's Finding of Fact

AFF Respondent Achiever's Finding of Fact

AOCFF Respondent Achiever's Objections Complainant's Finding of Fact

RJOFF Respondents Jazz and OptiColor's Finding of Fact  
(RJFF)

JORCFD Respondents Jazz & OptiColor's Rebuttal to Complainant's Findings of Fact

CORJFF Complainant Fuji's Objections to Respondent Jazz and OptiColor's Finding of Fact

JORSFF Respondent Jazz & OptiColor's Rebutal to Staff's Findings of Fact

- CRRJFF** Complainant Fuji's Rebuttal to Respondent Jazz and OptiColor's Finding of Fact
- RJCL** Respondents Jazz and OptiColor's Conclusions of Law
- RSFF** Respondents Sakar, Argus and China Film's Finding of Fact

## OPINION

### I. PROCEDURAL HISTORY

By notice of investigation, which issued on March 18, 1998 and was published in the Federal Register on March 25, 1998 (63 Fed. Reg. 14474, 14475), the Commission instituted an investigation, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, to determine whether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain lens-fitted film packages by reason of infringement of certain claims of certain patents, and whether there exists an industry in the United States as required by subsection (a)(2) of section 337. The complaint was filed on February 13, 1998, under section 337 of the Tariff Act of 1930, as amended, on behalf of Fuji Photo Film Co., Ltd. (Fuji) of Tokyo, Japan. A supplement to the complaint was filed on March 2, 1998.

Order No. 3, which issued on April 16, 1998, set a target date of March 25, 1999. Order No. 11, which issued on August 20, 1998, set a new target date of May 25, 1999.

The claims in issue from fifteen patents owned by complainant (FF 54) were identified in the notice of investigation as follows:

- (1) claims 1, 5, 6, 9, or 11 of U.S. Letters Patent 4,833, 495 (the '495 patent);
- (2) claims 14 or 15 of U.S. Letters Patent 4,855,774 (the '774 patent);
- (3) claims 1, 7, 8, or 15 of U.S. Letters Patent 4,884,087 (the '087 patent);
- (4) claims 1, 19, and 22 of U.S. Letters Patent 4,954,857 (the '857 patent);
- (5) claims 1 or 9 of U.S. Letters Patent 4,972,649 (the '649 patent);
- (6) claims 14 or 16 of U.S. Letters Patent 5,063,400 (the '400 patent);<sup>1</sup>
- (7) claims 1 or 11 of U.S. Letters Patent 5,235,364 (the '364 patent);
- (8) claim 1 of U.S. Letters Patent 5,361,111 (the '111 patent);
- (9) claims 1, 15, 23, or 25 of U.S. Letters Patent 5,381,200 (the '200 patent);

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<sup>1</sup> Order No. 47 which issued on November 9, 1998 was an initial determination which granted complainant's oral motion to withdraw claim 16 of the '400 patent. By notice dated December 4, the Commission determined not to review said initial determination.

- (10) claims 1 or 7 of U.S. Letters Patent 5,408,288 (the '288 patent);
- (11) claims 1 or 28 of U.S. Letters Patent 5,436,685 (the '685 patent);
- (12) claims 1 or 13 of U.S. Letters Patent Re 34,168 (the Re '168 patent);
- (13) the claim of U.S. Letters Patent Des. 345,750 (the '750 patent);
- (14) the claim of U.S. Letters Patent Des. 356,101 (the '101 patent); or
- (15) the claim of U.S. Letters Patent Des. 372,722 (the '722 patent)

The respondents identified in the notice were the following: Achiever Industries Limited (Achiever) of Hong Kong; Ad-Tek Specialities Inc. (Ad-Tek) of California; AmerImage, Inc. d/b/a Rainbow Products (Rainbow) of Florida, Argus Industries (Argus) of Illinois, Boecks Camera LLC (Boecks) of California, Boshi Technology Ltd. (Boshi) of Hong Kong, BPS Marketing (BPS) of Washington state, China Film Equipment Corp. (China Film) of China, Dynatec International, Inc. (Dynatec) of Utah, E.T.Trading, Ltd. d/b/a Klikit (Klikit) of Brooklyn, New York, Fast Shot (Fast Shot) of Texas, Forcecam, Inc. (Forcecam) of California, Haichi International Inc. (Haichi) of New York, Innovative Trading Co. (Innovative) of California, Jazz Photo Corp. (Jazz) of New Jersey, Labelle Time, Inc. (Labelle) of Florida, Linfa Photographic Ind. Co. Ltd. (Linfa) of Hong Kong, Opticam Inc. (Opticam) of California<sup>2</sup>, OptiColor Camera (OptiColor) of Washington State, Penmax, Inc. (Penmax) of California, PhilmEx Photographic Film (PhilmEx) of California, P.S.I. Industries, Inc. (PSI) of Florida, Rino Trading Co., Ltd. (Rino) of Korea, Sakar International, Inc. (Sakar) of New Jersey, T.D.A. Trading Corp. (T.D.A.) of New York, Vantage Sales, Inc. (Vantage) of Illinois, and Vivitar Corp. (Vivitar) of California.

The notice of investigation did not identify which respondent is alleged to infringe which patent in issue. Moreover while the notice identified fifteen patents in issue and twenty-six

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<sup>2</sup> While Opticam is referred to in the notice of investigation and complaint, complainant at closing argument (Tr. at 4073 to 4075) admitted that Opticam is not violating section 337. As the notice indicated, with the exception of Opticam, there are twenty one domestic respondents of the twenty-six identified respondents.

respondents, excluding Opticam, the allegations of complainant in the complaint were not coextensive with each of the respondents. For example while the notice identifies claims 1, 7, 8 or 15 of the '087 patent to be in issue, respondents Ad-Tek, AmerImage, Boecks, BSP, China Film, Fast Shot, Forcecam, Innovative, Labelle, Linfa, Penmax, PhilmEx, Rino, Sakar, T.D.A. and Vantage are alleged to infringe only claims 1 and 8. Respondent PSI is alleged to infringe only claims 1, 7 and 15. Respondents Achiever and Vivitar are alleged to infringe only claims 7 and 15. Respondents Argus, Boshi, Dynatec, E.T. Trading, Haichi, Jazz and Opticolor are alleged to infringe claims 1, 7, 8 and 15.

Only respondents Achiever, Argus, China Film, Dynatec, Jazz, OptiColor, PSI and Sakar participated in the hearing. The following respondents, while not participating in the hearing, did file a response to the complaint and notice of investigation: Ad-Tek, Rainbow, Boecks, BPS, Klikit, Penmax, PhilmEx, T.D.A., Vantage and Vivitar.

Respondents Boshi, Fast Shot, Haichi, Innovative, Labelle, Linfa, Forcecam and Rino filed no response to the complaint and notice of investigation. Order No. 23, which issued on September 25, 1998, was an initial determination and found Boshi, Fast Shot, Haichi, Innovative, Labelle and Linfa in default pursuant to Commission rule 210.16. Order No. 24, which also issued on September 25, found Forcecam and Rino in default pursuant to Commission rule 210.16. On October 23, the Commission determined not to review Order Nos. 23 and 24.

The prehearing conference and hearing were conducted on November 2, 3, 4, 5, 6, 7, 9, 10, 11, 12 and 13, 1998. Following the filing of post-hearing submissions, closing arguments were heard on January 8, 1999.

The matter is now ready for a decision.

These initial and recommended determinations are based on the record compiled at the hearing and the exhibits admitted into evidence. The administrative law judge has also taken into account his observation of the witnesses who appeared before him during the hearing. Proposed findings submitted by the parties not herein adopted, in the form submitted or in substance, are rejected as either not supported by the evidence or as involving immaterial matter and/or as irrelevant. The findings of fact included herein have references to supporting evidence in the record. Such references are intended to serve as guides to the testimony and exhibits supporting the findings of fact. They do not necessarily represent complete summaries of the evidence supporting said findings.

## **II. PRODUCTS IN ISSUE**

The products in issue are single use cameras, also known as “lens-fitted film packages” or “LFFPs.” (FF 1).<sup>3</sup> Single use cameras are relatively inexpensive, disposable cameras which are pre-loaded with film and a film cartridge so that after use, all of the film has been advanced into the film cartridge. (FF 1).

## **III. PARTIES**

See FF 6-53.

## **IV. IMPORTATION**

Each of the respondents that appeared at the hearing admitted importation of the accused LFFPs into the United States. (SX-3). Also there is evidence that respondents are involved in the importation of accused LFFPs into the United States. (See FF 6-53).- Thus the Commission has

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<sup>3</sup> The terms “LFFP,” single use cameras and one-time-use cameras are used interchangeably in the initial and recommended determinations.

in rem jurisdiction. It also has in personam jurisdiction over at least respondents Achiever, Argus, China Film, Dynatec, Jazz, OptiColor, PSI and Sakar who participated at the hearing.

## V. CLAIM INTERPRETATION

As the Procedural History, supra, stated, complainant has put in issue twelve utility patents and three design patents. In interpreting claims of utility patents, the administrative law judge should look to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and the prosecution history. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 116 S. Ct. 1384, (1996) (Markman). Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language. Vitronics Corp. v. Conceptor Inc., 90 F.3d 1576, 39 U.S.P.Q.2d 1573 (Fed. Cir. 1996) (Vitronics). Claims are construed in the same manner when determining both validity and infringement. W. L. Gore & Associates, Inc. v. Garlock, Inc., 842 F.2d 1275, 1279 (Fed. Cir. 1988), Southwall Technologies, Inc. v. Cardinal IG Co., 54 F.3d 1570, 1578 (Fed. Cir. 1995). Claims should also be interpreted to preserve, rather than defeat, their validity. ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577 (Fed. Cir. 1984).

The claim, specification and the file history constitute a public record of a claim, a record on which the public is entitled to rely and competitors are entitled to review, to apply the established rules of claim construction, and to ascertain the scope of a patentee's claimed invention. Words in a claim are generally given their ordinary and customary meaning, although a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, so long as the special definition of the term is clearly stated in the patent specification or file history. When there is still some genuine ambiguity in a claim, after

consideration of all available intrinsic evidence, extrinsic evidence may be resorted to in order to construe a claim. Vitronics, 90 F.3d at 1578, 1580. Extrinsic evidence consists of all evidence external to the patent and its prosecution history, including expert testimony, dictionaries and learned treatises. Markman 52 F.3d at 967. However, resort to dictionary definitions that contradict the file wrapper and specification is an improper technique of claim construction. Vitronics at 1580.

In connection with issues of claim interpretation of the claims in issue, only respondent Achiever of those respondents who appeared at the hearing, complainant and the staff raised issues of, and presented evidence on, claim interpretation during the hearing and in the posthearing submissions.<sup>4</sup> Moreover respondents Dynatec and Jazz affirmatively stated on the record that they were not contesting the interpretation of any claims in issue. (Tr. at 1834). In addition, as to certain claims in issue complainant, the staff and respondents PSI, Achiever and Argus agreed and stipulated as to the only disputed claim elements. (See SX-1).

It is only the disputed claim elements that are interpreted by the administrative law judge. See In the Matter Of Certain Digital Satellite System Receivers and Components Thereof, Inv. No. 337-TA-392, at 45, (October 20, 1997) (construing only those claims actually in dispute); In the Matter of Certain Hardware Logic Emulation Systems and Components Thereof, Inv. No. 337-TA-383, (July 31, 1997) (enumerating a series of disputed phrases and their construction); In the Matter of Certain Ion Trap Mass Spectrometers and Components Thereof, Inv. 337-TA-393 at p. 24-25 (February 25, 1998) (noting that much of a claim's language was not in dispute and

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<sup>4</sup> For PSI's Message Cameras manufactured by Achiever, PSI adopts and incorporates by reference the arguments and authorities set forth in Achiever's posthearing brief. (PSIBr at 1).

limiting discussion to two terms and a certain aspect of claim coverage).<sup>5</sup>

#### A. The '087 Patent

The '087 patent is based on U.S. Ser. No. 87,388 filed on August 20, 1987 (CX-3) which is the senior most U.S. application prosecuted among the U.S. applications underlying the patents in issue. Claims 1, 7, 8 and 15 in issue read:

1. A lens-fitted photographic film package having an externally operable member for effecting an exposure, comprising:

a light-tight film casing which must be destroyed to open the same, having an opening through which said exposure is made when said externally operable member is operated;

a removable light-tight film container having a film winding spool therein disposed on the opposite side of said opening in said light-tight casing from said rolled film, one end of said rolled film being attached to said film winding spool;

means for winding said rolled film into said light-tight film container and around said film winding spool; and

winding control means responsive to operation of said externally operable member for allowing said film winding spool to rotate so as to enable said rolled film to be advanced by only one frame after every exposure; said winding control means including:

a sprocket wheel driven by movement of said rolled film; and

a frame counter driven by said sprocket wheel, said frame counter being provided with indications designating a series of frame numbers and means for

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<sup>5</sup> This course of action has been sanctioned by the Court of Appeals for the Federal Circuit, which referring to In the Matter of Certain Hardware Logic Emulation Systems and Components Thereof, Inv. No. 337-TA-383 (July 31, 1997) stated "By agreement, the appeal turns on the proper construction of certain disputed terms in the three asserted claims. The operation and structure of the accused device are neither uncertain nor disputed. In sum we adopt the claim construction of the Commission which was correct and derived according to our case law on appropriate methodology." Mentor Graphics Co. v. United States International Trade Commission, 124 F.3d 226 (Fed. Cir. 1997).

disabling said winding control means responsive to said frame counter indicating there remains on said unexposed film no film frame capable of being exposed.

7. A lens-fitted photographic film package comprising:

a light-tight film casing which must be destroyed to open the same, having an opening through which an exposure is made;

a light-tight film container having a film winding spool therein disposed on one side of said opening in said light-tight film casing;

a rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container; one end of said spool being exposed outside said light-tight film casing;

a film roll of [un]exposed film<sup>6</sup> of which one end is attached to said film winding spool in said light-tight film container and which is rolled around said rotatable spool.

8. A lens-fitted photographic film package comprising a light-tight film casing which must be destroyed to open the same, and a rolled film contained in said light-tight film package, said light-tight film package comprising:

a front casing section provided with a lens opening, a finder frame opening, and engaging openings;

a middle casing section with its back open and containing said rolled film therein, said middle casing section having engaging lugs which engage with said engaging openings of said front casing section and holding a lens behind said lens opening between said front and middle casing sections; and

a rear casing section light-tightly closing said back of said middle casing section.

15. A lens-fitted photographic film package comprising:

a light-tight film casing, having an opening through which an exposure is made;

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<sup>6</sup> While claim 7 of the '087 patent reads "exposed film," the administrative law judge is interpreting the phrase as "unexposed film" in view of the fact that the file history shows that claim 36, which became patent claim 7, reads "unexposed film." See CPX-3, Response dated February 21, 1989 at 4.

a light-tight film container having a film winding spool therein disposed on one side of said opening in said light-tight film casing;

a rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container; one end of said spool being exposed outside said light-tight film casing;

a film roll of unexposed film of which one end is attached to said film winding spool in said light-tight film container and which is rolled around said rotatable spool. (Emphasis added).

In dispute among Fuji, Achiever, PSI, Argus and the staff is the phrase "a light-tight film casing" found in claims 1, 7, 8 and 15 supra. Also in dispute is the language "which must be destroyed to open the same" found in claims 1, 7 and 8 supra.

Complainant argued that in the specification of the '087 patent an LFFP "preferably" includes the packaging or cardboard wrapping and as such the packaging contributes to the light tightness of the lens fitted photographic film package and thus the term "light-tight film casing" should be given a broad interpretation that encompasses an LFFP that may have a cardboard cover, or may not have a cardboard cover, as a matter of design choice. (CBr at 32-33).

The staff argued that the '087 patent specifically describes an outer casing or packaging, relying on CX-3, col. 4, ll. 22-26. (SBr at 20). It is also argued that its "discussion" with respect to claim interpretation with regard to the '495 patent applies as well to the '087 patent. Id.<sup>7</sup>

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<sup>7</sup> As to the claims in issue complainant, the staff and respondents PSI, Achiever and Argus have agreed that certain disputed claimed language, of all the utility patents in issue, should be construed in the same manner for each patent in issue where the language appears in a claim in issue. See, SX-1, ¶ 27. Hence, for example, pursuant to said stipulation, if claimed language in  
(continued...)

Respondents Achiever and PSI argued that the claimed "light tight film casing" clearly refers to a container for loading film in a light tight environment, i.e. a body that prevents the unexposed film from being exposed to light except through the "opening through which an exposure is made," (referring to claim 7 of the '087 patent); that the light tight film casing can be formed by a front body section and a back cover section (ABr at 6); and that the "light tight casing" as used in claim 7 does not include an outer jacket or covering. (ABr at 11).

Each of claims 1, 7, 8 and 15 recite a lens fitted photographic film package "comprising" a light tight film casing. The term "comprising" denotes an open claim, which claim can include elements other than the recited elements. See e.g., Moleculon Research Corp. v. CBS Inc., 793 F.2d 1261, 229 U.S.P.Q. 805, 812 (Fed. Cir. 1986), (Moleculon) (when used in a transitional phrase, the word "comprising" is a term of art and means that the claim does not exclude additional, unrecited elements); and Dow Chemical Co. v. American Cyanamid Co., 615 F. Supp. 471, 484, 229 U.S.P.Q. 171, 180 (E.D. La 1985), aff'd 816 F.2d 617, 2 U.S.P.Q.2d 1350 (Fed. Cir. 1987), cert. denied 108 S. Ct. 1490 (1987) (Dow Chemical) (The term "comprising" permits the inclusion of other steps, elements or materials in addition to the elements or components specified in the claims). Furthermore, the specification of the '087 patent, with reference to "a first preferred embodiment" of the claimed invention shown in Fig. 1, as the staff argued, states "[t]he film package is preferably

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<sup>7</sup>(...continued)

dispute in the '495 patent is common to disputed claimed language of the '087 patent, and a decision has been made on the claimed language of the '495 patent, that decision is controlling for the same claimed language in the '087 patent. The administrative law judge, however, will consider the intrinsic evidence for each patent in issue independent of any other patent in issue, unless the other patent is a continuation, continuation in part or division of the first patent.

encased tightly in an outer casing or packaging, not shown, which is formed with several openings for exposing the taking lens 4, finder window 5, and shutter actuating member 6." (Emphasis added) (FF 83). Accordingly, in view of the "comprising" language in the claims in issue and the teaching of the specification of the '087 patent, the administrative law judge rejects the argument of Achiever and PSI that the claimed subject matter in issue should not include a lens fitted photographic film package which comprises a light tight film casing that has a cardboard cover. Rather, he interprets the claimed phrase "a light tight film casing" in each of claims 1, 7, 8 and 15 to encompass an LFFP that either may have an outer cardboard cover or may not have an outer cardboard cover.

Complainant, with regard to the "light tight film casing which must be destroyed to open same" language in claims 1, 7 and 8 argued that said language should be interpreted so as to differentiate an LFFP, which is intended for single use, from a conventional camera, which is designed to be readily opened and closed by a user and loaded and reloaded with film numerous times. (CBr at 34).

The staff argued that the destruction language "should be construed in the same manner as suggested for the '495 patent, as agreed by Fuji and Achiever as well." (SBr at 21).<sup>8</sup>

Respondents Achiever and PSI argued that claim 15 of the '087 patent is identical to claim 7 of said patent except for the disputed limitation "must be destroyed to open same"; that claim 15 is also directed to a lens fitted film package; that lens fitted photographic film packages are described in the background of the invention section of the '087 specification as

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<sup>8</sup> See fn. 7 supra.

being intended as one time use cameras, without any reference to the light tight film casing being destroyed; and that the "must be destroyed" limitation must mean something different than being an LFFP. (ABr at 8). Thus, it is argued that the "plain and clear" language of the claim limitation of claim 7 of the '087 patent in dispute requires a lens fitted film package that has, among other elements not in dispute, a light tight film casing that must be broken, fractured or otherwise damaged to the extent that it is incapable of achieving light tightness and thus operating as an LFFP when it is opened. (ABr at 8, 9). Achiever and PSI further argued that the specification and file wrapper of the '087 patent support the conclusion that the light tight film casing has to be broken, fractured or otherwise "destroyed" as a light tight film case. (ABr at 9-12).

It is clear from the plain language of claims 1, 7 and 8 as against claim 15 that while the former claims have the language "must be destroyed to open same," claim 15 does not have that language. It is also clear that applicants intended that said claim 15 not have that language. Thus in the prosecution, it was argued that claim 45, which became claim 15 of the patent, "does not require that the light tight film casing be destroyed to open same." (FF 111). The practice has been long recognized that "claims may be multiplied...to define the metes and bounds of the invention in a variety of different ways." Tandon Corp. v. U.S. Int'l Trade Comm'n, 4 U.S.P.Q.2d 1283, 1288, 1292 (Fed. Cir. 1987). Furthermore, the Federal Circuit has recognized that "where some claims are broad and others are narrow, the narrow claim limitations cannot be read into the broad whether to avoid invalidity or to escape infringement." Kalman v. Kimberly-Clark Corp., 218 U.S.P.Q. 781, 788 (Fed. Cir. 1983). Thus, claim 15 is separate from claims 1, 7 and 8 and the language of claim 15 is not read into

claims 1, 7 and 8 nor is the language of claim 15 used to define the scope of claims 1, 7 and 8.

Referring to the specification of the '087 patent, in describing the removal of the film patrone<sup>9</sup> from the light-tight case with respect to an embodiment of the claimed invention, the specification states:

It is desirable to provide a tab 38 which can be pulled to tear along a groove 37 by which an openable part of the bottom of the back cover 3 is defined. When the part defined by the groove 37 is torn off, an opening is provided through which the patrone 20 can be removed without detaching the back cover 3 from the main front body section 2. Thus forming an opening in the film package makes it impossible to reuse the film package. Therefore, it will be impossible to refill a new film into the used film package container in order to reclaim a film package for reuse. (Emphasis added)(FF 86).

The specification further, in describing assembly of the light-tight case and in connection with a third preferred embodiment of the invention as shown in Figs. 7-10, states:

Reference is now had to Figs. 7 to 10 showing another preferred embodiment of the lens fitted film package. The lens fitted film package 1 comprises a main body section 50, a back cover section 52, and a front cover section 51 which are all made of plastic materials. These sections are assembled into a light tight box shaped film container. As will be described in detail later, these sections are fixedly assembled after having loaded the film patrone 20 and a film 21 into the main body section 50. Therefore, the film patrone 20 and the film 21 can by no means be removed by the user." (Emphasis added) (FF 88).

The patent specification, in referring to a fourth embodiment of the claimed invention, also states:

In using the lens fitted film package thus compromised, after operating the shutter

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<sup>9</sup> Column 2, lines 46-48 of the '087 patent states "a 35-mm size film patrone already commercially available is preferably used for the light tight film container." Accordingly, unless otherwise noted, the administrative law judge equates the terms "patrone" and "light tight film container."

actuating member 120 to make an exposure, the film advancing knob 103 is rotated. As a result, as the spool 114 of the film container 110 is rotated in the clockwise direction as viewed in Fig. 13, the exposed film 21 is wound back into the light tight film container 110. Therefore, when the exposure of all the frames of the film 21 has been completed, the film is fully contained in the light tight film container 110. Consequently, the film container 110 can be removed by breaking or disassembling the film package even in daylight. " (Emphasis added) (FF 89).

The administrative law judge finds that said language of the specification supports the interpretation of the "destruction" language as describing an LFFP that after a single use has lost light-tightness upon removal of the film cartridge and which cannot be opened and reloaded by the user, like a conventional camera, but must be broken or disassembled in order to retrieve the used film.

In addition, in the prosecution of the '087 patent, original claim 36 which ultimately became claim 7 in issue (FF 108), read:

36. A lens-fitted photographic film package comprising:

a light-tight film casing having an opening through which an exposure is made;

a light-tight film container having a film winding spool therein disposed on one side of said opening in said light-tight film casing;

a rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container; one end of said spool being exposed outside said light-tight film casing;

a film roll of which one end is attached to said film winding spool in said light-tight film container and which is rolled around said rotatable spool. (FF 97).

In a Patent Office action mailed on June 6, 1988, claim 36 was rejected, along with claims 1-5 under 35 U.S.C. §102(b) as being anticipated by U.K. application Serial No. 2, 138, 580A or Hamada, U.S. Patent No. 3,896,467. (FF 99). The U.K. application disclosed a film winding mechanism for a conventional camera that could be unloaded and reloaded.

(FF 100). While the Hamada patent disclosed a compact camera which can be utilized without substantially requiring any skill in photography, the compact camera is exchanged at the camera shop by the user for a new camera or reloaded for the user by the camera shop. (FF 101). Following the June 6, 1988 Patent Office action, claim 36 in a response received by the Patent Office on September 6, 1988 was amended to read:

36. A lens-fitted photographic film package comprising:

a light-tight film casing which must be destroyed to open the same, having an opening through which an exposure is made;

a light-tight film container having a film winding spool therein disposed on one side of said opening in said light-tight film casing;

a rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container; one end of said spool being exposed outside said light-tight film casing;

a film roll of which one end is attached to said film winding spool in said light-tight film container and which is rolled around said rotatable spool. (Underline in original) (FF 103).

The "destruction" language was added to distinguish over the 580A U.K. application and the Hamada U.S. Patent. Thus in a response received by the Patent Office on September 6, 1988, the applicants remarked, with respect to amended claim 36:

It is noted that claims 35-38, as originally presented, did not require that the film casing must be destroyed in order to open the same. This omission has been corrected by the present amendment, so that these claims now contain the distinctive feature of allowed claim 6.

In view of the fact that we seek only to conform the remaining claims to those already allowed, it is not believed to be necessary to give an extended discussion of the applied references. Suffice it to say only that they do not disclose the combination of an obligatorily destructible film casing, with the various other features claimed. (Emphasis added) (FF 106).

Thus, the administrative law judge finds that the applicants used the language

"obligatorily destructible" in the context of distinguishing the claimed LFFP from the cameras which are disclosed in the UK 580A application and the Hamada patent and to describe the claimed LFFP as incapable of being reloaded by the user.<sup>10</sup> Therefore, the administrative law judge finds that the file history also supports the interpretation of the "destruction" language of claims 1, 7 and 8 as to describe an LFFP that cannot be loaded and reloaded like a conventional camera and which has lost its light-tightness upon removal of the film cartridge.

Based on the foregoing, the administrative law judge interprets the claim language "a light-tight film case which must be destroyed to open same" as describing an LFFP that, upon removal of the film cartridge, is distinguished from a camera that can be readily loaded and reloaded by a user and which camera has not lost its light-tightness upon removal of the film cartridge.<sup>11</sup>

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<sup>10</sup> Moreover, after the amendment was received on September 6, 1988, the prior art rejections of claim 36, which became patent claim 7 in issue, were not directed to the "must be destroyed" language. (FF 106, 107). Thus claim 36 was thereafter only rejected on the Heyer et al. U. S. Patent No. 2, 612, 092. (FF 106, 107). However, the applicants were then successful in their argument that there was no light tight film container in Heyer et al. (FF 108).

<sup>11</sup> Complainant and respondents Achiever, PSI and Argus as well as the staff, in their stipulation (SX-1 at ¶ 10), stated that:

the only disputed claim element in claim 15 of U.S. Patent No. 4, 884, 087 is 'a rotatable spool disposed on the opposite side of said opening in said light tight film casing from said light tight film container; one end of said spool being exposed outside said light tight film casing.'

However, complainant's counsel at the Prehearing Conference (Tr. at 126 to 128) agreed with the staff's statement that "I don't think there really are any arguments as to the meaning of those words." Thus, the administrative law judge finds that there is no claim interpretation issue with respect to claim 15 of the '087 patent.

means for forcing said film to be curved in an S-curve between said film passage and said slot of aid film container upon said film being advanced.

9. A lens-fitted photographic film package having exposure effecting means and taking lens comprising:

a light tight film case;

a film which is formed in a roll and contained in a film roll chamber of said light tight film case;

a film container received in said light tight film case into which said film, after exposure, is advanced frame by frame and wound in a roll; and

means to exert a frictional force on said film upon said film being advanced,

said means comprising a friction applying member formed to deflect the film from a path along which said film would otherwise pass, said member being a projection that directly contacts said container within which said film is wound in a roll.

11. A lens-fitted photographic film package having exposure effecting means and a taking lens comprising:

a light tight film case;

a film which is formed in a roll and contained in a film roll chamber of said light tight film case;

a film container disposed in a film container chamber of said light tight film case and having a film slot through which said film, after exposure, is wound in a roll into said film container;

a film passage formed between said film roll and film container chambers; and

means for forcing said film to be curved in an S-curve between said film passage and said slot of said film container upon said film being advanced,

said forcing means comprising a projection which abuts against said film container to incline said film slot of said film container.. (Emphasis added).

In dispute among Fuji, Achiever, PSI and the staff is the phrase "a light tight film case" found in claims 1, 5, 6, 9 and 11 supra. Also in dispute is the language "which must be

## B. The '495 Patent

The '495 patent is based on U.S. Ser. No. 111, 416 filed on October 20, 1987 (CX-1) which is the second U.S. application prosecuted among U.S. applications underlying the patents in issue. Claims 1, 5, 6, 9 and 11 in issue read:

1. A lens-fitted photographic film package having means for effecting an exposure and a taking lens, which comprises a light-tight film case which must be destroyed to open the same, a film in the form of a roll light-tightly contained in said light-tight film case, and a film container in which exposed film is wound; the improvement in which said light-tight film case has a film roll receiving chamber to receive therein said film light-tightly and said film roll receiving chamber has upper and lower projections formed on an inner surface thereof for supporting an outermost convolution of said film in the form of a roll at its upper and lower sides.

5. A lens-fitted photographic film package having exposure effecting means and a taking lens comprising:

a light-tight film case which must be destroyed to open the same;

a film which is formed in a roll and contained in a film roll chamber of said light-tight film case;

a film container received in said light-tight film case into which said film, after exposure, is advanced frame by frame and wound in a roll; and

means to exert a frictional force on said film upon said film being advanced.

6. A lens-fitted photographic film package having a exposure effecting means and a taking lens comprising:

a light-tight film case which must be destroyed to open the same;

a film which is formed in a roll and contained in a film roll chamber of said light-tight film case;

a film container disposed in a film container chamber of said light-tight film case and having a film slot through which said film, after exposure, is wound in a roll into said film container;

a film passage formed between said film roll and film container chambers; and

destroyed to open same" found in claims 1, 5 and 6 supra. Furthermore, Fuji, Achiever, PSI and the staff, in their prehearing statements, disputed the claim language directed at exerting a frictional force found in claims 5, 6, 9 and 11 supra.<sup>12</sup>

Referring to the claimed term "a light tight film case", the complainant argued that in the specification of the '495 patent an LFFP "preferably" includes the packaging or cardboard wrapping and as such the packaging contributes to the light tightness of the lens fitted photographic film package and thus the term "light-tight film casing" should be given a broad interpretation that encompasses an LFFP that may have a cardboard cover, or may not have a cardboard cover, as a matter of design choice. (CBr at 32-33, CRBr at 3-4).

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<sup>12</sup> Neither Fuji, Achiever nor PSI addressed claim interpretation with regard to the "means for exerting a frictional force" language in their post hearing submissions. The staff argued that the dispute concerning the "means to exert a frictional force" language was resolved by the parties' stipulation. (SBr at 16). The stipulation (SX-1) at paragraphs 24-26, states:

24. Each Achiever camera having no means to exert a frictional force on said film upon said film being advanced, as represented for example by CPX 668 and RPX ACH 1, does not infringe claim 5 of U.S. Patent No. 4, 833, 495.

25. Each Achiever camera having one or more projections over the film cartridge, such as those projections designated by letter "P" in CPX 46A and CPX 47A and represented for example by RPX PSI4, infringes claim 6, 9 and 11 of U.S. Patent No. 4, 833, 495.

26. Each Achiever camera that does not have one or more projections over the film cartridge, such as those projections designated by the letter "P" in CPX 46A and CPX 47A, represented for example by all of the exhibits listed in Paragraph 1 above except RPX PSI 4 does not infringe claim 6, 9 and 11 of U.S. Patent No. 4, 833, 495.

The administrative law judge agrees with the staff and finds that there is no interpretation dispute concerning the "means to exert a frictional force" claim language.

Respondents Achiever and PSI did not specifically address in their posthearing submissions the "light tight film casing" language of the claims of the '495 patent.<sup>13</sup>

The staff argued that, although there is evidence that the outer cover contributes to the light tightness, a condition which was recognized in the prior art (citing Prontor ROCX-126), the staff found no suggestion in the '495 patent itself that an outer paper cover is considered part of the light tight case. (SBr at 16).

Each of claims 1, 5, 6, 9 and 11 recite a lens fitted photographic film package "comprising" a light tight film casing. The term "comprising" denotes an open claim, which claim can include elements other than the recited elements. See e.g., Moleculon and Dow Chemical, supra. Furthermore, the specification, with reference to a perspective view of the lens-fitted photographic film package of the invention, shown in Fig. 1, states "The film package is preferably encased tightly in an outer case, not shown, which is formed with several openings for exposing the taking lens 4, finder window 5, and shutter actuating member 6 and is made of printable cardboard or printable plastic sheet material." (Emphasis added) (FF 119). Accordingly, in view of the "comprising" language in the claims in issue and the teaching of the specification, the administrative law judge interprets the claimed phrase "a light tight film casing" as encompassing an LFFP that either may have an outer cardboard cover or may not have an outer cardboard cover.

Complainant, with regard to the "light tight film casing which must be destroyed to open same" language, argued that said language should be interpreted so as to differentiate an

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<sup>13</sup> However, Achiever and PSI relied on arguments made concerning interpretation of the claims in issue of the '087 patent for interpretation of the claims in issue of the '495 patent.

LFFP, which is intended for single use, from a conventional camera, which is designed to be readily opened and closed by a user and loaded and reloaded with film numerous times. (CBr at 34). Complainant further argued that the interpretation of the "destruction" language should be interpreted the same for every claim in which that phrase appears, including not only the claims in issue in the '495 patent but the claims in issue of any other patent in issue.

Respondents Achiever and PSI argued that the interpretation given to this phrase as determined from a review of the claims, specification and prosecution history of the first application (the '087 patent) in which the patentee chose to use the claim limitation governs all subsequent uses of the element. (ABr at 5).

The staff argued that, in light of the patent specification and file history, the language "light tight film casing which must be destroyed to open same" does not require that the case be damaged completely beyond any further useful purpose; that the intent of the patentee was to distinguish over conventional cameras with doors that open and close repeatedly, without damage, to allow regular film retrieval and replacement by the user; that the destruction of the case contemplated in the patent relates to the light tightness of the case, which is jeopardized due to the damage caused by opening the case, especially by an end user without proper tools, and that the proper construction of the "destruction" language should be that it requires a loss of light tightness when the case is opened and attempted to be reclosed by a typical user.

The specification of the '495 patent, in the background of the invention, states:

As the lens-fitted photographic film package has no conventional back cover for allowing loading and unloading a film and no complex exposure control mechanism, a low manufacturing cost has been achieved. The lens-fitted photographic film package, after the exposure of all frames of the film, is forwarded to a photo shop or a photo laboratory without removing the film. There, the exposed film is removed by breaking

open the film package and then developed to make prints therefrom while the film package without film is scrapped. The prints together with the film are returned to the customer. The lens-fitted photographic film package makes it easy to take pictures because there is no film loading and unloading. (Emphasis added). (FF 120).

The specification also describes a perspective view of the lens-fitted photographic film package of the present invention, shown in Fig. 1, and states "The rear case section 3 is fixed to the front case section 2 in any well known manner, for example by ultrasonic welding, so as not to be separable by the user." (FF 121). The specification describes the manner in which the film patrone is removed from the LFFP by using a dismantling jig to detach the rear case section from the front case section, and also describes an alternative construction for the removal of the film patrone from the LFFP. Thus it states:

It is desirable to provide an openable portion 40 in the bottom wall of the rear case section 3. This openable portion 40 is defined by a circular groove 37 formed in the inner surface of the bottom wall of the rear case section 3 and is easily breakable along the groove 37. The openable portion 40 is broken from the rear case section 3 to form an opening in the bottom wall of the rear case section 3 so as to allow the film patrone 20 to be removed easily. For easy breaking of the openable portion 40, there is provided a tab 38, disposed in a recess 41 formed in the bottom wall of the rear case section 3. When the tab 38 is pulled, the openable portion 40 of the bottom wall of the rear case section 3 is easily broken and torn off along the groove 37, providing the opening through which the film patrone 20 can be removed without detaching the rear case section 3 from the front case section 2. The forming of this opening in the light tight case of the film package 1 prevents the light tight film case from being reused. In this way, the user is prevented from reusing the film case; and this in turn avoids the poor exposures that would result from such reuse. (Emphasis added) (FF 123).

In addition, in the prosecution history of the '495 patent, original claims 3, 20 and 21, which became patent claims 1, 5 and 6 respectively, were rejected by the Patent Office. (FF 125). In response to the rejection of original claims 3, 20 and 21, the applicants argued:

Claims 3 and 4 have also been amended to sharpen their definition of the invention relative to the cited references. What is disclosed in Watanabe and Wallace 2,566,267 is not a lens-fitted film unit of which the film casing must be destroyed to remove a

film, but only a conventional camera. In particular, Wallace discloses a sprint-metal sheath that is provided with two pads and receives therein a film rolled on a spool (refer to the description at column 3, lines 66-73). This spring sheath serves as a magazine and therefore by no means teaches the feature of novelty of claim 3.

As to claims 20 and 21 [became patent claims 5 and 6], Wong et al 4,455,074 discloses a pre-wind camera of the type having a camera back cover which can open and close. Therefore, these claims have been amended to require the light-tight film casing to be destroyed to open the same. (Emphasis added) (FF 127).

After the response, the Examiner allowed the claims at issue, among other claims. (FF 128, 129).

Based on the specification and the prosecution history, the administrative law judge interprets the claim language "a light-tight film case which must be destroyed to open same" as describing an LFFP that after a single use upon removal of the film cartridge has lost light-tightness and is distinguished from a conventional camera that can be readily loaded and reloaded by a user and which conventional camera has not lost its light-tightness when so loaded and reloaded.<sup>14</sup>

### C. The '774 Patent

The '774 patent is based on U.S. Serial No.127, 286 filed on December 1, 1987 which is the third U.S. application filed of the underlying patents in issue. (CX-2). Claims 14 and 15 in issue read:

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<sup>14</sup> The complainant argued that Japanese priority documents from which the '495 patent claims priority support the interpretation of the destruction language as distinguishing an LFFP from a conventional camera. The administrative law judge does not consider priority documents to be intrinsic evidence. See Personalized Media Communications, LLC v. International Trade Commission, 48 U.S.P.Q.2d 1880 (Fed. Cir. 1998). Moreover, in view of the intrinsic evidence, he finds the priority documents, assuming they support the language of claims in issue, unnecessary for claim interpretation.

14. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber, and a back wall portion that closes said two chambers, said rolled film chamber having a rearwardly opening concave curved wall against which the outermost turn of the rolled film lies, said back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers, said back wall portion having a forwardly opening concave curved portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film and maintains said rolled film in a substantially cylindrical roll.

15. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber, and a back wall portion that closes said two chambers, said rolled film chamber having a rearwardly opening concave curved wall against which the outermost turn of the rolled film lies, said back wall portion having a forwardly opening concave curved portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film and maintains said rolled film is [sic] a substantially cylindrical roll. (Emphasis added).

In dispute among Fuji, Achiever, PSI and the staff is the language:

said back wall portion having a forwardly opening concave curved portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film and maintains said rolled film is [sic] a substantially cylindrical roll [hereinafter "concave curved portion"]

found in claims 14 and 15 supra. (SX-1, Paragraph 20).

Complainant argued that the appropriate interpretation of the concave curved portion of the limitation of claims 14 and 15 of the '774 patent is one that encompasses a curved surface facing or overlying the film roll chamber that contacts and supports the film to keep it from

becoming deformed while in the film roll chamber and as the film is unwound from the film roll chamber; that a proper interpretation of the claim encompasses a limitation which includes a support structure that is so constructed as to avoid distortion of the film as it is unwound from the fill chamber; that the structure contacts the film roll at a point spaced from the edges as appropriate to avoid this distortion; and that, therefore, a structure that incorporates a concave curved surface overlying the film roll chamber which contacts the film at a point spaced from the film edges and that maintains the film in a substantially cylindrical roll, whether only as needed during deformation of the film or for the entire time the film resides in the film roll chamber, would come within the scope of the concave curved portion claim element at issue in claims 14 and 15 of the '774 patent. (CBr at 40).

Respondents Achiever and PSI argued at the prehearing conference that the elements in the claims should be construed to require that the concave curved portion have sufficient width to guide and support the film roll over some substantial region away from the edges of the film. (Tr. at 115-116).

Furthermore, with respect to the concave curved portion, Achiever and PSI, in their posthearing briefs, argued that it is clear from the plain language of the claim element in issue that forwardly opening concave curved portion must be provided by the back wall portion of the camera; that the claim further requires that this concave curved portion support three limitations, viz., (1) "that overlies said rolled film chamber", (2) "that contacts and supports the rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film", and that (3) "that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film and maintains said

rolled film is (sic) a substantially cylindrical roll" (ABr at 9) (Tr. at 4221).

The staff argued that the plain language of the claims 14 and 15 read in light of the specification simply requires that the back wall portion have a concave curved portion overlying the film chamber that contacts and supports the rear of the film emerging from the film roll at regions of the film spaced from the longitudinal edges of the film. (SBr at 18).

The administrative law judge finds, based on the language of the claims in issue, the specification and the prosecution history of the '774 patent, that a proper interpretation of the claimed "concave curved portion" encompasses a limitation which includes a concave curved support structure that is so constructed as to avoid distortion of the film as it is unwound from the film chamber and which structure contacts the film at a point spaced from the edges as appropriate to avoid this distortion. Thus the specification of the '774 patent, in the Summary of the Invention section and with reference to a preferred embodiment of the invention states:

reinforcing ribs are provided on an inner side of the back wall of the film case of the film package. In this case, the reinforcing ribs extend in the direction of advance of the film and serve as a reinforcing means not only to avoid deformation of the film but also to support accurately the film in the correct exposure position. (Emphasis added) (FF 151).

The Summary of the Invention, with reference to another embodiment of the invention, also states: "[t]he reinforcing member is in the form of a tongue like platform by which two sections of the film cases are connected." (FF 151). Furthermore, the specification states:

On the inner surface of the back wall of the rear case section 3, there is provided a plurality of reinforcing ribs 18 formed integrally with the back wall as is shown in detail in Fig. 3. The reinforcing ribs 18 extend lengthwise over the back wall, preventing the rear case from being deformed by an external force. Each reinforcing rib has a gently concavely curved front surface 18a shaped complementarily to the shape of the curved film guiding and supporting tracks 15. The reinforcing ribs 18, when the rear case section 3 is attached to the front case section 2, gently press the film

26 extending between the film roll 23 and the film patron 20 against the supporting tracks and finally hold the film 26 in cooperation with the supporting tracks 15. In this way, the film 26 is held stably in the exposure position without shifting vertically and/or waving over the exposure frame 10. (Emphasis added) (FF 152).

Also the specification, in describing a cross sectional view of the lens-fitted photographic film package, shown in Fig. 4 (FF 153), states that "As can be seen in Fig. 4, since the curved ribs 18 support the film roll 23 in the chamber 11 from the rear, the film roll 23 is not substantially deformed from its cylindrical shape." (Emphasis added) (FF 154). In addition the specification states "Inside the back wall 93 of the rear case section 52 is a portion 98 having a curved surface for supporting the film 21 thereon and guiding it therealong." (FF 155). In describing an exploded perspective view of the lens-fitted photographic film package (FF 156), the specification states:

As best seen in Fig. 6, at either end of the portion 98 of rear case section 52 there are concave portions that face forward and overlie and rearwardly close the chambers 55 and 56 and, in the case of film roll chamber 56, maintain the film roll in its cylindrical configuration, as described above in connection with chamber 11. (Emphasis added) (FF 157).

Thus the administrative law judge finds that it is clear from the language of the specification that the specification is limited only to the extent that the claimed structure has a concave curved support structure that is designed to support the film as it emerges from the roll and to maintain the roll in a substantially cylindrical shape.

Referring to the prosecution of the '774 patent, original claims 25 and 26, which ultimately became claims 14 and 15, read:

25. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the

outermost turn of the rolled film lies, said back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that supports the rear of the film emerging from said roll and that in cooperation with said rearwardly opening concave wall of said rolled film chamber maintains said rolled film in a substantially cylindrical roll.

26. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that supports the rear of the film emerging from said roll and that in cooperation with said rearwardly opening concave wall of said rolled film chamber maintains said rolled film in a substantially cylindrical roll. [FF 138]

Original claims 25 and 26 were rejected as being unpatentable over B.R. Dutch 6, 708, 486 in view of British 453, 817 (Wolf) and Caviness (U.S. Patent No. 4, 329, 037). Thus, the Examiner stated "to provide the film guide in B.R. (Fig. 2) with arcuate ribs as suggested at 20 in Caviness (Figs. 2 and 3) and 10, 2 in Wolff (Fig. 3), if desired, would be obvious to one of ordinary skill in the art having these references before him." (FF 143). Thereafter, original claims 25 and 26 were amended to distinguish B.R. (Dutch 6, 708, 486) and Wolf and Caviness. (FF 144). The Patent Office again rejected original claims 25 and 26 based on the same references as were cited in the previous rejection. (FF 147). Subsequently, the applicants again amended claims 25 and 26 to read:

25. (twice amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that contacts and supports the

rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film maintains said rolled film in a substantially cylindrical roll.

26. (twice amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said to chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film maintains said rolled film in a substantially cylindrical roll. (Underlined material represents amended language) (FF 148).

In connection with the amendment, the applicants stated:

In a nutshell: the weakness of the rejection is CAVINESS, and the claims have now been amended so as clearly to avoid CAVINESS.

As was pointed out in the previous amendment, CAVINESS discloses a structure in which the film is stationary, and so the edges 63 shown in Fig. 7 never contact a moving film. They serve as a film support, but not as a film guide. However the latest official action takes the position in effect that this is an insufficient distinction over CAVINESS.

Very well, we now make a sufficient distinction by reciting a positive relationship of parts that cannot be found in CAVINESS. Specifically, we now recite (claim 1) that there are a plurality of ribs spaced from the longitudinal edges of the film and in contact with portions of the film that are spaced from said longitudinal edges of the film. We now also recite (claims 25 and 26) that the back wall portion has a forwardly-opening concave, curved portion that overlies the rolled film chamber and that contacts and supports the rear of the film emerging from the roll at regions of the film spaced from the longitudinal edges of the film.

Why is this a structural distinction? Because in CAVINESS, the edges 63 are shown with such a spacing that they contact only the side edges of the film and that do not contact regions of the film spaced from those side edges. (FF 149). (Emphasis added).

Thus the administrative law judge finds that the file history also supports a claimed concave

curved support structure that contacts the film emerging from the roll at regions of the film spaced from the longitudinal edges.

Based on the foregoing, the administrative law judge finds that a proper interpretation of the claimed "concave curved portion" encompasses a limitation which includes a concave curved support structure that is so constructed as to avoid distortion of the film as it is unwound from the film chamber and which structure contacts the film at a point spaced from the edges as appropriate to avoid this distortion.

#### **D. The '857 Patent**

The '857 patent is based on U.S. Serial No. 409, 420 filed on September 19, 1989, the fifth application prosecuted among the applications underlying the patents at issue, and a division of Application Serial No. 087, 388 which became the '087 patent. Claims 1, 19 and 22 in issue read:

1. A lens-fitted photographic film package having an externally operable member for effecting an exposure, comprising:

a light-tight casing having an opening through which said exposure is made when said externally operable member is operated;

a roller [sic - rolled<sup>15</sup>] unexposed film disposed on one side of said opening in an unexposed film roll receiving chamber in said light-tight casing with its outermost turn exposed to side walls of said chamber and its innermost turn surrounding an empty space;

a removable light-tight film container having a film winding spool therein disposed on the opposite side of said opening in said light-tight casing from said

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<sup>15</sup> While patent claim 1 reads "roller unexposed film", the administrative law judge is interpreting the phrase as "rolled unexposed film" in view of the fact that the claim reads "rolled unexposed film" in the file history. CPX-4, '857 file history, Preliminary Amendment dated September 19, 1989 at 2.

rolled film, one end of said rolled film being attached to said film winding spool;

means for winding said rolled film into said light-tight film container and around said film winding spool; and

means defining a film passage in said light-tight casing, wherein said light-tight casing must be destroyed to expose said film passage.

19. A lens-fitted photographic film package having an externally operable member for effecting an exposure, comprising:

a light-tight film casing having an opening through which said exposure is made when said externally operable member is operated;

an [un]exposed<sup>16</sup> rolled film disposed on one side of said opening in said light-tight casing;

a removable light-tight film container having a film winding spool therein disposed on the opposite side of said opening in said light-tight casing from said rolled film, one end of said rolled film being attached to said film winding spool;

means for winding said rolled film into said light-tight film container and around said film winding spool; and

winding control means responsive to operation of said externally operable member for allowing said film winding spool to rotate so as to enable said rolled film to be advanced by only one frame after every exposure; said winding control means including:

a sprocket wheel driven by movement of said rolled film;

a frame counter driven by said sprocket wheel, said frame counter being provided with indications designating a series of frame numbers and means for disabling said winding control means responsive to said frame counter indicating there remains on said unexposed film no film frame capable of being exposed; and

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<sup>16</sup> While the patent claim reads "exposed", the administrative law judge is interpreting the phrase as "unexposed" in view of the fact that the claim reads "unexposed" in the file history. CPX-4, '857 file history, Preliminary Amendment dated September 19, 1989 at 3.

means defining a film passage in said light-tight casing, wherein said light-tight casing must be destroyed to expose said film passage.

22. A lens-fitted photographic film package comprising:

a light-tight film casing having an opening through which an exposure is made;

a light-tight film container having a film winding spool therein disposed on one side of said opening in said light-tight film casing;

a rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container; one end of said spool being exposed outside said light-tight film casing;

a film roll of unexposed film of which one end is attached to said film winding spool in said light-tight film container and which is rolled around said rotatable spool; and

means defining a film passage in said light-tight casing, wherein said light-tight casing must be destroyed to expose said film passage. (Emphasis added).

In dispute among Fuji, Achiever, PSI, Argus and the staff is the phrase "wherein said light tight casing must be destroyed to expose said film passage" found in claims 1, 19 and 22 supra.

Complainant argued that said language should be interpreted so as to differentiate an LFFP, which is intended for single use, from a conventional camera, which is designed to be readily opened and closed by a user and loaded and reloaded with film numerous times. (CBr at 34). Complainant also argued that the prosecution history of the '857 patent supports this interpretation. (CBr at 37).

The staff argued that the '857 patent is a division of the '087 patent and as such, the interpretation given to the "destruction" language of the '087 patent is appropriate for the '857 patent.

Respondents Achiever and PSI did not specifically address the claim interpretation issues of the '857 patent but relied on their interpretation of the "destruction" language of the '087 patent. (ABr at 5).

In the claim interpretation of the parent '087 patent, the administrative law judge found the claim language "a light tight film case which must be destroyed to open same" as describing an LFFP that, upon removal of the film cartridge, is distinguished from a camera that can be readily loaded and reloaded by a user and which camera has not lost its light tightness upon removal of the film cartridge. The administrative law judge finds that the prosecution of the '857 patent supports that original interpretation. Thus, original claim 6 of the '857 patent, which ultimately became patent claim 1, was amended to read:

6. A lens fitted photographic film package having an externally operable member for affecting an exposure, comprising:

A light tight casing [which must be destroyed to open same,] having an opening through which said exposure is made when said externally operable member is operated;

a rolled unexposed film disposed on one side of said opening in an unexposed film roll receiving chamber in said light tight casing with its outermost turn exposed to side walls of said chamber and its innermost turn surrounding an empty space;

a removable light tight film container having a film winding spool therein disposed on the opposite side of said opening in said light tight casing from said rolled film, one end of said rolled film being attached to said film winding spool; [and]

means for winding said rolled film into said light tight film container and around said film winding spool; and

means defining a film passage in said light tight casing, wherein said light tight casing must be destroyed to expose said film passage (Underlined material represents amended language) (FF 194).

In connection with this amendment the applicants argued:

At the conclusion of the prosecution of 07/087, 388 the Examiner inquired how the subject matter of claim 6 is unobvious in view of any of the SRL (sic. SLR (Single Reflex Lens)) cameras in which the unexposed film is fully withdrawn from the cartridge prior to the first exposure, and then is rewound into the cartridge one frame at a time.

The answer to that question is as follows:

The present invention is in the filed of lens fitted photographic film packages having a light tight casing which must be destroyed to open same. Such packages are what might be called single use packages, because the customer receives them pre-packaged, with film in place ready to make the first exposure; and when all of the exposures are made, the customer turns in the package, which is opened only at that time and in due course receives the developed film. To take more pictures, the customer buys another package, and so on.

These packages are not cameras that are opened to insert the film and having a motor that winds out the unexposed film when the loaded camera is closed, and in which the user again opens the camera to remove the cartridge with the exposed film rewound into it. Such cameras have complicated and hence costly structure, and are not practical unless used for a long period of time with many successive rolls of film. (Emphasis added) (FF 195).

Thus, the administrative law judge finds that the prosecution history supports the finding that the "destruction" language to describe an LFFP as distinct from a conventional camera that the user opens to retrieve the film cartridge and reloads with unexposed film and which conventional camera has not lost its light tightness upon removal of the film cartridge.

#### **E. The '400 Patent**

The '400 patent is based on U.S. Ser. No. 454, 972 filed on December 22, 1989, and was the sixth U.S. application prosecuted among the U.S. applications underlying the patents in issue. Claim 14 in issue read:

14. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, a separate empty light-tight film cartridge having a spool therein rotatable about an axis of rotation, said film cartridge being enclosed in said light-tight film case on one side of said lens, an unexposed rolled film with its one end

retained on said spool in said film cartridge, said unexposed rolled film being disposed on the other side of said taking lens with its outermost turn in contact with said film case, said light-tight film case comprising a main case section which has a film cartridge receiving chamber with an opening at its bottom for removably receiving said film cartridge and a rolled film receiving chamber for receiving said rolled film, a rear case section which is securely fixed to the rear side of said main case section and cannot be disassembled therefrom, and a third member sealing said opening at the bottom of said film cartridge receiving chamber, said third member being disposed only on said one side of said lens in alignment with said axis and openable to expose said opening of said film cartridge receiving chamber so as to allow said film cartridge to be removed, said film package being devoid of means for advancing a film rolled on a said cartridge from said one side of said lens into a rolled configuration on said other side of said lens, wherein said third member is covered by an outer cover that covers also at least a portion of said light-tight film case. (Emphasis added).

In dispute among Fuji, Achiever, PSI and the staff is the phrase "a rear case section which is securely fixed to the rear side of said main case section and cannot be disassembled therefrom" found in claim 14 supra.

Complainant argued that the language of said phrase should be interpreted to mean a back cover that is so designed as to prevent or discourage the user from opening the back, as one would a conventional camera, for removing the film; and that, therefore, the user is discouraged from opening the back by providing secure means of affixation of the rear cover, as opposed to a simple latch and hinge mechanism as found on a conventional camera. (CBr at 41).

The staff argued that the claim language should be construed to include a method of affixation, such as the snap-fit arrangement shown in the Prontor patent, which allows separation of the back cover, but that such separation could cause damage to the camera; and that the claim limitation does not require the breaking or fracturing of welds. (SBr at 26-27, SRBr at 3-4).

Respondents Achiever and PSI argued that the phrase language should be interpreted such that it requires light tight film case sections that are securely fixed to each other in such a manner, e.g. by ultrasonic welding, that their separation would break or damage the light tight case so that it could not be reused as a light tight film case. (ABr at 12-13, ARBr at 8-9).

The administrative law judge rejects Achiever's and PSI's argument that the rear case section has to be secured by ultrasonic welding. (ABr at 13, ARBr at 8, Tr. at 4219-4220). While it is true that the disclosed embodiments of the specification only teach attachment by ultrasonic welding (FF 200, 201, 202), the particular embodiments appearing in the written description will not be read into the claims when the claim language is broader than such embodiments. See Electro Medical Systems S.A. v. Cooper Life Sciences Inc., 32 U.S.P.Q.2d 1017, 1021 (Fed. Cir. 1994); see also Specialty Composites v. Cabot Corp., 6 U.S.P.Q.2d 1601, 1605 (Fed. Cir. 1988). In the Summary of the Invention section the specification of the '400 patent states "The two case sections are fixedly attached to each other in any well known manner, for example by means of ultrasonic welding, so as not to be separable." (FF 203) (Emphasis added). Thus the specification uses the language "in any well known manner" and then further provides ultrasonic welding as an example of a well known manner. Accordingly, the administrative law judge finds that there are alternative means of fixedly attaching the rear cover.

The administrative law judge also rejects Achiever's and PSI's argument that the phrase "cannot be disassembled therefrom" is absolute and that therefore the rear case cannot be removed without breaking or damaging the light tight film case such that it cannot be used as a light tight film case. (Tr. at 4219-4220). The specification's Summary of the Invention, after

describing attachment in any well known manner, goes on to state "This inseparable light tight film case forces users to avoid any reuse of the lens-fitted photographic film package after the removal of the film." (Emphasis added) (FF 203). The specification, with reference to Figs. 10-14, also states:

Reference is now had to Figs. 10-14 showing another preferred embodiment of the film package 1B. The lens-fitted film package 1B comprises a middle case section 50, a front case section 51, and a rear case section 52 which are all made of plastic materials. These sections 50, 51, 52 are assembled into an integral light tight box shaped film case. As will be described in detail later, these sections 50, 51 and 52 are fixedly assembled after having loaded an empty film patronne 20 and a film 21 in the middle case section 50. Therefore, the film patronne 20 and the film 21 cannot be removed by the user. (Emphasis added). (FF 200).

In addition, the file history shows that alternative manners of attaching the rear case sections were known in the art. For example, in the file history, the Examiner, in discussing the Prontor patent, described the main case section 1 and rear case section 2 of Prontor to be securely fixed together and unable to be disassembled without destroying the light-tight case. (CPX-6, Office Action dated 7/23/90 at 3). This statement that Prontor already disclosed the "securely fixed" claim element was not disputed by Fuji during prosecution. Prontor does not require welding, but instead the specification describes an alternative method of securely attaching the rear case section, viz., a "particularly inextricable connection of the housing parts may be achieved by the fact that one of the housing parts at least has two hook-shaped extensions and the other housing part two recesses serving to receive the hook ends." (FF 204). Furthermore, the Prontor specification states "The object of this arrangement is in the first place to prevent the magazine from being opened accidentally and ensure that the film material can be removed therefrom in a darkroom after destroying the magazine." (Emphasis

added) (FF 205). Thus, the administrative law judge finds that the purpose of "securely fixed" element of the Prontor patent was directed at the user, such that the user would not accidentally open the housing sections.

The administrative law judge rejects respondents Achiever's and PSI's argument that the Examiner gave the "securely fixed and cannot be disassembled therefrom" language the same meaning as the "must be destroyed language". (ABr at 12-13). Claim 14 of the '400 patent issued from originally numbered claim 44. (FF 207, 216). Original claim 44 descended from original claim 27 through a series of Amendments. (FF 208, 209, 210). Original claim 27 did not contain any "must be destroyed" language. (FF 210). However, claim 31, another claim added via Preliminary Amendment at same time as claim 27, did contain the "must be destroyed" language. (FF 211). In the July 23, 1990 Office Action, relied upon by Achiever, the Examiner's arguments related to the must be destroyed language are directed at claim 31 which ultimately lead to claim 16 of the issued patent, not at claim 27 as propounded by Achiever. (FF 212). Concerning the rejection specific to claim 27 which contained no "must be destroyed" language it is clear that no arguments were made vis-à-vis the destructibility of the light-tight case. (FF 213, 214).

Also, the administrative law judge finds no arguments related to destructibility were advanced in connection with claim 27 in the further Amendment dated February 4, 1991. (FF 214). In the Amendment After Final Rejection in which Fuji's patent attorney re-wrote dependent claim 37 in independent form as claim 44, no "must be destroyed" language was presented. (FF 215). Claim 44, which was subsequently allowed, issued as claim 14. (FF 216). The "must be destroyed" language was, however, maintained in new claim 46, which

descended from claim 31 (FF 215), and which issued as claim 16. (FF 216). Thus the Examiner allowed claim 14, which contained the language "securely fixed", and claim 16, which contained the "must be destroyed" language, simultaneously. (FF 216). Thus, the administrative law judge finds that the Examiner did not attribute the meaning of the "must be destroyed" language of claim 16 to the "securely fixed" language of claim 14. Hence the administrative law judge finds that the file history supports the interpretation of claimed phrase as describing the attachment of the rear case section, in any well known manner, including but not limited to ultrasonic welding, such that the rear case is sufficiently secure to discourage a user from removing the rear cover in order to reload the LFFP with new film like a conventional camera.

Based on the specification and the file history as set forth in the foregoing, the administrative law judge interprets the language "a rear case section which is securely fixed to the rear side of said main case section and cannot be disassembled therefrom" as describing the attachment of the rear case section, in any well known manner, including but not limited to ultrasonic welding, such that the rear case is sufficiently secure to discourage a user from removing the rear cover in order to reload the LFFP with new film like a conventional camera.

#### **F. The Re '168 Patent**

The Re '168 patent is based on U.S. Ser. No. 689, 000 filed on April 12, 1991 (CX-12) and was the seventh application prosecuted among the U.S. applications underlying the patents in issue. Claim 1 in issue reads:

1. A lens-fitted photographic film package having at least a roll of unexposed photographic film, a taking lens, shutter means and film transporting means, said lens-fitted photographic film package comprising:

a main case section which is open at its front, said main case section mounting at least said shutter means and said film transporting means and containing light-tightly said roll of unexposed photographic film;

a front cover section which is attached to said main case section and closes said open front of said main case section to cover the majority of said taking lens and said shutter means and said film transporting means, said front cover section being formed with at least one opening for partly receiving therein a member of one of said means, which member projects forwardly beyond surfaces of said main case section which are in contact with an inner surface of said front cover section which said front cover section is securely attached to said main case section. (Emphasis added).

Fuji, Achiever, PSI, Argus and the staff agreed and stipulated (SX-1, ¶17) that the only disputed claim element is as follows:

a front cover section which is attached to said main case section and closes said open front of said main case section to cover the majority of said taking lens and said shutter means and said film transporting means, said front cover section being formed with at least one opening for partly receiving therein a member of one of said means, which member projects forwardly beyond surfaces of said main case section which are in contact with an inner surface of said front cover section which said front cover section is securely attached to said main case section.

However, with respect to said claim element they also stipulated as to which of the Achiever cameras infringe the Re '168 patent and which of the Achiever cameras do not infringe claim 1 of the Re '168 patent. (SX-1, ¶¶ 18, 19). Hence, the administrative law judge finds that the disputed claim element has been mooted.

#### **G. The '364 Patent**

The '364 patent is based on U.S. Ser. No. 868, 502 which was filed on April 15, 1992 (CX-7) and was the eighth application prosecuted among the U.S. applications underlying the patents in issue. Claims 1 and 11 in issue read:

1. A lens-fitted photographic film package which is pre-loaded with film and has a shutter mechanism and a taking lens, said lens-fitted photographic film package

comprising:

a main body section having said shutter mechanisms, said taking lens, a cassette chamber disposed on one horizontal side of said taking lens, and a film roll chamber disposed on the opposite side of said taking lens from said cassette chamber, said film roll chamber being adapted to contain a roll of said film which is pulled out from a film cassette and wound in a roll, and said cassette chamber containing said film cassette;

a flash unit including a circuit board mounted in front of said film roll chamber, a main capacitor and a discharge tube for emitting a flash of light, said main capacitor being disposed above said film roll chamber and extending in a horizontal direction;

a battery for charging said main capacitor, said battery being disposed between said cassette chamber and said film roll chamber and extending in a horizontal direction below said taking lens;

a front cover section attached to a front of said main body section; and

a rear cover section attached to a rear of said main body section. (Emphasis added).

Claim 11 reads as follows:

11. A lens-fitted photographic film package which is pre-loaded with film and has a shutter mechanism and a taking lens, said lens-fitted photographic film package comprising:

a cassette chamber for containing a film cassette and disposed on one horizontal side of said taking lens;

a film roll chamber for containing a roll of said film pulled out from said film cassette and wound in a roll, said film roll chamber being disposed on the opposite side of said taking lens from said cassette chamber;

a flash unit including a main capacitor and a discharge tube for emitting a flash of light, said main capacitor being disposed above said film roll chamber and extending in a horizontal direction; and

a battery for charging said main capacitor, said battery being disposed between said cassette chamber and said film roll chamber and extending in a horizontal direction below said taking lens. (Emphasis added).

Fuji, Achiever, PSI, Argus and the staff agreed and stipulated that the only disputed claim element is the phrase "said main capacitor being disposed above said film roll chamber and extending in a horizontal direction" which is found in claims 1 and 11 supra. (SX-1, ¶6). However, with respect to said claim they have agreed that certain Achiever cameras infringe claims 1 and 11 of the '364 patent and certain Achiever cameras do not infringe said claims. (SX-1, ¶¶7-9). Hence, the administrative law judge finds that the disputed claim language has been mooted.

#### **H. The '111 Patent**

The '111 patent is based on U.S. Ser. No. 958, 171 which was filed on October 8, 1992 and was the ninth application prosecuted among the U.S. applications underlying the patents in issue. Claim 1 in issue reads:

1. A lens-fitted photographic film unit containing a photographic film and being adapted to take photographs, comprising:

at least one plastic pushbutton formed integrally with a wall of said film unit, only a portion of said pushbutton being separated from said wall by a slit which surrounds most but not all of said pushbutton, said pushbutton being connected to said film unit by an integral bridge, said pushbutton being adapted to be depressed inwardly of the wall from an initial position and to move back outwardly to said initial position when released; and

a barrier formed on an outer surface of said wall surrounding said pushbutton only partially, said barrier projecting outwardly relative to an actuating surface of said pushbutton when said pushbutton is in said initial position, said barrier terminating in two ends disposed on opposite sides of said bridge.

At the hearing and in the posthearing submissions, no party raised any dispute as to the claim language.

#### **I. The '200 Patent**

The '200 patent is based on U.S. Ser. No. 62, 185 filed on May 17, 1993 and was the eleventh application prosecuted among the U.S. applications underlying the patents in issue.

Claims 1, 15, 23 and 25 in issue read:

1. A lens-fitted photographic film unit having a pre-loaded photographic film on which an image is formed through a taking lens system upon depression of a shutter release button, said film unit comprising:

a shutter mount and a projecting portion projecting forward of said shutter mount along an optical axis of the taking lens system, said projecting portion having a flat surface on the front side thereof;

a shutter opening on said optical axis formed in said flat surface of said projecting portion; and

a shutter blade attached to said shutter mount, said shutter blade having a claw portion, an arm portion and a masking portion for opening and closing said shutter opening, said shutter blade being bent in a crank shape in the middle of said arm portion in a direction along said optical axis such that said masking portion is disposed farther toward than said claw portion so as to correspond in shape to said shutter mount and said projecting portion.

15. A lens-fitted photographic film unit having a pre-loaded photographic film on which an image is formed through a taking lens system upon depression of a shutter release button, said film unit comprising:

a shutter mount having a flat projection projecting forward along an optical axis of said taking lens system;

a shutter opening formed in said projection on said optical axis of said taking lens system; and

a shutter blade having a claw portion and a masking portion for opening and closing said shutter opening and being swingable between a closed position and an open position, said masking portion having on a surface facing said shutter opening a recess and a semicircular rim, said rim being disposed on the side of a leading edge portion of said masking portion when said shutter blade swings from said closed position to said open position, said recess having a tapered surface formed approximately in a half portion of said recess on the side of a trailing edge portion opposite to said leading edge portion of said masking portion such that the thickness of said masking portion decreases in a direction toward said trailing edge portion so as to prevent said tapered

surface from being brought into contact with said projection formed around said shutter opening during swinging of said shutter blade, said projection fitting in said recess when said shutter blade is in said closed position.

23. A lens-fitted photographic film unit having a pre-loaded photographic film on which an image is formed through a taking lens system upon depression of a shutter release button, said film unit comprising:

a shutter mount;

a shutter opening formed in said shutter mount;

a shutter blade having a claw portion and a masking portion for opening and closing said shutter opening and being swingable between a closed position and an open position;

a stop aperture disposed in front of said shutter blade; and

a protrusion in said masking portion on a side of a trailing edge portion when said shutter blade swings from said closed position to said open position, said protrusion protruding toward said stop aperture and swinging so as to traverse said stop aperture during swinging of said shutter blade.

25. A lens-fitted photographic film unit having a pre-loaded photographic film on which an image is formed through a taking lens system upon depression of a shutter release button, said film unit comprising:

a shutter mount having a flat projection projecting forward along an optical axis of said taking lens system;

a shutter opening formed in said projection on said optical axis of said taking lens system; and

a shutter blade having a claw portion and a masking portion for opening and closing said shutter opening and being swingable between a closed position and an open position, said masking portion having on a surface facing said shutter opening a recess and a semicircular rim, said rim being disposed on the side of a leading edge portion of said masking portion when said shutter blade swings from said closed position to said open position, said projection fitting in said recess when said shutter blade is in said closed position.

All parties and the staff are in agreement that there is no dispute concerning the interpretation

of the claims of the '200 patent. (Tr. at 79-80).

## J. The '288 Patent

The '288 patent is based on U.S. Ser. No. 114, 093 which was filed on August 31, 1993 and was the twelfth prosecuted application among the U.S. applications underlying the patents in issue. Claims 1 and 7 in issue read:

1. A lens-fitted photographic film unit, in which a body contains photographic film drawn out of a cassette in a form of a roll, a film winding wheel is rotated after each exposure to rotate a spool in said cassette, and thereby said film is wound back into said cassette, said film unit comprising:

an axial hole formed in one distal end of said spool;

a pair of engaging plates, projected from said axial hole in a position axially downward inside said axial hole, and shaped in a rotationally symmetrical fashion at a straight angle with respect to an axis of said axial hole; and

a key way defined by a plurality of inner teeth formed on an inside of said axial hole and axial upward from said engaging plates;

wherein said winding wheel includes a drive shaft integrally formed therewith and fitted in said axial hole; and

said drive shaft includes a plurality of engaging teeth formed thereabout, arranged at a regular pitch, extended axially, and respectively engaged with said inner teeth.

7. A lens-fitted photographic film unit, in which a body contains photographic film drawn out of a cassette in a form of a roll, a film winding wheel is rotated after each exposure to rotate a spool in said cassette, and thereby said film is wound back into said cassette, said film unit comprising:

an axial hole formed in one distal end of said spool;

a pair of engaging plates, formed on an inside defined by said axial hole in said spool, and shaped in a rotationally symmetrical fashion at a straight angle in a position axially outward inside said axial hole;

a plurality of inner teeth formed inside said axial hole, arranged circularly at a regular pitch, shaped to have a substantially triangular section, and extended axially and

upward over said engaging plates;

a drive shaft integrally formed with said winding wheel and fitted in said axial hole while said cassette is contained in said body; and

a plurality of outer teeth formed about said drive shaft, shaped to have a substantially triangular section engaged with said inner teeth, and extended axially, said drive shaft fitted in said axial hole to engage said inner teeth with said outer teeth for transmission of rotation of said winding wheel to said spool.

All parties and the staff are in agreement that there is no dispute concerning the interpretation of the claims of the '288 patent. (Tr. at 79-80).

#### **K. The '685 Patent**

The '685 patent is based on U.S. Ser. No. 203, 556 which was filed on March 1, 1994 and was the thirteenth application prosecuted among the U.S. applications underlying the patents in issue. Claims 1 and 28 in issue read:

1. A lens-fitted photographic film unit which has resinous and metal parts and which has an exposure aperture, a film supplying chamber for containing unexposed photographic film, and a film take-up chamber for taking up said film after exposure, in which said film supplying chamber and said film take-up chamber are disposed horizontally on opposite sides of said exposure aperture, and which has a taking lens, a shutter mechanism, a film wind-up wheel for winding up said film as exposed, and a wind-up stopping mechanism for preventing said wind-up wheel from rotating after film is fed by one frame after each exposure by rotation of said wind up wheel, said film unit comprising:

a resinous film containing unit in which said exposure aperture, said film supplying chamber and said film take-up chamber are formed;

a single photo-forming unit including said shutter mechanism and said wind-up stopping mechanism, said single-photo forming unit having metal parts and being secured to said film containing unit but being removable as a single unit from said film containing unit so as to facilitate removal of metal parts from resinous parts; and

a front cover secured to said film containing unit in front of said photo taking unit.

28. A lens-fitted photographic film unit which has resinous and metal parts and which has an exposure aperture, a film supplying chamber for containing unexposed photographic film, and a film take-up chamber for taking up said film after exposure, in which said film supplying chamber and said film take-up chamber are disposed horizontally on opposite sides of said exposure aperture, and which has a taking lens, a shutter blade, a driven sprocket wheel driven in rotation by movement of said film, shutter cocking means for cocking said shutter blade in response to rotation of said sprocket wheel, shutter driving means for driving said shutter blade upon release of said shutter cocking means, a film wind up wheel for winding up exposed film into said take up chamber, and a wind up stopping mechanism for preventing said wind up wheel from rotating after said film is wound up by one frame after each exposure by rotation of said wind up wheel, said film unit comprising:

a resinous film containing unit in which said exposure aperture, said film supplying chamber and said film take-up chamber are formed;

a single phot forming unit including said shutter blade, said sprocket wheel, said shutter cocking means, said shutter driving means, and said wind up stopping mechanism, said single photo forming unit having metal parts and being secured to said film containing unit but being removable as a single unit from said film containing unit so as to facilitate removal of metal parts from resinous parts; and

front cover secured to said film containing unit in front of said photo forming unit.

All parties and the staff are in agreement that there is no dispute concerning the interpretation of the claims of the '685 patent. (Tr. at 79-80).

#### L. Design Patents D '101, D '722, D '750

The D '750 patent, which is based on U.S. Ser. No. 1, 452, filed on November 13, 1992 and which was the tenth application prosecuted among the U.S. applications underlying the patents in suit, the D '101 patent, which is based on U.S. Ser. No. 21, 031, filed on March 16, 1994 and which was the fourteenth application prosecuted among the U.S. applications underlying the patents in issue, and the D '722 patent, which is based on U.S. Ser. No. 34, 742, filed on February 10, 1995 and which was the fifteenth application prosecuted among the U.S. applications underlying the patents in issue, are all design patents.

Determining whether a design patent claim has been infringed requires, first, as with utility patents, that the claim be properly construed to determine its meaning and scope. See Elmer v. ICC Fabricating Inc., 36 U.S.P.Q.2d 1417, 1420 (Fed. Cir. 1995). However, design patents have almost no scope and the claim is limited to what is shown in the application drawings. Id. at 1421 citing In re Mann, 8 U.S.P.Q.2d 2030, 2031 (Fed. Cir. 1988).

None of the parties nor the staff disputed the scope of the drawing of any of the design patents. Therefore, the administrative law judge finds that there is no dispute as to the scope of the claims and drawings of the design patents.

## VI. INFRINGEMENT

After the administrative law judge has construed claim language in issue, he must determine whether any accused system falls within the scope of the asserted claims. H.H. Robertson, Co. v. United Steel Deck, Inc., 820 F.2d 384, 389; Sofamor Danek Group, Inc. v. De Puy-Motech, Inc., 74 F.3d at 1216, 1218. To find infringement, an accused system must meet each claim limitation, either literally or under the doctrine of equivalents. Charles Greiner & Co. v. Mari-Med Mgf., Inc. 962 F.2d 1031, 1034, (Fed. Cir. 1992). Complainant has the burden of proving, by a preponderance of the evidence, that the claims in issue are infringed by the accused products. See e.g. Conroy v. Reebok International, Ltd., 14 F.3d 1570, 1573 (Fed. Cir. 1994); Braun Inc. v. Dynamics Corp., 975 F.2d 815 (Fed. Cir. 1992); 4 Chisum, Patents, § 18.06[1] (1995).

Complainant has put in issue in its infringement allegations two groups of single use cameras. As to the first group, it is alleged that five types (Types 1-5, with and without flash)

of Fuji one-time-use cameras are pertinent to this investigation because empty one-time-use camera bodies of those types have been "remanufactured" by one or more of the respondents, or "remanufactured" one-time-use cameras of that type have been sold by one or more of the respondents in the United States. It is alleged that also pertinent to this investigation are products of two of complainant's licensees which are also being "remanufactured", viz. two types of Kodak one-time-use camera bodies designated Types 7 and 7A, and two types of Konica one-time-use camera bodies designated Types 8 and 8A. (CBr at 42, 43).

Complainant, referring to the second group of single use cameras, alleged that the products of several of the respondents are newly manufactured one-time-use cameras; that respondent Achiever manufactures single use cameras, in contrast to reloaded cameras that are originally manufactured by another entity, and that respondents PSI, Achiever, OptiColor, Argus and Vivitar sell, those newly made Achiever one-time-use cameras, both flash and non-flash, which have been generally designated Type 6; and that nineteen subtypes of Achiever-manufactured one-time-use cameras exist which differ in construction detail; and that by stipulation (SX-1) numerous subtypes of Types 6 LFFP infringe one or more claims of one or more of the patents in issue. (CBr at 43).<sup>17</sup>

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<sup>17</sup> Complainant has alleged that "Dynatec is offering for sale newly manufactured products which contain features of both types 2 and 4 as well as remanufactured Types 4, 7 and 7A. (CFF-52) but Type 4 LFFPs allegedly represent about only 5% of Dynatec's product line." (CBr at 73). Complainant's CFF 52 read:

It is undisputed that Dynatec International, Inc. ("Dynatec") is a corporation with its principal place of business at 3820 West Great Lakes Drive, Salt Lake City, Utah 84120. (SX-3, par. 6), and that Dynatec imports and sells in the United States LFFPs at least under the trademark "Fun Pak" and "Dollar General." (SX-3, par. 14; CX-140-145). Dynatec has produced various types of LFFPs during

(continued...)

In closing argument, the parties participating in the hearing admitted that Types 1-5, 7 and 7A and 8 and 8A single-use cameras are involved in the "remanufacturing" of single use cameras while only Type 6 single-use camera and its nineteen subtypes single-use cameras as well as "three newly made undefined" type single-use cameras (Tr. at 4274) are involved in the newly manufactured single use camera. (Tr. at 4273 to 4276).<sup>18</sup>

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<sup>17</sup>(...continued)

discovery in this investigation. Further, Complainant has obtained through its own investigation samples of Dynatec and Dollar General LFFPs. (CPX-166-167; CPX-188-193; CPX-390; CPX-392-393; CPX-396). Dynatec is offering for sale or selling newly manufactured products which contain features of both Types 2 and 4 as well as remanufactured Types 4, 7 and 7A. (CPX-166-167; CPX-188-193).

Dynatec's rebutal to CFF 52 (DOCF-52) read:

While Dynatec did offer for sale newly manufactured products prior to the instigation of this proceeding, once Dynatec became aware that newly manufactured products were being provided to Dynatec by its Chinese supplier, Dynatec requested that all of its Fun Pak cameras be made from reloaded previously used one time use camera shells. Since that time all Dynatec cameras have resulted from the reloading of either Fuji and Kodak bodies. (R-DYNA-32 at Q&A 8).

Moreover, complainant and respondents agreed that only Type 6 single use cameras are newly manufactured. (Tr. at 4274). Hence, the administrative law judge is limiting the newly manufactured issue to the Type 6 single use cameras.

<sup>18</sup> The record is confusing as to whether undefined single use cameras are restricted to only newly manufactured single use cameras. Thus there is testimony from complainant's technical expert Bellows that while "Jazz Model DZ35," without flash, Type Undefined (CPX-198) has features similar to Type 6 (CX-725, Q&A 81), the Argus "Just Once", Type Undefined (CPX-176) has features from both Type 8 and Type 4 (CX-725, Q&A 72); that Boshi "Boshi" with flash, Type Undefined (CPX-183) has appearance of Type 5 and internal supply spool as in Types 6 (CX-725, Q&A 75); that Dynatec "FunPak Outdoor," without flash, Type Undefined (CPX-193) has features similar to Types 2 and 4 (CX-725, Q&A 77); that Penmax "Kingswood Day Camp," without flash, Type Undefined (CPX 212) has features similar to Type 5 (CX-725, Q&A 86); that Sakar "Sport Shot," without flash, Type Undefined (CPX-220) has features similar

(continued...)

As to the types of single use cameras in issue, Alfred H. Bellows was qualified as complainant's expert in mechanical engineering, camera manufacturing and camera design. (Tr. at 1710). No objection was raised as to so qualifying Bellows. (Tr. at 1709, 1710).

Bellows read the patents in issue and examined numerous single use cameras. (CX-725 Q&A 19-25). Utilizing the complaint and the claim charts and exploded illustrations appended thereto, as well as the patents in issue, Bellows educated himself on the technology and the contents of the patents in issue. (CX-725, Q&A 26-27). Bellows also examined numerous cameras both provided by Fuji as well as those he collected at local photo shops. (CX-725, Q&A 28). Bellows termed certain samples of single-use cameras of certain respondents as referenced samples or reference specimens and identified them as Types 1 to 8 single-use cameras. (See FF 217). Bellows was also given single use cameras sold by each of the respondents identified in the notice of investigation, with the exception of Opticam, and identified the types of those cameras. (See FF 217).

Complainant set forth Bellows' methodology in certain findings which included proposed CFF 126, 127, 129, 130, 131, 132 and 133 which findings were not objected to by any party.<sup>19</sup> Respondent Achiever did object to the following proposed CFF 128 on the

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<sup>18</sup>(...continued)  
to Types 2 and 4 but had no viewfinder lens (CX-725, Q&A 91); and that Vantage "Sharp Shot," without flash, Type Undefined (CPX-223) has no visible film supply spool like Types 1 through 5, a rigid cassette closure like Type 8 and otherwise appearance unlike any type. (CX-725, Q&A 93). Moreover Bellows identified a Haichi "Fast" without flash as "Type Undefined" (CPX-196) (FF 217; CX-725 Q&A 80).

<sup>19</sup> Respondent Achiever did object to proposed CFF 132 but only on the ground that complainant's characterization of Bellows performing a "rigorous analysis" was argumentative in the word "rigorous."

ground of "Conclusory Statement with no factual basis:"

CFF 128. Utilizing the claim charts and exploded diagrams of CX-742 through CX-449 and CX-730 through CX-741, Mr. Bellows then performed a rigorous claim by claim, element by element analysis wherein for each camera type Mr. Bellows confirmed the presence of corresponding structure in an actual specimen of the particular LFFP type under study. (Bellows, CX-725 at Q&A 31-32). Mr. Bellows testified that in providing his opinions that a particular LFFP contains all of the elements of a particular claim, he verified that each element of the particular claim was in fact present in the samples studied. (Bellows, CX-725 at Q&A 32).

Bellows however was available for discovery deposition before the hearing. Moreover he testified at length during the hearing and respondents at the hearing had the opportunity to cross-examine him.

As testified by Bellows, Types 1 to 6, 7, 7A, 8 and 8A are set forth in CX-742, 743, 744, 745, 746, 747, 748 and 749 which are exploded illustrations of single use cameras that have been categorized as conforming to a particular Type 1 to 7, 7A, 8 and 8A. (CX-725 Q&A 27, 32).

Referring to the patents in issue, most claims of the patents had what Bellows testified were two types of elements: background and central. The "background" elements of the claims were features that any camera would need to have or features that were incidental or peripheral to the claimed invention in issue. The "central" elements of the claims were those which reflected what Bellows considered the more significant aspects of the invention in issue. (CX-725, Q&A 31). As some examples of "background" claim elements of the claims in issue and referring to CX-742 to 749, where "A" is indicated in said exhibits, "A" refers to a "lens-fitted photographic film package," "lens fitted photographic film unit," or a "method of assembling a lens fitted photographic film package." (CX-725, Q&A 32). The "B" in the

over view portions of said CX-742 to 749 and the "K" in the detailed portions of said CX-742 to 749 refer to the "shutter mechanism." (CX-725, Q&A 32). In said exhibits, the "C" refers to a "taking lens;" the "AB" refers to an "opening through which exposure is made;" the "AK" refers to "an exposure opening" or "an exposure aperture" which Bellows testified is the place where light enters; the "D" refer to a "light-tight casing" or "body" while the "V" refers to a "light-tight casing" or "body" which includes the cardboard overlap; the "E" refers to the unexposed film supply roll, sometimes rolled around a spool, on the opposite side from the take-up film cassette; and the "F" refers to refers to a "film container," "removable light-tight film container," "empty light-tight film cartridge," "film cassette," or "cassette." (CX-725, Q&A 32). In Bellows' study, he focused on the "central" elements although for every claim in issue he testified that he "made sure that all of the 'background' elements in the claim were present in the accused LFFP." (CX-725, Q&A 31).

#### **A. The Accused "Remanufactured" Single Use Cameras<sup>20</sup>**

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<sup>20</sup> No respondent, including those respondents participating in the hearing, challenged complainant's evidence or allegations that the accused "remanufactured" single use cameras have the elements of the patent claims asserted against them. The respondents at the hearing however did submit evidence, and in their posthearing submissions argued, that the evidence and law establish that they are not involved in any impermissible "remanufacturing" or reconstruction of LFFPs but rather are involved only in permissible repair. Hence they argued that they do not infringe any patent in issue.

Respondent PSI and respondent Achiever were represented by the same counsel. Respondent Achiever is involved only with newly manufactured single use camera and did submit evidence and arguments relating to claim interpretation and alleged infringement. Respondent PSI has newly manufactured Message cameras originating from Achiever and adopted and incorporated by reference the arguments and authorities set forth in Achiever's post hearing submissions. (PSIBr at 1). PSI also has "remanufactured" single use Smile Time cameras. For those cameras PSI adopted and incorporated by reference the arguments and authorities set forth by co-respondents in support of a determination of non-infringement "under the first sale doctrine (continued...)

## 1. The '087 Patent

An object of the invention of the '087 patent is to provide a lens-fitted film package which makes it possible to remove easily an exposed film in daylight. (CX-3, col. 2, lines 14-16). To accomplish this object, the lens fitted film package comprises a light-tight film casing having an exposure opening, a rolled film disposed on one side of the exposure opening in the light-tight casing, a removable light-tight film container having a film winding spool therein disposed on the other side of the exposure opening in said light-tight film casing, and an externally operable film winding member for winding the rolled film around the film spool of the light-tight film container. (*Id.* col. 2, lines 23-33).

According to a feature of the invention of the '087 patent, the film of the lens-fitted film package is wound around the film spool in the light-tight film container by one frame after every exposure and when the exposure of all frames of the film has been completed, the film is fully contained in the light-tight film container. Therefore, the film can be removed from the film package in the daylight and usually the container is removed by breaking the light-tight casing in a photo shop or a photo laboratory. (*Id.* col. 2, lines 34-42).

Referring to claim 1 of the '087 patent, the administrative law judge finds that Types 1

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<sup>20</sup>(...continued)

and by virtue of permissible repair.” (PSIBr at 1). Counsel for respondents Argus, China Film and Sakar, at closing argument argued that “our three small Respondents are addressing only the recycled as opposed to newly made camera products in this case.” (Tr. at 4276). It was also argued, in their initial post hearing brief, that no 35 U.S.C. section 295 presumption of infringement has any application; and that respondent China Film’s Mass Chance recycle plant film loading method does not infringe complainant’s ‘649 method patent based on (1) First Sales Doctrine of Exhaustion of Patent Rights and (2) Use of a Different, Non-Infringing Film Rolling-Loading Method.

thru 5 and 7 through 8A LFFPs comprise every element of the claim. (See CX-3, CX-732, CX-725, Q&A 31, 36 and CX-742 to CX-746 and CX-748 and CX-749 (first two pages)). Thus referring to central elements, said types comprise the claimed external release button Y, a light-tight film cartridge F with spool P, a thumb wheel J with a spool driver O, and an advance control mechanism BA that includes a sprocket AA driven by the sprocket holes in the film, a frame counter disc Z, and a lockout AF that senses the end of the frame counter disc and disables the advance control mechanism. Also when samples of Types 1 thru 5 and 7 thru 8A units were dissected, all of the claimed elements and features were examined, cycled and demonstrated to perform the function "claimed." In addition the various "means" recited in claim 1 corresponded to the structure disclosed in the '087 patent, which in turn essentially corresponded with structures found in the various LFFPs considered. (CX-725, Q&A 36, CX-732). Furthermore said types contain all of the background elements of the claim. (CX-725, Q&A 31, CX-732). Hence the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 1 of the '087 patent is found in the Types 1-5 and 7-8A single use cameras of respondents Ad-Tek, Argus, Boecks, Boshi,<sup>21</sup> China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Rino, Sakar and T.D.A. (See FF 217).

Referring to claim 7 of the '087 patent,<sup>22</sup> Types 7 thru 8A comprise every element of

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<sup>21</sup> There is in evidence (CX-101) which is respondent BPS's response to complainant's interrogatories. Therein it is indicated that BPS imports single use cameras from Boshi. Hence the administrative law judge finds the single use cameras of Boshi and BPS coextensive.

<sup>22</sup> Claim 15 is identical to claim 7 except that there is no statement in claim 15 that the single use camera must be destroyed to open it. (CX-3).

claim 7. (See CX-3, CX-732, CX-725, Q&A 31, Q&A 36 and CX-748 and CX-749 (first two pages)). Thus claim 7 recites the inclusion of a spool in the supply roll chamber, one end of which is externally exposed so that during the manufacture the film can be wound from the light-tight take-up cartridge to the supply roll side of the LFFP after closure of the LFFP. (CX-725, Q&A 36). This element is marked AJ in the exploded illustrations of Types 7, 8 and 8A and those types contain the spool AJ as well as all of the other elements of the claim. (CX-725 Q&A 31, 36). Hence the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 7 of the '087 patent is found in Types 7 thru 8A of respondents Argus (Type 8A), Dynatec (Types 7 and 7A), Jazz (Type 8) and PSI (Type 7A). (See FF 217). He does not find that claim 15 has been infringed by those types in view of the fact that claim 15 does not require that the light-tight film casing be destroyed to open the same. (FF 111). In the accused types he finds that the light-tight film casing is destroyed when opened.

Referring to claim 8 of the '087 patent CX-3, Types 1 thru 5 comprise every element of the claim. (CX-3, CX-732, CX-725, Q&A 31, Q&A 36 and CX-742 to CX-746). Thus the types upon disassembly comprise the claimed general construction of the three major body components, viz., a front casing section L, a middle casing section W and a rear casing section S. (CX-725, Q&A 36). The front casing section includes the claimed lens opening AB, the claimed finder frame opening AC and the claimed latch or engaging sections N. (Q&A 36, CX-742 to CX-746).<sup>23</sup> The middle or main casing section contains the claimed rolled film E,

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<sup>23</sup> At closing argument, when complainant's counsel was asked by the administrative law  
(continued...)

has the claimed lugs M that latch into the latch openings N and captures the claimed lens C between it and the front casing section as claimed. Id. The back cover section excludes light from the rear of the middle casing section as claimed Id. Also said types contain all of the background elements in the claim. (CX-725, Q&A 31, CX-732). Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 8 of the '087 patent is found in Types 1 thru 5 of single use cameras of respondents Ad-Tek, Argus, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, Rainbow, Rino, Sakar, and T.D.A. (See FF 217). As to infringement of claims 1, 7 and 8 of the '087 patent, see also CX-725 Q&A 71 to 73, 75 to 79, 81 to 84, 86 to 92.

## 2. The '495 Patent

The objects of the invention of the '495 patent are (1) to provide a lens-fitted photographic film package which makes it possible to reduce the frictional force exerted on a film rolled in a film receiving chamber of the package (2) to provide a lens-fitted photographic film package in which a film can be advanced smoothly, and (3) to provide a lens fitted photographic film package in which a film is prevented from getting scratch marks on the surface thereof. (CX-1, col. 2, lines 5-15). The '495 patent has several claims that can be summarized into two distinct "central" features: the scratch prevention and the film-

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<sup>23</sup>(...continued)

judge what for example the “- -” means on CX-732 which relates to claim 8 of the '087 patent, it was represented that it means that there is “no correspondence to a physical element.” (Tr. at 4086). The administrative law judge finds that representation inconsistent with Bellows' testimony (CX-725 Q&A 36) and the figures set out in CX-743 to CX-745.

stabilizing friction. (CX-725, Q&A 34).

Referring to claim 1 of the '495 patent, Types 1 through 5 single use cameras comprise every element of that claim. (CX-1, CX-730, CX-725, Q&A 34 and CX-742 to CX-746). Thus referring to central elements and what has been specified as the improvement in the claim (col. 10, lines 22-27), the types have light-type film case which has a film roll receiving chamber to receive therein said film light-tightly, viz., film supply roll chamber G, which film roll receiving chamber or film supply roll chamber has upper and lower projections formed on an inner surface thereof for supporting an outermost convolution of said film in the form of a roll at its upper and lower sides, viz., pair of nearly-circumferential rails H, molded into both the middle and rear plastic case sections in the region that forms the film roll chamber and near the edges of the film to prevent the image area of the film from being scratched during film advancement. (CX-725, Q&A 34, CX-730). Also said types contain all other elements of claim 1. Id. Hence the administrative law judge law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 1 of the '495 patent is found in Types 1 thru 5 of single use cameras of respondents Ad-Tek, Argus, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, Rainbow, Rino, Sakar and T.D.A. (See FF 217).

Referring to claim 5 of the '495 patent, Types 1 thru 5 and 7 thru 8A comprise every element of that claim. (CX-1, CX-730, CX-725, Q&A 34 and CX-742 to 746 and CX-748 and CX-749). Thus claim 5 specifies a "means to exert a frictional force on said film upon said film being advanced." (CX-1). The friction means is in the film path BB-BC of said types to maintain the film in its proper position during and between exposures. The "proper

position" of the film would include both its momentary geometric relation to the lens, i.e., in the "film plane," and its long term physical state of advancement from frame to frame, i.e., that it not slip back or forward from supply roll to take-up roll. (CX-725, Q&A 34). In the specification and drawings of the '495 patent, a wide variety of friction means is taught. Thus the friction means includes the bulge portion 2a (FIGS. 5A and B), bulge 3B (FIG. 5B) and bulge members 40 (FIG. 5C) on the film roll side (col. 7, lines 15-37), and projections 82, 84 abutting the film cartridge 20 (FIGS. 13 and 14) and projection 82 abutting the film (FIG. 15) before or adjacent the exit to the film chamber. (Col. 9, lines 18-col.10, line 6). Examination of the reference samples shows that Types 1 thru 5 and 7 thru 8A samples each exhibited stabilizing friction means in the film transport path and also contained all other elements of claim 5. (CX-725, Q&A 34). Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 5 of the '495 patent is found in the Types 1-5 and 7-8A single use cameras of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Rino, Sakar, and T.D.A. (See FF 217).

Referring to claim 6 of the '495 patent Types 1 thru 5 and 7 thru 8A comprise every element of that claim. (CX-1, CX-730, CX-725, Q&A 34 and CX-742 to CX-746 and CX-748 and CX-749). Thus claim 6 specifies "and means for forcing said film to be curved in an S-curve between said film passage and said slot of said film container upon said film being advanced." (CX-1). This claim element refers to effecting the friction means of claim 5 by forcing the film into a reverse "S-curve" as it enters the take-up cartridge also referred to as a cassette, container or patrone. (CX-725 Q&A 34). Examination of the reference samples

6 and 9 by reciting that the friction-causing S-curve is created by the projection-causing realignment of the entrance slot of the take-up cartridge relative to the natural path of the advancing film. (CX-725, Q&A 34). Both of those features are present in Types 1 thru 5 and 7 thru 8A samples as are the other elements of the claim. Thus one removal of some of the light baffling portions of one single-use LFFP the effect of those projections in forming a slight reverse curve could clearly be seen. Also Bellows removed the nonreversing thumb wheel and film sprocket, cut an opening in the LFFP at its film supply roll end, and extended the free end of the film straight out through that opening in order to make comparative tension measurements on the free ends of the film. When comparing the friction both with and without the projections BD, it was clear that the S-curve was, indeed, causing the friction. (CX-725, Q&A 34). Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 11 of the '495 patent is found in the types 1-5 and 7-8A single use cameras of respondent Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Rino Sakar and T.D.A. (See FF 217). As to infringement of claims 1, 5, 6, 9 and 11 of the '495 patent, see also CX-725, Q&A 71, 72, 73, 75 to 79, 81 to 84, 86 to 92.

### **3. The '774 Patent**

In the '774 patent, the claimed lens-fitted photographic film package is provided with a reinforcing means formed on inner walls of a film case of the film package to prevent the film case from being deformed by external force applied thereto. (CX-2, col. 2, lines 15-20). Thus the patent is about strengthening features and film locating and controlling features. (CX-725 Q&A 35).

Referring to claim 14 of the '774 patent, Types 1 thru 5 and types 7 thru 8A LFFPs comprise every element of the claim. (See CX-2, CX-731, CX-725, Q&A 31, Q&A 35 and CX-742 to CX-746 and CX-748 and CX-749). Thus said types recite the inclusion of two features, one being a curved rear wall with protuberances BB that hold the film in a matching arcuate film "plane," and the other being a film supply roll chamber G with curved surfaces and rails T in the cover that maintain the roll in a generally circular shape. The slightly curved film "plane" is defined by mating plastic surfaces in the middle and rear sections. In Types 1 through 5 and old Type 7, the rear surface is covered with buttons with usually polished spherical faces that reflects the claimed "back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers." In Types 7A, 8 and 8A the proturbances are in the form of multiple curved rails extending horizontally across the film plane. The film supply roll chamber is formed by a cavity between the middle and rear sections of the case, the forward portion of which includes a semicircular cylindrical surface while the rear portion includes a lesser curve with side rails as claimed. Those curved surfaces together form about three fourths of a complete circular chamber. Also said types contain all of the background elements of claim 14. (CX-725, Q&A 31, 35, CX-731). Hence the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 14 of the '774 patent is found in the Types 1-5 and 7-8A single use cameras of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Rino, Sakar and T.D.A. (See FF 217).

Referring to claim 15 of the '774 patent, claim 15 is identical to claim 14 with the

exception that it omits the claimed phrase "said back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers" Thus the claim lacks the proturbances BB. The claim does include the film supply roll chamber G with curved surfaces and rails T in the cover that maintain the roll in a generally circular shape. (CX-725, Q&A 35). Thus complainant has sustained its burden in establishing that the subject matter of claim 15 is found in the single use cameras identified with respect to claim 14. As to infringement of claims 14 and 15 of the '774 patent, see also CX-725, Q&A 71, 72, 73, 75 to 79, 81 to 84, 86 to 92.

#### **4. The '857 Patent**

This patent is a division of the '087 patent. (CX-4). However in contrast to the claims of the '087 patent, each of the claims 1, 19 and 22 in issue recite the structure supporting the single use function in a somewhat different way than it is defined in the claims of the '087 patent, as applicants represented to the Patent Office. (FF 195).

Referring to claim 1 of the '857 patent types 1 thru 5 LFFPs comprise every element of the claim. (CX-4, CX-733, CX-725, Q&A 31, Q37 and CX-742 to CX-746). Thus said types recite the film transport elements of supply roll E in a chamber G, take-up spool P and cartridge F, film winding components J and O and film passage in the casing W and S. The supply roll E is described as having its outer wrap in contact with its receiving chamber G in the LFFP body and its inner wrap being free, i.e., there is no spool. (CX-725, Q&A 37). Hence the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 1 of the '857 patent is found in Types 1 thru 5 single use cameras of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast

Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, Rainbow, Rino, Sakar and T.D.A. (See FF 217).

Referring to claim 19 of the '857 patent which recites the film advancement mechanism in detail (CX-725, Q&A 37), Types 1 through 5 and 7 through 8A single use cameras comprise every element of that claim, as can be seen from the technical observations made with respect to claim 1. (CX-4, CX-733, Q&A 37, CX-742 to CX-746 and CX-748 and CX-749). Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 19 of the '857 patent is found in the types 1 through 5 and 7 through 8A single use cameras of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Rino, Sakar and T.D.A. (See FF 217).

Referring to claim 22 of the '857 patent which recites the inclusion of a spool in the supply roll chamber and is similar to claim 7 of the '087 patent, as with said claim 7, the administrative law judge finds that types 7 through 8A single-use cameras comprise every element of that claim. (CX-4, CX-733, Q&A 37, CX-748 and CX-749). Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 22 of the '857 patent is found in the types 7 through 8A of respondents Argus, Dynatec, Jazz, and PSI. (See FF 217). As to infringement of claims 1, 19 and 22 of the '857 patent see also CX-725, Q&A 71 to 73, 75 to 79, 81 to 84, and 86 to 92.

##### **5. The '400 Patent**

The objects of the invention of the '400 patent is to provide a lens-fitted photographic film package which makes it possible to remove easily an exposed film therefrom and to

provide a lens-fitted photographic film package so constructed as to limited to a single use. (CX-6, col 2, lines 2-9).

Referring to claim 14 of the '400 patent, Types 1 thru 5 and 7A comprise every element of the claim. (CX-6, CX-725, Q&A 40, CX-742 to CX-746 and CX-748).<sup>24</sup> Thus said types comprise a single-use camera with a bottom closure U, called the claimed "third member," that closes the bottom R' of the film cartridge chamber R in such a manner that it can be easily torn open by the processor for removal of the film cartridge F. Said types also describe the cardboard covering V that covers the third member U and at least part of the plastic body and include the claimed element that the film cannot be rewound from the cartridge to the supply roll side of the LFFP. For Types 1 thru 5, the bottom closure, or third member, is in the form of a hinged flap sealed closed, but with a notch for insertion of a tool or thumb nail to make it easy to pry open. For Types 7 and 7A the bottom closure was part of a door that also enclosed the end or rear of the cassette chamber. All of the Types 1 thru 5 included cardboard coverings that also covered the third member and some of the Types 7 and 7A samples had overlapping labels in this region. (CX-725, Q&A 40). Hence the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 14 of the '400 patent is found in the Types 1 thru 5 and 7 and 7A single use cameras of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Rino,

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<sup>24</sup> Complainant alleged that Type 8 infringed the '400 patent. (CORJFF 7). However Bellows did not so testify. (See CX-725, Q&A 40, Q&A 67). Furthermore in complainant's posthearing brief (CBr at 49) complainant did not assert that the '400 patent is infringed by the Type 8.

Sakar and T.D.A. (See FF 217). As to infringement of claim 14 of the '400 patent. (See also CX-725, Q&A 71 to 73, 75 to 79, 81 to 84 and 86 to 92).

## 6. The Re '168 Patent

Objects of the invention of the Re '168 patent include providing a lens-fitted photographic film package which is thin and compact for convenience of carrying and which enables removing a film from said package without taking the film out of an external case. (CX-12, col. 2, lines 10-18). Referring to claim 1 of said patent the administrative law judge finds that Types 1 thru 4 and 7 thru 8A comprise every element of the claim. (CX-12, CX-725, Q&A 46, CX-741, CX-742 to CX-745 and CX-748 and CX-749). Thus said types recite one or more openings DA in the front cover L that permit components mounted on the main body section W to extend into or beyond the thickness of the front cover, thereby permitting the assembled film package to be as thin as possible. (CX-725, Q&A 46). Bellows testified that examples of "extending" components include the taking lens C, the mounting rim AE around the taking lens, the forward most segment of the film-advancing thumb wheel J, parts of the shutter mechanism AG, and the bell crank extension of the shutter trip button Y and that in said types the taking lens and its mounting ring extend into the thickness of the front cover section; that Types 1 and 7 had a clearance slot for the forward segment of the thumb wheel; that a part of the shutter mechanism extends into a curved slot in the Type 1 cover, while Types 2, 3, 4, 7, 7A, 8 and 8A have covered bulges, or cowlings, that extend well beyond the taking lens that accommodates the extending components of the shutter; and that the trip button's bell crank extends into a clearance slot in the cover of Types 1, 2, 3 and 4 LFFPs. Id. Thus the administrative law judge finds that complainant has sustained its burden in

establishing that the subject matter of claim 1 of the Re '168 patent is found in Types 1 thru 4 and 7 thru 8A LFFPs of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Rino, and Sakar. (See FF 217).

Referring to claim 13 of the Re '168 patent, the administrative law judge finds that Types 1 and 4 LFFPs comprise every element of the claim. (CX-12, CX-725, Q&A 46, CX-741, CX-742, CX-745). Thus said types recite the generally brick-shape of the film package A, the similarly shaped cardboard overwrapping cover V, and the weakened portion V' of the cardboard cover that permits easy access to the openable plastic section U that allows the film cassette to be removed. (CX-725, Q&A 46). Bellows testified that upon examination of the samples he observed that the Types 1 and 4 LFFPs are parallelepiped in shape and have cardboard overwraps with a weakened portion for tearing them open. *Id.* Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 13 of the Re '168 patent is found in Types 1 and 4 of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Shot, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, Rainbow, Rino and Sakar. (See FF 217). As to infringement of claims 1 and 13 of the Re '168 patent, see also CX-725, Q&A 71 to 73, 75 to 79, 81 to 84 and 86 to 92.

#### **7. The '364 Patent**

The '364 patent describes and claims general LFFP features in combination with a particular electronic flash unit. (CX-725, Q&A 41). The objects of the invention of the '364 patent are to provide a compact film package with flash unit, to provide a film package with a

flash circuit board of which is simple to shape and to provide a film package with flash unit, from which the battery is not easily removable. (CX-7, col. 1 and 2). Referring to claim 1 of said patent, the administrative law judge finds that Types 1, 2, 3 and 4 comprise every element of that claim. (CX-7, CX-725, Q&A 41, CX-736, CX-742 to CX-745). Thus said types comprise a lens-fitted film package A that includes three main body components W, L and S, a flash unit X, comprising a circuit board X1, a capacitor X2, a flash tube X3 and a battery X4. (CX-725 Q&A 41). As Bellows testified, claim 1 further recites that the capacitor and battery are in specific locations and orientations within the LFFP, i.e. the capacitor is above the film roll chamber G and is horizontal, while the battery is below the lens AB between the film roll and cassette chambers and is horizontal and upon examination of the reference samples (see FF 217), Bellows found that all of those elements were present in samples of Types 1 thru 4 LFFPs and both the battery and capacitor were located as claimed. Bellows also verified that all other elements of the claim were present in the Types 1 thru 4. Id. Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 1 of the '364 patent is found in types 1 thru 4 of respondents of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Chance, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, Rainbow, Rino, and Sakar. (See FF 217).

Referring to claim 11 of the '364 patent the administrative law judge finds that Types 1 thru 4 comprise every element as with claim 1 because, as Bellows testified, claim 11 is virtually identical to claim 1 except that it does not recite body components nor the flash circuit board. (CX-725 Q&A 41). Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 11 of the '364 patent is

found in Types 1 thru 4 of the same respondents who have been found infringing claim 1 of the '364 patent. (See FF 217). As to infringement of claims 1 and 11 of the '364 patent, see also CX-725, Q&A 71, 72, 73, 75, 76, 77, 78, 79, 81, 82, 83, 84, 86, 87, 89, 90, and 91.

## **8. The '111 Patent**

The '111 patent covers features that prevent inadvertent actuation of the shutter trip button or the flash charging button. (CX-725 Q&A 42). As the patent states the object of the invention is to provide a lens-fitted photographic film unit whose pushbuttons are formed integrally with flat surfaces of a film housing, but which are not subject to accidental actuation. To achieve this object a barrier is formed on a wall of a lens-fitted photographic film unit so as partially to surround the pushbutton. The pushbutton is formed of plastic integrally with the wall, but separated from the wall by a channel-shaped slit. According to the invention, the barrier prevents articles from colliding with and accidentally depressing the pushbutton. Consequently, an unintended shutter release and flash emission can be prevented. (CX-8, col. 2, lines 3-17).

Referring to claim 1 of the '111 patent the administrative law judge finds that Types 1 thru 4 single use cameras comprise every element of the claim. (CX-8, CX-725, Q&A 42, CX-737, CX-742 to CX-745). Thus those types recite a single-use camera that has at least one push-button AH which is formed as a portion of the camera's outside wall L but is largely separated from the wall by a slot AH1 that surrounds most of the button, and in which the button is protected from unintended pressing by an elevated barrier AH3 that partially or wholly surrounds the push-button. (CX-725, Q&A 42).

Bellows testified that each of the Types 1 thru 4 sample single-use cameras that had

flash units were examined and found to have a flash-charging button with all of the claimed features; that those buttons were molded into the front face of the front cover section where the distinct features claimed would be readily molded with simple injection mold-opening motions; that all of the units, flash or not, were found to have a shutter trip button that fit the claimed features except that a distinct elevated barrier was not present in every case; that the shutter trip button is located on the top of the front cover section where it is more difficult to mold complicated shapes without added mold tooling cost; and that thus the barrier feature was present more subtly in the form of the button being recessed below the surrounding flat plastic.

Id. Hence the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 1 of the '111 patent is found in Types 1 thru 4 of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Chance, Forcecam, Jazz, Kliikit, Linfa, OptiColor, Penmax, PhilmEx, Rainbow, Rino and Sakar. (See FF 217). As to infringement of claim 1 of the '111 patent, see also CX-725, Q&A 71, 72, 73, 75, 76, 77, 78, 79, 81, 82, 83, 84, 86, 87, 89, 90 and 91.

## **9. The '200 Patent**

The '200 patent covers the shutter mechanism of a lens-fitted film package. (CX-725, Q&A 43). Its objects are to provide a lens-fitted photographic film unit having a single kick-type shutter blade appropriate for its miniaturization, to provide a lens-fitted photographic film unit in which light is prevented from entering through the gap between the shutter blade and the shutter opening, and to provide a lens-fitted photographic film unit in which the shutter blade can be driven smoothly. To achieve those objects a lens-fitted photographic film unit is provided with a swingable shutter blade which is bent at an elbow portion in a crank shape.

At one end of the arm portion is formed a claw portion which is hit by a shutter actuating lever when a shutter release button is depressed. At another end of the arm portion is formed a masking portion which moves from a closed position for blocking light from entering a shutter opening to an open position for allowing light to enter the shutter opening. The film unit comprises a base section having a mechanism mount and a shutter mount which is formed integrally with a projected portion projecting forward along the optical axis of the unit. The shutter opening is formed in the front surface of the projected portion. The shutter blade is attached swingably to the shutter mount in the vicinity of the claw portion while the masking portion is disposed on the front surface of the projected portion in opposition to the shutter opening. Therefore, the claw portion is swung in a plane different from that of the masking portion. (CX-9, col. 2, lines 25-66).

Referring to claim 1 of the '200 patent, the administrative law judge finds that Types 2, 3 and 4 single use cameras comprise every element of the claim. (CX-9, CX-725, Q&A 43, CX-738, CX-743 to 745). Thus said type recites the shutter mounting platform CA with a raised rim CP around the shutter opening CB, the geometry of the offset shutter blade K that includes the claw portion CD, the arm portion CI, and the masking portion CE, and that the blade is bent in a crank shape CS to offset the masking portion from the pivot in the claw portion. (CX-725, Q&A 43). Bellows testified that he examined samples of Types 2, 3 and 4 shutters and found all of those features present in those samples. Id. Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 1 of the '200 patent is found in Types 2, 3 and 4 of respondents Argus, Boecks, Boshi, China Film, Dynatec, Forcecam, Jazz, Klikit, OptiColor, Penmax, PhilmEx, Rainbow,

Rino, and Sakar. (See FF 217).

Referring to claim 15 of the '200 patent, the administrative law judge finds that Types 2, 3 and 4 single use cameras comprise every element of claim 15. (CX-9, CX-725, Q&A 43, CX-738, CX-743 to 745). Thus those types recite refinements to the shutter mechanism in which the masking portion CE of the blade is capable of swinging to open and close the shutter opening CB; that half of the rear surface of the masking portion CH is tapered in thickness to reduce friction when swinging; and that there is a light-sealing rim CR surrounding one half of the masking portion on its rear surface. (CX-725, Q&A 43). Bellows identified all of those features and characteristics in shutter samples from Types 2, 3 and 4 LFFPs including the taper that measures only 0.005 to 0.007 inches - about two thicknesses of paper. Id. Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 15 of the '200 patent is found in Types 2, 3 and 4 of respondents Argus, Boecks, Boshi, China Film, Dynatec, Forcecam, Jazz, Klikit, OptiColor, Penmax, PhilmEx, Rainbow, Rino and Sakar. (See FF 217).

Referring to claims 23 and 25 of the '200 patent, the administrative law judge finds that Types 2, 3 and 4 single use cameras comprise every element of those claims. (CX-9, CX-725, Q&A 43, CX-738, CX-743 to 745). Thus as to claim 23, those types recite further refinements to the shutter mechanism in which there is a lens aperture CF in front of the masking portion CE of the blade K and a protrusion CG on the forward surface of the blade at its trailing edge that fits closely to the aperture CF. (CX-725, Q&A 43). Bellows testified that he examined samples of Types 2 thru 4 LFFPs and identified all of the recited features Id. Referring to claim 25, claim 25 is substantially identical to claim 15 except that the taper on

the rear surface of the shutter blade is not recited. Id. Thus the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claims 23 and 25 of the '200 patent is found in Types 2, 3, and 4 of the respondents identified with respect to the infringement of claims 1 and 15 of the '200 patent. (See FF 217). As to infringement of claims 1, 15, 23 and 25 of the '200 patent, see also CX-725, Q&A 72, 73, 74, 75, 76, 77, 79, 81, 82, 84, 85, 86, 87, 89, 90 and 91.

#### **10. The '685 Patent**

The '685 patent covers the recyclability of single use cameras. (CX-725, Q&A 45). In the "Background Of The Invention" section of the patent, it is disclosed that in the prior art after use of the single use camera the film unit in its entirety is forwarded to a photo laboratory when the whole strip of the film is exposed; that an operator at that laboratory unloads the cassette containing the exposed film from the film unit and subjects it to development and printing in accordance with conventional photographic processing techniques; and that the user receives photoprints and a negative film but does not receive the film housing of the film unit; and that the film housing after processing is destroyed and discarded as waste causing damage to the environment. Hence the '685 patent teaches that it is desirable to be able to recycle the film housing after processing. (CX-11, col. 1, lines 45 to 58).

The '685 patent in the "Background Of The Invention" section teaches that it is disclosed in Japanese Patent Laid-Open Publ. No. 3-39734 to construct a lens-fitted film unit by following the steps of: constructing a wind-up stopping mechanism including a metallic spring together with a film containing unit of plastic integrally having the film supplying chamber for containing a roll of unexposed film and the film take-up chamber for receiving the

film as wound up after exposure; combining with the film containing unit a shutter mechanism as assembled previously in a separate manner; engaging the front cover with the film containing unit to bear against the wind-up stopping mechanism and the shutter mechanism; loading the film containing unit with the film; and then securing the rear cover tightly thereto and that "[p]erhaps it would be conceivable to utilize this structure [of the prior art] of the film unit for recycling its parts." (CX-9, col. 1, lines 65-67, col. 2, lines 1-11). However it is disclosed that the film unit of this prior art is disadvantageous for recycling parts because discarding such parts will be less costly than recycling them; that although the front cover, rear cover, shutter mechanism and film containing unit can be disassembled easily it is laborious to remove the wind-up stopping mechanism from the film containing unit and to separate and classify its parts into resin and metal; that if the film containing unit is reused without removing the wind-up stopping mechanism, the reuse of the shutter mechanism as withdrawn necessitates an inspection of its performance after securing it to the film containing unit as reused; and that a random combination of a reused shutter mechanism and a reused film containing unit causes additional errors in dimensions, which might influence badly the performance of the recycled film unit, e.g., the shutter speed. (CX-11, col. 2, lines 14-30).

The '685 patent discloses that the objects of the invention of said patent are to provide a lens-fitted photographic film unit of which the parts can be recycled easily; to provide a lens-fitted photographic film of which the parts can be classified easily into those to be remolded and those to be reused; and to provide a lens-fitted photographic film of which the performance is not worsened even when the parts as reused are reassembled into it. To achieve those objects a film containing unit is provided which has an exposure aperture, a film

supplying chamber and a film take-up chamber formed therein. A photo-taking unit is associated with a shutter mechanism and a wind-up stopping mechanism and is secured to the film containing unit so removably as to facilitate removal of non-resinous parts. A front cover is secured to the film containing it in front of the photo-taking unit. (CX-11, col. 2, lines 32-55).

The '685 patent further teaches that besides the front cover, rear cover and film containing unit being easily disassembled, according to the invention, it is easy to remove the photo-taking unit from the film containing unit, thereby to classify easily its parts into all resinous remoldable units and metal-containing units; that even though the reuse of the shutter mechanism of the photo-taking unit as withdrawn necessitates an inspection of its performance after securing it to the film containing unit as reused, a random combination of a reused photo-taking unit and a reused film containing unit will give rise to no error, e.g. in dimensions, and thus will have no bad influence on the performance of the recycled film unit, e.g. as to the shutter speed; and that the performance will not be worsened even when the parts as reused are reassembled into the novel film unit. (CX-11, col. 2, 3). The '685 patent further describes a detailed process of disassembling the film unit when returned to the manufacturer via a photo laboratory (col. 5, lines 44-68, col. 6, lines 1-14) and a detailed reassembling process (col. 6, lines 14-31).

Referring to claim 1 of the '685 patent, the administrative law judge finds that Types 1 thru 4 single use cameras comprise every element of claim 1 of the '685 patent. (CX-11, CX-725, Q&A 45, CX-740, CX-742 to 745). Thus those Types 1 thru 4 recite a single use camera A with both metal and plastic parts and recites the plastic body parts, i.e., the film-

containing assembly S and W and the front cover unit L, and the removable photo-forming unit AG that includes some metal parts, i.e., the shutter mechanism and the film winding mechanism BA; that on disassembly of samples of Types 1 thru 4 LFFPs, all of the recited items are identified and easily separated into two divisions of "resinous" and "metal-containing" with the metal parts comprising a shutter return spring, drive rivets, and a shutter trip all being part of a single removable assembly. As Bellows testified all elements of claim 1 were present. (CX-725, Q& A 45). Accordingly the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 1 of the '685 patent is found in Types 1 thru 4 of respondents Ad-Tek, Argus, Boecks, Boshi, China Film, Dynatec, Fast Chance, Forcecam, Jazz, Klikit, Linfa, OptiColor, Penmax, PhilmEx, Rainbow, Rino and Sakar. (See FF 217).

Referring to claim 28 of the '685 patent, the administrative law judge finds that Types 1 thru 4 single use cameras comprise every element of that claim. (CX-11, CX-725, Q&A 45, CX-740, CX-742 to CX-745). Thus claim 28 is similar to claim 1 except that the nonspecific recitation of the shutter mechanism and winding mechanism is replaced with a detailed enumeration of the various components that comprise the shutter mechanism and film winding mechanism, i.e., shutter blade K, sprocket wheel AA, shutter cocking mechanism CK, shutter driver CJ, thumb wheel J, and advancement control AF. (CX-725, Q&A 45). During Bellows' disassembly of the LFFPs, he identified all of the elements recited in claim 28. Accordingly the administrative law judge finds that complainant has sustained its burden in establishing that the subject matter of claim 28 of the '685 patent is found in Types 1 thru 4 of the respondents identified with respect to the infringement of claim 1 of the '685 patent. (See

FF 217). As to infringement of claims 1 and 28 of the '685 patent, see also CX-725, Q&A 71, 72, 73, 75, 76, 77, 78, 79, 81, 82, 83, 84, 86, 87, 89, 90 and 91.

#### **11. The '288 Patent**

The '288 patent covers a lens-fitted film package that includes a novel variation on a standard film cassette in which the normal rotation-engaging key projections that repeat at 180 degree intervals are augmented with smaller spline-like teeth that permit engagement at repeats of much less than 180 degree intervals. The patent also covers the mating features on the thumb wheel-driven drive shaft which feature increases the number of azimuthal positions at which the film cassette can be installed, thereby saving the film. (CX-725, Q&A 44).

The '288 patent specifically teaches that in the invention an axial hole is formed in a distal end of a spool in a photographic film cassette, which is specially adapted to receive a rotary drive shaft when a camera is loaded with the film cassette; that knurled inner teeth are formed on the inside of the axial hole in the end of the spool that receives the drive shaft, thereby to rotate the spool upon rotation of the drive shaft; that a wind-up wheel is mounted over the cassette-containing chamber of the camera, to be rotated by the user: that the drive shaft is formed on the wind-up wheel to protrude into the cassette-containing chamber and to be inserted in the axial hole in the cassette spool; and that knurled outer teeth are formed around the drive shaft to mesh with the inner teeth of the axial hole. Thus the '288 patent discloses that the interval between the first frame and the film end is prevented from varying and a predetermined number of photographs, greater than the stated number of exposures on the film, can be taken without fail. (CX-10, col. 3, lines 2-22).

Complainant's Bellows testified that each of claims 1 and 7 is infringed by " all of

Types 1 through 4 single-use cameras." (CX-725, Q&A 44) (Emphasis added). Thus with respect to claim 1, Bellows testified that claim 1 recites a film cassette F with internal key way teeth EC and an integral thumb wheel J and drive shaft O in which the drive shaft has mating key way teeth EE; that he has observed samples of Types 1 through 4 LFFPs with both types of engaging structures; the conventional 2-lug style and the internal key way or multiple tooth style; that in the latter examples there were approximately 30 triangular teeth postformed in the spool of the film cartridge, apparently with a heated tool; that mating male teeth were found on the drive shaft of the thumb wheel; and that, therefore, he concluded that claim 1 of the '288 patent is infringed by all of Types 1 through 4 single use cameras. (CX-725, Q&A 44). With respect to claim 7 of the '288 patent Bellows testified that claim 7 is substantially the same as claim 1, but that the text of the claim appears to be more general in some respects, e.g., there is no mention of the "key way", and more specific in other respects, e.g., that the teeth are of a triangular shape; and that, as with claim 1, he has also verified that all other elements of claim 7 of the '288 patent are present and, therefore claim 7 of the '288 patent is infringed by all types 1 through 4 single use cameras. (CX-725, Q&A 44).

Bellows also testified in explaining infringement of claims 1 and 7 by each of Types 1 thru 4 that "Patent '288 Claims 1, 7 (sometimes)" (CX-725, Q&A 59, 61, 62 and 63). The administrative law judge is unable to find in the record what Bellows intended by the term "sometimes" and he accordingly finds this testimony of Bellows ambiguous. Moreover, with reference to infringement of the '288 patent by respondents China Film, Fast Shot, Klikit, Linfa, OptiColor and Penmax, Bellows testified "by inference, as the multi tooth feature could not be verified." (CX-725, Q&A 76, 78, 82, 83, 84 and 86). Still later, Bellows testified,

with respect to infringement of claims 1 and 7 of the '288 patent by respondents Boecks, Jazz, Philmex, and Rino that they infringe "by inference." (CX-725, Q&A 73, 81, 87 and 90). Bellows did testify that when stated "by inference," in connection with the '288 patent, he meant (CX-725, Q&A 74):

[t]here is evidence , specifically the declaration of Lisa Jakob, Exhibit CX-772<sup>25</sup>, the { } alters the standard 35 mm cartridge film spool by sawing off the top of it and gluing on a portion that contains the multi-tooth feature of the '288 patent. While I came across no such LFFPs, evidence exists that such LFFPs are out there, and they would come within the '288 patent, claims 1 and 7. (Emphasis added).

Ms. Jakob testified (CX-770, Q&A 24):

The film canister is altered by sliding a conventional 35 mm canister beneath a buzz saw in order to cut off the top of the spool. Then, a separately molded film spool portion with peripheral gear teeth apparently designed to mate with the film advance wheel on Fuji one time use cameras is then glued on to the spool.

While there is evidence that{ } alters the film cartridge, complainant's expert Bellows testified that he has never seen such an altered film cartridge in an LFFP. The administrative law judge interprets this testimony to mean that Bellows has never seen such an LFFP with an altered film canister with respect to the single use cameras of each of the respondents for whom he testified "by inference." The administrative law judge finds Bellows' testimony that "such LFFPs are out there" insufficient to establish that complainant has met its burden in showing that respondents China Film, Fast Shot, Klikit, Linfa, OptiColor, Penmax, Boecks, Jazz, Philmex, and Rino. Thus, the administrative law judge finds that respondents China Film, Fast Shot, Klikit, Linfa, OptiColor, Penmax, Boecks, Jazz,

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<sup>25</sup> CX-772 is not in evidence. However, in evidence is CX-770 which is the direct testimony of complainant's Ms. Jakob.

Philmex, and Rino do not infringe claims 1 and 7 of the '288 patent.

Bellows further testified without qualification, i.e., without the use of the terms "sometimes" or "by inference", that the Ad-Tek, Argus, Boshi, and Dynatec single use cameras infringe the '288 patent. (CX-725, Q&A 71, 72, 75 and 77). Thus, the administrative law judge finds that complainant has met its burden in establishing infringement of the '288 patent by respondents Ad-Tek, Argus, Boshi and Dynatec.

## **12. Design Patents D '101, D '722, and D '750**

Each of the three design patents in issue claim an ornamental design for a single use camera as shown in the figures of the patents. Complainant's expert Bellows compared the ornamental design illustrations of D '750 with a sample of the Type 1 LFFP without flash and found them to be substantially identical. He also compared the ornamental design illustrations of D '101 with samples of the Type 1 LFFPs with flash and found them to be substantially identical. He further compared the ornamental design illustrations of D '722 with samples of the Type 4 LFFPs with flash and found them to be substantially identical. (CX-725, Q&A 47). Bellows concluded that the Type 1 units with flash of respondents Ad-Tek, Fast Shot, Linfa is substantially identical to the claim of the D '101 patent (CX-725, Q&A 71, 78 and 83); and that the type 4 with flash of respondents Boecks, China Film Dynatec, Forcecam, Jazz, Klikit, OptiColor, Penmax, PhilmEx, Rino, and Sakar is substantially identical to the claim of the D '722 patent. (CX-725, Q&A 72, 73, 76, 77, 79, 81, 82, 84, 86, 87, 90, 91).

With respect to D '750, Bellows testified that he compared the ornamental design illustrations of D '750 with a sample of the Type 1 LFFP without flash and found them to be substantially identical. (CX-725, Q&A 47, 59). However Bellows identified no respondents

with respect to the D '750 patent. (See CX-725, Q&A 70 to 94).

Referring to D '101 and D '722 in issue, design patent infringement is a question of fact that the patent holder must prove by a preponderance of the evidence. ODDzon Products, Inc. v. Just Toys, Inc., 122 F.3d 1396, 1405 (Fed. Cir.1997). Significantly a requisite similarity between the patented design and the accused article is determined by the ordinary observer test, which the Supreme Court articulated in Gorham Mfg. Co. v. White, 81 U.S. (14 Wall.) 511 (1872). Identity is not tested through the eyes of an expert but rather through those of the "ordinary observer:"

if, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other. [81 U.S. (14 Wall.) at 528].

Thus Gorham requires a comparison between the accused and patented designs be made not by an expert but by an ordinary observer. Bellows was not an ordinary observer. Thus Bellows was qualified by this administrative law judge as an expert in mechanical engineering, camera manufacturing and camera design. (Tr. at 1710). In addition it is a fact that the accused single use cameras are sold with outer cardboard covers which in some instances have private label (see, e.g., CPX-173) and in other instances identify the source. (see, e.g., CPX-174). Significantly the purchaser never removes the outer cardboard cover which cardboard cover covers the claimed design.

Based on the foregoing the administrative law judge finds that complainant has not sustained its burden in establishing that any of the design patents in issue are infringed by any respondent.

#### **B. The Accused "Newly Manufactured" Single Use Cameras**

Complainant alleged that Achiever Type 6 LFFPs infringe the following claims of the

following patents:

'495 patent claims 5, 6, 9, 11<sup>26</sup>  
'774 patent claims 14, 15  
'087 patent claims 7, 15  
'857 patent claim 22  
'649 patent claim 9  
'400 patent claim 14  
'364 patent claims 1, 11  
Re '168 patent claim 1

(CBr at 50).<sup>27</sup> Complainant however represented that many of the infringement issues related to the Type 6 LFFP sold by respondents have been resolved by stipulation. (SX-1).<sup>28</sup> Thus it represented that there is no infringement involving the following subtypes of Type 6 and recited claims (CBr at 5 to 53):

A first subtype of a type 6 camera does not have an outer cover covering the film door as represented by CPX-165, CPX-171, CPX-210, CPX-241, CPX-242, CPX-243, CPX-244, CPX-245, CPX-301, CPX-304, CPX-519, CPX-520, CPX-668, RPXACH-1, RPXACH-4, RPXACH-7, RPXACH-8, RPXPSI-4 and RXPSI-12-30 and therefore does not infringe claim 14 of the '400 patent (SX-1, pars. 1, 4);

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<sup>26</sup> While complainant in its post hearing submissions argued that claim 1 of the '495 patent is infringed by Achiever (CBr 50, 56), Bellows did not find that the elements of claim 1 of the '495 patent is in any Type 6 single use camera manufactured by Achiever. (See CX-725, Q&A 34, Q&A 65 and Q&A 70).

<sup>27</sup> Achiever began manufacturing single use cameras in 1993. One of Achiever's customers is PSI and PSI packages those cameras as "Message Cameras." (Chan Witness Statement, RXACH-8, Q&A 5-10).

<sup>28</sup> Bellows testified at the hearing that all the elements of the Type 6 are found in claims 5, 6, 9 and 11 of the '495 patent (CX-725, Q&A 34), claims 14 and 15 of the '724 patent (CX-725, Q&A 35), claims 7 and 15 of the '087 patent, (CX-725, Q&A 36), claim 22 of the '857 patent (CX-725, Q&A 37), claim 14 of the '400 patent (CX-725, Q&A 40), claims 1 and 11 of the '364 patent (CX-725, Q&A 41), and claim 1 of the '168 patent (CX-725, Q&A 46). However during the hearing, thru stipulation (SX-1) entered into by complainant, the staff, Achiever and Argus, certain issues relating to infringement were stipulated to. However as to issues not involved in the stipulation the administrative law judge finds that complainant has sustained its burden in establishing infringement of the Type 6 thru Bellow's testimony.

A fourth subtype of a Type 6 LFFP has a main capacitor extending vertically as represented by RPXACH-8, CPX-668, RPXACH-4, RPXACH-7, CPX-241, CPX-301, CPX-171, CPX-304, RPXACH-1 and RPXPSI-4, and therefore does not infringe claims 1 and 11 of the '364 patent. (SX-1, par. 8);

A fifth subtype of a Type 6 LFFP has no capacitor, as represented by CPX-240 and CPX-178, and therefore does not infringe claims 1 and 11 of the '364 patent. (SX-1, par. 9);

A sixth subtype of a Type 6 LFFP has no rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container with one end of said spool being exposed outside said light-tight film casing as represented by RPXACH-7, CPX-171, CPX-301, CPX-240, CPX-241 and CPX-304, and therefore does not infringe claims 7 and 15 of '087 patent, nor does it infringe claim 22 of the '857 patent. (SX-1 pars. 11, 13 and 15);

A ninth subtype of a Type 6 LFFP has a front cover section which is attached to said main case section and closes said open front of said main case section to cover the majority of said taking lens and said shutter means and said film transporting means, said front cover section being formed without at least one opening for partly receiving therein a member of one of said means which member project forwardly beyond surfaces of said main case section which are in contact with an inner surface of said front cover section which said front cover section is securely attached to said main case section, as represented by CPX-240 and CPX-668, and therefore does not infringe claim 1 of the '168 patent. (SX-1, par. 19);

A tenth subtype of a Type 6 LFFP does not have a film roll receiving chamber having upper and lower projections formed on an inner surface thereof for supporting an outermost convolution of said film in the form of a roll at its upper and lower sides as represented by CPX-165, RPXACH-4, CPX-668, RPXACH-1, RPXPSI-4, CPX-242, CPX-243, CPX-244, CPX-245 and CPX-240, and therefore does not infringe claim 1 of the '495 patent. (SX-1, par. 21);

A twelfth subtype of a Type 6 LFFP has no means to exert a frictional force on said film upon said film being advanced, as represented by CPX-668 and RPXACH-1, and therefore does not infringe claim 5 of the '495 patent. (SX-1, par. 24) and;

A fourteenth subtype of a Type 6 LFFP does not have one or more projections over the film cartridge such as those projections designated by the letter P in CPX-46A and CPX-47A, and as represented by CPX-165, CPX-171, CPX-178, CPX-210, CPX-240, CPX-241, CPX-242, CPX-243, CPX-244, CPX-245, CPX-301, CPX-304, CPX-519, CPX-520, CPX-668, RPXACH-1, RPXACH-4, RPXACH-7 and RPXACH-8 and therefore does not infringe claims 6, 9 and 11 of the '495

patent. (SX-1, par. 26).<sup>29</sup>

Complainant further represented that, by the stipulation (SX-1), there is infringement as alleged by complainant involving the following subtypes of Type 6 and patents (CBr at 53-54):

A third subtype of a Type 6 LFFP has a main capacitor disposed above the film chamber and extending horizontally, as represented by CPX-165, CPX-242, CPX-243, CPX-244 and CPX-245. (SX-1, par. 7; CFF 895). The third subtype of Type 6 LFFP infringes claims 1 and 11 of the '364 patent. (SX-1, par. 7);

A seventh subtype of a Type 6 camera has a rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container with one end of said spool being exposed outside said light-tight film casing as represented by CPX-165, RPXACH-4, RPXACH-8, CPX-178, CPX-242, CPX-243, CPX-244, CPX-245, CPX-668, RPXACH-1 and RPXPSI-4, and therefore infringes claim 15 of the '087 patent. (SX-1, par. 12);<sup>30</sup>

An eighth subtype of a Type 6 LFFP has a front cover section which is attached to said main case section and closes said open front of said main case section to cover the majority of said taking lens and said shutter means and said film transporting means said front cover section being formed with at least one opening for partly receiving therein member of one of said means which member projects forwardly beyond surfaces of said main case section which are in contact with an inner surface of said front cover section which said front cover section is securely attached to said main case section, as represented by CPX-165, CPX-171, CPX-178, CPX-210, CPX-241, CPX-242, CPX-243, CPX-244, CPX-245, CPX-301, CPX-304, CPX-519, CPX-520, RPXACH-1, RPXACH-4, RPXACH-7, RPXACH-8, RPXPSI-4 and RXPSI-12-30, and therefore infringes claim 1 of the '168 patent. (SX-1, par. 18); and

A thirteenth subtype of a Type 6 LFFP has one or more projections over the film cartridge, such as those projections designated by the letter P in CPX-46A, and CPX-47A and as represented by RPXPSI-4, and therefore infringes claims 6, 9 and

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<sup>29</sup> The administrative law judge notes that while certain claims of certain patents were stipulated as non-infringed with respect to certain subtypes of Type 6, the administrative law judge finds that not all of the patents in issue have been stipulated as non-infringed with respect to any one subtype.

<sup>30</sup> With respect to claim 15 of the '087 patent, the administrative law judge found no infringement of claim 15 as to the accused "remanufactured" single use cameras. See Section VIA1.

11 of the '495 patent. (SX-1 par. 25).

According to complainant, the only infringement issues that survive the stipulation (SX-1) are (1) whether the Type 6 LFFP contains a light-tight film case which must be destroyed, as that language is found in claims 5 and 6 of the '495 patent, claim 22 of the '857 patent, and claim 7 of the '087 patent; (2) whether the Type 6 LFFP contains a back cover that is securely fixed to the main case, as required in claim 14 of the '400 patent; (3) whether certain subtypes of Type 6 LFFP contain the "concaved curved portion" limitation found in claims 14 and 15 of the '774 patent; and (4) whether the methods of loading film into Type 6 LFFPs employed by Achiever infringe claim 9 of the '649 patent. (CBr at 50).<sup>31</sup>

#### 1. The "must be destroyed" limitation

Regarding the "must be destroyed" limitation, in issue is whether the eleventh subtype of Type 6 LFFP meets that language of claim 1 of the '495 patent (SX-1, par. 22), whether the twelfth subtype of Type 6 LFFP meets that language of claim 7 of the '087 patent and of claim 22 of the '857 patent (SX-1, pars. 14 and 16), and whether the nineteenth subtype of Type 6 LFFP meets that language of claim 5 of the '495 patent. (SX-1, pars 23 and 24). (CBr at 54-55). If said language is met it is argued that there is infringement. (SX-1, pars. 22, 23, 24).

The administrative law judge has found that the "must be destroyed" limitation describes an LFFP that, upon removal of the film cartridge, is distinguished from a camera that can be readily loaded and reloaded by a user and that has not lost its light-tightness upon

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<sup>31</sup> Point (4) is treated in Section VIII, *infra*.

removal of the film cartridge and that the "must be destroyed" limitation as it appears in the claims in issue of the '087, '495 and '857 patents must be so interpreted. (See Claim Interpretation supra).

Relying on testimony of Bellows, the administrative law judge found that Types 1-5 infringes claim 1 of the '495 patent; that Types 7, 7A and 8A infringe claim 7 of the '857 patent; and that types 7 thru 8A infringe claim 5 of the '495 patent. See Section VI A supra. Relying on the same testimony, which also referenced Type 6 single-use cameras, he finds that complainant has sustained its burden in establishing infringement of claims 1 and 5 of the '495 patent, claim 7 of the '087 and claim 22 of the '857 patent by the subtypes in issue.

Respondent Achiever argued that Mr. Chan testified that the Achiever cameras are designed to be reusable so that after use by a consumer, Achiever or some other users, can remove the back, load a new roll of film, and remount the back cover without replacing any parts of the camera. (AFF 61). Chan however has testified that to reuse an Achiever Type 6 LFFP equipped with a spool, one needs two screwdrivers and a thin tool to pry open plastic tabs on the sides of the LFFP; and that if a powered screwdriver was used it would need to be a powered screwdriver with adjustable torque. (Tr. at 2763 to 2767). Achiever Type 6 LFFPs sold in the United States have no instructions advising how the LFFP can be reused. (Chan Tr. 2789-2790). Chan's testimony establishes that the Achiever Type 6 single use camera cannot be opened and reloaded like a conventional camera.

## **2. The "securely fixed back cover" limitation**

With reference to the "securely fixed back cover" limitation, in issue is whether the second subtype of Type 6 LFFP meets the "securely fixed rear case section" limitation of

claim 14 of the '400 patent (SX-1, par. 5) (CBr at 57). The administrative law judge interpreted the "securely fixed rear case section" limitation as describing the attachment of the rear case section, in any well known manner, including but not limited to ultrasonic welding, such that the rear case is sufficiently secure to discourage a user from removing the rear cover in order to reload the LFFP with new film like a conventional camera. (See Claim Interpretation, Section V E supra).

Relying on testimony of Bellows the administrative law judge has found that Types 1 thru 5 and 7A infringe claim 14 of the '400 patent. See Section VI A supra. Relying also on that testimony which referenced Type 6 single-use cameras, the administrative law judge finds that complainant has sustained its burden in establishing infringement of claim 14 of the '400 patent by the second subtype of Type 6 LFFP.

### **3. The "concave curved portion" limitation**

Referring to the "concave curved portion" limitation, in issue are the fifteenth, sixteenth, seventeenth and eighteen subtypes of the Type 6 LFFP.

#### **(a) The Fifteenth and Sixteenth Subtypes of the Type 6 LFFP**

In issue is whether the fifteenth and sixteenth subtypes of a Type 6 LFFP, which have two curved ribs and three curved ribs (respectively) on the inside of the back cover of the light-tight case meets the "concave portion" limitation of claims 14 and 15 of the '774 patent. (SX-1, par. 20, CX-752) (CBr at 58). The administrative law judge has found that a proper interpretation of the claimed "concave curved portion" encompasses a limitation which includes a concave curved support structure that is so constructed as to avoid distortion of the film as it is unwound from the film chamber and which structure contacts the film at a point

spaced from the edges as appropriate to avoid this distortion "concave portion" limitation as. (See Claim interpretation supra).

Complainant argued that the film can expand sufficiently to fill the film roll chamber and to contact the curved ribs on the back cover of the Type 6 LFFP; that the support provided by the ribs takes place at a location on the film that is spaced apart from the longitudinal edges of the film; and that, therefore, the evidence clearly supports a finding that the fifteenth and sixteenth subtypes infringe claim 14 and 145 of the '774 patent. (CBr at 59-61).

The staff argued that the fifteenth and sixteenth subtypes of the Type 6 LFFP literally infringe claims 14 and 15 of the '774 patent because they provide a concave curved portion spaced from the edges as described in the claim language. (SBr at 36).

Respondent Achiever argued that the fifteenth and sixteenth subtypes of the Type 6 LFFP do not infringe claims 14 and 15 of the '774 patent because Mr. Chan testified, the purpose of the curved side ribs is to support the side wall and not to contact and support the film roll (RX ACH 8C, Q&A 52, ABr at 30). However the fact that the curved side ribs may perform an additional function does not avoid infringement. See Spindelfabrik Suessen-Schurr, Stahlecker & Grill GmbH v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft, 829 F.2d 1075, 1085 (Fed. Cir. 1987), cert denied 484 U.S. 1063 (1988) (A device that meets all claim limitations infringes, even if part of that structure performs a function in addition to the claimed function for that particular part).

Respondent Achiever also argued that the fifteenth and sixteenth subtypes of the Type 6 LFFP do not infringe claims 14 and 15 of the '774 patent because Mr. Chan demonstrated through a physical camera, RPXACH 8, that there is a spacing of approximately two

millimeters between the film roll and the curved ribs in the assembled position and thus there is no contact, and that Mr. Chan testified that contact with the ribs could occur only if the spool is purposely turned to loosen the film on the film roll. (ABr at 30). However, Bellows testified that, in connection with Type 6 LFFPs having a spool, the spool is free to expand back out to its full diameter and contact the ribs over the film roll chamber. (Tr. at 2356-2359, CPX-248). Also that in those Type 6 LFFPs that do not have a spool it is even more likely that the film will contact the concave curved portions of the type 6 LFFP. (Tr. at 2359-2360).

The administrative law judge rejects respondent Achiever's argument that the portion of the ribs that contact the film as it emerges from the film roll is in fact not ribs but are "raised rails" which are flat, not concavely curved as required by claims 14 and 15 of the '774 patent and therefore do not infringe said claims. (ABr at 30-31). Achiever argued that those rails are connected to the ribs and thus can be characterized in some sense as extending from the ribs, but that those flat rails cannot be part of the concave curved portion because they are flat; and that the plain language of the claim requires a concave curved portion, thus, these raised rails do not meet the "concave curved portion" limitation. (ABr at 31). However, Achiever admits that the "raised rails" extend from the ribs. (ABr at 31). Thus the administrative law judge finds that these "raised rails" are part of the concave curved support structure and therefore are within the claimed language. Furthermore, even if the "raised rails" were not part of the concave curved structure, if the accused device performs substantially the same function in substantially the same way to obtain substantially the same result then infringement exists under the doctrine of equivalents. See Datascope Corp. v. SMEC, Inc., 776 F.2d 320,

227 U.S.P.Q. 838 (Fed. Cir. 1985) (Datascope); Lemelson v. United States, 752 F.2d 1538, 224 U.S.P.Q. 526 (Fed. Cir. 1985) (Lemelson).

Based on the foregoing, the administrative law judge finds that complainant has established that the subtypes fifteen and sixteen of the Type 6 Achiever LFFP infringes claims 14 and 15 of the '774 patent.

(b) the Seventeenth and Eighteenth Subtypes of the Type 6 LFFP

In issue further is whether the seventeenth and eighteenth subtypes of a Type 6 LFFP, which have two angled projections with a base and three angled projections without a base respectively molded into the inside of the back cover section of the light-tight case, meets the "concave curved portion" limitation of claims 14 and 15 of the '774 patent. (SX-1, par. 20; CX-752) (CBr at 58-59).<sup>32</sup>

Both the complainant and the staff argued that seventeenth and eighteenth subtypes infringe claims 14 and 15 of the '774 patent under the doctrine of equivalents because these angled projections perform the same function in the same way and obtain the same result as the concave curved ribs. (CBr at 61-63, SBr at 37).

The administrative law judge rejects respondent Achiever's argument that the seventeenth and eighteenth subtypes do not infringe claims 14 and 15 because it has angled side ribs not curved side ribs and the angled ribs do not meet the limitations of said claims. (ABr at 27-28). While the angled side ribs do not meet the concave curved portion limitation

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<sup>32</sup> While respondent Achiever also argued the "raised rails" of the seventeenth and eighteenth subtypes are not concavely curved as it did with respect to the fifteenth and sixteenth subtypes, the administrative law judge has found that the "raised rails" are part of the concave curved portions.

of claims 14 and 15 of the '774 patent, the angled ribs perform the same function as the curved ribs by cradling the film. (Tr. at 1815-1818). Also, the angled ribs perform the function in a similar way by providing an angle that closely approximates the curve by providing two tangents of the curve. (Tr. at 1818-1820). Moreover, upon viewing a tracing of the front surfaces of the angled ribs and examining the points of tangency of the straight lines of the angled ribs projected upon a tracing of the curved surface of the curved ribs, it is clear that while the tracings are not a perfect fit, there exists a strikingly similar shape and the angled ribs and the curved ribs perform the "same function," see Datascope and Lemelson. (CPX-171A, CX-754, Tr. at 1818-1820). Furthermore, the administrative law judge rejects Achiever's argument that the tracing does not show alignment of the arc in the curved rib with the straight lines of the angled rib and that the tracings overlap and overrun. (ABr at 28). While Achiever argued that the tracing (CPX-171A), which was made on Bellows' business card, is crude and inaccurate, it offered no evidence to that effect. The administrative law judge notes that Bellows was qualified as an expert in mechanical engineering, camera manufacturing and camera design. Therefore, the administrative law judge has given weight to Bellows' tracing on the business card, CPX-171A, and he does not find any issue of credibility concerning Bellows' testimony regarding infringement of the '774 patent.

Based on the foregoing, the administrative law judge finds that complainant has sustained its burden in establishing that the seventeenth and eighteenth subtypes of the type 6 Achiever LFFP infringe claims 14 and 15 of the '774 patent.

### **C. The Accused Undefined Single Use Cameras**

Bellows identified an Argus "type undefined" with features from both Type 8 and Type 4

and testified that the type infringes claims 1, 5, 6, 9, 11 of the '495 patent, claims 14 and 15 of the '774 patent, claims 1, 7, 8, 15 of the '087 patent, claims 1, 19 and 22 of the '857 patent, claims 1 and 9 of the '649 patent, claims 14 and 16 of the '400 patent, claims 1, 11 of the '364 patent, claim 1 of the '111 patent, claims 1, 15, 23 and 25 of the '200 patent, claims 1, 28 of the '685 patent, claims 1, 13 of the '168 patent and the 'D722 claim. (CX-725, Q&A 72). However he also testified that the patents infringed by each of Type 4 and the Types 8 and 8A are not coextensive. (See CX-725, Q&A 63 , Q&A 67). Moreover the administrative law judge can find nothing in the record to show what particular claim elements of the Type 4 and what particular claim elements of the type 8 the Argus "type undefined" has. However in view of the fact that there was no argument raised as to Bellows' testimony (CX-725, Q&A 72), the administrative law judge finds that complainant has sustained its burden in establishing infringement of said claims of said patents by the Argus "type undefined."

Bellows also identified a Boshi "type undefined" with its appearance similar to Type 5 but it had the internal supply spool of Types 6 and concluded that it infringes a number of claims in issue. (CX-725, Q&A 75). The patents identified by Bellows as infringing Type 6 are not coextensive with the patents identified by Bellows as infringing Type 5 and Bellows has identified more patents as being infringed by the Boshi "type undefined" than is the number of patents set forth as infringed for each of the Type 5 and Type 6. (See CX-725 Q&A 64, Q&A 65, Q&A 75). The administrative law judge can find nothing in the record to show what particular claim elements of the Type 5 and the particular claim elements of the Type 6 the Boshi "type undefined" has. However in view of the fact that Order No. 23 found Boshi in default pursuant to Commission rule 210.16 and the fact that there was no argument raised as to Bellows' testimony

(CX-725, Q&A 75), the administrative law judge finds that complainant has sustained its burden in establishing that infringement of the recited claims by the Boshi “type undefined.” Id.

Bellows identified a Dynatec “type undefined” without flash that had features similar to both Types 2 and 4 and testified that the type infringes the claims identified with respect to the Argus undefined type. (CX-725, Q&A 77). The administrative law judge can find nothing in the record to show what particular claim element of the Type 2 and the particular claim elements of the Type 4 the Dynatec “type undefined” has. However in view of the fact that there was no argument raised as to Bellows’ testimony (CX-725, Q&A 77), the administrative law judge finds that complainant has sustained its burden in establishing infringement of the recited claims by the Dynatec “type undefined”. Id.

Bellows identified a Haichi “type undefined” but did not identify the type with any specific type e.g. Types 1 to 8A. Moreover he merely testified that the undefined type “probably” infringes certain claims in issue. (CX-725 Q&A 80). However since Order No. 23 found Haichi in default pursuant to Commission rule 210.16 and because there has been no argument raised with respect to the testimony of Bellows as to Haichi type undefined, the administrative law judge finds that complainant has established its burden in showing that the Haichi type undefined infringes the identified claims. (CX-725, Q&A 80).

Bellows further identified a Jazz “type undefined” with features similar to Type 6, and testified that the type infringes the claims identified with respect to the Argus undefined type. (CX-725, Q&A 81). His testimony however shows that the patents he testified the Type 6 infringe (CX-725, Q&A 65) are not coextensive with the patents Bellows testified that the Jazz undefined type infringe. (CX-725, Q&A 81). However in view of the fact that there was no

argument raised as to Bellows' testimony (CX-725, Q&A 81), the administrative law judge finds that complainant has sustained its burden in establishing infringement of said claims (Id.), excluding the '288 patent, by the Jazz type undefined.

Bellows identified a Penmax "type undefined" without flash but with feature similar to Type 5 and testified that the type infringes the claims identified with respect to the Argus undefined type. (CX-725, Q&A 86). The patents that Bellows identified with respect to what Type 5 infringes (CX-725, Q&A 64) are not coextensive with the patents Bellows identified as to what Penmax infringes. (CX-725, Q&A 86). However in view of the fact that there was no argument raised as to Bellows' testimony (CX-725, Q&A 86) the administrative law judge finds that complainant has sustained its burden in establishing infringement of the recited claims (Id.), excluding the '288 patent, by the Penmax "type undefined."

Bellows identified a Sakar "type undefined" without flash which had features similar to types 2 and 4 but had no viewfinder lens and testified that the undefined type infringes certain claims in issue. (CX-725, Q&A 91). However he testified that the patents infringed by each of types 2 and 4 are not coextensive. (CX-725, Q&A 61, Q&A 63). Moreover the administrative law judge can find nothing in the record to show what particular claim elements of the Type 2 and what particular claim elements of the Type 4 the Sakar "type undefined" has. However in view of the fact that there was no argument raised as to Bellows' testimony (CX-725, Q&A 91), the administrative law judge finds that complainant has sustained its burden in establishing infringement of the claims Bellows identified. (CX-725, Q&A 91).

Bellows identified a Vantage "type undefined" without flash but had no visible film supply spool (like Type 1-5), had a rigid cassette closure (like Type 8), but otherwise had a different

appearance from any type and concluded that the Vantage type undefined "probably infringes" certain identified claims. (CX-725, Q&A 93). The administrative law judge can find nothing in the record to show what particular claim elements of each of the Types 1-5 and of Type 8, the Vantage "type undefined" has. Bellows also has testified that Types 1-4 infringe more patents than what he identified with respect to the Vantage "type undefined". ( See CX-725, Q&A 59, Q&A 61, Q&A 62 Q&A 63 and Q&A 93). However in view of the fact that there was no argument raised as to Bellows' testimony (CX-725, Q&A 93) the administrative law judge finds that complainant has sustained its burden in establishing infringement of said claims identified by Bellows. (CX-725, Q&A 93).

#### **VII. Repair-Reconstruction Issue Involving Alleged "Remanufactured" Single Use Cameras**

Respondents Jazz and OptiColor argued that the "most important issue in this proceeding is the repair versus reconstruction issue." (JOBr at 2). Respondent Dynatec argued that the "legal issue presented in this case focuses on a determination as to whether Dynatec's FunPack cameras are repaired or reconstructed under governing legal authority." (DBr at 3). Respondents Argus, China Film and Sakar argued that the "principal focus in this case is on recycled, reconditioned lens-fitted film packages ('LFFP') devices sold into national and international commerce." (ACSBBr at 3).<sup>33</sup> Thus respondents appearing at the hearing, with the exception of respondent Achiever, have raised the defense of permissible repair in response to complainant's allegation of infringement as to the "remanufactured" single use

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<sup>33</sup> For PSI's reloaded SmileTime cameras, PSI adopts the arguments and authorities "set forth by co-respondents in support of a determination of non-infringement under the first sale doctrine and by virtue of permissible repair." (PSIBr at 1).

cameras.

The doctrine of permissible repair is an affirmative defense, see Dana Corporation v. American Precision Company, 827 F.2d 755, 758 (Fed. Cir. 1987). The party asserting an affirmative defense must prove the facts that establish that defense by clear and convincing evidence, see RCA Corp. v. Applied Digital Data Sys. Inc., 221 U.S.P.Q. 385, 387 (Fed. Cir. 1984); see also Symbols Techs v. Opticon, Inc., 935 F.2d 1569, 1580 (Fed. Cir. 1991). Thus, respondents involved in the alleged "remanufacture" have the burden to prove by clear and convincing evidence that their actions are a permissible repair rather than an impermissible reconstruction.

Respondents Jazz and OptiColor argued, in support of their affirmative defense of permissible repair, that Jazz and OptiColor, as subsequent owners of the product, have an implied license to use the product and that the implied license includes the right to repair the patented product (JOBr at 24-31); that the evidence shows that the "reconditioning" processes used by Jazz and OptiColor do not amount to a second creation of a single use camera but rather shows that the accused processes are a permissible repair; that a single use camera has a useful life beyond one roll of film; that the accused processes are simple, quick, and involve relatively few steps; and that the nature and design of the single use camera supports a finding that the actions of respondents involved in the alleged "remanufacture" are a permissible repair. (JOBr at 47-93).

Respondent Dynatec, in support of its affirmative defense of permissible repair, argued that complainant sold its single use cameras without any contractual limitation and thus is precluded from preventing the "legal repair" and subsequent resale of the single use cameras

(DBr at 7); that the single use cameras have a useable life remaining after certain limited elements are spent; that a finding of reconstruction cannot be based upon a change in the patented combination's performance or capacity; that allegations of the low quality condition of repaired products does not establish reconstruction; that complainant has acknowledged the repairability of its single use cameras; that Dynatec's process of disassembly, replacement, and modification of elements of a single use camera and subsequent reassembly constitutes permissible repair; and that "remanufacturing" the previously used single use camera "according to the patentee's instructions or procedures" constitutes permissible repair. (DBr at 7-39).<sup>34</sup>

Respondents Argus, China Film and Sakar in support of the affirmative defense of permissible repair argued that they have an implied license to use the single use cameras and this license includes the right to repair the single use camera (ACSB at 6); that their processes are inexpensive, efficient and make no substantial changes to the single use camera; and that their processes are a permissible repair rather than a reconstruction. (ACSB at 6-7).

Complainant argued that no respondent or its suppliers have any license, express or implied, to do anything, much less reconstruct the single use cameras (CBr 103-122); that the nature of the actions of the respondents involved in the alleged "remanufacture" support a finding that their processes involve an impermissible reconstruction; that the nature of the single use camera and how it was designed support a finding that the alleged "remanufacture"

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<sup>34</sup> The term "according to the patentee's instructions or procedures" is in the subheading for section e (DBr at 16). The administrative law judge finds nothing in section e (DBr at 16 to 20) which explains the phrase "according to the patentee's instructions or procedures."

is not a permissible repair; that the fact that no market for spare parts for single use cameras has developed supports the finding that the alleged "remanufacture" is impermissible reconstruction; and that the intent of complainant supports a finding that the alleged "remanufacture" in issue is impermissible reconstruction of the single use cameras. (CBr at 122-134).<sup>35</sup>

The staff argued that when complainant and its licensees sell a single use camera, each end user acquires a license to use the product until it is spent, and that the single use camera is spent when the original roll of film is exposed (SBr at 48); that the actions of the respondents involved in the alleged "remanufacture" in reconditioning and reloading spent single use cameras constitute the making of a new article, or reconstruction, rather than the repair of an unspent article; and that the fact that the complainant did not intend for its products to be reloaded is a factor tending to prove that the alleged "remanufacture" processes are infringing reconstruction. (SBr at 46-55).

On August 12, 1997, the Federal Circuit decided Hewlett-Packard Company v. Repeat-O-Type Stencil 123 F.3d 1445 (Fed. Cir. 1997) cert denied, 118 S. Ct. 1304 (1998) (Hewlett). In Hewlett, the Court concluded that while there is no bright-line test for determining whether a modification is a "reconstruction" sufficient to infringe a patent owned by the seller of a product, the district court did not err in granting the motion of the accused infringer Repeat-O-Type Stencil (ROT) for summary judgement of non-infringement of certain patents of Hewlett-Packard Company (HP). It found that HP sold ink jet cartridges without

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<sup>35</sup> Complainant is the owner by assignment of the patents in issue. (FF 54).

condition or restriction; that ROT lawfully purchased two types of HP brand new ink jet cartridges model HP 516525A (known within HP as the "Kukla" cartridge) and model HP 51608A (known within HP as the "Stanley" cartridge) and disregarding HP's instructions the purchaser ROT modified them; and that the modification was more akin to permissible repair than to impermissible reconstruction. Hewlett 123 F.3d at 1451, 1452, 1454.

On August 7, 1997, the Federal Circuit, five days prior to its decision in Hewlett, decided Sandvik Aktiebolag v. E.J. Company et. al 121 F.3d 669, (Fed. Cir. 1997), cert denied, 118 S. Ct. 1337 (1998) (Sandvik). The Court referred to a number of factors to consider in determining whether a party has made a "new" article. Those factors included

- a. the nature of the actions by the alleged infringer;
- b. the nature of the device and how it is designed (namely, whether one of the components of the patented combination has a shorter useful life than the whole);
- c. whether a market has developed to manufacture or service "the part at issue"; and
- d. objective evidence of the intent of the patentee.<sup>36</sup>

Sandvik 121F.3d at 673. The Court concluded that, while there is no bright line test for determining whether reconstruction or repair has occurred, under "the totality of the circumstances" and based on all the facts in the case the alleged infringer E.J. Company (E.J.) had made a new article, after the device in issue had become spent, i.e., E.J. was

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<sup>36</sup> In setting forth these factors the Court concluded that an analysis under those factors would be consistent with the Supreme Court's holding in Aro Mfg. Co. v. Convertible Top Replacement Co. 365 U.S. 336. (1961). 121 F.3d at 673.

reconstructing an otherwise spent device when "it retips Sandvik's drills" and accordingly that E.J. infringed the patents in issue Sandvik 121 F.3d at 673, 674.

## **A. The Sandvik Factors**

### **1. The Nature Of The Actions By The Infringers**

In each of Hewlett and Sandvik, pertinent to the conclusions of the Court was the claimed subject matter in issue and the nature of the actions of the accused infringers.

In the repair-reconstruction portion of Hewlett, the Court focused on U.S. Patent Nos. 4,827, 294 (the '294 patent) and 4,931,811 (the '811 patent). The '294 patent, entitled "Thermal Ink Jet Printhead Assembly Employing Beam Lead Interconnect Circuit," was directed to an "ink jet pen" (i.e., a cartridge), which formed an improved electrical connection between the printhead of the pen and the ink jet printer carriage in which the pen is mounted.

Claim 3 of the '294 patent, which was representative, read as follows:

An ink jet pen including in combination:

(a) a pen body housing having an ink storage compartment therein and an ink flow port adjacent one surface thereof and further having outer surfaces thereof and further having out surfaces which are contoured to mate with adjacent surfaces of a pen carriage member,

(b) a thin film printhead mounted on said one surface of said pen body housing and adjacent to said ink flow port therein for receiving ink from said ink flow port during an ink jet printing operating, and

(c) a flexible electrical circuit member including a plurality of beam leads bonded at predetermined locations on said thin film printhead for supplying electrical power and signals thereto during an ink jet printing operation, said flexible electrical circuit being extended over one of said contoured outer surfaces of said pen body housing and secured thereto, whereby electrical

conductors in a pen carriage are adapted to mate with certain ones of the said beam leads of said flexible electrical circuit for supplying power and electrical drive signals to said beam leads when said pen body housing is mounted in said carriage.

The '811 patent, entitled "Thermal Ink Jet Pen Having A Feedtube With Improved Sizing And Operational With A Minimum Of Depriming," was directed to an "ink jet pen" that uses a "standpipe" to improve the connection between the ink reservoir and the printhead by preventing air bubbles from impeding the flow of ink to the printhead.<sup>37</sup> Claim 2 of the '811 patent, which was representative, read as follows:

2. A thermal ink jet pen including an ink reservoir therein, and a thin film printhead interconnected to said reservoir by way of a standpipe, with said standpipe having an air accumulating section at the ink receiving end thereof and said thin film printhead including an orifice plate with a plurality of orifices therein of a known radius,  $r$  subnozzle characterized in that the minimum acceptable radius,  $r$ , of said air accumulating section of said standpipe satisfies the equation  $r/r$  subnozzle  $\leq 100$ .

Hewlett, 123 F.d at 1447, 1448. The Court, for interpretation of claim 3 of the '294 patent and claim 2 of the '811 patent, made reference to the following diagram, from the '811 patent:

[ insert diagram ]

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<sup>37</sup> The presence of the standpipe differentiates the claimed invention of the '811 patent over the claimed invention of the '294 patent.

The Court then stated that as illustrated in the above diagram the pen body construction includes a pen body housing (10) and a cap (28); that the pen body also includes a foam storage material (12) which serves as the ink reservoir, a standpipe formed by walls (20) and (22), and a printhead (18); and that the cap (28) has an air vent tube (30) for supplying air to the ink reservoir as ink is transferred through the standpipe to the printhead. 123 F.3d at 1448.

In Hewlett, ROT described its cartridge modification in its own patent, U.S. Patent 5,408,256 ('256 patent), entitled "Refillable Color Ink Jet Cartridge And Methods For Making Said Cartridge:"

A non-refillable color ink jet cartridge such as the Hewlett-Packard #51625A can be converted into a refillable cartridge. The upper portion of this cartridge contains the three air vent/ink has refill holes, and this upper portion has a plastic cap capable of being removed. After placing the body of the plastic cartridge on a suitable support such as, for example, the edge of a table, the protective plastic cap covering the upper portion of the cartridge can be removed by prying it off of a cartridge with a sharp instrument such as a knife.

...  
The upper protective cap [26] can now be modified so that it can be placed snugly back onto the main cartridge body [12] as often as is necessary to replenish depleted ink supplies. A variety of methods can be employed to do this, including placing two adhesive backed pads [36 and 38] at both sides of the longitudinal length of the upper protective cap.

'256 Patent, col. 1, line 56 to col. 2, line 18. ROT sold the modified refillable ink jet cartridges in kits which also contained bottles of refillable ink. The refillable ink was not manufactured or supplied by HP. In addition to modifying the cartridges, ROT replaced the black ink of HP's Stanley cartridges with a variety of color inks and resold them as color cartridges. 123 F.3d at 1449.

Referring to ROT's modification, and as seen by the '256 patent, ROT first removed the cap 28 with a sharp instrument such as a knife and then, when HP Stanley cartridges were bought, replaced the black ink of the cartridges.<sup>38</sup> Thereafter ROT modified cap 28 so that it could be placed snugly back onto the new cartridge as necessary, *i.e.*, the cap was made removable and replaceable so that the new cartridge could be refilled with ink numerous times.<sup>39 40</sup> Significantly in matching ROT's accused process, which the Court found to be akin

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<sup>38</sup> The Court pointed out that while the cap was not explicitly recited in the claims in issue of the '294 and '811 patents it agreed with HP that the claims relate to ink jet cartridges, not to specific components within the cartridges; that the preamble of claim 3 of the '294 patent and claim 2 of the '811 patent clearly stated that the claims relates to an "ink jet pen including" the recited limitations; that the claim term "including" is synonymous with "comprising", thereby permitting the inclusion of unnamed components Hewlett 123 F.3d at 1450, 1451. However the Court later stated that "ROT does not replace any of the elements recited in the claims; the housing, printhead, standpipe, ink reservoir, and flexible strip are all original components of the purchased cartridges" and that "[u]sing the original housing, ROT only changes the way in which the cap of an unused, new cartridge is connected to the remainder of the cartridge" Id.

<sup>39</sup> While ROT may refill the ink reservoir with ink, the ink is not recited in the claims in  
(continued...)

to permissible repair rather than to impermissible reconstruction, to the claims in issue of the '294 patent and the '811 patent, ROT did not replace any elements specifically recited in the claims in issue.<sup>41</sup> Moreover in Hewlett ROT was the original purchaser of a new cartridge.

In Sandvik, the patents in suit were directed to a drill with a shank portion and a unique carbide tip geometry that had specially configured cutting edges which resulted in a drill suitable for high-feed machining with improved cutting ability especially at its center portion, although the unique carbide drill tip was not separately patented. In issue in Sandvik was U.S. Patent No. 4,222,690 (the '690 patent) (ALJ Ex. 1) and U.S. Patent No. 4,381,162 (the '162 patent). Claim 1 of the '690 patent provided:

A drill comprising a pair of cutting edges each starting at the center of rotation of the drill and extending symmetrically with respect to said center and curved outwardly away from the direction of rotation of the drill with a greater curvature in the radial inner portion than in the outer peripheral portion of the drill when viewed from the bottom of the drill, each of the cutting edges being formed with a rake face starting at said center of rotation and having a rake angle approximately equal to zero at the radial inner portion of said rake face, said drill having formed in said twister groovers close to said starting end of each of the cutting edges to provide an increase in rake face at the inner radial portion of the cutting edge in the vicinity of said starting end of said cutting edge.

The '162 patent, a division of the '690 patent, described and claimed similar subject matter. For example, claim 1 of the '162 patent claimed a method of drilling a bore using a

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<sup>39</sup>(...continued)  
issue.

<sup>40</sup> ROT in its '256 patent taught that a variety of methods can be employed to modify the cap of the new cartridge.

<sup>41</sup> See fn. 38, supra.

drill having "helical grooves and a pair of cutting edges having a rake face." Sandvik 121 F.3d at 670.

The Court reproduced the following Figures 1 and 2 of the '690 patent (ALJ Ex 1):

It then stated that the claimed drill of the '690 patent has a tip (1), a shank portion (2), twisted grooves (3), projections (4) with these projections bending and breaking the chips to render them smoothly removable and a conical end having a center point (11) at the apex of the cone and a pair of cutting edges 10; and that the drill shank (2) is made of medium carbon steel while the drill tip (1) is made of a more durable carbide and is brazed to the steel shank (2). Sandvik 121 F.3d at 671 to 673.

The Court in Sandvik observed that Sandvik manufactured a commercial embodiment of the patented drill which over time and use dulls and may require resharpener or regrinding; that Sandvik expected the drill tip to be resharpened, which was not contended as

an infringement and in fact issued guidelines explaining how to resharpen the tip; that the accused infringer E.J. offered a drill repair service which included resharpening and retipping Sandvik drills; that E.J. retipped drills at the request of customers, who had purchased the drills from Sandvik, when the tips could not be sharpened; that according to E.J.'s vice-president some of E.J.'s customers elected not to have the drill retipped when it could not be sharpened any longer; and that Sandvik did not manufacture or sell replacement drill tips. Id.

While respondents Jazz and OptiColor in their initial post hearing submission argued that "every element recited in the patented combination [of the '690 patent] after the word 'comprising' in the preamble" (emphasis in original) was being made by E.J and that E.J. was "truly making the entire patented combination from a raw block of carbide," (JOBBr at 12, 13), the facts are to the contrary. Thus, as the Court pointed out, while the drill shank (2) is made of medium carbon steel, the drill tip is made of a more durable carbide and is brazed to the steel shank. Moreover examination of Figure 2 of the '690 patent shows that the drill shank while it is not part of the tip is represented by the following claimed phrase:

said drill having twisted grooves [(3) which is part of shank 2] and means defining a cavity [cavities 6 and 7 of Figs 5 to 8 of the '690 patent] formed in said twisted grooves close to said starting end of each of the cutting edges to provide an increase in rake face at the inner radial portion of the cutting edge in the vicinity of said starting end of said cutting edge.

In addition and in further support that the tip made by E.J. was not the entire patented combination, the '690 patent (col. 2, lines 27-34) states:

Each of the tips 1 is made for example from cemented carbide alloy in the form of a plate and attached to the conical end of the shank 2 by brazing, or any bolt as a throw-away piece. Instead of attaching the separate tips to the shank 2, the tips may be formed integrally with the shank 2.

As each of Sandvik and Hewlett made clear there is no bright line test for determining whether reconstruction or repair has occurred. Moreover, as is clear from a reading of Sandvik and Hewlett, any consideration of a reconstruction-repair issue is highly fact specific. Based on Sandvik and Hewlett, both of which cases the Supreme Court denied cert as reported in 118 S. Ct. 1337 (1998) and 118 S. Ct. 1304 (1998), it is at least necessary for the administrative law judge to look at the alleged "remanufacture" as it relates to the claimed subject matter in this investigation.

In each of Sandvik and Hewlett there was no dispute as to what was being done by the accused infringers. In this investigation there is a dispute as to what is being done by the accused infringers because complainant was barred from obtaining full and free access to the alleged "remanufacturing" factories of the respondents' suppliers. In addition there are admitted differences among the "remanufacturing" processes. Moreover there is a variety of original LFFPs which differ in construction. Compare e.g., Fuji's Types 1 thru 4 LFFPs (CPX-137 to 144) and the Kodak Max (CPX-150) and the Kodak FunSaver 35. (CPX-149).

Despite the differences with respect to the original single use camera used in the alleged "remanufactures" and the differences in the various accused "remanufacturers" as well as complainant's inability to obtain full and free access to the suppliers' factories, respondents involved in the "remanufacture" have admitted that every element of the claims in issue of the '087, '495, '774, '857, '400, '168, '364, '111, '200, '288 and '685 utility patents are in the accused cameras. The administrative law judge has further found that complainant has met its burden in establishing that elements of the claims in issue of said utility patents are in the accused cameras as set forth in the infringement section VI A supra. However, as each of

Sandvik and Hewlett has done, it is necessary to look at what the respondents are specifically doing in their alleged "remanufacturing" with respect to the claimed subject matter in issue. It is undisputed that said respondents are not buying new single use cameras and then performing actions on said new cameras which was done by the accused infringer in Hewlett. Rather, said respondents are using parts of single use cameras, which have been manufactured by Fuji and its licensees and which have already been used by the buyer of said cameras, to make single use cameras that are admittedly covered by claims in issue of the '087, '495, '774, '857, '400, '168, '364, '111, '200, '288 and '685 utility patents.

Although there are differences in the alleged "remanufacturing" processes when each of said processes is looked at, which differences the administrative law judge finds significant, respondents involved in the "remanufacturing" at closing argument admitted to some common elements of said processes. Thus regarding the nature of those processes the staff, in its post hearing brief, argued:

From the evidence of the various suppliers' reloading processes, some common elements can be derived that appear to occur during each process. These common steps (not necessarily in this order) are removing the cardboard cover, opening the LFFP body (usually by cutting at least one weld), replacing the winding wheel or modifying the film cartridge to be inserted, resetting the film counter, replacing the battery in flash LFFPs, winding new film out of a canister onto a spool or into a roll, resealing the LFFP body using tape and/or glue, and applying a new cardboard cover. The various suppliers apparently use different versions of the process, . . . most of which are more elaborate than the common elements of the basic process would suggest. All and all, however the Staff submits that to the extent the processes at issue differ, those differences are not significant with respect to the overall nature of the actions for purposes of determining the repair versus reconstruction issue ... [SBr at 50-51].<sup>42</sup>

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<sup>42</sup> The staff, at closing argument, represented that it was not intended in its post hearing (continued...)

The respondents involved in the alleged "remanufacturing" at closing argument agreed with the staff's characterization. (Tr. at 4034, 4037, 4040).

Looking at only what respondents agreed to as the elements of the alleged "remanufacturing" processes, and looking at the claims in issue of the '087, '495, '774, '857, '400, '168, '364, '111, '200, '288 and '685 utility patents, the administrative law judge finds that the alleged "remanufacturing" processes are not comparable to what was done in Hewlett where the alleged infringer bought a claimed unused device and modified a cap on the device which cap was not specifically recited in the claims in issue. Rather the administrative law judge finds that the alleged "remanufacturing" processes are comparable to what the accused infringer did in Sandvik. This is shown by reference to illustrative claims of each of the '087, '495, '774, '857, '400, '168, '364, '111, '200, '288 and '685 utility patents.

#### The '087 patent

The administrative law judge finds that, with respect to claim 1 of the '087 patent (see claim interpretation section supra), the respondents in their process of "remanufacturing" Types 1-5 and 7-8A LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) assembling the light tight film casing which must be destroyed to open same through the assembly of the front and rear covers with the use of tape or glue, which results in the claimed element "a light tight film casing which must be destroyed to open same" (element 3 of claim 1 of the '087 patent

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<sup>42</sup>(...continued)

brief to state that the details of the various accused processes were not significant. (Tr. at 4040).

see CX-732), (2) inserting an unexposed rolled film which results in the claimed element "an unexposed rolled film disposed on one side of said opening in said light tight casing" (element 5 of claim 1 of the '087 patent, see CX-732), (3) inserting a removable light tight container which results in the claimed element "a removable light tight film container" (element 6 of claim 1 of the '087 patent, see CX-732), (4) attaching one end of said rolled film to the film winding spool which results in the claimed element "one end of said rolled film being, attached to said film winding spool" (element 8 of claim 1 of the '087 patent, see CX-732), (5) replacing the winding wheel in certain instances, which results in the claimed element "means for winding said rolled film into said light tight film container and around said film winding spool" (element 9 of claim 1 of the '087 patent, see CX-732), (6) enabling the winding control means by resetting the frame counter which results in the claimed element:

winding control means responsive to operation of said externally operable member for allowing said film winding spool to rotate so as to enable said rolled film to be advanced by only one frame after every exposure; said winding control means including" (element 10 of claim 1 of the '087 patent, see CX-732)

and which also results in the claimed element:

a frame counter driven by said sprocket wheel, said frame counter being provided with indications designating a series of frame numbers and" (element 12 of claim 1 of the '087 patent, see CX-732)

and (7) that by resetting the counter the respondents also enable the means for disabling said winding control which results in the claimed element "means for disabling said winding control means responsive to said frame counter indicating

there remains on said unexposed film no film frame capable of being exposed" (element 13 of claim 1 of the '087 patent, see CX-732).

#### The '495 patent

With respect to claim 1 of the '495 patent (see claim interpretation section supra), the respondents in their process of "remanufacturing" Type 1-5 LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) assembling the light tight film casing which must be destroyed to open same through the assembly of front and rear covers with the use of glue or tape which results in the claimed element "which comprises a light tight film case which must be destroyed to open same" (element 4 of claim 1 of the '495 patent, see CX-730), (2) inserting a film roll into the LFFP shell which results in the claimed element "a film in the form of a roll light tightly contained in said light tight film case" (element 5 of claim 1 of the '495 patent, see CX-730), and (3) inserting a film container into the LFFP shell which results in the claimed element "and a film container in which exposed film is wound" (element 6 of claim 1 of the '495 patent, see CX-730).

#### The '774 patent

With respect to claim 14 of the '774 patent (see claim interpretation section supra), the respondents in their process of "remanufacturing" Type 1-5 and 7-8A LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) assembling the light tight film casing through the assembly of front and rear covers with the use of

glue or tape which results in the claimed element "a light tight film case" (element 2 of claim 14 of the '774 patent, see CX-731), and (2) inserting a film roll into the LFFP shell which results in the claimed element "and a rolled film" (element 4 of claim 14 of the '774 patent, see CX-731).

### The '857 patent

With respect to claim 1 of the '857 patent (see claim interpretation section supra), the respondents in their process of "remanufacturing" Type 1-5 LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) assembling the light tight film casing through the assembly of front and rear covers with the use of glue or tape which results in the claimed element "a light tight casing" (element 3 of claim 1 of the '857 patent, see CX-733), (2) inserting a roll of unexposed film into the LFFP shell which results in the claimed element:

a roll [of] unexposed film disposed on one side of said opening in an unexposed film roll receiving chamber in said light tight casing with its outermost turn exposed to side walls of said chamber and its innermost turn surrounding an empty space; (element 5 of claim 1 of the '857 patent, see CX-733),

(3) inserting a light tight film container into the LFFP shell which results in the claimed element "a removable light tight film container" (element 6 of claim 1 of the '857 patent, see CX-733), (4) attaching one end of the rolled film to the film winding spool which results in the claimed element:

having a film winding spool therein disposed on the opposite side of said opening in said light tight film casing from said rolled film, one end of said rolled film being attached to said film winding spool (element 7 of claim 1 of the '857 patent, see CX-733),

(5) replacing the winding wheel, in certain instances, which results in the claimed element "means for winding said rolled film into said light-tight film container and around said film winding spool" (element 8 of claim 1 of the '857 patent, see CX-733) and (6) enabling the means for winding the rolled film by resetting the frame counter which results in the claimed element "means for winding said rolled film into said light tight container and around said film winding spool" (element 8 of claim 1 of the '857 patent, see CX-733).

#### The '400 patent

With respect to claim 14 of the '400 patent (see claim interpretation section supra), the respondents in their process of "remanufacturing" Type 1-5 and 7-7A LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) assembling a light tight film case through the assembly of front and rear covers by the use of tape or glue which results in the claimed element "a light tight film case" (element 2 of claim 14 of the '400 patent, see CX-735) and which also results in the claimed element "and a rear case section which is securely fixed to the rear side of main case section and cannot be disassembled therefrom" (element 11 of claim 14 of the '400 patent, see CX-735), (2) inserting a light tight film cartridge into the LFFP shell which results in the claimed element "a separate empty light tight film cartridge having a spool therein rotatable about an axis of rotation" (element 4 of claim 14 of the '400 patent, see CX-735) and which also results in the claimed element "said film cartridge being enclosed in said light

tight film case on one side of said lens" (element 5 of claim 14 of the '400 patent, see CX-735), and (3) inserting an unexposed rolled film with one end retained in the film cartridge into the LFFP shell which results in the claimed element "an unexposed rolled film with its one end retained on said spool in said film cartridge" (element 6 of claim 14 of the '400 patent, see CX-735) and which also results in the claimed element "said unexposed rolled film being disposed on the other side of said taking lens with its outermost turn in contact with said film case" (element 7 of claim 14 of the '400 patent, see CX-735).

#### The Re '168 patent

With respect to claim 1 of the '168 patent, the respondents in their process of "remanufacturing" Types 1-4 and 7-8A LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) opening the LFFP body which results in the claimed element "a main case section which is open at its front" (element 7 of claim 1 of the '168 patent, see CX-741), (2) inserting a roll of unexposed film which results in the claimed element "and containing light tightly said roll of unexposed photographic film" (element 10 of claim 1 of the '168 patent, see CX-741), and (3) reattaching the front cover section with tape or glue which results in the claimed element:

a front cover section which is attached to said main case section and closes said open front of said main case section to cover majority of said taking lens and said shutter means and said film transporting means (element 11 of claim 1 of the '168 patent, see CX-741).

## The '364 patent

With respect to claim 1 of the '364 patent, the respondents in their process of "remanufacturing" Type 1-4 LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) unwinding film from a film cassette and inserting the roll of film into the LFFP body which results in the claimed element:

a film roll chamber disposed on the opposite side of said taking lens from said cassette chamber, said film roll chamber being adapted to contain a roll of said film which is pulled out from a film cassette and wound in a roll (element 9 of claim 1 of the ' 364 patent, see CX-736),

(2) inserting the film cassette into the LFFP body which results in the claimed element "said cassette chamber containing said film cassette (element 10 of claim 1 of the '364 patent, see CX-736), (3) inserting a battery into the LFFP body which results in the claimed element "a battery for charging said main capacitor" (element 16 of claim 1 of the '364 patent, see CX-736) and which also results in the claimed element "said battery being disposed between said cassette chamber and said film roll chamber and extending in a horizontal direction below said taking lens" (element 17 of claim 1 of the '364 patent, see CX-736), (4) attaching the front cover to the LFFP body with tape or glue which results in the claimed element "a front cover section attached to a front of said main body section" (element 18 of claim 1 of the '364 patent, see CX-736), and (5) attaching a rear cover to the LFFP body with tape or glue which results in the claimed element "a rear cover section attached to a rear of said main body

section" (element 19 of claim 1 of the '364 patent, see CX-736).

#### The '111 patent

With respect to claim 1 of the '111 patent, the respondents in their process of "remanufacturing" Type 1-4 LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) inserting a roll of film in the LFFP body which results in the claimed element "a lens fitted photographic film unit containing photographic film and being adapted to take photographs" (element 1 of claim 1 of the '111 patent, see CX-737).

#### The '200 patent

With respect to claim 1 of the '200 patent, the respondents in their process of "remanufacturing" Type 2-4 LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) inserting a roll of film in the LFFP body which results in the claimed element "a lens fitted photographic film unit having a pre-loaded photographic film on which an image is formed" (element 1 and element 11 of claim 1 of the '200 patent, see CX-738).

#### The '685 patent

With respect to claim 1 of the '685 patent, the respondents in their process of "remanufacturing" Type 1-4 LFFPs, which produces the claimed cameras (see infringement section supra) make a lens-fitted photographic film package by (1) inserting film into the LFFP body which results in the claimed element "a film

supplying chamber for containing unexposed photographic film" (element 3 of claim 1 of the '685 patent, see CX-740),(2) replacing the winding wheel, in certain instances, which results in "a film wind up wheel for winding up said film as exposed" (element 8 of claim 1 of the '685 patent, see CX-740), (3) enabling the film wind up wheel to function properly by resetting the frame counter which results in the claimed element "a film wind up wheel for winding up said film as exposed" (element 8 of claim 1 of the '685 patent, see CX-740), (4) enabling the wind up stopping mechanism by resetting the frame counter which results in the claimed element "a wind up stopping mechanism for preventing said wind up wheel from rotating after film is fed by one frame after each exposure by rotation of said wind up wheel" (element 9 of claim 1 of the '685 patent, see CX-740), and (5) attaching a front cover to the LFFP body with tape or glue which results in the claimed element "a front cover secured to said film containing unit in front of said photo taking unit" (element 14 of claim 1 of the '685 patent, see CX-740).

#### The '288 patent

With respect to claim 1 of the '288 patent, respondents Ad-Tek, Argus, Dynatec and Boshi, in their process of "remanufacturing" Type 1-4 LFFPs, which produces the claimed cameras (see infringement section supra) makes a lens-fitted photographic film unit by (1) inserting a roll of film into the LFFP body which results in the claimed element "in which a body contains photographic film drawn out in a form of a roll" (element 2 of claim 1 of the '288 patent, see CX-739), and (2) modifying the film

cassette, in certain instances, so that it mates with the winding wheel, which results in the following claimed elements:

a spool in said cassette and thereby said film is wound back into said cassette, said film unit comprising (element 3 of claim 1 of the '288 patent, see CX-739);

an axial hole formed in one distal end of said spool (element 4 of claim 1 of the '288 patent, see CX-739);

a pair of engaging plates, projected from said axial hole in a position axially downward inside said axial hole, and shaped in a rotationally symmetrical fashion at a straight angle with respect to an axis of said axial hole (element 5 of claim 1 of the '288 patent, see CX-739); and

a key way defined by a plurality of inner teeth formed on an inside of said axial hole and axially upward from said engaging plates (element 6 of claim 1 of the '288 patent, see CX-739);

wherein said winding wheel includes a drive shaft integrally formed therewith (element 7 of claim 1 of the '288 patent, see CX-739); and

said drive shaft includes a plurality of engaging teeth formed thereabout, arranged at a regular pitch, extended axially, and respectively engaged with said inner teeth. (Element 8 of claim 1 of the '288 patent, see CX-739).

Based on the foregoing, the administrative law judge finds that the processes of the respondents involved in the alleged "remanufacture" are more complicated than simply adding film, battery and paper as argued by Jazz and OptiColor (JOBBr at 13) and also more involved than simply taking a new claimed cartridge and modifying a cap of that cartridge, which cap was not specifically claimed, as in Hewlett. The Court in Sandvik stated "E.J. does not just attach a new part for a worn part, but rather must go through several steps involving claims in issue to replace, configure and integrate the tip onto the shank" 121 F.3d at 673. Based on the comparison detailed supra, the administrative law judge finds that the respondents involved in the "remanufacture" also must go through several steps to "replace, configure and integrate"

the parts of a single use camera to make a "remanufactured" single use camera; that they do more than just add film, battery and paper; and that in their "remanufacturing" processes, they manipulate a variety of parts of the single use camera directly reading on claim elements in issue.

In addition, referring to what is known about the processes used in the alleged "remanufacture" the administrative law judge finds that the individual processes used by the respondents further reveal the nature of the alleged "remanufacturing" processes and supports the finding that those processes involved a reconstruction and not a permissible repair.

### The Jazz Suppliers

Jazz has four steady suppliers of LFFPs, viz. Peji, Ginfax Vastfame and Boshi. (FF 218). Boshi supplies about 10% of respondent Jazz's reloaded cameras.<sup>43</sup> (FF 219). In addition to the elements of the Boshi process that are common to all of the respondents' processes, from what is known only from the video, the Boshi process includes placing the LFFP camera body in a machine which appears to be grinding down the Fuji Film logo on the cowl surrounding the taking lens (FF 258); the side weld next to the film cassette receiving chamber is cut with a chisel like blade in a hand press (FF 258); the front cover is removed and then the film door on the film receiving chamber is cut (FF 258); and then the front cover

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<sup>43</sup> While Fuji's counsel received one videotape from a Boshi factory (CPX-470), Fuji had no opportunity to visit the Boshi factory to corroborate the video or to determine whether any steps were left out of the video. Moreover the video, for example, gives no insight into how the single use camera shells are obtained by Boshi nor in what condition they are in when they are received nor what selection process is used by Boshi to determine which shells will be used in the "remanufacturing" process.

is reattached with no effort to match the covers with bodies. (FF 258).<sup>44</sup>

According to the video the next step involves removing the front cover again (FF 259); inserting a razor blade like tool under the counter wheel and cutting or prying a mechanism underneath the wheel (FF 259), Lorenzini testified that he is not exactly sure what the worker is doing with the razor blade at this stage, but that the worker is either working the frame counter or completing the opening of the take up spool area (FF 225); the front cover is then reattached to the LFFP body (FF 259); the rear cover is pulled away from the main body at the corner near the advance wheel and a metal ring is placed inside the film cassette chamber in order to hold the back cover apart from the middle section (FF 259); then the flash unit is tested. (FF 259).

The following step, pursuant to the video, involves measuring the leader of the film against a block and then inserting the film into the LFFP body (FF 260); a worker then manipulates the leader into the gap between the middle and back sections and removes the metal ring holding the body open (FF 260); at this stage, if the film door has been lost a new door is added (FF 260); a worker then clips off the engaging tabs of the film door (FF 260); then a worker inserts a small metal hook between the film wheel and the engaging pawl and pulls the hook back and tapes it down along the back cover of the LFFP body (FF 260), Bellows testified that the use of the hook under the film wheel is done in order to disengage the stopping mechanism in order to reload film in the one time use camera body. (CX-725, Q&A 103).

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<sup>44</sup> Jazz's counsel admitted that an "appropriate cutting tool" is need to separate the back cover from the main body. (JORCFF 2031).

Thereafter, according to the video, the process involves the winding of the film which involves inserting a spindle which engages the film in the film receiving chamber, then placing the LFFP body in a dark box and pushing the body against a machine which winds the film (FF 261); a worker winds the thumb wheel backward while the film is winding (FF 261); then a worker removes the spindle while the camera is still in the dark box and tapes the film receiving door shut. (FF 261). In the next step a worker inserts a new battery and the flash is tested and a frame is shot (FF 262), the cardboard inner covering is then placed around the LFFP and the body is put in a cellophane wrapper. (FF 262).

The video further shows that the Boshi process also includes the modification of the film cassette in which a circular ring is placed around the circumference of the spool, then a worker uses heated dies to mold the teeth to the inner circumference of the spool of the film cassette so that it engages the teeth on the Fuji advance wheel. (FF 263).<sup>45</sup>

Regarding the processes used by Jazz's supplier Peji, Lorenzini testified that he saw the Peji process and he described the process as involving (1) the opening of the Fuji Quicksnap at three points with some sort of tool, (2) placing the camera in some sort of mechanical fixture and pulling a lever so that the plastic is cut and the back can be opened, (3) checking the flash, kicker, shutter and advance mechanism and cleaning the camera, and (4) loading the film in a

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<sup>45</sup> Jazz and OptiColor argued that the respondents' suppliers do not manufacture or assemble the overwhelming majority of parts in the LFFP (RJFF 15); and that respondents' suppliers use intact, without assembly or disassembly, the overwhelming majority of the camera and all its parts originally manufactured. (RJFF 17). It is clear, from an analysis of the common elements of the respondents' processes and the elements of Boshi's process, that while the respondents' process does not involve the manufacture of a majority of the parts of the LFFP, the process involves the manipulation, configuration and integration of many parts directly related to the claimed subject matter in issue.

dark box where the film is pulled from the cannister then the canister and film roll are placed back in the camera and the back cover is put back on with a rubber band and tape. (FF 264).

Lorenzini also testified that he saw the Ginfax process. Lorenzini described the process as involving cutting open the camera, checking the flash and film advance mechanism, loading the film in a dark box which involves a motor pulling the film out of the cannister into a roll, and placing the film and canister in their respective portions of the camera.

The administrative law judge finds that Lorenzini's description of each of the Peji process and the Ginfax process is deficient in details. For example, Lorenzini's description of each of the processes does not give any insight into (1) how many welds are cut and with what sort of tools (2) how the frame counter is adjusted (3) whether and how the winding wheel or film cartridge is modified, (4) what the details are concerning the process for loading and winding the film; and (5) whether any modification are done to either the mechanical units or the flash units.

#### The San Harbor Process

OptiColor's sole supplier of single use cameras is respondent San Harbor. (FF 267). The only testimony proffered at the hearing concerning the process used by San Harbor was the testimony of Mr. Lass, the president of OptiColor. (FF 278). Lass himself has not seen the San Harbor process and his information was obtained from Mr. Brammer, who toured a San Harbor facility apparently no longer in use<sup>46</sup> and received explanations from Corinna and/or Vitoria Lim. (FF 279).<sup>47</sup> Ms. Corinna Lim did not testify at the hearing, but her deposition was

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<sup>46</sup> OptiColor admitted that Brammer has not visited San Harbor's "new" factory. (JORCFF 2242).

<sup>47</sup> There is pending Motion No. 406-49 by OptiColor for reconsideration of an oral ruling  
(continued...)

taken, and she gave testimony concerning the San Harbor process. However Lim testified that she did not "have such detailed practical knowledge because she was not performing the activity first hand." (FF 280). Moreover, Lim also testified that "being a general manager of a factory, of course when I go and inspect I inspect things in general and not in detail." (FF 283). Significantly Lim never testified at the hearing nor did the complainant have the opportunity to visit the San Harbor factory and corroborate any of Lim's deposition testimony.

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<sup>47</sup>(...continued)

on November 13, 1998 excluding from evidence ROCX 150 and ROCX 151, viz. OptiColor's designations from the depositions of Lass and Brammer. While complainant opposed the motion, Motion No. 406-49 is granted. In granting Motion No. 406-49, the administrative law judge has considered ROCX 150 and ROCX 151 as well as the counter designations CX-329 and CX-326. Regarding ROCX 150 (Lass deposition designations). The administrative law judge, as indicated supra, gives no weight to the Lass testimony concerning the San Harbor process because Lass never visited the factory and received his information second hand from Brammer, who has never visited the current San Harbor factory. Regarding ROCX 151 (Brammer deposition designations) the administrative law judge finds that the designations offered by OptiColor in conjunction with the Brammer deposition designations offered by complainant (CX-326) add nothing to what Lim stated in deposition concerning the process used at the San Harbor factory because Brammer did not visit the current San Harbor and thus could not testify about it.

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The Dynatec Process

Mr. Yu, president of China products, Inc., a sourcing agent who locates factories in China, was the only individual who proffered testimony at the hearing regarding the processes of the Changzhou factory which supplies Dynatec. (FF 292, 293). Yu testified (FF 298):

A Sure. The first will be remove the cardboard paper on this cover, and taking off the battery, if there's one attached to; then open the back, the back panel. If there's a side panel attached to, most of the time the photoprocessor took them out because they need to take the cartridge film, cartridge out of this -- out of this -- out of this cavity.

So if there's a side panel on them, first remove the side panel. If there's no side panel attached to, just remove the back cover. After that, adjust the film, film counter to the -- sorry -- then after that we replace the winding wheel, and if it's originally from Kodak. If it's a used one, we don't need to replace it.

Now, after that we reset the counter to the proper number.

Q Now, at some point in this process you also remove the battery; is that correct?

A The battery was removed after the cardboard cover was removed.

\* \* \*

Q How is it then that you accomplished the removal of the back panel?

A Basically there are four latches on each side of -- on each side of the back panel; and also there is latches that on the bottom, just unlatch them and open them up.

Q Then you described a step for removal of the battery for the flash cameras. What is the next step in the procedure that is incorporated by the Changzhou supplier?

A You mean the Max?

Q For reloading this particular camera shell, that is CPX 190.

A You mean after you unlatch them or after you remove the battery?

Q After you unlatch and remove the back panel.

A Oh, yeah. After you open the back panel, the procedure will be replace the winding wheel, then adjust the counter. After that --

Q When you say "the counter," what counter is that?

A It's a white wheel, white wheel film counter, has numbers on them.

\* \* \*

Q What is the purpose for the film counter, Mr. Yu?

A The film counter -

\* \* \*

THE WITNESS: Film counter is used to count how many exposures was taken.

BY MR. LAYCOCK:

Q What then is the next step?

A The next step will be the winding the unexposed film from the canister on to a plastic spindle. After -- after winding all the unexposed film on to that plastic spindle, the spindle is full of film, and then put both canister and the spindle back to the -- back to the respective cavities.

\* \* \*

Q What's the next step in the process used to reload the CPX 190 exhibit?

A After that, put back the back panel, then insert the battery, the new battery on to the camera; apply the -- apply the Dynatec cardboard cover on it, and then it is done.

\* \* \*

Q Are these the steps that you testified that you observed being practiced by the Changzhou Company?

A Yes.

Q And is it your understanding that these are the steps that are always followed for the reloading of this particular camera shell on behalf of Dynatec?

A Yes.

Q I'd like you to now take before you Exhibit RPDYNA 19.

A I have RPDYNA 19 in front of me.

\* \* \*

Q Do you recognize RPDYNA 19 as a Dynatec Fun Pak camera with flash?

A Yes.

Q And are you able to identify the camera shell that has been reloaded to result in the Fun Pak camera with flash?

A Yes.

Q What is it?

A It is the loaded with the Kodak Max shell with the Dynatec package.

Q Would you please describe for the Court the process steps followed by the Changzhou supplier in preparing this camera on behalf of Dynatec?

A Sure. The process -- the process will be first remove the -- whatever cardboard cover on the shell, and open the back panel by unlatching the four latches, two latches on each side as well as the two latches on the top, one is on top of on the bottom, the opening, and open the back panel and take out the batteries in it.

After that, replace the winding wheel and reset the film counter. After that it will be, you know, winding unexposed film from canister on to a spindle.

Once the spindle is full of film and put both canister and the film, the spindle with film back to respective concavities. And after that, insert a new battery, close the back panel. And apply the -- apply the Dynatec cover on them and it's done.

Q The procedural steps that you have just described, are those the same steps which you have observed and learned are a part of the process incorporated by the Changzhou Company in preparing this particular camera?

A Yes.

Q Thank you. I'd like you to now take before you Exhibits RPDYNA 4 and RPDYNA 5.

A I have RPDYNA 4 and 5 here.

Q Are these the same exhibits that you identified as being Dynatec Fun Pak cameras made from Fuji shells?

A Yes.

Q Is the process for reloading each of the exhibits RPDYNA 4 and 5 similar?

A Similar except the outdoor does not have a flash unit.

Q Would you please describe the process incorporated by the Changzhou Camera Company in preparing these particular cameras on behalf of Dynatec?

A Sure. The procedure of reloading the Dynatec flash camera with Fuji recycled Fuji shell are the same as the Kodak one, remove the cardboard box in this step. And then remove the battery at the bottom, and then open the -- open the front cover by unlatching the latches on both side and top and bottom, open the front cover, and taking off the flash unit, then taking off the shutter, the mechanical unit what we call the shutter mechanism.

And after that, the factory uses a cutter to cut the bottom cap of film supplying chamber.

\* \* \*

Q How is the cutting procedural step accomplished, Mr. Yu?

A They have a tool sitting on the table and insert the camera in and there's a cutter from top and goes down, and cuts that particular part, cutting -- cutting it in half so the bottom is still connected to the body itself.

Q And what is it that is cut, Mr. Yu?

A They're cutting the bottom cap, bottom cap of the film, what Fuji calls the film supply chamber.

Q Would you please continue in your description of the procedural steps used by the Changzhou Company in preparing particular cameras.

A Sure. After it's open, they use -- the factory uses a flexible tape, like a leader attached to the end of the unexposed film. And then winding the

film back into the canister only leaves that tape out, protruding out; then insert that -- insert that tape into the film take-up chamber, and then also from that chamber into that channel where the shutter mechanism sits there.

And after that, they insert a whole canister into that film take-up chamber. Then pull the tape, same -- pull the tape and the film out of that canister. Once it's pulling out and remove that tape, and then fit the fitted film into that -- into that film supply chamber, then using a winding tool, stick into the opening part of -- opening bottom part of the film supply chamber and winding the film into that chamber.

Q Is there a film counter in the RPDYNA Exhibits 4 and 5?

\* \* \*

THE WITNESS: Yes. There is a film counter.

Before we insert the -- you know, before we insert, put that film counter back, the shutter mechanism back, we adjust, the factory is readjusting the film counter.

BY MR. LAYCOCK:

Q So that is -- is that an additional procedural step followed in the preparation of these cameras?

A Yes, it is, it's an additional one.

Once the film was winding into that film supply chamber, it's sealed, the bottom, the bottom cap of the film supply chamber where it was cut, and we put back the film -- put back the shutter mechanism with a counter adjusted to the proper number.

And then reattach the flash unit, after that and then they will put the cover, front panel back to the -- to the place, and insert the -- insert a new battery and put a cap on top of -- on the top of the lens so to cover the logo.

And once that is done, will apply the cardboard paper, Dynatec's package on to the camera and the film.

Q Are those the procedural steps that are always followed by the Changzhou Company in preparation of the Fuji shells?

A Yes.

Regarding Yu's credibility as a witness, testimony at the hearing indicated that his memory is questionable. For example, while Yu's deposition was taken on September 1, 1998 by complainant's counsel, Yu testified on November 12, 1998 at the hearing that he could not remember being questioned by complainant's counsel at his deposition concerning what was said during his visit to the Changzhou factory in May of 1998. (Tr. at 3295). Moreover, at his deposition on September 1, 1998, Yu could not recall what was said during his visit to the Changzhou factory in May of 1998 (CPX-417), even though it is undisputed that Yu accompanied Gledhill to the Changzhou factory and performed translations during the production of a videotape. (CPX-407). A further indication of Yu's lack of memory is the fact that, at his deposition, Yu testified that he had never seen any of the film loading steps demonstrated for him in the light (CX-162), while he later testified, after examination by Dynatec's counsel, that he did see the steps demonstrated for him in the light (RDYNA-35). However yet upon further examination by complainant's counsel Yu could not recall, had no idea or did not pay attention to any details concerning the film winding and loading process and what sort of tool was used during that process. (CX-162). Moreover, while Yu testified, at the hearing, that he had no assistance from counsel preparing his declaration (RDYNA-34) (Tr. at 3268 to 3274), he also testified that he obtained the drawing of Exhibit A to his Declaration (RDYNA-34) from his attorney. (Tr. at 3274). Earlier, at his September 1, 1998 deposition, Yu testified that he downloaded Exhibit A from the Internet. (CPX-417). Yu also testified, at hearing, that he received Exhibits C and D of his Declaration from Kodak (Tr. at 3275), but at his deposition Yu testified that he downloaded these exhibits from the Internet.

(CPX-417). Furthermore, Yu testified that he obtained knowledge regarding the cost of single use camera shells from his visit to the Changzhou factory in March of 1998. (Tr. at 3299). However, during his deposition on September 1, 1998, Yu testified that he had no idea how Changzhou obtained the single use camera shells and that he never participated in identifying sources of shells for Changzhou. (Tr. at 3299-3300). Based on Yu's lack of memory, and the inconsistencies between his testimony at the hearing on November 12, 1998 and his testimony is at his deposition on September 1, 1998, the administrative law judge finds Yu's testimony lacking in credibility.

Moreover Yu's testimony supra., adds little information concerning the elements of the Changzhou process beyond what are known as the elements that are common to all of the "remanufacturing" processes. For example, Yu's testimony does not give any information on (1) how the Changzhou factory obtains the single use camera shells and what condition they are in when received (2) how the frame counter is removed and adjusted, (3) how the winding wheel is modified, and (4) whether any modifications are done to either the mechanical units or/the flash units. Moreover, a review of the videotape taken by Gledhill of the Changzhou process (CPX-407) reveals that the process shown is merely a "bench" demonstration<sup>48</sup> and does not disclose any information regarding the actual process used in the Changzhou factory. (FF 310). Accordingly, the administrative law judge gives no weight to the process revealed in the videotape.

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<sup>48</sup> The administrative law judge understands a "bench" demonstration to be a demonstration given apart from the factory's remanufacture process and only for the benefit of the viewer, rather than an actual view of what happens during the remanufacture process.

The{                      }Process

The administrative law judge finds that there is very little evidence in the record concerning the{                      }process. Complainant visited the{                      }factory on September 1, 1998. (FF 317). However complainant was only able to view some preloading activities and some postloading activities, but did not have the opportunity to witness the loading process. (FF 320). Complainant was unable to view the loading process that day because none of China Film's product were being loaded that day, but rather another customer's product was being loaded and{                      }could not authorize complainant to view another customer's product and the process involved in making that product. (FF 319).

In addition to the preloading and postloading activities,{                      }gave a bench demonstration of the loading of China Film's product, i.e. the reload of a Fuji LFFP. (FF 320). However in view of the facts that the complainant did not have the opportunity to witness the reloading procedure of China Film's product at the{                      }factory, and that the demonstration was merely a "bench" demonstration of the reload process, the administrative law judge finds insufficient evidence in the record to support China Film's argument that the{                      }reloading process was adequately disclosed to complainant and that said process is a repair.

Subsequent to complainant's visit,{                      }extended another visitation offer for October 21, 22, or 23, 1998. However, the offer for visitation was for a time already past the close of discovery and during the time for submission of prehearing statements and thus

untimely. (FF 321).<sup>49</sup>

{ } also supplies PSI. Thus, the administrative law judge also finds that there is insufficient evidence in the record to support PSI's argument that its supplier's process is simple.

#### The Sakar Process

Sakar only made an offer of visitation to its reload factory on October 16, 1998. (ACS Br at 11). This offer was made after the close of discovery. Moreover there is nothing in the record to indicate what is involved in the Sakar process. (FF 322).

Based on the foregoing, the administrative law judge finds that, in the instances in which some information is known about the respondents' individual remanufacture processes, viz. Changzhou (accepting Yu's testimony), Boshi and San Harbor, those processes support a finding of impermissible reconstruction because the factories involved do much more than merely add film, battery and paper. The administrative law judge further finds that, in the instances in which those respondents, involved in alleged "remanufacture," have provided little or no information on the factories' processes, viz. Ginfax, Peji, { } and Sakar, those respondents have not sustained their burden in proving that the actions of those factories constitute permissible repair.

Moreover, referring to what is known about the nature of the accused processes involved in the "remanufacture", the administrative law judge finds that said processes, began

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<sup>49</sup> Order No. 11 which issued on August 20, 1998 had put the parties on notice, inter alia, of a target date of May 25, 1999, a discovery cut-off and completion date (non-experts) of October 2, 1998, and an evidentiary hearing commencing on November 2, 1998.

with damaging or breaking single use camera bodies. Thus, as seen supra, the alleged remanufacturing processes can include opening the single use camera bodies by either cutting welds or hooks with a special cutting tool such as a hand press, or using a cutting tool to open welds or hooks and then placing the camera in some sort of mechanical fixture and pulling a lever so that the plastic is cut and the back is opened.<sup>50</sup> They also can include cutting along the film door with a hand held paper cutter and cutting a weld to open the back door. The alleged "remanufacturing" processes also may involve using a razor blade to cut open the take up spool area or reset the frame counter, and if the back cover is not removed bending it back and holding it open with a washer. In addition the administrative law judge also finds that some of the processes even include the use of a grinding machine to grind down the cowl on the front cover that surrounds the taking lens. Dynatec's technical expert Read in his "Dave Read's 'how-to' instructions for reloading Fuji QuickSnaps" (CX-164 at 10) stated:

"Another gentle tug on the shutter assembly should lift it free completely. Now you can remove the advance wheel with no effort.

When releasing the second latch on the shutter assembly, be careful! I broke one with very little force. I don't know if it will be a long-term problem, but the shutter assembly is definitely a little loose now. I also wouldn't recommend removing and replacing the shutter assembly too often" [Emphasis added]

At the hearing, when questioned about that portion of his instructions, Read testified (Tr. at

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<sup>50</sup> Dynatec's Yu admitted that in reloading the Dynatec flash camera with a Fuji recycled Fuji shell, "the factory uses a cutter to cut the bottom cap of film supplying chamber." (Tr. at 3223). While Dynatec's Read testified that based on the "evidence" Read sees in the process of reloading Kodak cameras "nothing is broken," and that "if anything were broken it would not be the essential parts of the camera, it would be some little plastic tab somewhere" (Tr. at 2648) there is no evidence that Read was in the Changzhou factory and actually witnessed what the alleged "remanufacturing" process involved.

3680-3681):

Q So would you now agree that it's relatively easy to break a part of the shutter assembly?

A No. When I say I broke one, I was referring to the second latch, not the shutter assembly. The latch is on the camera body, it's not part of the mechanical unit.

Q Doesn't it hold the shutter assembly on there?

A Yes, that's why it's not a part of the mechanical unit. It's mounted to the body and it holds the mechanical unit onto the body.

Q Do you have any idea of what the effect of a loose shutter mechanism might be in a camera?

A In this case, the entire mechanical unit could shift around a little bit, and it's possible that it might shift the active image area on the negative slightly one way or the other, up and down a little bit, maybe. [Emphasis added].

Based on the foregoing, the administrative law judge finds that the nature of the actions by respondents involved in the "remanufacture" is effectively a recreation of the patented inventions.

## 2. Complainant's Intent

A further factor pointed out by the Court in Sandvik was the patentee's intent.

The administrative law judge rejects respondents' argument that an analysis of the patentee's intent can only be used as objective evidence that the patentee expected that its product would be repaired and reused. (JOBBr at 113, 114). Specifically, respondents argued that the cases in which a court relied on intent were cases where "the patentee was claiming that the device was spent, and could not be repaired, yet the patentee itself was offering a

repair service or parts for the device similar to those being offered by the defendant" (JOBr at 34); and that courts only used the intent of the patentee "against the patentee to support a holding of repair." (JOBr at 34).

The Court however in Sandvik found that the evidence showed that Sandvik never intended its drills to be retipped; that Sandvik did not manufacture or sell replacement drill tips; that Sandvik did not publish instructions on how to retip its patented drills or suggest that the drills could or should be retipped; and that there was no objective evidence that Sandvik's drill tip was intended to be a replaceable part. 121 F.3d at 674. The Court, in so finding, stated:

There is, therefore, no objective evidence that Sandvik's drill tip was intended to be a replaceable part. Although the repair or reconstruction issue does not turn on the intention of the patentee alone, the fact that no replacement drill tips have ever been made or sold by the patentee is consistent with the conclusion that replacement of the carbide tip is not permissible repair. (Emphasis added).

Id. Thus, the Court in Sandvik recognized that the patentee's intent is a factor in the repair-reconstruction analysis and that the patentee's intent can be used not only to show that the patentee expected its device to be reused but also to show that the patentee did not expect its device to be reused. The administrative law judge, like the Court in Sandvik, is not using complainant's intent to determine the issue of the repair versus reconstruction. Rather he is looking at complainant's intent to determine whether it is consistent with the conclusion that the alleged "remanufacturing" processes constitute or do not constitute an impermissible reconstruction, and whether it supports the ultimate finding on the issue.

In this investigation the administrative law judge finds that the evidence shows that Fuji, who is the owner of the patents in issue (FF 54), never intended that the single use

cameras in issue be "reconstructed" as is being done in the "remanufacture" by the accused infringers and in fact intend that the cameras be constructed as to be limited to a single use.<sup>51</sup> Single use cameras are relatively inexpensive, disposable cameras which are preloaded with film and a film cartridge so that after use, all of the film has been advanced into the film cartridge. (FF 1). In contrast to a single use camera, a conventional camera is designed to be reloaded by the consumer. Access to the film compartment of a conventional camera is relatively easy, usually by opening a hinged cover, inserting the film cartridge into the camera, and threading the film tongue through the slit on the winding spool, or in the case of auto-loading cameras, by pulling the film tongue enough to go over the winding spool and closing the cover. The design of conventional cameras, including the materials used, permits repeated reuse, while LFFPs are designed to be used once. (Omura CX-650, Q&A 14).

In design by Fuji of the first 35 mm LFFP, certain criteria were considered important during its development. Thus the single use camera had to be easier to use than a conventional camera. The single use camera had to require relatively no mechanical skill on the part of the user. The difficulty a user might have with loading film into a conventional camera had to be avoided. The single use camera had to be relatively inexpensive to manufacture and convenient to mass produce. The LFFP had to be capable of sale at a low enough price relative to the price of film alone that users would not be disturbed by the fact that the LFFP

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<sup>51</sup> See, e.g., col. 2, lines 7-10 of the '400 patent (CX-6), which is based on 1986 and 1987 priority data, (CX-6) and disclose that an object of the invention is to provide an LFFP so constructed as limited to a single use.

would be disposable.<sup>52</sup> Despite the low price of an LFFP, it had to provide high quality pictures, which would be found acceptable to users of conventional cameras. Finally, the single use camera had to be convenient for a photo processor to develop the pictures taken with the LFFP using existing equipment. In other words, the basic concept in developing this LFFP, in terms of the user, was to "make it a product that could be used by anybody, anytime, and anywhere with ease and without worry," and in terms of the photo processor, the concept was to create an LFFP that could be processed using existing equipment without any hassle. "Anyone" meant that the single use camera should be easy to use for women who may not be very good at using cameras, children and even the elderly. "Anytime and anywhere" meant that the single use camera can be bought on a trip even if the traveler did not bring a camera, and can take pictures whenever he wants. "Easy to use without worry" meant that the price was low enough and the functionality was good enough that consumers were satisfied. (Omura CX-650, Q&A 23). It was Fuji's design objective that the single use camera be used by users of all ages, from young children to the elderly; that any use of the single use camera should require no mechanical skill nor any ability to load or thread film; and that Fuji's single use cameras should be essentially point-and-shoot products so that little skill in picture taking is required. Further, it was Fuji's design objective that the single use camera be a strong and

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<sup>52</sup> Dynatec's Gledhill in deposition testified that when he takes a single use camera to a photo developer to have it developed, as a consumer he does not ask to get the camera back; that his best description of a single use camera is a camera that any consumer would purchase and when the consumer returns the camera to get the prints, the consumer returns the camera and the film all in one and that the fact that the camera is also called a one-time-use camera is that the camera is used up when the consumer takes it to a photo developer. (CX-147 at 11, 18, 57). OptiColor's President Lass testified that when he uses the term "single use cameras" he is referring to "a camera that is used by an individual one time." (Tr. at 1865).

reliable product, capable of resisting normal usage, but which, because of its low costs could be taken to places, such as to the beach or skiing, where people might be unwilling to risk more expensive cameras. (Omura CX-650, Q&A 32).

To satisfy the criteria considered important during Fuji's development of the single use camera, the key to its successful design was the use of a standard 35mm film cartridge, with which film processors were very familiar. The best method of using the 35 mm cartridge was to provide a film supply compartment and a film take-up compartment on both sides of the photo lens inside of a light-tight plastic case, to provide unexposed film that has been rolled up inside the film compartment by unwinding it out of the cartridge ahead of time, and to store the empty cartridge in the film take-up compartment.<sup>53</sup> Fuji's LFFP was designed so that as the pictures were taken, the exposed film was wound back into the 35 mm film cartridge.<sup>54</sup> When all of the film was used and all of the film was wound into the cartridge, all that was required of the user was that the user deliver the used LFFP to a photo processor. The single use camera was designed by Fuji so that a user need never touch the film, thus the single use camera was enclosed in a paper box which the user would have to destroy if he wanted to access the film, and which paper box contributes to the light tightness of the single use camera.<sup>55</sup> Also, consistent with Fuji's design that the user never had to handle the film, Fuji

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<sup>53</sup> See for example claim 1 of the '087 patent, claim 1 of the '857 patent, claim 1 of the '495 patent, claim 14 of the '400 patent, claim 1 of the '364 patent, claim 1 of the '685 patent and claim 1 of the Re '168 patent, see section VII A1 supra.

<sup>54</sup> See for example claim 1 of the '087 patent, claim 1 of the '857 patent and claim 1 of the '685 patent, see section VIIA1 supra.

<sup>55</sup> See for example claim 1 of the '087 patent, claim 1 of the '495 patent and claim 1 of  
(continued...)

made the rear cover difficult to remove by securing it with ultrasonic welding and/or hooks that would break if opened. Therefore the user neither had to load the film, nor wind the film back into the film cartridge after use as was the common practice in conventional cameras, or remove the film from the camera body. Furthermore, in order to allow easy and fast access to the film for the photo processor for further developing, Fuji designed the single use camera with a door at the bottom of the film take-up compartment which can be broken open by ripping the paper back from the outside.<sup>56</sup> Since removal of the film could be performed in ordinary room light, and since the cartridge could be processed using equipment already owned by photo processors, the single use camera developed by Fuji was very convenient for photo processors to deal with. (Omura CX-650 Q&A 28, 30 and 31).

In order to achieve the good photo quality, Fuji, moreover had to do more than just use a 35 mm film. Fuji paid close attention to the design of the lens of the LFFP so that the lens could provide high quality photos even though it is an inexpensive plastic lens. Also, Fuji took measures to ensure that the film is positioned accurately in relation to the lens and that it is fixed in that position and maintains its position during picture taking. (Omura CX-650 Q&A 29). Some of the features incorporated in Fuji's LFFPs to improve picture quality included the providing of upper and lower projections formed on an inner surface of the film roll receiving chamber which supported the outermost portion of the film roll at its upper and lower sides. Another feature used by Fuji, in its design of the single use cameras, was the

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<sup>55</sup>(...continued)  
the '857 patent, see section VIIA1 supra.

<sup>56</sup> See for example claim 14 of the '400 patent, see section VIIA1 supra.

structure which forced the film to be curved in an S-curve between the film passage and the slot of the film container. Other features were protuberances on the inside of the back cover which defined a forwardly opening concave path to the frontal part. (Omura CX-650 Q&A 30).<sup>57</sup>

Furthermore, the cardboard of the Fuji single use camera instructed the purchaser to bring the entire single use camera to a photo processor to have the pictures developed but it also warns the purchaser about electrical shock with Fuji's flash single use cameras. Thus the evidence establishes that a Fuji flash QuickSnap single use camera is in a box and each of the box and the outer cardboard cover of the camera has statements instructing the purchaser to not remove the film and return the camera to the photo processor and further cautioning the purchaser about the risk of electrical shock if opened by the purchaser. (CPX-137). A Fuji QuickSnap single use camera without flash on its box instructs the purchaser not to remove the film and to return the camera to a photo processor. (CPX-138). Both CPX-137 and 138 instructs the purchaser that the single use camera will not be returned to the purchaser after processing. Similar notations are on the Kodak Max flash single use camera (CPX-150) and on the Kodak Fun Saver 35 flash single use camera. (CPX-149) (See also Snook CX-700, Q&A 9).

Fuji did accomplish its design objectives because a typical user, who has purchased for example a Fuji QuickSnap single use camera, uses the camera by exposing the roll of film which is included within the single use camera product. As the frames of the film are

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<sup>57</sup> See for example claims 14 and 15 of the '774 patent, see section VIIA1 supra.

exposed, the film is wound into the cartridge within the camera body by the rotation of the film advance wheel by the user. When all of the frames have been exposed, all of the film has been wound into the cartridge. Users then follow the instructions on the cardboard of the camera to bring the entire single use camera to a photo processor in order to have the pictures developed. Users pay the photo processor to develop the film within the camera and receive back only the negatives and prints, but not the empty single use camera body. The photo processor tears open the inner cardboard where the film cartridge door is located, breaks open the door covering the film cartridge compartment within the camera and removes the film cartridge. The photo processor then develops the film. (Baer CX-614 Q&A 14, 15).

Respondents acknowledge that complainant's single use camera was designed by complainant such that it was not to be opened and reloaded by the purchaser and yet be inexpensive, thus achieving Fuji's design objectives. For example, Argus' president William James Pearson testified that he did not have the capability of reloading Fuji's single use camera although "with some training . . . I'm sure that I could." (Tr. at 3426, 3442). Dynatec's technical expert Read's "how-to" instructions for reloading Fuji Quick Snap (CX-164) in its introductory paragraph states:

Before you start, let me say that reloading Fuji QuickSnap cameras is not a trivial exercise. It's not impossible, either, but if you don't like diddling with little bits of plastic, or are afraid of destroying a few cameras or wasting a few rolls of film while you learn, then I don't recommend reloading. (Emphasis added).

Read was also unable to reload a Kodak LFFP with the assistance of a kit purportedly designed to make such reloading possible. (FF 358).

Jazz's technical expert Heidke, in direct examination by Jazz, testified (Tr. at 3099 to

3100):

Q Dr. Heidke, let me just ask you one question, because you touched on a topic. You indicated that it's a camera that you reloaded carefully. Is it your opinion that the Fuji LFFPs are the type of cameras that should typically be reloaded by the average consumer?

A I would not recommend it, and I am not recommending that average consumers should engage in reloading these things, because I think reloading a camera, if you want good results, has to be done with someone who has some real knowledge and understanding of cameras and films, and the processes associated with them. It's not difficult to do, and the advanced amateur, I think I used those words in one of the papers that I wrote, an advanced amateur could probably do it but I would not recommend it for consumers. [Emphasis added]

Heidke further testified on cross-examination (Tr. at 3200-3201):

You told us before that in your life experience before this case, being a former Kodak employee, you bought 50 or 60 Kodak one-time use cameras; is that correct?

A That's correct.

Q Why didn't you just buy one and reload it 50 or 60 times?

A Because I was supplying them to -- we were having -- in one case we had a party with about 14 tables full of people, and I wanted to put a single-use camera on each one of the tables, so I bought 14 cameras and put them on the tables so everybody could use them at the party.

Q So now you have 14 that you could reuse, so then you only have to buy no more cameras for the rest of your life; is that fair?

A No, that's not fair. I would not for myself personally engage in reloading any single-use camera for my personal use.

Q Why not?

A Because to me it is -- the value of my time, and the other

things that I like to do, and given the value of the cameras, their price, to me personally I would buy a new one rather than to take the time to break the back off, splice some new film onto an old petrone, take the eight or 10 minutes. I would prefer to buy a new one.

Q And you would agree that that's the view of the average consumer who buys these products?

A I believe that's true. [Emphasis added]

Dynatec's technical expert Read testified that it was his opinion that the average person buys a one-time use camera because it is easy to use, convenient and relatively inexpensive. (Tr. at 3689).

Respondents, in the single use cameras that they sell resulting from "remanufacture", have recognized that single-use cameras are for a one-time use. Thus OptiColor's accused single use flash cameras are sold with the following legend: "Caution. To avoid risk of electrical shock, do not disassemble camera at any time. Return entire camera to photo finisher for processing. Avoid exposure to heat, water and dust." (Lass, Tr. at 2038, 2039, CPX-544). The Dynatec Fun Pack single use flash camera is in a box that has the label "CAUTION: To Avoid Risk Of Electrical Shock Do Not Open Camera" and also the label "Instructions for Developing: Do not open camera case. Return camera to photo dealer for developing ... This is a single use camera. It will not be returned after the film is developed." (CPX-166). An accused Jazz single use flash camera is in a box that has the label "CAUTION: To avoid electric shock from the flash condenser, do not attempt to disassemble this unit." (CPX-197). An accused Sakar single use flash camera is in a box which has the following wordings in duplicate, viz., "Caution: To avoid risk of electric shock, do not

disassemble cameras at anytime." (CPX-218). As seen by CPX-544 and CPX-166, supra respondents' single use cameras have labels that indicate the cameras should be returned to photo dealer for developing. See also, CPX-187, CPX-174, CPX-197, CPX-218. See further, the testimony of Dynatec's Gledhill that respondent Dynatec sells its product with a label instruction for consumers not to open up the camera and to send the entire camera to a film processor. (Gledhill, Tr. at 2566). OptiColor's Lass also testified that OptiColor uses the legend because the retailers that OptiColor sell those cameras to "don't want the end user taking a chance of damaging the film inside which would result in damaged pictures." (Tr. at 2086).

Respondents, involved in the alleged "remanufacture," argued that nearly all parts of Fuji's LFFPs can be reused and make reference to {

} (CX-703) (JOFF 47). {

} (CX-703 at SSL 905-NONE-0045772).

It is a fact that the '685 patent in issue is directed to a lens-fitted photographic film unit whose parts can be recycled easily. However such recycling is a detailed process not done by the purchaser or for the purchaser but rather done by the manufacturer of the single use camera when the single use camera with its exposed film is returned to the manufacturer via a photo laboratory. See CX-11, col. 5, lines 45-68, col. 6, lines 1-14. Moreover in May of

1990, after Fuji started a program to collect LFFP empty bodies, Fuji dismantled the bodies with simple disassembly machines and removed, cleaned and tested the strobe (flash) units for potential reuse. Also beginning in April 1991, Fuji entered into agreements with Kodak and Konica to exchange returned empty LFFP bodies to the original manufacturer. In November of 1992, an automated recycling line Fuji's Fukano helped develop was installed at Fuji's Ashigara, Japan factory and presently Fuji maintains a two-story recycling facility for single use cameras produced in the Ashigara factory. (CX-610 Q&A 23).

Fuji's procedure for dealing with collected empty one-time-use camera bodies returned to Fuji is indeed a detailed process and there is no evidence that a photo processor or a respondent involved in the alleged remanufacture follows such detailed process. Thus Fuji in its process, sorts the empty LFFP bodies, off-site, to screen out non-Fuji products with those of Kodak and Konica returned to Kodak and Konica. The empty LFFP bodies which have been "remanufactured" by third parties are also separated because those include glue and tapes to close the previously opened empty bodies and the glue and tape can interfere with dismantling. Fuji is also concerned that such products will contaminate its equipment and/or components selected for reuse. (Id. Q&A 24, 25).

As the administrative law judge has seen in a recycling videotape (CPX-37), the "pure" empty Fuji single use camera bodies with flash, in Fuji's recycling process, are sorted into various types. After sorting, the cardboard cover is removed and bundled for recycling and the stripped empty bodies are then transported to the appropriate automated disassembly line for removal of the front cover from the assembled main body and rear cover and the charged electrode then removed. Thereafter the battery is removed from the main body for testing and

sorting and the strobe is removed from the main body for cleaning and testing. The picture taking lenses are also removed for cleaning and testing from the mechanical units while they are still attached to the main body. The mechanical unit is then removed from the main body and the viewfinder lenses are removed from the mechanical unit for cleaning and testing. (Id. Q&A 26). With respect to the rear covers and main bodies uncovered from the empty LFFPs returned to the recycling factory, Fuji grinds them up and pelletizes them in a further treatment outside of Ashigara and then the resulting material is remolded into front covers for use in the manufacturing of a new LFFP. Front covers, obtained from the recycling process, are inspected and those which are free of scratches and other deformations, are reused. Currently, only about { } of such front covers are reused each month which represents less than { } percent yield. (Id. Q&A 34-36). Metal charge electrodes recovered in the recycling process are sent to a third party for recycling because the charge electrode is a fairly complicated but thin metal item and if it does not have proper springiness or shape, the charge button will not work properly. Batteries recovered are divided into three categories and those in the best condition are reused in new LFFPs. Mechanical units removed from the main body are cleaned using compressed air and the counter is reset to a predetermined starting position with the torque inspected to ensure that the counter moves correctly with advancement of film, the shutter speed measured and the height of the mechanical unit also measured. About only { } percent of mechanical units pass all of those tests. (Id. Q&A 40-45).

In Fuji's recycling process the flash units removed from a used LFFP are collected in trays and then cleaned in an automated line. The flash unit itself is subjected to over fifty automated tests directed to both its appearance and functionality. The percentage of strobe

units that pass those tests has averaged about{ } percent. (Id. Q&A 48-50). The viewfinder lens and picture taking lens that were removed from the returned single use camera's empty bodies are subjected to seven separate baths and then inspected.

Approximately{ } percent of the cleaned lens pass inspecting. (Id. Q&A 51-52).

Kodak also has a recycling process. (CX-702). In that process{ }(CX-700, Q&A 15), and film processors are encouraged to return spent single use cameras from which the film has been removed to Kodak's recycling center in Rochester, New York. At the center,{

}(Snook CX-700 Q&A 13-17).

The administrative law judge finds that the fact that complainant reuses{ }percent of the flash units tested,{ }percent of the mechanical units tested,{ }percent of the lens and{ }percent of the front covers, and only after extensive testing, and the fact that Kodak { }are not inconsistent with complainant's intent that the single use cameras be disposed of after exposure of one roll of film. This is borne out by the fact that those parts which have passed complainant's extensive testing procedures are only re-used in conjunction with newly manufactured front covers{ }, newly manufactured main bodies and newly manufactured rear covers which newly manufactured components are critical to the light tightness of complainant's single use camera; and further borne out by the fact that Kodak{

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Based on the foregoing, while the administrative law judge finds that the repair verses reconstruction issue does not turn on the intention of the patentee alone (as the Court stated in Sandvik 121 F.3d at 674) he finds the evidence in this investigation, with respect to Fuji's intent, consistent with and supports the conclusion that the alleged "remanufacture" is a reconstruction and not a permissible repair.

### **3. The Nature Of The Original Single Use Camera And How It Was Designed**

Another Sandvik factor concerns the nature of the original single use camera and how it was designed. As seen from section VII A 2, supra, the administrative law judge, in analyzing complainant's intent also examined the nature of the single use camera and how Fuji designed it. Based on that examination he finds that the nature of the single use camera and how it was designed support the conclusion that the alleged "remanufacture" is a reconstruction and not a permissible repair.

### **4. Whether A Market Has Developed To Manufacture And/Or Service The Original Single Use Camera**

It is argued by respondents that over the past several years a huge industry and market has developed for the reconditioning and sale, in the United States and abroad, of previously used LFFPs originally manufactured by Fuji and others; that this factor weighs heavily in favor of a finding of permissible repair; and that in this huge industry, (1) scores of companies have been providing reconditioning services and importing and distributing reloaded LFFPs in the United States, (2) reloaded LFFPs have been and are being sold by a great number and variety of U.S. resellers, including large retail chains, and (3) millions of LFFPs have been

and are being purchased annually by the consumer end users. (See for example JOBr at 108, 113).

Complainant argued that the number of infringers cannot in any way indicate that such infringers are performing a permissible repair rather than remanufacture; that all that the number of infringers indicates is that the infringement is profitable; that each of the respondents involved in the "remanufacture" purchases new one-time-use cameras from Asian factories who make the new one-time-use cameras from "abandoned" empty bodies received from film processors;<sup>58</sup> and that none of them do anything closely resembling a repair. (CBr at 132-133).

The staff argued that it appears that most consumers do not know if an LFFP they purchase is reloaded and that the large market for reloaded LFFPs logically has much to do with the low prices charged for them in their direct competition with new, higher priced Fuji and Kodak LFFPs. (SBr at 53).

The Court in Sandvik stated "[e]vidence of development in the industry could also be a factor tending to prove that there is a reasonable expectation that the part of the patented combination wears out quickly and needs frequent replacement." 121 F.3d at 674 (Emphasis added). The Court in Sandvik found "no evidence of large number of customers retipping . . . these drills or of companies (other than [infringer] E.J.) offering to retip these drills" Id. (Emphasis added). Therefore, the question is whether or not the existence of a "huge industry" tends to prove that there is a reasonable expectation by the customers who originally

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<sup>58</sup> There is evidence that respondents suppliers purchase LFFP bodies, from third parties. (FF 333).

purchased single use cameras from complainant and its licensees that the single use cameras will be "reloaded." In this investigation the administrative law judge finds no evidence that a large number of consumers are seeking to "reload" their specific single use cameras and he finds no market for parts or services for repairing an original purchaser's single use camera. Thus, the administrative law judge finds that while the fact that a "huge industry and market" for the sale of remanufactured single use cameras may exist, that fact does not tend to prove that there exists a reasonable expectation by the original purchaser of the single use camera that his specific single use camera will be reloaded. Furthermore, while the respondents involved in the alleged "remanufacturing" argued that the fact that a huge industry and market has developed for the sale of remanufactured single use cameras weighs heavily in favor of a finding of permissible repair, said respondents have cited no precedent for the proposition that the protection of valuable intellectual property rights can be outweighed by the interests of a large number of infringers.

#### **B. Quality Issue**

Fuji, in support of its argument that respondents' alleged remanufacturing processes amount to a reconstruction and not a repair, argued that the "remanufactured" single use cameras sold by respondents have lower quality than Fuji's single use cameras and referred to evidence that it maintains supports that argument. (See CFF 2093-2160). Hence it argued that single use cameras are not designed for repeated use because there is "significant deterioration of picture quality with re-use." (CRBr at 39).

Respondents argued that any asserted differences in quality between a patented product as new and the product after use and "reconditioning" are legally irrelevant to the question of

whether the "reconditioning" process constitutes permissible repair or modification, or the creation of a new product after the original as a whole has been spent, citing Hewlett-Packard, 123 F.3d at 1448, 1453; General Electric Co. v. United States, 572 F.2d 745, 782 n.14 (Ct. Cl. 1978); Mallinckrodt, Inc. v. Medipart, Inc., 15 U.S.P.Q.2d 1113, 1115 (N.D. Ill. 1990), vacated on other grounds, 976 F.2d 700 (Fed. Cir. 1992); Champion Spark Plug Co. v. Emener, 16 F. Supp. 816, 820 (E.D.Mich. 1936). See JOCL 10 and JOBr at 44-45. The administrative law judge does not find that those authorities support respondents' argument that quality evidence is "legally irrelevant" on the question of whether Fuji's single use cameras are designed for repeated use. Rather the administrative law judge finds that those cases are distinguishable from the evidence in this investigation. Thus in Hewlett Packard the Court in considering whether the alleged inferior quality of the accused device would support HP's position, stated that HP's unilateral intentions to insure quality through a single use of the product in issue cannot change the fact that ROT has only modified an "unused cartridge". 123 F.3d at 1453. Respondents here are not starting with an unused single use camera. In each of General Electric, Mallinckrodt and Champion,<sup>59</sup> the Court was not looking at the issue of the patentee's intended design of the product. The Court in Sandvik however did look at the intended design of the product. Thus the administrative law judge is looking at quality as evidence of complainant's intended design of the camera as a single use camera.

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<sup>59</sup> It is noted that in General Electric the Court found that in the overhauling, the parts for the overhauling were acquired from the patentee GE (572 F.2d at 782) which is not the case here. Also Mallinckrodt involved only a cleaning which is distinguishable from the accused actions in this investigation. (16 U.S.P.Q.2d at 1121). The Court in Champion, while it found that a right to repair survived abandonment, did not address any factors involved in repair but rather found for complainant on trademark infringement. (16 F. Supp. at 882).

It is undisputed that the quality of pictures produced by a single use camera is important to consumers (non-objected CFF 2093). Fuji presented specific evidence showing tests of single use cameras performed by the David McNorrill who is the Quality Assurance (QA) Engineer for the Fuji's L Plant in Greenwood, South Carolina. The L Plant makes, recycles and tests Fuji QuickSnap brand one-time-use cameras. One of McNorrill's responsibilities as QA Engineer of the L plant is to evaluate the quality of one-time-use cameras coming off the manufacturing line at the Fuji Greenwood manufacturing plant. To evaluate the quality of single use cameras, McNorrill uses a battery of tests which analyze various aspects of one-time-use cameras on a daily basis. CX-652 are the Fuji operating standards.<sup>60</sup> Those tests are performed by using the extensive testing equipment at the L Plant, some of which has been customized for the specific performance of the standard tests. Moreover using facilities at the L Plant, McNorrill takes standardized pictures using the tested cameras and develop and examine negative and prints made from those negatives. (CX-651 Q&A 1 to 6).

McNorrill subjected one-time-use cameras of various respondents, which appear to have been made by rebuilding used Fuji or Kodak empty bodies. McNorrill's overall conclusion, after testing hundreds of those one-time use cameras was that they were of lesser quality than Fuji cameras and exhibited a relatively high percentage of quality defects which affect picture taking. (CX-651, Q&A 7). McNorrill in his tests found that the accused single

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<sup>60</sup> McNorrill testified that most of the tests he performed are explained in CX-652 with the exception of the test for { } which "light shielding" test was done at the request of complainant's law firm. (Tr. at 1502).

use cameras did not achieve consistently acceptable light tightness which it was concluded is probably because in certain instances, the rear body portion has been removed and reassembled. Moreover many of the products McNorrill tested exhibited light leak which affected the quality of at least one of the photos taken with the roll of film. (McNorrill CX-651, Q&A 4 to Q&A 8). The administrative law judge was able to observe the demeanor of McNorrill and found his testimony credible.

CX-654 are the results of McNorrill's tests which he performed in the fall of 1997. At that time, he performed quality tests using new Fuji single use cameras off the line as the standard. He then tested approximately 200 "remanufactured single use cameras made by respondent Jazz and 200 "remanufactured" single use cameras made by respondent Fast Shot using the procedures and equipment normally used to test Fuji one-time-use cameras from the assembly line. The purpose of the evaluation was to check the quality of those single use cameras of respondents Jazz and Fast Shot. McNorrill's conclusion was that the quality of tested single use cameras made by Jazz and Fast shot was inferior in quality and not acceptable when compared to Fuji's standards. McNorrill in his tests found the following defects (CX-651, Q&A 12, CX-654):

- Light leak (CX-655);
- Poor picture quality such as poor magenta color balance;
- visible scratches (CX-656);
- Flash failures;
- Jammed film;
- Misnumbered shot counts;
- Excessive flash re-charge time;
- Loss of function after dropping;
- Difficulty of removal of film cartridge;
- Split (destroyed) film upon removal from cartridge; and
- High humidity in storage bag.

McNorrill, in addition to the tests conducted in the fall of 1997 also made note of various component and structural modifications as well as a variety of problems which occurred during testing. A wide variety of batteries and film were found in the different types of tested single use cameras including ISO 400 film in the Fuji Type 4 which when originally sold by Fuji is sold with ISO 800 film. Further, some canisters were unmarked or contain as low as ISO 100 type film. Also the structural modifications he found included gear teeth which had been melted onto the plastic spool of the film canister apparently using a hot iron, various tapes used to secure the rear body to the main case and close openings in the film path and changed film advance wheels. Also on several occasions when attempting to remove film from the canister, McNorrill found spilt and cracked film as well as scratches on the film. He also found one-time use cameras with replaced film advance wheels, such as certain OptiColor single use cameras. (CX-651, Q&A 11 to 15).

In July of 1998 McNorrill performed another set of tests of which the results are reported in CX-658. (See also CX-659 to 664). The tests were performed on 58 OptiColor, 52 Dynatec, 20 Achiever, 52 Jazz, 52 Linfa and 52 Fuji one-time-use cameras. Those results showed that the quality of the single use cameras was not significantly different from each other and considerably below that of Fuji's single use cameras. (CX-651, Q&A 16 to 26). In those tests McNorrill tested a sample of cameras using{

} The purpose of those tests was to determine if the cardboard cover affected light tightness and therefore provided a light shielding function to close holes in the film patch as a result of the reassembly. McNorrill testified that the overall results of this testing showed that the cardboard inner carton has a significant function in shielding light; that the results for single use cameras with the cut board (cardboard) cover were that 2 out of 18 cameras tested had an unacceptable level of light fog, whereas the results for the "naked" single use cameras showed that 11 of the 18 had an unacceptable level of light fog; and that light fog is a deterioration of picture quality due to exposure of the film from a light source other than through the picture taking lens. (CX-651, Q &A 16-19).<sup>61</sup>

In the July 1998 tests, while McNorrill found that of the 12 OptiColor cameras tested for usage quality all 12 produced good quality images (CX-658 at Test Item No. 6) and of 10 OptiColor cameras used to test shutter speed, all ten were within Fuji's own stated range for acceptable shutter speed (Id., at Test Item 7), he found the following defects in the OptiColor single use camera, but not in the Fuji single use cameras (CX-659, CX-651, Q&A 21):

3 of 12 exhibited severe light leak problems after exposure to high intensity light, apparently due to structural defects (leaks) in the camera body (CX-660).

1 of 8 showed light leak after a{ } drop and then exposure to a relatively lower light intensity, indicating weakened structural integrity;

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<sup>61</sup> McNorrill noted Fuji tests its single use cameras without the inner cardboard wrapper in place at a substantially lower light intensity than the test with the inner cardboard wrapper in place in recognition of Fuji's understanding that the inner cardboard wrapper can contribute to light tightness.

2 of 14 had a loose battery or shifted counter after a repeated drop test, indicating weakened structural integrity; and

3 of 24 had either the first or last pictures cut off.

With respect to Dynatec's "remanufactured" single use cameras, McNorrill, referring to his July 1998 tests, testified that for four out of the eight tests conducted, "each one of the Dynatec's passed." (McNorrill, Tr. at 1536). However Fuji subjected different Dynatec single use cameras to eight different tests. In those tests McNorrill found (1) Two out of the ten Dynatec single use cameras tested failed the light shielding test with the cardboard cover; (2) Four out of six Dynatec single use cameras failed the light shield test without the cardboard cover and the shutter blades stuck in one of these cameras; (3) All eight Dynatec single use cameras passed the first drop test; (4) All fourteen Dynatec single use cameras passed the second drop test; (5) Eleven of twenty-four Dynatec single use cameras failed the film counter accuracy test; (6) Two of ten Dynatec single use cameras exhibited shutter malfunctions causing overexposure of images in the image quality test; (7) The shutter blades stuck in two of ten Dynatec single use cameras during the shutter speed evaluation test; and (8) The average flash recycle time for the first and 27<sup>th</sup> shot of Dynatec single use cameras was outside of Fuji's standard. Different cameras were used for each test. (CX-658).

McNorrill also, in his July 1998 tests, found the following defects in the Jazz single use cameras, but not in the Fuji single use cameras (CX-651, Q&A 23):

4 of 10 exhibited light leak problems (3 severe) after exposure to high intensity light, apparently due to structural defects (leaks) in the camera body;

5 of 5 showed light leak after a{ }and then exposure to a relatively lower light intensity, indicating weakened structural integrity; blurred pictures apparently from a loosened film path

were also observed (CX-657);

2 of 14 had a loose battery, distorted images or shifted counter after a repeated drop test, indicating weakened structural integrity;

5 of 24 had picture number errors;

1 of 10 had poor picture quality resulting from a dirty lens (CX-662); and

1 of 10 had a stuck shutter blade.

McNorrill, in his July 1998 tests, further tested the quality of various brands of “remanufactured” single use cameras including Jazz, Linfa, Achiever, OptiColor and Dynatec and he also checked two of each type of single use camera with no cut board at{ } (the standard test for cameras with the cardboard cover). His results were as follows (CX-651, Q&A 24):

- a. The Fuji LFFPs substantially showed no fog on either roll of film (CX-663);
- b. Jazz single use cameras showed severe fog on both rolls of film;
- c. The Linfa single use cameras showed severe fog on one roll of film and substantially no fog on the other;
- d. The OptiColor single use cameras showed severe fog on both rolls of film; and
- e. The Dynatec single use cameras showed severe fog on both rolls of film

Those results showed to McNorrill diminished light tightness of the “remanufactured” single use cameras compared to that of the original Fuji single use manufactured cameras. McNorrill further observed that based on his testing of “remanufactured” third party one-time-use cameras such as those of respondents’ OptiColor, Jazz and Dynatec, after the welds, which hold the main body and rear cover together, are broken and the main body and rear cover (only the film roll door portion of the rear cover in the case of Dynatec) are reassembled by being taped back together, the resulting single use camera did not ordinarily have the same strength, durability or light

tightness as the original welded single use camera; and that while before welding the rear cover and main body of new Fuji one-time-use cameras are held together by hooks or clamps that engage in aligned holes, in the main bodies and rear covers of the remanufactured OptiColor and Jazz one-time-use cameras many of the hooks or clamps had been broken during “remanufacturing”, especially in the case of OptiColor, which to McNorrill was an indication that the rear cover was pried open or the hooks and clamps were otherwise displaced with excessive force. McNorrill concluded that the tested “remanufactured” single use cameras were different in terms of quality and characteristics compared to an originally made Fuji QuickSnap brand on-time-use camera. (CX-651, Q&A 25 to 27).<sup>62</sup>

In addition to the work done by Fuji’s McNorrill, the administrative law judge finds credible testimony from David M. Snook who testified at the hearing. Snook is the manager of worldwide recycling for the single use camera business of Eastman Kodak Company. (CX-700, Q&A 2-3). In 1997 Kodak became aware that certain third party companies were acquiring spent Fuji and Kodak single use cameras from photo finishers, “remanufacturing” the spent single use cameras and selling the “remanufactured” products as new single use cameras. {

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<sup>62</sup> Jazz’s own technical expert Heidke testified that he would not be confident in getting twenty-seven usable shots out of a Jazz camera. (See Tr. at 3119, 3329 to 3331).

} (CX-700 Q&A 24-26).

The brand names on the{ }third party tested single use cameras by Snook were as follows: Jazz, Dynatec, Marc's, Arbor Drug, Rite-Aid, Focal, Wedding Camera and Party camera. (CX-700, Q&A 24, Q&A 27; CX-702 at 3).{

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Respondents argued that even setting aside the “legal irrelevance” of quality evidence, the realization is reached that Fuji’s evidence, rather than establishing the allegedly poor quality of respondents’ LFFPs, only highlights the impossibility of using “quality” as a criteria for the repair reconstruction determination and reconfirms that such evidence of “quality” should be rejected. (JOBBr at 119). It is argued that although there might be minute differences in quality between reloaded single use cameras sold by respondents and Fuji, there would be no significant differences that would be perceivable to the average consumer (JORCFF 2100) and that McNorrill’s tests are not probative as (1) they are attempting to hold “repaired” cameras to the standards of new cameras,<sup>63</sup> (2) the tests indicated that Jazz cameras might not work if repeatedly dropped from a high height, and (3) some of McNorrill’s tests were not even the standard tests for new cameras, but instead were “Larry Rosenthal’s tests “ (JORCFF 2096). However as

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<sup>63</sup> It appears that this argument admits that the “remanufactured” single use cameras of Jazz and OptiColor are inferior in quality to new LFFPs.

McNorrill testified he used in his tests the “procedures and equipment normally used to test one-time-use cameras from the assembly line.” (CX-651-Q&A 10).<sup>64</sup> There is in evidence test reports on testing of respondents’ cameras obtained from respondents. (CX-876). However no individual from any third party testing lab appeared on behalf of respondents, no standards used to evaluate the pictures in said reports were set forth by respondents, nor were examples of the photographs referenced in said reports shown. See Lorenzini, Tr at 2959-2965. Moreover while OptiColor’s Lass testified that in engaging potential customers as part of the process of obtaining new accounts one of the first things that is done is to send samples to the prospective buyer (Tr.

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<sup>64</sup> CX-652 are the Fuji operating standards for McNorrill’s tests. (CX-651, Q&A 5). The results of those tests are specifically set forth in CX-654. (CX-651 Q&A 12).

Respondents, involved in the alleged “remanufacture,” have taken the position that the quality of their cameras is high because the complaints are low. (Lass Tr. at 2002). However if for example a consumer buys a Fred Meyer OptiColor single use camera and shoots the roll of film and brings it to a photo processor the consumer gets back the pictures and negatives. The consumer does not get back the camera. Nothing on the negative identifies that the camera used was a Fred Meyer camera and nothing indicates that OptiColor was connected with the cameras since OptiColor does not put its name on its products because it is primarily in the private label business. Thus if any complaint was made it would have been made to Fred Meyer and OptiColor’s Lass had no personal knowledge of the exact procedure at Fred Meyer for dealing with customer complaint. (Tr. at 2002 to 2004).

Respondents Jazz and OptiColor have also argued that the skyrocketing sales of their LFFPs “attest to their acceptance by consumers.” (JOB at 125; JOFF 48; JORCFF 2127). Complainant, in response and relying on Snook Tr. at 1240-1241, 1257-1258, argued that there is no reliable evidence regarding the sale of remanufactured LFFPs, compared to the overall market. (CRRJFF 48). Assuming the evidence supports the argument of Jazz and OptiColor, it is a fact that respondents’ single use cameras cost less than newly manufactured single use cameras. See section XIII, infra. Hence any commercial success can be due to the lower cost.

While it is a fact that Fuji has received complaints about the quality of its own originally manufactured single use cameras, including complaints about the film advance problems, flash errors and failures, light leakage, scratched lenses or lenses with foreign particles, scratched film, skipped frames, shutter problems, and cameras that do not produce all exposures (ROCX-44; Fukano Tr. at 1340; ROCX-26 at 169-170), the administrative law judge finds that the basis for

Fuji's argument that the single use camera was not designed for repeated use because there is "significant deterioration of picture quality with reuse" is borne out by the controlled tests conducted by Snook and McNorrill. Thus the administrative law judge concludes that a difference in quality between newly manufactured single use cameras and the alleged "remanufactured" single use cameras further supports the finding that Fuji did design its single use cameras with the intent that they should be disposed of after the single use by the purchaser from complainant and its licensees.

### **C. Conclusion**

Based on the foregoing, the administrative law judge finds that the respondents, involved in the alleged "remanufacture" of single use cameras sold by complainant and its licensees and which have already had one roll of film exposed by the original purchaser, have not sustained their burden in proving by clear and convincing evidence that their "remanufacture" is a permissible repair. Rather the administrative law judge finds that the evidence established that those respondents are effectively recreating the patented single use camera of complainant and its licensees, and hence are involved in impermissible reconstruction.

### **D. Implied License**

Federal Circuit precedent establishes that the purchaser's implied license to use a product includes the right to repair that product. Thus, the Court in Sandvik stated:

"[W]hen Sandvik sold its patented drills to its customers it granted them an implied license to use the drill for its useful life...and the implied license to use includes the right to repair the patented drill.

Sandvik, 121 F.3d at 672 (Emphasis added). Furthermore the Court in Kendall Co. v.

Progressive Medical Tech. Inc., 38 U.S.P.Q.2d 1917, 1920 (Fed. Cir. 1996) stated:

When Kendall sold its patented SCD system to its customers it granted them an implied license to use the device for its useful life...That implied license to use included the right to repair the patented article and necessarily to purchase repair parts from others. (Emphasis added).

However, the Court in Sandvik made clear the implied license to use does not include the right to reconstruct. 121 F.3d at 673. See also Hewlett 123 F.3d at 1451.

The respondents, who remanufacture single use cameras, are not original purchasers as was the case in Sandvik, Kendall and Hewlett. However, the administrative law judge finds that question of whether the implied license to use the single use camera can transfer to those respondents, who are not original purchasers is moot, in view of the fact that the remanufacture involved impermissible reconstruction.

#### **VIII. Infringement ('649 Patent)**

Complainant has accused one or more respondents of infringing claims 1 and/or 9 of the '649 patent. Specifically, complainant has accused the following respondents of infringing claim 1 of the '649 patent:

Ad-Tek, Type 1;  
Argus, Types 4, 5, 6, 8A, Undefined (with features from 4 and 8A);  
Boecks, Type 4;  
Boshi, Types 2, Undefined (with features similar to type 2 and 6);  
China Film, Types 2, 3 and 4;  
Dynatec, Types 4, 7, 7A and Undefined (with features of types 2 and 4);  
Fast Shot, Type 1;  
Forcecam, Typ 4;  
Jazz, Types 2, 3, 4, 8 and Undefined (with features similar to type 6);  
Klikit, Types 4 and 6;  
Linfa, Type 1;  
OptiColor, Types 2, 4 and 6;  
Penmax, Types 4 and Undefined (with features similar to type 5);  
PhilmEx, Type 4;

Rainbow, Type 2;  
Rino, Type 4;  
Sakar, Types 2, 4 and Undefined (with features similar to types 2 and 4);  
T.D.A., Type 5; and  
Vantage, Type Undefined (with features similar to types 1-5 and 8).

Complainant has also accused the following respondents of infringing claim 9 of the '649 patent:

Achiever, Type 6;  
Argus, Types 4, 5, 6, 8A, Undefined (with features from 4 and 8A);  
Boshi, Types 2, Undefined (with features similar to type 2 and 6);  
Dynatec, Types 4, 7, 7A and Undefined (with features of types 2 and 4);  
Haichi, Type Undefined;  
Jazz, Types 2, 3, 4, 8 and Undefined (with features similar to type 6);  
Klikit, Types 4 and 6;  
OptiColor, Types 2, 4 and 6;  
PSI, Type 7A; and  
Vivitar, Type 6.

Complainant has the burden of proving, by a preponderance of the evidence, that said claims 1 and/or 9 are infringed by the accused process. See supra.

Claim 1 of the '649 patent recites a film insertion method that requires a dark room. With this method, the free end of the film extending from a manufactured film cartridge is, while in a darkroom, wound from the cartridge into a roll. The trailing end remains attached to the spool within the cartridge. The newly formed roll, the now empty cartridge and the film extending therebetween are inserted into respective recesses in the main body section of the LFFP across the exposure opening of the LFFP. The back cover is then installed and sealed to render the entire LFFP—now loaded with unexposed film—light tight. (CX-5, Claim 1).

Claim 9 of the '649 patent recites an alternate film insertion method that, unlike the

method of claim 1, does not require a dark room during the actual loading process.

Specifically, the method of claim 9 requires that a film containing cartridge be installed into the film cartridge chamber of an LFFP body. The free end of the film extending from the cartridge is then attached to a spool which is placed into the unexposed film roll receiving chamber on the LFFP on the opposite side of the exposure opening. The back cover is then installed and secured, however, leaving one end of the spool exposed outside the LFFP body. The spool contains a means for coupling to a winding mechanism which is applied to the exposed spool end for winding the unexposed film into a roll in the film roll receiving chamber within the LFFP. (CX-5, claim 9).

As seen supra, the distinction between claim 1 and 9 is that claim 1 is performed in a darkroom and the film is wound out of the cartridge outside of the LFFP body and then the film and cartridge are inserted and the LFFP body is shut. In contrast, in claim 9, which is performed in the light, the film is attached to the spool outside of the camera but then the film and cartridge are inserted into the LFFP body and the film is wound out of the cartridge after the LFFP rear cover has been shut.

#### **A. Claim Interpretation**

The '649 patent is based on U.S. Serial Number 314, 215 filed on February 22, 1989 (CX-5) and was the fourth U.S. application filed among the underlying patents in issue.

Claims 1 and 9 in issue read:

1. A method for assembling a lens-fitted photographic film package which comprises a light-tight casing comprising a main body section having an exposure opening therein and a back cover section, a rolled film disposed on one side of said exposure opening, and a light-tight container disposed on the opposite side of said exposure opening from said rolled film, said container having a film winding spool to which is attached one

end of said rolled film, said method comprising the steps of:

winding a film withdrawn from said light-tight container in a roll in a darkroom;

loading said film in a roll and said light-tight container from which said film was withdrawn into separate receiving chambers formed in one of said sections of said light-tight casing of said lens-fitted photographic film package; and

fixing said back cover section to said main body section so as to assemble light-tightly said lens-fitting photographic film package.

9. A method for assembling a lens-fitted photographic film package which comprises a light-tight casing having an exposure opening, a roll of unexposed film disposed on one side of said exposure opening, and a light-tight container disposed on the opposite side of said exposure opening from said film, said container having therein a film winding spool attached to one end of said film, said method comprising the steps:

placing said light-tight container in which the greater part of said film is contained in a container-receiving chamber formed on said opposite side of said exposure opening in a main body section of said light-tight casing such that a leader portion of said film withdrawn from said light-tight container is attached to a spool and is placed together with said spool in a film roll receiving chamber formed on said one side of said exposure opening in said main body section of said light-tight casing;

fitting a back cover section to said main body section so as to form said light-tight casing, one end of said spool being exposed outside said light-tight casing;

temporarily connecting rotational apparatus to said exposed end of said spool;

winding a major portion of the length of said film on said spool in said film roll receiving chamber by rotating said spool by said rotational apparatus; and

disconnecting said rotational apparatus from said exposed end of said spool.  
(Emphasis added).

In dispute among Fuji, Achiever, PSI, Argus and the staff is the phrase "that a leader portion of said film withdrawn from said light-tight container is attached to a spool and is placed

together with said spool in a film roll receiving chamber formed on said one side of said exposure opening in said main body section of said light-tight casing" which is found only in claim 9 supra.

Respondents Achiever and PSI argued that the claimed phrase requires attachment of the leader portion of the film to the spool outside of the camera and then placement of the spool and attached leader portion together into the film roll receiving chamber and that the claimed invention should be so limited. Achiever and PSI further argued that the claimed phrase requires and the claimed invention is limited to a spool that remains in the film roll receiving chamber and thus is not removed. (ABr at 18-22). Achiever and PSI also argued, only at closing argument, that the term "spool" as used in the claim should be interpreted to mean "something that has flanges on both ends in general." (Tr. at 4221).

The staff argued that the claim language is not particularly clear as to the relative timing of the film attachment with respect to insertion of the film and spool in the receiving chamber. However, the staff argued that PSI's and Achiever's interpretation that the leader is attached to the spool outside the camera and then the spool and attached leader portion are placed together into the film roll receiving chamber "is reasonable" based on the claim language. The staff did not submit an argument concerning whether or not the claimed language should be interpreted to describe a spool that remains in the film roll receiving chamber and thus is not removed. (SRBr at 6).

Complainant argued that a plain reading of the language of claim 9 reveals that there is no temporal or spatial limitation placed upon where or when the leader is attached to the spool, and that the claim only requires that the spool and leader both be placed in the film roll

receiving chamber, and therefore does not require that attachment of the leader portion of the film to the spool occur outside of the camera. (CRBr at 14-16). Complainant also argued that the claimed language does not require that the spool remain in the film roll receiving chamber after the method steps are carried out. (CRBr at 16-18).

The language in issue in claim 9 states:

that a leader portion of said film withdrawn from said light-tight container is attached to a spool and is placed together with said spool in a film roll receiving chamber formed on said one side of said exposure opening in said main body section of said light-tight casing.

That claim language describes the attachment of the leader portion of the film to the spool prior to describing the placement of the attached leader portion and spool together into the film roll receiving chamber. Thus the plain language of the claim discloses that the attachment of the leader portion of the film to the spool occurs prior to the placement of the attached leader portion and spool into the film roll receiving chamber. Furthermore, the administrative law judge finds that the use of the word "together" in the claimed phrase to describe the placement of the attached leader portion of the film and spool into the film roll receiving chamber indicates that this attachment occurs prior to the placement of the leader portion and spool into the film roll receiving chamber.

Referring to the specification of the '649 patent, in describing Fig. 13, which is a cross sectional view of the lens-fitted photographic film package of Fig. 12, the specification states:

As is shown in Fig. 13, behind the taking lens 101 is a shutter mechanism 107 supported by an exposure frame 108. On the right hand side of the exposure frame 108 as viewed from the front of the main body section 100 of the film package, there is a film container receiving chamber 111 for receiving a light tight film container 110. On the other hand, on the left hand side of the exposure side frame 108, there is a film-receiving chamber 112. In the film-receiving chamber 112 is a spool shaft 113

supported for rotation. The film which is not yet exposed is wound up around the spool shaft 113. The leading end 21a of the film 21 is attached to a spool 114 supported by the film container 110 for rotation. The part of the film 21 between the film receiving chamber 112 and the film container 110 in the film-container-receiving chamber 111 passes behind the exposure frame 108. (Emphasis added). (FF 179).

The specification of the '649 patent also states:

According to the above-described construction, the lens-fitted film package is assembled in the following way. At first the film container 110 with the leading portion of the film 21 withdrawn and the trailing end fixed to the spool 114 is loaded in the film container receiving chamber 111 of the main body section 100. After fixing the end of the leader portion of the film 21 to the spool shaft 113 of the film-receiving chamber 112, the back cover section 119 is fixed to the main body section 100 so as to form a light-tight rectangular box-shape film package. Then a screw driver, for example, is inserted through an opening formed in the bottom wall of the main body section 100 to engage with the groove 113a at the spool shaft 113, thereby turning the spool shaft 113 in the counter clockwise direction as viewed in FIG. 13 in order to wind up the film 21 around the spool 113 in the film-receiving chamber 112. This film winding operation can be formed in the day-light because the film package is maintained light-tight. (Emphasis added) (FF 180).

Thus, the discussion of the method of the '649 patent in the specification is silent as to the location of the spool during the attachment of the leader, and the specification has no spatial or temporal limitations on the attachment of the film leader to the spool and placement of the attached leader portion and spool into the film roll receiving chamber. Therefore the administrative law judge finds that the specification does not conflict with the interpretation of the literal language of claim 9 that the leader portion of the film is attached to the spool outside of the camera and then the leader portion of the film and the spool are placed together into the film roll receiving chamber.

The administrative law judge rejects respondents Achiever's and PSI's argument that the language of claim 9 requires that the spool remain in the film roll receiving chamber. After placement of the attached leader portion of the film and the spool into the film roll

receiving chamber, the next steps, according to claim 9 are:

fitting a back cover section to said main body section so as to form said light-tight casing, one end of said spool being exposed outside said light-tight casing;

temporarily connecting rotational apparatus to said exposed end of said spool;

winding a major portion of the length of said film on said spool in said film roll receiving chamber by rotating said spool by said rotational apparatus; and

disconnecting said rotational apparatus from said exposed end of said spool.

(Claim 9 supra).

The language of the claim does not contain any requirement that the spool remain in the film roll receiving chamber. Moreover, the specification does not require that the spool remain in the LFFP after the method steps are carried out, but rather merely recites that the spool is utilized to wind the film into the film roll receiving chamber. Thus, the specification states:

a screwdriver, for example, is inserted through an opening formed in the bottom wall of the main body section 100 to engage with groove 113A of the spool shaft 113, thereby turning the spool shaft 113 in the counterclockwise direction as viewed in Fig. 13 in order to wind up the film 21 around the spool 113 in the film receiving chamber 112. (FF 180).

Furthermore, the administrative law judge finds that the file history does not disclose whether the spool should remain in the film roll receiving chamber after the method steps of claim 9 are carried out.

The administrative law judge further rejects Achiever's and PSI's argument that the term "spool" as used in the claim should be interpreted to mean "something that has flanges on both ends." While figure 14 of the '649 patent shows the spool with a tab on the top and a screw head like structure on the bottom and nothing on the shaft in between, the administrative law judge finds nothing in the specification that describes the spool as having or requiring

flanges. Furthermore, he finds nothing in the file history that describes the spool as having or requiring flanges.

Based on the foregoing, the administrative law judge interprets claim 9 as not requiring that the spool have or require flanges and remain inside the film roll chamber after the method steps of claim 9 are carried out.

#### **B. Claim 9 And Accused Newly Manufactured Single Use Cameras**

As to newly manufactured cameras, complainant has alleged that Achiever manufactures type 6 cameras that infringe claim 9 of the '649 patent and that respondents PSI, Vivitar, OptiColor and Argus sell Achiever's newly manufactured LFFP and that, therefore, said respondents also infringe claim 9 of the '649 patent. Specifically, the complainant argued that a simple review of the video of the Achiever factory, and the Chan testimony, clearly indicates that all of the steps of claim 9 of the '649 patent are carried out in loading a type 6 LFFP without a spool, notwithstanding the fact the spool may be ultimately removed; and that, thus, all Achiever LFFPs, whether supplied with or without a spool, infringe claim 9 of the '649 patent. (CBr at 70).

Only respondent Achiever set forth an argument regarding infringement of claim 9 of the '649 patent. Achiever argued that it uses three independent methods of loading the film; the spool method, the cartridge method and the spool less method. It further argued that the spool method does not infringe because the spool is positioned inside the LFFP body not outside when the film leader is attached; that the cartridge method does not infringe because the pin tool utilized to wind the film does not remain in the film receiving chamber after the method steps are carried out; and that the spool less method does not infringe because the pin

tool does not remain in the film receiving chamber and because the film leader is attached to the spool while the spool is inside the LFFP body. (ABr at 32). Achiever also argued that prosecution history of the '649 patent creates a prosecution history estoppel that applies to limit the scope of the doctrine of equivalents. (ARBr at 10).

Achiever set forth findings of fact concerning the processes used in its spool, cartridge, and spool less methods of loading film. (AFF 184, 185, 186, 187, and 188). Complainant did not object to these findings of fact as they relate to Achiever's single use cameras made in China. The administrative law judge finds, based on Achiever's finding of fact 185, that the Achiever spool method occurs outside of a dark room and involves the following steps:

- A. The camera is positioned with its rear cover removed and the rear interior of the main camera body facing the assembly so as to provided access to the film canister chamber and the film roll receiving chamber;
- B. the spool is placed in the film roll receiving chamber;
- C. the film canister is placed in the film canister chamber with a portion of the film, referred to as the leader, extending out of the canister;
- D. the leader of film is inserted into an axial slot formed in the central shaft of the spool;
- E. the spool is turned slightly to begin the winding of the film around the spool;
- F. the back cover is placed on the main camera body and the hatch is placed in the bottom opening below the film canister chamber, thus forming a light-tight casing;
- G. a power screwdriver is then connected to the exposed end of the spool, which provides a standard screw head for rotation;
- H. the spool is rotated counter-clockwise with the power screwdriver to withdraw the film from the canister spool; and
- I. the power screwdriver is removed from the spool end.

The administrative law judge also finds that, based on AFF 188, the cartridge method involves the following steps:

- A. the camera is positioned with its rear cover removed and the rear interior of the main camera body facing the assembly so as to provided access to the film canister chamber and the film roll receiving chamber;

- B. the leader of film from a 35mm film canister is inserted into the axial slot of a pin tool having a slotted shaft and a screw head;
- C. the pin tool is placed laterally in a plastic cartridge similar to a 35mm film canister but sized to fit in the film roll receiving chamber, with the film leader extending from the slotted shaft of the pin tool, through the mouth of the plastic cartridge, over to the 35mm film canister.
- D. the film canister is placed in the canister chamber with a portion of the film, referred to as the leader, extending out of the canister to the plastic cartridge;
- E. the plastic cartridge with the pin tool is placed in the film roll receiving chamber;
- F. the back cover is placed on the main body and the hatch is placed in the bottom opening below the film canister chamber, thus forming a light-tight casing;
- G. a power screwdriver is then connected to the screw head of pin tool;
- H. the pin tool is rotated counter-clockwise with the power screwdriver to withdraw the film from the canister, leaving only a portion of the film in the canister secured internally to the canister spool;
- I. the power screwdriver is removed from the pin tool;
- J. the camera is then placed in a "dark bag," that is, a black bag that prevents the entry of light;
- K. the pin tool is removed from the camera, leaving a small hole previously occupied by the pin tool shaft;
- L. in the dark bag, a plug is inserted to close up the hole; and
- M. the camera is removed from the dark bag.

The administrative law judge further finds, based on AFF 187, that the spool less method of loading film involves the following steps:

- a. the camera is positioned with its rear cover removed and the rear interior of the main camera body facing the assembly so as to provide access to the film canister chamber and the film roll receiving chamber;
- b. a pin tool having a slotted shaft and a screw head is placed in the film roll receiving chamber;
- c. the film canister is placed in the film canister chamber with a portion of the film, referred to as the leader, extending out of the canister;
- d. the leader of film is inserted into an axial slot formed in the shaft of the pin tool;
- e. the pin tool is turned slightly to begin the winding of the film around the pin;
- f. the back cover is placed on the main camera body and the hatch is placed in the bottom opening below the film canister chamber, thus forming a light-tight casing;
- g. a power screwdriver is then connected to the screw head of pin tool;
- h. the pin tool is rotated counter-clockwise with the power screwdriver to

- withdraw the film from the canister, leaving only a portion of the film in the canister secured internally to the canister spool;
- i. the power screwdriver is removed from the pin tool;
  - j. the camera is then placed in a "dark bag," that is, a black bag that prevents the entry of light;
  - k. the pin tool is removed from the camera, leaving a small hole previously occupied by the pin tool shaft;
  - l. in the dark bag, a plug is inserted to close up the hole; and
  - m. the camera is removed from the dark bag.

The administrative law judge rejects Achiever's argument that the spool method of loading does not infringe claim 9. Specifically, Achiever argued that in demonstrating the spool method during his live testimony, Mr. Chan showed that the spool is positioned in the film roll chamber when the leader is attached; and that this method avoids infringement of claim 9 of the '649 patent which requires a spool outside the film roll chamber when the film leader is attached to the spool. (ABr at 32). The administrative law judge interpreted the language of claim 9 of the '649 patent as requiring that the leader portion of the film be attached to the spool outside of the camera and then the leader portion of the film and the spool are placed together into the film roll receiving chamber, see interpretation section supra. However, the administrative law judge finds that the attachment of the leader portion of the film to the spool whether done outside the camera body or inside the camera body, as is done by Achiever, is an insubstantial change from the method of claim 9 of the '649 patent, because the administrative law judge finds that the spool method of loading the film used by Achiever performs substantially the same function (to load the film), in substantially the same way (attaching a leader portion of the film withdrawn from a light tight container to a spool), and obtains substantially the same result (the film is wound around the spool as it resides in the camera with the rear cover shut). See Datascope and Lemelson, supra.

The administrative law judge further rejects Achiever's argument that the cartridge method does not infringe claim 9 of the '649 patent. Achiever argued that in explaining the steps of the cartridge method of loading film, Mr. Chan explained that the cartridge is temporarily equipped with a pin tool; that although the film leader is attached to the pin tool outside of the film roll receiving chamber, the pin tool does not remain in the cameras; and that, therefore, the cartridge method does not meet the limitation of claim 9 of the '649 patent in view of the absence of a spool permanently resident in the film roll receiving chamber. (ABr at 32). The administrative law judge interpreted the language of claim 9 of the '649 patent as not requiring that the spool remain inside the film roll chamber after the method steps of claim 9 are carried out, see claim interpretation supra. Thus, Achiever's argument that it does not infringe because the pin tool does not remain in the film roll receiving chamber is rejected. Furthermore, the administrative law judge finds that the use of a "pin tool" as opposed to a spool is an insubstantial difference, because the "pin tool" performs the same function as the spool. Thus, the administrative law judge finds that the use of a "pin tool" in loading the film performs substantially the same function (to load the film), in substantially the same way (attaching a leader portion of the film withdrawn from a light tight container to a spool), and obtains substantially the same result (the film is wound around the spool as it resides in the camera with the rear cover shut). See Datascope and Lemelson, supra.

The administrative law judge further rejects Achiever's argument that the spool less method does not infringe claim 9. Specifically, Achiever argued that the spool less method of loading film also utilizes a pin tool, but the leader of the film is attached to the end of the pin tool when the pin tool is positioned in the film roll receiving chamber, not outside of it; that in

addition to receiving the leader portion while placed in the film roll receiving chamber, the pin tool, like the pin tool in the cartridge method, does not remain in the light tight container after loading is complete; and that, therefore, because the spool less method fails to provide two aspects of claim 9 of the '649 patent, the spool less method does not infringe. (ABr at 32). As noted supra, the administrative law judge finds that the attachment of the leader portion to the spool while it is resident in the LFFP body is an insubstantial change; that the use of a "pin tool" as opposed to a spool is also an insubstantial change; and that the fact that the pin tool does not remain inside the film roll receiving chamber is not relevant in light of the administrative law judge's interpretation of the language of claim 9 of the '649 patent.

Moreover, the administrative law judge finds that there is no prosecution history estoppel limiting the application of the doctrine of equivalents. Original claim 31, which ultimately became claim 9 of the '649 patent, did not contain the "placed together" language, but read as follows:

31. A method for assembly a lens-fitted photographic film package which comprises a light-tight casing having an exposure opening, a rolled film disposed on one side of said exposure opening, and a light-tight container disposed on the opposite side of said exposure opening from said rolled film, said container having therein a film winding spool attached to one end of said rolled film, said method comprising the following steps:

placing said light-tight container in which the greater part of said film is contained in a film-container-receiving chamber formed on said opposite side of said exposure opening in a main body section of said light-tight casing;

attaching a leader portion of said film withdrawn from said film container in a spool provided in a film roll receiving chamber formed on said one side of said exposure opening in said main body section of said light-tight casing;

fitting a back cover section to said main body section so as to make said lens-fitted photographic film package light-tight; and

rotating from outside said package said spool in said film roll receiving chamber so as to wind said film around said spool. (Emphasis added) (FF 161).

Original claim 31 was rejected by the Patent Office under 35 U.S.C. § 103 based on U.S.

Patent No. 4, 397, 535 to Harvey. (FF 163). The examiner stated:

Claims 31-32 are rejected under 35 U.S.C. § 103 as being unpatentable over Harvey. Harvey teaches (figure 1) a film package comprising a light-tight casing 18 having an exposure opening 34, a roll of film enclosed in a light-tight container 10 (figure 1), film advancing means 194, and a back cover 28.

Light-tight casing 18 is received in chamber 22 and the film leader is attached to spool 110 and subsequently wound about the spool 110 by the advancing means 194. The method of Claims 31-32 would have been obvious over Harvey in that during use of the light-tight camera of Harvey, 35mm size film patronne 110 is inserted into chamber 22, the film leader of the film withdrawn from patronne attached to the spool 110, the back cover is closed, and the film is wound about the spool 110 from outside the package by advancing means 194. (FF 163).

Subsequently, the applicants filed a Petition for Complete Action (FF 164) and the Examiner maintained the rejection of original claim 31 on the same basis as the previous rejection. (FF 165). Thereafter, the applicants, in an Amendment, to distinguish claim 31 over Harvey rewrote claim 31 as claim 37 which read in part as follows:

37 . A method for assembling a lens-fitted photographic film package which comprises a light-tight casing having an exposure opening, a roll of unexposed film disposed on one side of exposure opening, and a light-tight container disposed on the opposite side of said exposure opening from said film, said container having therein a film winding spool attached to one end of said film, said method comprising the steps:

placing said light-tight container in which the greater part of said film is contained in a container-receiving chamber formed on said opposite side of said exposure opening in a main body section of said light-tight casing such that a leader portion of said film withdrawn from said light-tight container is attached to a spool and is placed together with said spool in a film roll receiving chamber formed on said one side of said exposure opening in said main body section of said light-tight casing; (Emphasis added) (FF 170).

In Harvey, the film leader is not attached to the spool until after the back cover is

closed. (FF 190, 191). As such, Harvey merely describes a common conventional camera loading method in which: 1) the film cassette is inserted into the film supply chamber with the film leader lying along the guide rails (FF 190); 2) the cover is closed (FF 190); 3) a motor within the camera drives rollers that engage the film and advance the film leader into the take-up chamber and into engagement with film capturing posts (FF 191); and finally 4) the film is rewound back into the cartridge after the pictures are taken (FF 192). Thus, in connection with said Amendment in which the applicant rewrote claim 31 as claim 37, applicants argued that:

the novel and unobvious subject matter set forth . . . consists in its broadest aspect in rotating from outside the package the spool in the film roll receiving chamber, by temporary engagement of a rotating apparatus with an exposed end of the spool, so as to wind the film around the spool prior to the exposure of any of the film. (FF 171).

The applicant thus distinguished Harvey based on the feature of unwinding the film before exposure through temporary engagement of an outside rotational device and did not address the timing of when the film is attached to the spool at all in the remarks. Thus, no prosecution history estoppel applies.

Based on the foregoing, the administrative law judge finds that the spool, cartridge and spool less methods of loading film used by Achiever Type 6 cameras infringes claim 9 of the '649 patent and that PSI, Vivitar, OptiColor and Argus, who are supplied Type 6 cameras by Achiever, infringe claim 9 of the '649 patent.

### **C. Claims 1 and/or 9 And Accused "Remanufactured" Single Use Cameras**

#### Claim 1 of the '649 patent

As to "remanufactured" cameras that complainant alleges infringe claim 1 of the '649

patent, complainant argued that the evidence shows that the San Harbor factory loads its film in accordance with a method that infringes claim 1 and that those respondents that are supplied by the{ }factory, namely OptiColor, Jazz, Argus, Boecks, PSI, Sakar and Vantage also infringe claim 1; that the evidence shows that the Ginfax and Peji factories load film in accordance with a method that infringes claim 1; that Jazz, who is supplied by Ginfax and Peji also infringes claim 1 that the evidence shows that the Changzhou factory practices a method for loading film that infringes claim 1; that Dynatec, who is supplied by the Changzhou factory infringes claim 1; and that the evidence shows that the{ }factory apparently loads film in a manner that infringes claim 1 and that respondents Jazz, PhilmEX, China Film, PSI and Boecks who are all supplied by{ } infringe claim 1 of the '649 patent.<sup>65</sup> (CBr at 92).

Respondents BPS Marketing, Boshi, OptiColor, Jazz, Argus, PhilmEX, Boecks, PSI, Sakar and Vantage did not set forth any non-infringement argument at the hearing or in the posthearing submissions. Thus, only Dynatec and China Film argued non-infringement of claim 1 of the '649 patent.

- (1) Respondents BPS Marketing, Boshi, OptiColor, Jazz, Argus, PhilmEX, Boecks, PSI, Sakar and Vantage
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The administrative law judge finds that the{ } factory process includes the following steps: in a darkroom, the film is withdrawn from the canister and attached to a tool

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<sup>65</sup> The administrative law judge notes that complainant's expert Bellows asserted that the Boshi factory method of loading also infringes claim 1 and that respondents Jazz, BPS Marketing, and Vantage, who are supplied by Boshi, infringe claim 1. (CX-725, Q&A 54). However, complainant did not assert infringement by the Boshi factory in its posthearing brief.

shaped like a spool; using a motor attached to the tool, the film is drawn from the canister and rolled onto the tool; the tool is removed; then the worker takes the roll of unexposed film and the canister and places the canister on the side of the camera which has the thumb wheel and takes the roll of unexposed film and places it on the opposite side of the taking lens in the other chamber; once the film is properly loaded and the sprocket teeth and film holes engaged, the back of the camera is fixed to the main camera body and checked by feel while still in the darkroom, tape is affixed to the camera to seal it. (CX-725, Q&A 52). The administrative law judge finds that this process reads on claim 1 of the '649 patent (CX-5, claim 1). Thus, the administrative law judge finds that complainant has sustained its burden in proving infringement of claim 1 of the '649 patent by said respondents who are supplied by{

}, namely OptiColor, Jazz, Argus, Boecks, PSI, Sakar and Vantage.

Regarding infringement of claim 1 of the '649 patent by the Peji and Ginfax factories, the administrative law judge finds that the process includes the following steps, in a dark box the film is pulled out of the film cannister into a roll (this step is done by hand at Peji and by a motorized tool at Ginfax), the roll and the cannister are inserted into the LFFP body in their respective receiving chambers, the back door is closed with a rubber band and tape. (CX-725, Q&A 54). The administrative law judge finds that the processes of the Peji and Ginfax factories read on claim 1 of the '649 patent. (CX-5, claim 1). Thus, the administrative law judge finds that complainant has sustained its burden in proving infringement of claim 1 of the '649 patent by Jazz who is supplied by the Peji and Ginfax factories.

With respect to infringement of claim 1 of the '649 patent by the Boshi factory, the administrative law judge finds that the Boshi process includes the following steps, in a dark

box, a tool is used to draw the film from the canister and is wound into a roll; the canister is fit into one part of the camera and the roll is fit into another; the film is wound while in the main body of the camera shell; the tool is removed from the roll after the film has been wound out; the back cover is then affixed to the main body and the film door is also affixed. (CX-725, Q&A 54). The administrative law judge finds that the only difference between the literal claim language and the method employed is that the film is placed into the main camera body and then wound out, as opposed to the film being wound out and then placed into the LFFP body. Bellows testified that this difference of winding the film out after the canister is placed in the LFFP body is an insubstantial difference in method steps. (CX-725, Q&A 54).<sup>66</sup> Thus, the administrative law judge finds the difference to be insubstantial because winding the film out of the canister in the LFFP performs the same function in the same way, *viz.* the film is unwound, and obtains the same result, namely the film is in a roll in the film roll receiving chamber. Therefore, the administrative law judge finds that the process of loading film used by the Boshi factory reads on claim 1 of the '649 patent. (CX-5, claim 1). Accordingly, the administrative law judge finds that the complainant has sustained its burden in proving infringement of claim 1 of the '649 patent by Boshi and those respondents who are supplied by Boshi, namely Jazz, BPS Marketing and Vantage.

(2) Dynatec

Although, Dynatec did not set forth any non-infringement argument with respect to claim 1 of the '649 patent in its posthearing briefs, it did set forth findings of fact on the non-

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<sup>66</sup> None of the respondents supplied by Boshi argued that this difference in method steps renders the accused method non-infringing.

infringement issue. Specifically, Dynatec argued that:

the unwinding of the film from the film cannister to the spindle can be accomplished either (1) with the release key from the One More Time Camera Kit (or equivalent tool) with the rear cover and side panel attached and therefore without the need of a darkroom or (2) by simply unwinding the film from the film cannister onto the spindle in the dark, placing the unwound film and film cannister into their respective chambers and closing the rear cover and side panel before bringing the camera into the light. (DFF68)

The administrative law judge finds that this finding of fact does not support a finding of non-infringement. Thus, the administrative law judge also finds that the Changzhou factory's process includes: winding unexposed film from a film canister onto a plastic spindle in a dark room, and then the spindle, which is full of film, and the film canister are positioned into their respective cavities; then the back panel and side film panel are reattached to the main body. (CX-725, Q&A 55, CPX-407). Furthermore, the administrative law judge finds that the only difference between the literal claim language and the method employed is that the film is placed onto a spindle. Bellows testified that the use of the spindle merely facilitates the winding of the film into a roll and is an insubstantial difference in method steps. (CX-725, Q&A 55).<sup>67</sup> The administrative law judge finds that the use of a spindle as opposed to a spool is an insubstantial difference because the spindle performs the same function in the same way, namely the film leader is attached to the spindle, and obtains the same result as the spool, namely the film is wound into a roll. Thus, administrative law judge finds that the process used by the Changzhou factory reads on claim 1 of the '649 patent. (CX-5, claim 1). Therefore, the administrative law judge finds that complainant has sustained its burden in

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<sup>67</sup> Dynatec did not argue that the use of the spindle rendered the accused process non-infringing.

proving that Dynatec, which is supplied by the Changzhou factory, infringes claim 1 of the '649 patent.

(3) China Film

China Film argued that when one views the videotape of the{ } process it is very clear that the{ } method is different from the method described in claim 1 of the '649 patent because the film is wound in a roll while inside the camera not outside and therefore does not read on claim 1 nor is it equivalent to claim 1. (ACSB at 14).

The administrative law judge finds that there is insufficient evidence in the record to determine whether or not{ } process infringes claim 1 of the '649 patent. The videotape of the{ } process is a "bench" demonstration and therefore the administrative law judge gives no weight to the videotape. Moreover, the camera in the "bench" demonstration has a hole drilled through the bottom of the shell, however, none of the samples produced to Fuji by China Film had a hole drilled in the bottom of the film receiving chamber. (FF 335). Thus, the administrative law judge finds that the process demonstrated in the{ } videotape cannot be the same process that was used to reload LFFPs by the { } factory.

35 U.S.C. § 295 states:

In actions alleging infringement of a process patent based on the importation, sale, offer for sale, or use of a product which is made from a process patented in the United States, if the court finds-

(1) that a substantial likelihood exists that the product was made by the patented process, and

(2) that the plaintiff had made a reasonable effort to determine the process actually used in the production of the product and was unable to so determine,

the product shall be presumed to have been so made, and the burden of establishing that the product was not made by the process shall be on the party asserting that it was not so made.

The administrative law judge finds that there is a substantial likelihood that the{ } reloaded LFFPs were made by the process of claim 1 of the '649 patent. (CX-725, Q&A 56).

The administrative law judge also finds that complainant has made a reasonable effort to determine the process actually used in the production of the{ } reloaded LFFPs.

Thus, the administrative law judge finds that complainant is entitled to the presumption of 35 U.S.C. § 295 that the LFFPs reloaded by{ } were made by a process that infringes claim 1 of the '649 patent.

The administrative law judge rejects China Film's argument that the 35 U.S.C. § 295 presumption does not apply. (ACSB at 10). As noted supra, the visit to the{ } factory involved a "bench" demonstration and, while the complainant was allowed to see some preload and postload activities, the complainant was not allowed to witness the actual reload process of China Film's product by the{ } factory because the{ } factory was not manufacturing China Film's product that day. China Film extended another offer for visitation of the{ } factory, but the offer was for visitation after the close of discovery and during the briefing of prehearing statements. Thus, the administrative law judge finds that complainant made a reasonable effort to obtain evidence, but that China Film did not provide adequate opportunity for complainants to do so. Moreover, China Film could have provided a witness at the hearing to testify concerning the process involved at the{ } factory, but it did not. Therefore, the administrative law judge finds that the 35 U.S.C. § 295 presumption applies and China Film has not sustained its burden in proving that the process

used by the{ } factory does not infringe claim 1 of the '649 patent.

Based on the foregoing, the administrative law judge finds that Jazz, China Film, and P.S.I. infringe claim 1 of the '649 patent by selling LFFPs produced by{ }<sup>68</sup>

Claim 9 of the '649 patent

(1) Dynatec

Complainant has alleged that Dynatec infringes claim 9 of the '649 patent. Dynatec did not set forth any non-infringement argument with respect to claim 9 of the '649 patent in its posthearing briefs. Dynatec, however, did set forth findings of fact on the non-infringement issue. Specifically, Dynatec argued that:

the unwinding of the film from the film cannister to the spindle can be accomplished either (1) with the release key from the One More Time Camera Kit (or equivalent tool) with the rear cover and side panel attached and therefore without the need of a darkroom or (2) by simply unwinding the film from the film cannister onto the spindle

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<sup>68</sup> The administrative law judge has found that the processes used by the particular respondents infringe claim 1 of the '649 patent. Thus, for example, he found that the{ } process infringes claim 1 and that those respondents who are supplied by{ }, namely OptiColor, Jazz, Argus, Boecks, PSI, Sakar and Vantage infringe claim 1. Bellows did testify that types 1, 2, 3, 4, and 5 of the accused LFFPs infringe claim 1 of the '649 patent "by inference." (CX-725, Q&A 59, 61, 62, 63, 63, and 64). Bellows also testified that when he uses the term "by inference" he means that:

Well, in many cases I could not observe all of the methods used by Respondents or Respondents' suppliers to load film into the LFFPs sold by Respondents, so I inferred, based upon all of the evidence before me, that the method claimed must be performed. My inferences as to the method used to load film in accordance with a claim of the '649 patent are based on the examination of LFFP samples and consideration of the various descriptions of the types of manufacturing methods used by Respondents or their suppliers. (CX-725, Q&A 60).

Thus, in view of the fact that the respondents' processes described above infringe claim 1 of the '649 patent and in view of the fact that the variations in LFFP types are not directed to film loading methods and in light of Bellows' testimony, the administrative law judge finds that these processes apply to each of types 1-5 of the accused LFFPs.

in the dark, placing the unwound film and film cannister into their respective chambers and closing the rear cover and side panel before bringing the camera into the light. (DFF 68)

The administrative law judge finds that this finding of fact sheds little light on the process used by the Changzhou factory for loading the film, and that it does not support a finding of non-infringement. Furthermore, the administrative law judge finds that this finding does not support Dynatec's non-infringement argument since at the hearing Dynatec's Reed was unable to unwind the film from the film cannister with the release key from the One More Time kit. (Tr. at 3563:21 -3564:7, 3595:20-3596:12). The administrative law judge also finds that the Changzhou factory's process occurs in the daylight, and involves putting the film cartridge in the main body section, pulling out the leader, attaching the leader to a spindle, then attaching the rear case, and using an electric screwdriver type device to rotate an exterior part of the spindle, which pulls the film out of the cannister and winds it onto the spindle. (CX-725, Q&A 57). The administrative law judge finds that the only difference between the literal claim language and the method employed is that the film is placed onto a spindle. The administrative law judge finds that the use of a spindle as opposed to a spool is an insubstantial difference because it performs the same function, namely to facilitate the winding of the film into a roll, in the same way, namely, the film leader is attached to the spindle, and obtains the same result, namely the film is wound into a roll.<sup>69</sup> Therefore, the administrative law judge finds that the process used by the Changzhou factory reads on claim 9 of the '649 patent. Thus, the administrative law judge finds that the complainant has sustained

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<sup>69</sup> Dynatec did not argue that the use of a spindle as opposed to a spool rendered the accused process non-infringing.

its burden in proving infringement of claim 9 of the '649 patent by Dynatec.<sup>70</sup>

(2) Jazz and Boshi

While complainant's expert Bellows alleged that Jazz and Boshi infringed claim 9 of the '649 patent (CX-725, Q&A 75, 81), Bellows, when asked which respondents infringe claim 9 of the '649 patent, testified that only Dynatec, Achiever, PSI, Vivitar, OptiColor and Argus infringe claim 9, and excluded Jazz and Boshi from his answer. (CX-725, Q&A 58, 59). Moreover, complainant did not assert infringement of claim 9 by Jazz and Boshi in its posthearing briefs. Thus, the administrative law judge finds that complainant has not sustained its burden in proving that Jazz and Boshi have infringed claim 9 of the '649 patent.

Other Respondents and Claim 1 and/or 9

For those respondents which complainant has alleged infringe claims 1 and/or 9 of the '649 patent and who have been found in default, see Order Nos. 23 and 24, viz. Fast Shot, Haichi, Linfa, Forcecam and Rino, in view of the undenied allegations of the complaint, the administrative law judge finds that those respondents infringe claims 1 and/or 9.

With respect to those respondents which complainant has alleged infringe claims 1 and/or 9 of the '649 patent and who have responded to the complaint and notice of investigation, but did not participate at the hearing, viz. Ad-Tek, Klikit, PenMax, Rainbow, TDA and Vivitar, the administrative law judge finds that, in view of the fact that complainant

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<sup>70</sup> Bellows testified that Types 6, 7, 7A, 8 and 8A all infringe claim 9 by inference. (CX-725, Q&A 65-67). In view of the fact that the Changzhou factory, which supplies Dynatec, uses a method which infringes claim 9 of the '649 patent and the fact that the variations in LFFP types are not directed at film loading methods, the administrative law judge finds that the infringing process applies to Dynatec's Types 6-8A.

was unable to obtain any evidence whatsoever concerning the accused process, those respondents also infringe claims 1 and/or 9 of the '649 patent. Thus, the administrative law judge finds that respondent Ad-Tek infringes claim 1; that Klikit infringes claims 1 and 9; that Penmax infringes claim 1; that Rainbow infringes claim 1; that TDA infringes claim 1; and that Vivitar infringes claim 9.

#### **IX. Validity ('649 Patent)**

Jazz and OptiColor argued that claim 1 of the '649 patents is invalid under 35 U.S.C. § 103. (JOBr at 139 to 141). It is argued that it is "admitted" by Fuji that the combination of Prontor U.K patent number 1,060,937 (CX-18) and the "light-tight" container of Voigtlander German patent number 949,324 (CX-20) or U.K. Patent No. 558,516 to Kodak (CX-19) results in practice of the method of claim 1 of the '649 patent; that the question is would it have been obvious to one of ordinary skill in the art to combine Prontor with the light-tight container of Voigtlander or any other standard light-tight container such as that shown by the Kodak reference; and that the U.S. Patent and Trademark Office, on four separate occasions answered that question with a resounding "yes." (JOBr at 139). Jazz and OptiColor offered no testimonial evidence at the hearing to support their arguments. Moreover no testimonial evidence was offered to show that the combination of Prontor with Voigtlander or Kodak teach or suggest every element of claim 1.

Fuji argued that there is a lack evidence of invalidity through obviousness and that to the contrary there is substantial evidence of non-obviousness. (CBr at 148).

The staff argued that there is insufficient evidence of obviousness to overcome the presumption of validity of the '649 patent, especially in light of the secondary consideration of

commercial success. (SBr at 58).

A patent is invalid under 35 U.S.C. § 103 if:

the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Id. The test for obviousness requires four factual determinations, viz., (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness, such as commercial success, copying, or long-felt need. Graham v. John Deere Co., 383 U.S. 1, 17, (1966) (Graham).

Secondary considerations, or "objective indications of nonobviousness," such as long felt need, commercial success, failure of others, copying, and unexpected results must be considered in a 35 U.S.C. § 103 determination. Graham, 393 U.S. at 17, Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 796 F.2d 443, 446 (Fed. Cir. 1986), cert. denied 484 U.S. 823 (1987). For objective evidence to be accorded substantial weight, its proponents must establish a nexus between the evidence and the merits of the claimed invention.

Statoflex, Inc. v. Aeroquip Corp., 713 D.2d 1530, 1539 (Fed. Cir. 1983).

In analyzing invalidity under 35 U.S.C. § 103, "the changes from the prior art . . . must be evaluated in terms of the whole invention, including whether the prior art provides any teaching or suggestion to one of ordinary skill in the art to make the changes that would produced the patentee's . . . device." Northern Telecom Inc. v. Datapoint Corp., 908 F.2d 931, 935 (Fed. Cir.), cert. denied, 498 U.S. 920 (1990) (Northern Telecom). The burden of

establishing the invalidity of patent claims "is especially difficult when the prior art was before the PTO examiner during prosecution of the application." Hewlett-Packard Co. v. Bausch & Lomb, Inc., 15 U.S.P.Q.2d 1525 1527 (Fed. Cir. 1990), citing American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1359 (Fed. Cir.), cert. denied, 469 U.S. 821 (1984).

Under 35 U.S.C. § 282, a patent is presumptively valid and the burden, under a "clear and convincing evidence" standard of proving invalidity, rests on the accused infringer.

Innovative Scube Concepts Inc. v. Feder Industries Inc., 26 F.3d 1112 (Fed. Cir. 1994).

U.K. Patent No. 1,060,937 which is based on an application filed in Germany on September 26, 1964 to Prontor-Werk (CX-18) (Prontor '937) shows and describes a disposable camera 1 which is pre-loaded with a roll of film in a cylindrical cavity 6 on one side of the taking lens 13. It has a take-up spool identified as winding core 9 on the other side of the taking lens 13 for winding exposed film using a single winding knob 10. Thus, Prontor-Werk shows a disposable camera which is pre-loaded with a roll of film on one side of the lens and a take-up spool on the other side of the lens for winding exposed film. (Omura CX-650, Q&A 35).

U.K. Patent No. 558, 516 to Kodak (Kodak '516) which is based on the application filed January 14, 1942 in the United States (CX-19) does not describe or depict a film cartridge. Element 13 of this reference is most clearly shown in Fig. 3. Element 13 is a cylindrically shaped open top chamber which is built as a unit with the bottom wall 9. This is described on page 1, line 101 through page 2, line 11. The film is loaded on a spool and not enclosed in a light tight container. The patent describes that the film, after loading, is unwound from the spool into a chamber 8 on the other side of the lens 2. As pictures are

taken, the film was then rewound back onto the spool. (CX-650, Q&A 38).

German Patent No. 949,324 to Voigtlander, based on an application filed September 20, 1956, and an English translation thereof (CX-20) (Voigtlander '324) shows a conventional type of camera in which a conventional 35 mm film cartridge is loaded. The film was withdrawn from the cartridge 5 as pictures are taken by a first mechanism. The film must be wound back into the cartridge 5 by an additional mechanism provided for this purpose prior to removal from the camera and photo processing. (CX-650, Q&A 39).

There is unrefuted testimony from at least persons of ordinary skill in the art<sup>71</sup> that it would require considerable effort to modify the Prontor-Werk product into a commercially viable product having the advantages of complainant's single use camera and capable of use with a 35 mm film cartridge. Thus the Prontor-Werk product has to be unloaded in a dark room and is not convenient for processing. Also, about 20 years passed between the Prontor-Werk development and the invention of Fuji's single use camera. During that time no one else produced a single use camera having the advantages of Fuji's single use camera. (CX-650, Q&A 37, CX-725, Q&A 111 to 113).

As the '649 patent shows the Examiner did have before him Japanese Publication No. 53-127934 (CX-22) and Netherlands patent document 6,708,486 (CX-17). Japanese Utility Model Publication No. 53-127934 published October 11, 1978, based on an application filed February 28, 1977 and a translation of the claim of that application (CX-22 and CX-22A)

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<sup>71</sup> While complainant presented evidence as to a person skilled in the pertinent art (FF 336) and how such a person would view the references relied on by Jazz and OptiColor, Jazz and OptiColor provided no testimony as to the appropriate level of ordinary skill in the art or how such a person of ordinary skill would view said references.

describes a conventional camera in which film in a conventional cartridge is loaded on one side of the lens. After the back cover is closed, the film is wound onto a take-up spool 6 on the other side of the lens. As pictures are taken, the exposed film is wound back into the cartridge by a separate winding mechanism. (CX-650, Q&A 43, Q&A 44).

Netherlands patent document No. 6,708,486 which is based on an application filed September 12, 1966 and an English language translation thereof (CX-17) based on the figures included with the Netherlands patent and the translation thereof, shows a disposable camera. The camera is pre-loaded with a roll of film on one side of the taking lens on a reel identified as spool 6. The taking lens is identified as objective lens 9. It has a second reel identified as take-up spool 5 on the other side of the taking lens 9 for winding exposed film. Though the drawing of the Netherlands patent shows an equal amount of film on both sides of lens 9, it shows only a single mechanism identified as button 16 for advancing the film in the camera. When ready for use, most of the film had to be on spool 6 on the side of the taking lens away from the mechanism. Hence the Netherlands patent shows a disposable camera which is pre-loaded with a roll of the film on one side of the lens and a take-up spool on the other side of the lens for winding exposed film. The film in the camera of the Netherlands patent must be unloaded in a darkroom. (CX-650, Q&A 33, Q&A 34).<sup>72</sup>

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<sup>72</sup> Each of the Prontor-Werk reference and the Netherlands reference show a disposable camera which is pre-loaded with a roll of film on one side of the lens and a take-up spool on the other side of the lens for winding exposed film. The Netherlands patent reference also shows the use of a reel for unreeling in the film chamber not found in the Prontor-Werk patent. (CX-650, Q&A 36).

As seen from the foregoing, the Examiner did have a reference before him that showed a conventional camera in which the film is loaded on one side of the lens, the back cover is closed, the film is wound onto a take-up spool on the other side of the lens and, as the pictures are taken, the exposed film is wound back into the cartridge (Japanese Publication No. 53-127934 (CX-22)) and a reference before him that showed a disposable camera that is pre-loaded with a roll of film on one side of the lens and a take-up spool on the other side for winding exposed film, and the film must be unloaded in a darkroom, viz., Netherlands patent document 6,708,486. (CX-17). Significantly claim 1 was issued over those references.

References in combination must suggest the invention as a whole. Absent a suggestion to combine references, one can do no more than piece the invention together using the patented invention as a template, which hindsight reasoning is impermissible. Texas Instruments v. U.S.I.T.C. 988 F.2d 1165, 1178 (Fed. Cir. 1993). Other than lawyer argument, the administrative law judge finds no suggestion in the record to combine the references as argued by Jazz and OptiColor. Moreover there is evidence of commercial success. (FF 337 to 341, 354).

Jazz and OptiColor, relying on the prosecution of the '130 patent (CPX-16) and the prosecution of the '400 patent (CPX-6), argued that four times the Examiner ruled that it would be obvious to one of ordinary skill in the art to replace a spool of Prontor with a light-tight container. However a comparison of the prosecution of U.S. Patent No. 4,890,130 (the '130 patent) (CPX-16) and the '400 patent (CPX-6) with the prosecution of the '649 patent (CPX-5) shows that the Examiner, who examined the applications for the '130 and '400 patents, was considering claims that were patentably distinct from the claims of the '649

patent.

Based on the foregoing, the administrative law judge finds that Jazz and OptiColor have not provided clear and convincing evidence that claim 1 of the '649 patent is invalid under 35 U.S.C. § 103.

#### **X. Enforceability ('649 Patent)**

Jazz and OptiColor argued that the '649 patent is unenforceable due to Fuji's inequitable conduct before the United States Patent Office. (RJCL 17). In support it is argued that as a result of concealing from the Examiner involved in the '649 prosecution the existence of applications for the '400 patent and for the '130 patent, the prior art cited therein and the rejections being issued by the Examiner in the prosecutions of the '400 and '130 patents, the '649 patent was allowed to issue. (JOBr at 135 to 138). Jazz and OptiColor also argued that the failure to cite the Prontor '937 and Voigtlander '324 combination, cited in the '400 patent in the '649 prosecution, constitutes inequitable conduct. (JOBr at 138).<sup>73</sup>

Fuji argued that there is not one shred of evidence that any material reference was withheld from the prosecution of the '649 patent and that there was no evidence of the

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<sup>73</sup> On June 11, 1998 Jazz filed Motion No. 406-3 for summary determination that the '649 patent is unenforceable based on the failure of the applicants to disclose the Prontor and Voigtlander references and a Kodak reference. Order No. 7 which issued on July 10, denied Motion No. 406-3 on the ground that certain Japanese references which were before the Examiner "appear to be more material to the '649 patent application than any Prontor, Voigtlander, or Kodak prior art" and also found that Jazz did not provide any evidence of Fuji's intent to deceive the Patent and Trademark Office. (Order No. 7 at 4-5). Jazz argued that during the summary determination briefing the issue disputed was whether certain Japanese prior art which was before the Examiner, was more relevant than the Prontor and Voigtlander combination; and that although the parties disputed the relevance of the Japanese art, the trial record now establishes beyond dispute that neither Japanese patent taught the first step of claim 1 of the '649 patent. (JORBr at 35).

threshold requirement of an intent to deceive the United States Patent Office. (CBr at 148-153).

The staff argued that it has not been demonstrated by clear and convincing evidence that the Prontor/Voigtlander combination was more material than the Japanese publications that were cited to the Examiner or that the required level of intent to deceive or mislead existed in the prosecution of the '649 patent. (SBr at 60). It is also argued that there is no clear and convincing evidence establishing either the materiality of any related proceedings or that there was any intent existing to deceive or mislead the Patent and Trademark Office. (SBr at 60).

Inequitable conduct resides in failure to disclose material information, with an intent to deceive. Materiality and intent must be proven by clear and convincing evidence. The term "gross negligence" has been used as a label for various patterns of conduct. It is definable, however, only in terms of a particular act or acts viewed in light of all the circumstances. A finding that particular conduct amounts to "gross negligence" does not of itself justify an inference of intent to deceive. Rather, the involved conduct, viewed in light of all the evidence, including evidence indicative of good faith, must indicate sufficient culpability to require a finding of intent to deceive. Kingsdown Medical v. Hollister, Inc. 863 F.2d 867, (Fed. Cir. 1988) (en banc as to certain portion cited), cert. denied, 490 U.S. 1067 (1989). The alleged conduct must not amount merely to the improper performance of, or omission of, an act one ought to have performed. Instead, clear and convincing evidence must prove that an applicant had the specific intent to accomplish an act that the applicant ought not to have performed, viz, misleading or deceiving the Patent Office. In a case involving nondisclosure of information, clear and convincing evidence must show that the applicant made a deliberate

decision to withhold a known material reference. Molins PLC v. Textron Inc., 48 F.3d 1172, 33 U.S.P.Q.2d 1823, 1829 (Fed. Cir. 1995) (Molins).

In the "Validity" section supra of this initial determination, the administrative law judge found the Patent Office examination in the prosecution of the '130 and '400 patents was not relevant to the prosecution of the '649 patent. He also found that Jazz and OptiColor had not provided clear and convincing evidence that claim 1 of the '649 patent is invalid under 35 U.S.C. § 103 in view of Prontor '937 taken with Voigtlander '324 or Kodak '516. At the hearing respondents Jazz and OptiColor provided no testimony that Fuji or its attorneys prosecuting the '649 application had any intent to deceive and the record is devoid of any such evidence.

Based on the foregoing, the administrative law judge finds that Jazz and OptiColor have not sustained their burden in establishing that the '649 patent is unenforceable.

#### **XI. Implied License (Estoppel)**

Jazz and OptiColor argued that an implied license has arisen based upon Fuji's knowledge of the sales of LFFPs by Jazz and OptiColor and Fuji's failure for years to take action. (JOBr at 141 to 144). It is argued that in determining whether a party should be "estopped" a patentee's inaction, coupled with other facts, can satisfy the element of misleading conduct; and that it strains the imagination that a party desiring to enforce its patent rights would watch a market grow and participate itself in the market. (JORBr at 36-37).

Complainant argued that no implied license or estoppel has arisen based on complainant's purported knowledge of sales of OptiColor and Jazz and Fuji's failure to take action. It is argued that although most of the cases relied upon by OptiColor in its initial

posthearing brief on this subject are equitable estoppel cases, it would appear that OptiColor is attempting to claim the benefit of this administrative law judge's decision on "waiver" in EPROMS, USITC Inv. No. 337-TA-395, Final Initial and Recommended Determinations at 7-38 (EPROMS ID).<sup>74</sup> It is argued that there is no circumstance under which Fuji's silence after knowledge purported to be acquired by unnamed Fuji representatives of unknown authority, either at trade shows or at annual business meetings concerning the purchasing by OptiColor of Fuji products over a period extending no more than three or four years, can qualify as "waiver"; that Mr. Lass of OptiColor conceded that no one from Fuji ever expressly consented to OptiColor's continued sale of remanufactured one-time use camera; and that OptiColor's reliance on "waiver", or its equivalent "implied license" is clearly misplaced, and that waiver and estoppel are different -- waiver resting on the intention of a party, and estoppel resting on the detrimental change of position induced by said party's acts or conduct. (CRBr at 59, 60).

The staff argued that it is not clear if Jazz and OptiColor are asserting that the implied license has arisen from acquiescence, from equitable estoppel, or on some other basis; that on any basis, the defense fails because there was no evidence presented at trial of conduct by Fuji that would clearly bespeak an intention to waive its patents, or of Fuji engaging in misleading conduct; that the only "conduct" alleged by Jazz/OptiColor is that Fuji "had the opportunity"

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<sup>74</sup> The staff noted that although it agreed with the Initial Determination in EPROMS on the implied license or waiver issue, that ID was not adopted by the Commission as a whole. See Commission Notice of Final Determination (July 2, 1998), Commission Opinion (July 9, 1998). The staff also noted that the only comments related to this issue in EPROMS were the "Additional Views" of Chairman Bragg, who indicated that she did not agree with the administrative law judge's analysis of the waiver defense. Opinion of Chairman Bragg at 13-16.

to inform OptiColor of possible patent infringement which allegation falls woefully short of what is required for this defense, citing Wang Labs, Inc. v. Mitsubishi Electronics, 103 F.3d 1571, 1582 (Fed. Cir.), cert. denied, 118 S. Ct. 69 (1997) (Wang). The staff further argued that, as applied to estoppel, the only "prejudice" OptiColor can even allege is damage to business reputation, and that there was no evidence of prejudice offered. Accordingly, the staff argued that there is no basis for a defense of implied license by waiver or estoppel as to Jazz, OptiColor or any other respondent. (SRBr at 23).

In EPROMs this administrative law judge held that the essential elements of a waiver relative to this investigation are (1) an existing right of complainant patentee, (2) knowledge by complainant patentee, actual or constructive, of the existence of such right, and (3) an actual intention by complainant patentee to relinquish it or an adequate substitute for such intention implied from acts or declarations which are not kept secret. He thereafter found that there was substantial evidence that complainant patentee had waived its rights to enforce a patent in issue. EPROMS ID at 15, 37, 38. In this investigation there is evidence that Fuji was aware that its used single use camera empty bodies were being "remanufactured" into new single use cameras prior to 1992 although such "remanufacture" was not being performed in the United States and did not involve any of the respondents. (FF 343). There is also evidence that Fuji first learned of the sale of "remanufactured" one-time-use cameras in the United States in around 1994 (FF 342) and first learned that OptiColor was selling infringing one-time-use cameras in the United States in the course of Fuji's pre-filing investigation in 1997. (FF 344). In addition there is evidence that in 1997 Fuji conducted an investigation to determine the identity of the persons involved in violation of section 337 in preparation for

filing a complaint in the Commission. (FF 345, 351). The administrative law judge however finds no evidence in the record that supports the argument that any respondent believed that Fuji would not seek to enforce its patent rights. As OptiColor's Lass testified he can recall no one from Fuji ever telling anyone from Seattle Film Works that Fuji affirmatively stated that it was going to let "you" continue to sell recycled Fuji single-use cameras. (FF 346).

A typical equitable estoppel situation, as the Court stated in Wang, is one in which the (1) infringer knows of the patent, (2) the patentee objects to the infringer's activities, (3) but the patentee does not seek relief until much later, and (4) thereby misleading the infringer to believe the patentee will not act. Id. at 1581. Significantly, in Wang, patentee Wang tried to coax the alleged infringer Mitsubishi into the SIMM market, provided designs, suggestions and samples to Mitsubishi, and eventually purchased SIMMs from Mitsubishi. Many years later patentee Wang accused Mitsubishi of infringement. On those facts, the Court found as a matter of law that Mitsubishi "properly inferred consent to its use of the invention of Wang's patents." Id. at 1582. The Court further held that "[i]n sum, Wang consented to Mitsubishi's use of the invention, granted the right to make, use, or sell the patented SIMMs without interference from Wang, and received consideration." Id. The administrative law judge finds the evidentiary record in this investigation in no way approaches the facts in Wang.

Based on the foregoing the administrative law judge finds that Jazz and OptiColor proffered no evidence which approaches in any way the evidence this administrative law judge relied on in his decision in EPROM's and which decision was not adopted by the Commission. Accordingly he finds that Jazz and OptiColor have not sustained their burden is establishing that there is an implied license, involving estoppel.

## **XII. DOMESTIC INDUSTRY**

Complainant argued that it has proved, beyond contravention, that there exists in the United States an industry relating to the articles protected by each of the fifteen patents in issue so that the domestic industry requirement of sections 1337(a)(2) and (3) is fully satisfied. (CBr at 156-163).

The staff argued that complainant has established a domestic industry under at least prongs(A) and (B) of section 337(a)(3) for each of the patents at issue and the respondents have not challenged this showing. (SBr at 66-68).

While respondent Achiever did not contest the domestic industry requirement in its pre-hearing brief, it did argue in its post hearing brief that complainant cannot meet the domestic industry requirement on the ground that all three of the section 337(a)(3) criteria require that the domestic investment be "significant" or "substantial;" and that complainant's South Carolina plant "manufactures only a fraction of the overall product," with a substantial portion of complainant's product still manufactured in Japan. Thus Achiever argued that complainant cannot meet the domestic industry requirement. (ABr at 32-33).

Section 337 prohibits unfair competition in the importation of articles that infringe a valid patent, provided that a domestic industry exists that exploits that patent. 19 U.S.C. § 1337(a)(2). The definition of domestic industry, as set forth in subsection 337(a)(3), reads:

For purposes of subparagraph (2), an industry in the United States, with respect to the articles protected by the patent . . . concerned—

- a. significant investment in plant and equipment;
- b. significant employment of labor or capital; or
- c. substantial investment in its exploitation, including engineering, research and development, or licensing.

The domestic industry requirement is satisfied by meeting the criteria of any one of the three factors supra. Certain Concealed Cabinet Hinges and Mounting Plates, Inv. No. 337-TA-289, Comm.'s Op. at 1920 (1990). Complainant however bears the burden of establishing that the domestic industry requirement is satisfied. Id at 22. Although there must be a domestic industry with respect to each asserted patent, there is no claim correspondence requirement as between the claims asserted against respondents and those practiced by the domestic industry. Certain Microsphere Adhesives, Process for Making Same and Products Containing Same Including Self-Stick Repositionable Notes, Inv. No. 337-TA-366, USITC Pub. 2949 (1996).

#### **A. The Technical Prong**

The parties appearing at the hearing stipulated that the LFFPs manufactured by Fuji in the United States are covered by at least one claim of each of the asserted patents. (SX-3, ¶ 19). No respondents have challenged that fact. See also FF 64, 65, 66. Therefore the administrative law judge finds that the technical prong of the domestic industry is met.

#### **B. The Economic Prong**

Based on the evidence (FF 56 to 63, 67 to 78), the administrative law judge finds that complainant has satisfied its burden in establishing a domestic industry under at least prongs (A) and (B) of Section 337(a)(3) for each of the patents at issue.

### **XIII. Remedy And Bonding**

Fuji is requesting the issuance of a general exclusion order and cease and desist orders as to the domestic respondents. (CBr at 165 to 171). Also relying on Commission rule

210.71(a), it is argued that it is imperative that any general exclusion order and any cease and desist order should include a requirement that all persons importing into the United States one-time-use cameras, which contend that their products do not infringe the asserted claims of the patents in issue, should be required to report this to the Commission and to Customs at the time of seeking entry together with an analysis of why such a person contends that such one-time-use cameras avoid such claims ("analysis"); that Customs can and should make the initial determination of non-infringement, if appropriate; that mere certification will not work, especially where determination of non-infringement from an exterior examination is not possible;<sup>75</sup> and that each respondent subject to a cease and desist order should be required to report to the Commission as to the disposition of its inventory at the time of the issuance of the Commission's cease and desist orders. (CBr at 171-172). Fuji has further requested a bond of three hundred percent during presidential review. (CBr 172 to 173).

Jazz and OptiColor argued that, in the event relief is granted in favor of Fuji on the ground of "reconstruction," any exclusion order must be tailored to the LFFPs found to have been reconstructed. Thus it is argued that "if it is determined that the replacement of the film, batteries, and paper is permissible repair, but that replacement of a plastic tab is reconstruction, then the exclusion must be limited to those devices in which the plastic tab has been replaced." (JOBr at 146). Jazz and OptiColor argued, with respect to any bond, that the

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<sup>75</sup> Complainant, respondents Achiever, PSI and Argus and the staff have stipulated that one cannot determine whether or not any claim of any patent asserted by complainant against respondents Achiever and PSI in this investigation is or is not infringed by an examination of the exterior of a camera made by respondent Achiever in the form in which it is imported into the United States. (SX-2)

most appropriate calculation of the amount of a bond sufficient to protect Fuji from injury is based upon the royalty rate received by Fuji under its license agreement with Concord Camera Corp. (JOBr at 146-148).

Respondent Achiever argued that it is imperative that any exclusion and cease and desist order entered be tailored to prohibit importation of only those cameras that embody the elements of the infringed claims; that the prerequisites to a general exclusion order under 19 U.S.C. 210.50(c) are not found; and that entry of a general exclusion order or a broad cease-and-desist order prohibiting importation of all single-use cameras would result in a windfall to Fuji. (ABr at 33 to 35).<sup>76</sup> Achiever, with respect to any bond, argued that under no circumstances should the bond exceed the price differential between the Fuji camera and the product of the respondents. (ABr at 35-36).

Respondents Argus, China Film and Sakar argued that "equity and good conscience" merit a non-remedy determination. (ACSB at 17-18).

The staff argued that the evidence demonstrates that a general exclusion order against the importation of infringing LFFPs is appropriate, should a violation be found. It also argued that circumstances exist in this investigation that permit the conclusion that each of the domestic respondents to this investigation maintain a commercially significant domestic inventory of the accused LFFPs, and that thus cease and desist orders are warranted. (SBr at

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<sup>76</sup> Respondent Achiever also argued that a general exclusion order would quash public interest concerns such as the effect of any exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States and United States consumers. (ABr at 35). Arguments however as to public interest should be made to the Commission and not to the administrative law judge. See Commission rule 210.50(b)(1).

68-70). The staff does not believe that a reporting or certification requirement in conjunction with a general exclusion order has been demonstrated to be necessary or appropriate although it represented that the Commission routinely includes in its cease and desist orders a requirement that each respondent regularly report to the Commission certain information regarding its importation, sales and inventory of covered products and that the staff is unaware of any reason to deviate from this standard provision in this investigation. (SBr at 71). With respect to any bond, the staff argued that a bond of one hundred percent of the entered value will protect complainant from injury by eliminating, or at least reducing, the price differential and that such a bond is also appropriate in light of the wide range of prices involved. (SBr at 71-72).

In Certain Airless Paint Spray Pumps and Components Thereof, Inv. No. 337-TA-90, USITC Pub. 1199 at 17, 216 U.S.P.Q. 465, 472-73 (1981) (Spray Pumps) a general exclusion order was deemed appropriate when there is proof of (1) a widespread pattern of unauthorized use of the patented invention, and (2) certain business conditions from which one might reasonably infer that foreign manufacturers other than respondents to the investigation may attempt to enter the U.S. market. Id.

In 1994, statutory standards on the issuance of general exclusion orders were adopted in the amendments to Section 337, adding a new subsection to Section 337(d) that states:

(2) The authority of the Commission to order an exclusion from entry of articles shall be limited to persons determined by the Commission to be violating this section unless the Commission determines that --

(A) a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to

products of named persons; or

(B) there is a pattern of violation of this section and it is difficult to identify the source of infringing products.

19 U.S.C. § 1337(d)(2) (effective January 1, 1995); see also Commission rule 210.50(c) (incorporating the statutory standards into the Commission rules). Those standards "do not differ significantly" from the Spray Pumps standards. Certain Neodymium-Iron-Boron Magnets, Inv. No. 337-TA-372, Commission Opinion on Remedy, the Public Interest and Bonding at 5 USITC Pub. No. 2964(1996) (Magnets). See also Certain Agricultural Tractors, Inv. No. 337-TA-380, 44 U.S.P.Q.2d 1385, 1397-1404 (1997) (General exclusion order granted) (Tractors).

In Spray Pumps, the Commission pointed out that a complainant

should not be compelled to file a series of separate complaints against several individual foreign manufacturers as it becomes aware of their products in the U.S. market. Such a practice would not only waste the resources of the complainant, it would also burden the Commission with redundant investigations. (Comm'n Op. at 30).

That consideration must be balanced against the potential of a general exclusion order to disrupt legitimate trade. Id. With this balance in mind, the Commission concluded that it would

"require that a complainant seeking a general exclusion order prove both a widespread pattern of unauthorized use of its patented invention and certain business conditions from which one might reasonably infer that foreign manufacturers other than the respondents to the investigation may attempt to enter the U.S. market with infringing articles." Id.

The Commission in Spray Pumps then set out the following factors as relevant in demonstrating whether there is a "widespread pattern of unauthorized use":

- (1) a Commission determination of unauthorized importation into the United States of infringing articles by numerous foreign

manufacturers;

(2) the pendency of foreign infringement suits based upon foreign patents which correspond to the domestic patent at issue; and

(3) other evidence which demonstrates a history of unauthorized foreign use of the patented invention.

Id.

The Commission in Spray Pumps also identified the factors relevant to showing "certain business conditions" as including:

(1) an established market for the patented product in the U.S. market and conditions of the world market;

(2) the availability of marketing and distribution networks in the United States for potential foreign manufacturers;

(3) the cost to foreign entrepreneurs of building a facility capable of producing the patented article;

(4) the number of foreign manufacturers whose facilities could be retooled to produce the patented article; or

(5) the cost to foreign manufacturers of retooling their facility to produce the patented article.

Id. at 31-32.

The administrative law judge finds that there is evidence that a general exclusion order against the importation of infringing LFFPs is appropriate. Thus he finds that there is a widespread pattern of unauthorized use of complainant's patents. For example there is evidence of imports or sales by each of the original respondents to this investigation (except Opticam) (FF 6 to 53). Jazz identified ten suppliers located in both Korea and China and other respondents identified still others. (FF 347, 348). Also additional entities believed involved

in section 337 violations have been indicated. (FF 349, 351). In addition in the last few years, the amount of infringing product and the number of entities involved have increased. (FF 352, 353). Furthermore it is often difficult to trace the origin of the imported LFFPs because certain imported LFFPs do not identify the manufacturer on the packaging. (FF 350).

With regard to the "certain business conditions" which constitute the second prong of the Spray Pumps test, the substantial sales of one-time-use cameras in the United States clearly demonstrate an established market for the patented product in the U.S. market, and in fact throughout the world. (FF 337, 352, 354). The success of the respondents in distributing their goods, both in the premium and retail markets, demonstrates the availability of marketing and distribution networks in the United States for potential foreign manufacturers. (FF 352, 353). Moreover additional reloading facilities can be set up with a minimal cost. (FF 355, 356).

Based on the foregoing the administrative law judge recommends issuance of a general exclusion order.<sup>77</sup>

As to any cease and desist orders, 19 U.S.C. § 1337(f) permits the Commission to issue, in lieu of or in addition to an exclusion order, a cease and desist order directing persons found to have violated Section 1337 "to cease and desist from engaging in the unfair methods or acts involved ...." The Commission has ruled that: "In general, cease and desist orders are warranted with respect to domestic respondents that maintain commercially significant U.S.

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<sup>77</sup> While respondent Achiever argued that any exclusion order should not cover "all" single use cameras, but be tailored to prohibit importation of only those cameras that embody the elements of the infringed claims, as the staff argued (SRBr at 25), Commission orders are always tailored to exclude only products covered by the claims in issue. In this investigation while it has been stipulated that certain subtypes of a Type 6 LFFP do not infringe certain claims in issue, it has been found that those subtypes infringe other claims in issue. See Section VI B supra.

inventories of the infringing product," and domestic respondents who have been defaulted are presumed to maintain significant inventories of infringing products in the United States and are likewise subject to cease and desist orders. Tractors, 44 U.S.P.Q. at 1404, n. 124. In this investigation, several respondents, including at least AmerImage, Argus Industries, Boecks Camera, BPS Marketing, China Film Equipment, Dynatec, Jazz, Opticolor, Penmas, Philmex, PSI, Sakar, TDA, Vantage, and Vivitar, provided information as to the inventory levels, all of which appear to be of a commercially significant level. (See CX-830). Based on the foregoing, the administrative law judge recommends cease and desist orders against each of the domestic respondents, viz. respondents Ad-Tek, Argus, Boecks, BPS, Dynatec, FastShot, Forcecam, Haichi, Innovative, Jazz, Klikit, Labelle OptiColor, Penmax, PhilmEx, PSI, Rainbow, Sakar, TDA, Vantage and Vivitar.

Complainant argued that any general exclusion order and any cease and desist order should include an "analysis". Complainant admits that a "mere certification" will not work. In Magnets, Comm'n Op. at 11, this administrative law judge found that testing was preferred to certification because certification would be ineffective at halting the importation of infringing magnets. The Commission agreed with this administrative law judge's indications that a certification provision in the general exclusion order would be inappropriate because magnet importers have been willing to misdescribe or mislabel goods to avoid problems with Customs and infringing magnets can be identified by testing and further found that the willingness on the part of importers to misdescribe or mislabel goods to Customs suggests that they would be equally willing to falsify a certification to Customs. In addition the Commission found that because there was no clear showing in the record what the volume of

imported infringing magnets was likely to be, it was uncertain to what extent a certification procedure would be less burdensome for Customs than performing tests on incoming magnets. It noted however that the issuance of a general exclusion order was likely to reduce the volume of infringing magnets sought to be imported into the United States, thereby reducing the burden on Customs to test incoming magnets; and that the issuance of a cease and desist order would also likely reduce the level of imports which will also reduce the flow of infringing magnets and thus reduce the burden on Customs to test incoming magnets. Magnets, Comm'n Op. at 11-12.

In this investigation, in view of the large number of respondents, who did not even participate in the hearing, and the respondents in default the administrative law judge finds that the complainant has not shown that the requested "analysis" would be effective in providing complainant complete relief. Moreover it is a fact, as indicated by Bellows' testimony, that on disassembly of the single use cameras infringement can be determined. Also the issuance of cease and desist orders to the large number of domestic respondents should likely reduce the level of imports and thus reduce the burden on Customs of testing. With respect to complainant's argument that each domestic respondent subject to a cease and desist order should be required to report to the Commission its inventory, because the Commission routinely includes in its cease and desist orders a requirement that a respondent, subject to a cease and desist order, regularly report to the Commission certain information regarding its importation, sales and inventory of covered products, the administrative law judge finds Fuji's requested inventory reporting requirements in any cease and desist order unnecessary.

**Bonding**

Section 1337(j) provides for the entry of infringing articles upon the payment of a bond during the 60-day Presidential review period. The bond is to be set at a level sufficient to "protect complainant from any injury" during the Presidential review period. 19 U.S.C. §1337(j), Commission rule 210.50(a)(3). In Tractors, 44 U.S.P.Q.2d at 1406 (1997), the Commission set a bond of 90% of entered value, based on the comparative pricing evidence of record, complainants' statement that a bond of 90% would adequately protect their interests and the absence of objection by any other party. In Certain Hardware Logic Emulation Systems, USITC Inv. No. 337-TA-383 Comm'n Op. filed Dec. 10, 1997, (Hardware) the Commission set a two-tiered bond.<sup>78</sup> The first tier was at 43% of transaction value based on price differentials which was to apply when the imports were at transaction value. The second tier amount was at 180%, only to ensure that the amount of any revenue ultimately forfeited to complainant remained at the 43% level in the event respondents' importations were appraised using a valuation method other than transaction value. (Comm'n Op. at 57).

{

} There is testimony

that "[r]emanufacturers appear to be selling their 15 exposure non-flash one-time-use camera at

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<sup>78</sup> In Hardware in issue were hardware logic emulations systems and components thereof that were used in the semiconductor manufacturing industry to design and test the electronic circuits of semiconductor devices. (Comm'n Op. at 1). Retail prices for a system were in the over \$100,000 bracket.

around{ }with a low of{ }and flash one-time-use camera at an average of{ }and as lows as{ }." (Hafenscher CX-761 Q&A 15). Also prices for complainant's single use cameras have varied. Thus with respect to the average retail price at which Fuji's one-time-use cameras are sold in the United States, the average retail price range for QuickSnap Flash one-time-use cameras with 27 exposures in 1997 was{ }while in 1998, the range was from{ } The average wholesale price of such one-time use cameras of Fuji, in 1997, was between{ }In 1998, the wholesale price range was from{ } per camera. (Baer CX-614 Q&A 55, 56). There is also testimony that Fuji's average price of 15 exposure non-flash one-time and cameras is around{ }while Fuji's average selling price of 15 exposure flash one-time-use cameras is around{ } (Hafenscher CX-761 Q&A 14).

{ } the administrative law judge finds, in view of the price variations, that it is impossible to calculate what level of bond based on price differentials will protect complainant from any injury. Hence he finds it appropriate to recommend a bond of 100 percent of entered value. See Magnets Comm'n Op. at 15 ("[where] it is impossible ... to calculate what level of bond based on price differentials will protect a complainant from any injury, it is appropriate to issue a bond or 100 percent of entered value ... of the goods in question").

## ADDITIONAL FINDINGS

1. Single-use cameras (also known as "lens-fitted film packages" or "LFFPs") are relatively inexpensive, disposable cameras which are pre-loaded with film and a film cartridge so that after use, all of the film has been advanced into the film cartridge. (Baer CX-614, Q&A 9; Bellows CX-725 Q&A 27).

2. Fuji is a business entity organized and existing under the laws of Japan with wholly owned subsidiaries in the United States. (SX-3).

3. While best known in the United States for its photographic products, complainant also manufactures and sells, throughout the world, magnetic information storage media, non-photographic imaging devices, medical and scientific imaging devices and other products. While it maintains manufacturing facilities in other locations within the United States, Fuji has, over the years, developed a major manufacturing complex in Greenwood, South Carolina operated by an indirect wholly owned subsidiary, Fuji Photo Film, Inc. (Fuji Greenwood). Among the products manufactured in Greenwood, South Carolina are photographic paper, film and one-time-use cameras (LFFPs). (CPX-17, Ogura, Tr. at 579-580, Croker, Tr. at 2450-2455).

4. Fuji invented and marketed the first commercially successful one-time-use camera, sold in Japan as "film with lens". Fuji has licensed Kodak, Konica and Concord to manufacture and sell one-time-use cameras. Although Fuji has sought termination of the Concord agreement, the propriety of that termination is the subject of litigation in the Southern District of New York, the termination being stayed pending the outcome of the litigation. (Omura, CX-650 at Q&A 21, Q&A 24, CX-621, CX-622, CX-623).

5. Mr. Ogura described the business of Fuji as follows:

Q Mr. Ogura, could you please describe the business of Fuji Photo Film?

A Fuji Film is a company that began in the business of movie film and that developed into a business of various types of photo film. For example, photographic film for general use, medical films such as x-rays and printing for the graphic arts.

But we've also developed businesses in the areas of peripheral devices such as cameras and film processes. In addition to the chemical imaging of photographic film we've also recently developed into the areas of electric imaging. An example of this in the area of medicine would be diagnostic devices for computerized radiography. And in the realm of science and research, the bioanalyzers being used.

The Fuji Film has also had its hand in magnetic resonance imaging. In areas other than medicine, Fuji has also been involved in products for computers such as high density floppy discs and high density recording tape. These are representative examples of the various areas in which we have developed our business in the fields of both imaging and information.

(Ogura, Tr. at 578-580).

6. Respondent Achiever is a Hong Kong corporation with its principal place of business at 12/F Union Hing Yip Factory Building, 20 Hing Yip Street, Kwun tong, Kowloon, Hong Kong. (SX-3, par. 3). Achiever manufactures for importation into and sale in the United States LFFPs referred to as Type 6 LFFPs under the trademarks or trade names of its customers. (SX-3, par. 11; CX-43). Achiever supplies various respondents in this investigation including but not limited to Argus, OptiColor, P.S.I., Vantage and Vivitar. (CX-37A; CX-40). Vivitar brand LFFPs are marked "Made in China with Film from Italy" and were purchased in the United States. P.S.I.'s Message Cameras are marked "Assembled

in China" and were purchased in the United States. Additionally, Achiever, Argus, OptiColor, and P.S.I. have produced infringing LFFPs to Fuji during the course of discovery as well as invoices from Achiever to various Respondents and customer. (CPX-170; CPX-171; CPX-172; CPX-240 to 245; CX-37A; CX-38; CX-40; CX-41; CX-42; CX-43).

7. Respondent Ad-Tek is a California corporation with its principal place of business at 2641 Towngate Road, #300, Westlake Village, CA 91361 and that Ad-Tek imports into and sells in the United States remanufactured LFFPs at least under the trade names "Ad-Tek Single Use", "Visa Promotion," and "Vivitar" as well as products imprinted with the trademarks and trade names of its customers. Ad-Tek has admitted purchase and importation of LFFPs from Vivitar and Vantage. Vivitar brand LFFPs are type 6. An Ad-Tek color brochure at p. 5 depicts a Fuji Type 1 offered for sale. (CX-51; CX-52; CPX-173).

8. Vivitar LFFPs are marked "Made in China" and were purchased in the United States. (CPX-668-669; CPX-17).

9. Respondent Argus is an Illinois corporation with its principal place of business at 2121 Oxford Road, Des Plaines, IL. (SX-3, par. 4). Argus imports into and sells in the United States remanufactured LFFPs at least under the trade name "Just Once." (SX-3, par. 12; CPX-174-178; CX-70; CX-68). During discovery in this case, Argus produced a variety of LFFPs including Types 4, 5, 6, 8A and an undefined, newly manufactured, type with features of both Types 8 and 4. (CPX-174-178). A brochure showing the distinctive flash button and taking lens cowl of a Fuji Type 2 LFFP and an actual Argus product were acquired during investigation of this action. (CX-68).

10. Argus has admitted importation of LFFPs from two Hong Kong suppliers

{ }and{ }whose products are manufactured in Hong Kong or China. (CX-60 at 11, SX-3).

11. Respondent Boecks is a limited liability company with its principal place of business at 9229 W. Sunset Boulevard Suite 101, Los Angeles, California 90069. (SX-4). Boecks imports into and sells in the United States remanufactured LFFPs at least under the trade name "Boecks." (CX-92). Complainant obtained samples of infringing Type 4 LFFPs through its own investigation. (CPX-179 to181). Additionally, Boecks produced documents and brochures showing a picture of an LFFP having the distinctive flip-up flash button, taking lens cowl and thin shape of a Fuji Type 4 LFFP. (CX-91).

12. Boecks has admitted purchase and importation of LFFPs from Asia. (CX-80 at 9). The Boecks LFFPs are marked "Made in China" or "Some Components Made in China" and were purchased in the United States. (CX-92).

13. Respondent Boshi is a corporation with its principal place of business at Room 921 Star House, 3 Salisbury Road, Tsim Ha Tsui Kowloon, Hong Kong. (Notice of Investigation).

14. Boshi sells and offers for sale for importation into and sale in and imports into and sells in the United States remanufactured LFFPs and/or newly manufactured LFFPs at least under the trademark "Boshicolor-Take One" and "Boshi Single Use." Boshi has been named as a supplier of remanufactured LFFPs by Respondent Jazz. (CX-95-96). A brochure showing the LFFP products of Boshi and sample LFFPs were obtained during Complainant's investigation. The BC 235 TAKE-1 depicted in the brochure has the distinctive flash button and taking lens cowl of a Fuji Type 2 LFFP. (CX-95). One sample Boshi LFFP is a remanufactured Fuji Type 2

LFFP. (CPX-182). The other is an undefined Type having features similar to those of Types 5 and 6. (CPX-183).

15. The Boshi LFFPs are marked "Distributed by Boshi & Co., Ltd. Tokyo, Japan" and "Made in China" and were purchased in the United States. (CX-96).

16. Respondent BPS is a corporation with its principal place of business at 18642-142nd Avenue, Woodinville, WA 98017 and that BPS imports into and sells in the United States remanufactured LFFPs and/or newly manufactured LFFPs at least under the trade names "Boshi Single Use", "Boshi Take-1", Solo, Fotacam, Wedding Cam, FastCam, and FastShot. (CPX-182; CX-101). A sample LFFP and brochures as well as an Internet home page were obtained during investigation by Complainant. (CX-102C; CX-103 to 105; CPX-182). The sample obtained at the 1998 PMA show is a Type 2, based on an examination of a Boshi Single Use LFFP, which is an undefined type with features of both Types 5 and 8. (CPX-183).

17. The Boshi LFFPs are marked "Distributed by Boshi & Co., Ltd Tokyo, Japan" and were purchased and/or obtained in the United States from BPS. (CX-105; CPX-182; CX-100). BPS has admitted purchase and importation from Boshi & Co., Ltd. and purchase from Express Photo Supplies, Las Vegas, NV and Super Image, Los Angeles, CA. (CPX-101; CX-107).

18. Respondent China Film is a corporation with its principal place of business at 20 Xin De Street, Beijing, P.R. China Zip.C: 100088. (SX-3, par. 5). China Film sells for importation into and sale in the United States remanufactured LFFPs at least under the designations "FORCE", "F/100," "TC-PO2," "FN/100," "DS-1," "DF-1," "DF-2" and "F900". (SX-3, par. 13; CX-115; CPX-366; CPX-371; CPX-378-379; CPX-184 to 187). A one-page brochure of China Film marked with the name and U.S. address of Respondent Innovative

Trading Co. and "Force"-branded Fuji Type 4 LFFPs were obtained through investigation by Complainant. (CX-122). In the brochure, China Film is offering for sale or selling at least remanufactured Fuji Types 2, 3, 4 and 5 LFFPs and offers for sale, "recycled Fuji, Kodak and Konica bodies" as well as "new camera bodies made by ourselves." The types of remanufactured Fuji LFFPs (Types 2-5) depicted in the brochure are readily determinable from the distinctive product designs, including the shape and placement of the shutter button, viewfinder, flash button and taking lens cowl, which are identical to those of the original Fuji product from which they are made. (CX-122). China Film additionally produced LFFPs during discovery including Types 2, 3 and 4. (CPX-184 to 187).

19. China Film has admitted to purchasing of LFFPs from{ }in Shenzhen, China and sale to{ }in the United States. (CX-115).

20. Respondent Dynatec is a corporation with its principal place of business at 3820 West Great Lakes Drive, Salt Lake City, Utah 84120. (SX-3, par. 6), and that Dynatec imports into and sells in the United States LFFPs at least under the trademark "Fun Pak" and "Dollar General". (SX-3, par. 14; CX-140 to 145). Dynatec has produced various types of LFFPs during discovery in this investigation. Further, Complainant has obtained through its own investigation samples of Dynatec and Dollar General LFFPs. (CPX-166-167; CPX-188 to 193; CPX-390; CPX-392-393; CPX-396). Dynatec is offering for sale or selling newly manufactured products which contain features of both types 2 and 4 as well as remanufactured Types 4, 7 and 7A. (CPX-166-167; CPX-188 to 193).

21. Dynatec has admitted importation and sale of LFFPs from its supplier Changzhou Chang Feng Camera Co. Ltd. in China. The Dynatec LFFPs are marked "Made in China" and

were purchased in the United States. (CX-146A).

22. Respondent Fast Shot is a corporation with its principal place of business at 7250 Harwill Drive, Suite O, Houston, TX 77036. Fast Shot imports into and sells in the United States remanufactured LFFPs at least under the trade names "Fast Shot Outdoor" and "Fast Shot." (CX-168-169; CPX-164; CPX-433-434). A brochure and a Type 5 LFFP sample product of Fast Shot were obtained by complainant. (CX-167 to 169). The types of LFFPs sold by Fast Shot (remanufactured Fuji Types 1, 2, 4 and 5) are evident from the distinctive product designs, including the shape and placement of the shutter button, viewfinder, flash button and taking lens cowl, which are identical to those of the original Fuji product from which they are made. (CPX-194; CX-167).

23. The Fast Shot LFFPs are marked "Made in China" and were purchased in the United States. (CPX-194; CPX-434; CX-168-169).

24. Respondent Forcecam is a corporation whose last known place of business was 421 Beverly Drive, Suite 502, 503, Beverly Hills, California 90212. As indicated in Response to Order No. 32, Forcecam has moved its place of business at least 4 times in the last year. Forcecam imports into and sells in the United States remanufactured LFFPs at least under the designation BH-01, BH-110, BH-111, BH-F02, W/Flash. A printout obtained from Forcecam's web site at WWW.FORCECAM.COM showing the LFFP products sold by Forcecam, Inc. together with sample LFFPs were obtained by complainant during their investigation. (CX-176; CX-178; CX-179 to 181) The samples obtained were Type 4 LFFPs. (CPX-195; CPX-437-438).

25. Forcecam admits that it imports from China into the United States the products pictured on the first page of their web site, which are remanufactured Fuji Type 4 LFFPs

described as produced in China. Additionally, the Levi's-branded LFFP found in the United States bears the notation "Imported by". (CX-177; CPX-438).

26. Respondent Haichi is a corporation with its principal place of sales at 444 Park Avenue South, 7th Floor, New York, New York 10016. Haichi imports into and sells in the United States remanufactured LFFPs at least under the designation "Fast Shot Outdoor" obtained from Fast Shot of Houston, Texas as named above. (CPX-194). During independent investigation Complainant obtained a sample LFFP and an advertisement, which is a Type undefined. The Fast Shot LFFPs are marked "Made in China" and were purchased in the United States from Haichi. (CPX-194; CX-188-189).

27. Respondent Innovative is a corporation with its principal place of business at 380 South Mentor Avenue, Suite 11, Pasadena, CA 91106. (Notice of Investigation)

28. During independent investigation, Complainant obtained an advertisement showing the LFFP products of Innovative. (CX-122). Innovative imports into, sells or offers for sale in the United States remanufactured LFFPs at least under the designations FORCE, F/100, TC-PO2, FN/100, DS-1, DF-1, DF-2 and F900 obtained from China Film. This is based on a stamp with Innovative's United States address appearing on a China Film brochure available in the United States. (CX-122). Based on an examination of the products shown on the China Film brochure, and as described at length above with regard to China Film, Innovative at least at one time offered for sale remanufactured Fuji Types 2-5 LFFPs. (CX-190, CX-122).

29. Respondent Jazz is a corporation with its principal place of business at 600 Blair Road, Carteret, NJ 07008. (SX-3, par. 7).

30. Respondent Jazz imports into and sells in the United States remanufactured

LFFPs at least under the trade names "Jazz DZ35" and "Jazz DZ50" and under the trade names and trademarks of its customers including "Drug Guild", "CVS", "Metro", and Bell & Howell". (SX-3, par. 15; CPX-197 to 201; CPX-447 to 459; CX-209). Jazz has produced LFFPs as well as documentation including customer lists and invoices from Jazz to customers including Albertson's and Wal-Mart. (CX-226; CX-232). Additionally, complainant through independent investigation has purchased LFFPs. Jazz imports and sells at least Types 2, 3, 4, 7, 7A and 8 LFFPs. (CPX-162).

31. The Jazz LFFPs are marked "Camera assembled in China" and were purchased in the United States. Jazz has admitted in answers to interrogatories, document requests and in depositions to purchase and import LFFPs from various suppliers including: Advance Tech. Int'l, Peji, Leader Peak, Boshi, VastFame, Mass Chance, Wing Kai, Ginfax, Tom Da and Rino. (CX-204; CX-220; Szeto, CX-236 at 26).

32. Respondent Klikit is a corporation with its principal place of business at 825 McDonald Ave, Brooklyn, NY 11218. Klikit imports into and sells in the United States at least the Types 4 and 6 LFFPs at least under the trade name "Klikit." (CPX-202-203; CPX-499). Complainant upon independent investigation obtained two sample LFFPs from E.T. Trading. The Klikit LFFPs are marked "Camera contains recycled parts made in Japan. Camera made in China" and were purchased in the United States. (CX-252; CX-253). E.T. Trading admitted importation and sale of LFFPs from Duoh Trading Co. Ltd., Room 1305 Day Chong Bld., 51,11 Hang-Dong, Song Pa-ku, Seoul, Korea. (CX-253).

33. Respondent Labelle is a Florida corporation with its principal place of business at 65 N.W. 166th Street, North Miami, FL. Labelle imports into and sells in the United

States remanufactured LFFPs at least under the trade names "Sakar", "Biltec" and "Hurricane Line." A Labelle brochure and an LFFP of the type sold by Labelle which is a Fuji Type 4 LFFP were obtained by Complainant upon independent investigation. (CX-424; CPX-609). Labelle is offering for sale or selling at least remanufactured Fuji Types 3 and 4 LFFPs and remanufactured Kodak Type 7 LFFPs based upon examination of their brochure. (CX-424).

34. The LFFPs are marked "Made in China" and were purchased in the United States from Labelle. (CX-259).

35. Respondent Linfa is a corporation with its principal place of business at Room 1018-1020, 10/F1, Tower B, New Mandarin Plaza, 14 Science Museum Road, T.S.T. East Kowloon, Hong Kong. Linfa sells and offers for sale for importation into and sale in the United States remanufactured LFFPs at least under the trade name "Miyako" and the designations M-2, R-2P, P-2, F-2 and K-2, among others. (CPX-204; CPX-505; CX-266). A brochure and Type 1 product samples were obtained by Complainant through independent investigation. Based on an examination of the brochure showing the distinctive appearance characteristics of the Fuji Type 1 (M-2), Type 2 (R-2P), Type 3 (P-2) and Type 4 (F-2) LFFPs and Konica Type 8 (K-2) LFFPs, and an examination of a sample Linfa Miyako (M-2) which is a remanufactured Fuji Type 1 LFFP, Linfa is offering for sale or selling at least remanufactured Fuji LFFPs Types 1, 2, 3 and 4 and Konica Type 8A LFFPs. (CX-266). The Miyako LFFPs obtained are marked "Made in China" and were purchased in the United States from Linfa. (CX-266; CX-267; CX-268; CPX-160).

36. Respondent OptiColor Inc. is a Washington corporation, wholly owned by Seattle Film Works, with its principal place of business at 3213 West Wheeler Street, Seattle,

WA 98199 and that OptiColor imports into and sells in the United States remanufactured LFFPs at least under the trade names "OpitiColor Camera," "Wedding Camera," "Hooters", "Snap Sights", "REI", "Fred Meyer", "Halloween Camera", "Opticam", "Seattle Film Works" and "One-Time Underwater Camera" and a camera with an image of a white shirt and red bowtie as well as imprinted with the trademark and trade names of its other customers. (SX-3, par. 16; CPX-205 to 210; CPX-506 to 536). OptiColor is selling at least Types 2, 4 and 6. (CPX-205 to 210). OptiColor produced numerous LFFPs and documents including invoices and customer lists. (CX-320; CX-330; CX-335). Complainant has through independent investigation obtained LFFP samples both directly and indirectly from OptiColor, Fred Meyer and Seattle Film Works. (CX-286).

37. OptiColor's current packaging is represented on its camera with packaging submitted as exhibit RPOC 1. This includes both a warranty and a statement that the manufacturer does not participate in the reconditioning or warranty of the camera:

This film and camera will be replaced if defective in manufacture or packaging, or if damaged. Except for such replacement, the sale, processing or handling of this film and camera is without warranty or liability even though defect, damage, or loss is caused by negligence or other fault. Since color dyes may in time change, this film and camera will not be replaced for, or otherwise warranted against, any change in color.

CAMERA MADE IN JAPAN, RECONDITIONED, RECYCLED, AND ASSEMBLED IN CHINA. ORIGINAL MANUFACTURER DOES NOT PARTICIPATE IN RECONDITIONING, RECYCLING, OR WARRANTY.

(Tr. Lass at 1929, 1934; RPO 1).

38. Respondent Penmax is a California corporation with its principal place of business at 824 S. Primrose, Suite H, Monrovia, California 91016. (SX-5). Penmax imports into and sells in the United States remanufactured LFFPs{

} (CPX-211-212;

CPX-564; CX-365). A brochure and samples of LFFP products of Penmax, Inc. were obtained through independent investigation of Complainant. Penmax is offering for sale or selling at least Types 1 and 4 LFFPs as well as an undefined Type with features similar to Type 5. (CPX-211-212; CX-361; CX-362).

39. Penmax LFFPs are marked "Assembled in China" and were purchased in the United States. (CX-362).

40. Respondent PhilmEx is a California limited liability corporation having its principal place of business at 912 N. La Cienega Boulevard, Los Angeles, California 90069 and that PhilmEx imports into and sells in the United States remanufactured LFFPs at least under the trade name PhilmEx Flashy 800 Single Use Camera as well as imprinted with the trademark and trade names of its customers such as Aeroflot and Hotel Sofitel. (CX-372). A brochure and product samples of LFFPs were obtained through independent investigation of Complainant. (CX-372; CPX-213; CPX-576-577). PhilmEx is offering for sale or selling at least remanufactured Fuji LFFP Type 4. The PhilmEx LFFPs are marked "Assembled in China" and were purchased in the United States. PhilmEx admitted to importation and sale of LFFPs. (CX-372; CX-375; CPX-213).

41. Respondent PSI is a corporation with its principal place of business at 1160-B South Rogers Circle, Boca Raton, FL 33487 and that P.S.I. imports into and sells in the United States LFFPs at least under the trade names "The Message Camera," "The Happy Birthday Message Camera," "The Baby's First Birthday Message Camera," "The It's A Boy!

Message Camera," "The It's A Girl! Message Camera," "The Party! Message Camera," "The Vacation Message Camera," "The Bible Message Camera," "The Wedding Message Camera," "The Anniversary Message Camera," "The Season's Greeting Message Camera," and "The Halloween Message Camera," as well as imprinted with the trademarks and trade names of its customers and its own tradename "SmileTime". (CX-398). A brochure and LFFP products of P.S.I. were obtained by Complainant through independent investigation. (SX-3, par. 9, SX-3, par. 17; CPX-165; CPX-214; CPX-215; CPX-583-595; CPX-597-604; CX-388-390; CX-391C; CX-398). Additionally, P.S.I. has provided numerous samples and product brochures depicting its various products as well as invoices both from suppliers and to customers. At least one respondent, T.D.A. Trading has named P.S.I. as a supplier of LFFPs. (CPX-474 [sic Foto Line]). P.S.I. is offering for sale or selling at least Types 6 and 7A LFFPs. (CPX-165; CPX-214-215). Respondent PSI imports into and sells in the United States reloaded LFFPs and newly manufactured LFFPs. (SX-3).

42. The P.S.I. LFFPs are marked "Assembled in China" and were purchased in the United States. (CX-391). P.S.I. has admitted to purchasing and importing LFFPs from suppliers Achiever Industries, Mass Chance and VastFame/San Harbor. (CX-405; Seminara, CX-392 at 22-23). Further, the video footage shot at the Mass Chance factory shows the remanufacture of P.S.I. "SmileTime" brand cameras up to the point of labeling. (CX-399; CX-405).

43. Respondent Rainbow is a corporation with its principal place of business at 1150 Hermosa Ave, Hermosa Beach, CA 90254-3719 and that Rainbow imports into and sells in the United States remanufactured LFFPs at least under the trade name "The Color Machine."

(CPX-216). Product samples were obtained by Complainant through independent investigation. Rainbow is offering for sale or selling at least remanufactured Fuji Type 2 LFFPs. (CPX-216).

44. The Rainbow LFFP is marked "Made in China" and was purchased in the United States. (CX-417).

45. Respondent Rino is a corporation with its principal place of business at Daejun Bldg, 286-5 Sukchondong, Song Pa-Ku, Seoul, Korea 138-190. (Notice of Investigation)

46. A sample of LFFP products of Rino was obtained by complainant through independent investigation. Rino remanufactures for importation into and sale in the United States at least Fuji Type 4 LFFPs. The Rino LFFPs are marked "Made in Japan. Assembled in Korea" or "Made in Korea" and were purchased in the United States.

(CX-422; CPX-217; CPX-608). At least one Respondent, Jazz Photo, has named Rino as a supplier of LFFPs. (CX-204).

47. Respondent Sakar is a New York corporation with its principal place of business at 195 Carter Dr., Edison, NJ 08817-2068 and that Sakar imports into and sells in the United States remanufactured LFFPs at least under the trademark "Sakar", "Sport Shot", and "Super Mario 64" as well as imprinted with the trademarks and trade names of its customers. (SX-3, par. 10, 18; CPX-609-628; CPX-218-221). A brochure and samples of LFFP products of Sakar were obtained through independent investigation of Complainant. (CX-423-424). Further, Sakar has provided samples of LFFPs as well as submitting interrogatory and document responses in this investigation. Sakar is offering for sale or selling at least remanufactured Types 2 and 4 LFFPs as well as one type undefined without flash which has

features similar to both Types 2 and 4. (CPX-218-221). The Sakar LFFPs are marked "Made in China" and were purchased in the United States or provided through discovery by Sakar. (CX-259). Additionally, Sakar has admitted purchase and importation of LFFPs from its supplier, { } in Hong Kong. (CX-425).

48. Respondent T.D.A. Trading is a corporation with its principal place of business at 31-16 Hunters Point Avenue, Long Island City, NY 11101. T.D.A. imports into and sells in the United States remanufactured disposable cameras at least under the trade name Sun Lite. (CPX-222; CPX-650; CX-472). A price list and a sample LFFP product of T.D.A. were obtained through independent investigation of Complainant. (CX-471; CPX-650). Based on an examination of the Sun Lite LFFP, T.D.A. is offering for sale or selling at least remanufactured Fuji Type 5 LFFPs. (CPX-222).

50. The Sun Lite LFFP is marked "Made in China" and was purchased in the United States. Additionally, T.D.A. Trading has admitted that it purchases some LLFPs from suppliers P.S.I. Industries (Foto Line) 1160B South Rogers Circle, Boca Raton, Florida 33487, This Company, Ltd. P.O. Box 582, Newark New Jersey 07101 and Leed Import, 1126 East 11<sup>th</sup> St. Los Angeles, CA 90021. (CX-474). At least P.S.I. has already admitted that it imports its LLFPs. (CX-405; Seminara, CX-392 at 22-23).

51. Respondent Vantage is an Illinois corporation with its principal place of business at 600 E. Higgins Road, Elk Grove Village, Illinois 60007-1519. (Notice of Investigation).

52. Vantage imports into and sells in the United States remanufactured LFFPs at least under the trade names "Vantage Wedding Flash Camera," "Sharp Shot Outdoor Camera,"

"Sharp Shot Flash Mini Camera," Sharp Shot Flash Panorama," "Sharp Shot Slim Flash Camera" and "Sharp Shot Super Mini Camera." (CPX-223; CPX-657). A brochure and LFFP products of Vantage were obtained through independent investigation of Complainant. (CX-487). Based upon examination of the Vantage brochure, which have the characteristics of Fuji and Konica LFFPs and the actual, Vantage is offering for sale or selling at least remanufactured Fuji Types 1, 2 and 4 LFFPs and remanufactured Konica Type 8A LFFPs. (CPX-223). The Vantage LFFPs are marked "Made in China", "Made in Japan. Assembled in China" or "Made in Japan" and were purchased in the United States. (CX-487).

52. Vantage has admitted that it purchases and imports LFFPs from VastFame and Boshi. (CX-490).

53. Respondent Vivitar is a corporation with its principal place of business at 1280 Rancho Conejo Blvd., Newbury Park, CA 91320-1403. Vivitar imports into and sells in the United States LFFPs at least under the trademark "Vivitar." (CPX-224-226; CPX-668-669). A brochure and LFFP products of Vivitar were obtained by Complainant through independent investigation. (CX-501; CX-52). Vivitar is offering for sale or selling at least Achiever Type 6 LFFPs. (CPX-224-226). The Vivitar LFFPs are marked "Made in China with film from Italy" and were purchased in the United States. (CX-502). Vivitar has admitted that it purchases, imports into the United States and sells LFFPs. (CX-503).

54. Complainant is the owner, by assignment, of each of the 15 patents in suit. (SX-3 at 1). Twelve of the patents in suit are utility patents and three are designed patents. Of the utility patents, 11 are directed to the structure of LFFPs and one, U.S. Patent No. 4,972,649, is directed to methods of assembling (in loading) film into LFFPs. (CX 1 to 15).

55. [THERE IS NO FF 55].

56. One of Fuji's U.S. subsidiaries, Fuji Photo Film, Inc. (Fuji Greenwood) maintains a complex of manufacturing plants in Greenwood, South Carolina, which employs about 1200 people. (Croker, CX-631 at Q&A 2 and Q&A 14).

57. Among the factories in the Fuji Greenwood complex is a plant devoted to the manufacture of Fuji one-time-use cameras, identified as the L Plant. (Croker, CX-631 at Q&A 4; Croker, Tr. at 2451).

58. Fuji's L Plant in Greenwood, South Carolina, which manufactures Fuji one-time-use cameras is approximately 120,000 square feet in size. Fuji is in the process of adding new space and will increase the total size of the factory to approximately 170,000 square feet. (Croker, Tr. at 2450).

59. Fuji has invested approximately{ }dollars in the Greenwood L Plant, dedicated to the manufacture and recycling of one-time-use cameras. The expansion of the L Plant facility will increase Fuji's total investment to approximately{ }dollars. (Croker, CX-631 at Q&A 12).

60. From the commencement of manufacture of one-time-use cameras at the L Plant in June, 1995, through December, 1997, Fuji spent approximately{ }on materials,{ }on outside labor,{ }on supplies,{ }on maintenance and{ }on utilities, in connection with the manufacture and recycling of one-time-use cameras at the Fuji Greenwood L Plant. Also, since June, 1995, through December, 1997, the Greenwood factory has paid approximately{ }in salaries, plus fringe benefits of about{ }and over { }in property tax relating to the manufacture of its one-time-use cameras. (Croker, CX-

631 at Q&A 13).

61. Of the approximately 1,200 people are employed in the entire Greenwood facility, approximately 105 are dedicated solely to the manufacture and recycling of Fuji one-time-use cameras. This 105 includes engineers, technicians, machine operators and maintenance workers. (Croker, CX-631 at Q&A 14).

62. Fuji's L plant in Greenwood, South Carolina also employs approximately 70 to 80 temporary employees that work in the L Plant manufacturing and recycling facility. (Croker, Tr. at 2450-2451).

63. Fuji's Greenwood, South Carolina facility employs 200 workers who provide human resources, computer, accounting and other support services to the L Plant and other Fuji facilities in Greenwood. Fuji also employs outside contractors for security, grounds maintenance, shipping and food service, who support the L-Plant. Furthermore, many of the raw materials used by the L-Plant are purchased from domestic vendors. (Croker, Tr. at 2454-2455).

64. CPX-90 and 92 are, respectively, Type 1 and Type 4 Fuji one-time-use cameras with flash made in Greenwood, South Carolina. (Croker, CX-631 at Q&A 6 and Q&A 8).

65. Fuji Greenwood manufactures one-time-use non-flash versions of Type 1 and Type 4 one-time-use cameras (CPX-91, CPX-93) and a waterproof version of a Type 1 camera. (Croker, Tr. 2451-2453). The waterproof camera made at the Greenwood facility is basically the non-flash version of CPX-90, housed in a waterproof shell. (Croker, Tr. at 2451- 2452).

66. Fuji Greenwood molds the front cover, main body, rear cover, mechanical unit frame and lenses using in-house molding machines. Fuji Greenwood assembles the mechanical unit in the one-time-use cameras and packages the assembled cameras. All of the components

mounted on the mechanical unit frame except the lenses are purchased from domestic vendors, as is the battery. The laminated film packaging material, flash contact, flash unit and 35 mm film are imported. (Croker, CX-631 at Q&A 18).

67. Fuji also maintains a recycling facility at Fuji Greenwood. (Croker, CX-631 at Q&A 24, Q&A 27).

68. Fuji manufactured approximately{ }one-time-use cameras in 1997 at the Greenwood facility. (Croker, Tr. at 2453).

69. Fuji manufactured approximately{ }one-time-use cameras during the first half of 1998 in the Greenwood facility. (Croker, Tr. at 2453).

70. Fuji makes about{ }Type 1 one-time-use cameras per month in the Greenwood factory. (Croker, CX-631 at Q&A 7).

71. Fuji makes about{ }Type 4 one-time-use cameras per month in the Greenwood factory. (Croker, CX-631 at Q&A 9).

72. As of last year, Fuji was exporting about{ }one-time-use cameras per year which were made in the Greenwood facility, for sale outside of the United States. (Croker, CX-631 at Q&A 10).

73. Fuji one-time-use cameras are sold in the United States by Fuji Photo Film U.S.A., Inc. headquartered in Elmsford, New York, an indirect wholly owned subsidiary of Fuji Japan. (Baer, CX-614 at Q&A 2-6).

74. Fuji's one-time-use cameras are sold in retail and wholesale channels of commerce under the QuickSnap trademark, as well as under the trademarks of third parties, either as a premium item or as an item intended for retail sale of the brand name of the retailer. (Baer, CX-

614 at Q&A 12 and Q&A 42).

75. Today, most of the one-time-use cameras sold by Fuji Photo Film U.S.A., Inc. come from Fuji Greenwood, while the balance is obtained from Fuji Japan. (Baer, CX-614 at Q&A 44).

76. Sales for retail distribution are handled by a nation-wide network of region sales offices and local salesmen. (Baer, CX-614 at Q&A 46).

77. Sales for the premium market are handled by{ }groups of sales representatives located around the country. (Hachenscher, CX-761 at Q&A 16).

78. Approximately 150 employees of Fuji Photo Film U.S.A., Inc. are involved at least in part in the marketing and sales of one-time-use cameras. They are located in seven offices around the country and in 29 states. (Baer, CX-614 at Q&A 47).

#### The '087 Patent

79. Under the heading "Background of the Invention", the '087 patent in discussing a lens-fitted photographic film package (CX 3, col. 1, lines 22-28) states:

The lens-fitted photographic film, after the exposure of all frames of the film, is forwarded to a photo shop or photo laboratory without removing the film. There, the film package is opened and the exposed film is developed to make prints therefrom while the film package without the film is scrapped.

80. Under the heading "Summary of the Invention" (CX 3, col. 2, lines 41-42) the '087 patent specification states:

Usually, the container is removed by breaking the light-tight casing in a photo shop or a photo laboratory.

81. Under the heading "Summary of the Invention", (CX 3, col. 2, lines 57-58 and lines 68-69) the specification also states:

The lens-fitted photographic film package of the present invention is assembled by the steps of . . . sealing the lens-fitted photographic film package so that it cannot be inadvertently opened.

The brief description of the drawings at Col. 3, ll. 1-12 states:

The above and other objects and features of the present invention will become apparent from the following detailed description taken in conjunction with the preferred embodiments thereof with reference to the accompanying drawings in which like parts are designated by like numerals throughout the views of the drawings and where in:

Fig. 1 is a front perspective view of the lens fitted photographic film package of one embodiment of the present invention;

82. Under the heading "Detailed Description of the Invention", the '087 patent states with reference to FIG. 1 (CX-3, col. 4, lines 8-14):

Referring now to FIG. 1., shown therein is a lens-fitted photographic film package (which is hereinafter referred to as a film package for simplicity) of a first preferred embodiment of the present invention. The film package 1 comprises a main front body section 2 and a back cover section 3 which forms a light-tight box-shaped film container.

83. The '087 patent later states, again with reference to Fig. 1 (CX-3, col. 4, lines 19-26):

The back section 3 is fixed to the main front body section 2 in any well known manner, for example by means of ultrasonic welding, so as not to be removed by the user. The film package is preferably encased tightly in an outer casing or packaging (not shown) which is formed with several openings for exposing the taking lens 4, finder window 5, and shutter actuating member 6.

84. In describing the assembly of the first preferred embodiment with reference to FIG. 3, the '087 patent states (CX-3, col. 5, lines 18-19):

Then the back cover section 3 is welded to the main front body section 2.

85. The '087 patent states (CX-3, col. 5, lines 67-68):

After the exposure of all frames of the film 21, the film package is forwarded to a photo-shop without removing the exposed film. There, the back cover section 3 is detached from the main front body 2 by the aid of, for example, an expanding jig so as to remove the patrone containing the exposed film 21.

86. The '087 patent later, with reference to FIG. 3, which is an exploded perspective rear view of the lens fitted photographic film package of Fig. 1 (CX-3 col. 3, ll. 10-16)), states:

It is desirable to provide a tab 38 which can be pulled to tear along a groove 37 by which an openable part of the bottom of the back cover 3 is defined. When the part defined by the groove 37 is torn off, an opening is provided through which the patrone 20 can be removed without detaching the back cover 3 from the main front body section 2. Thus forming an opening in the film package makes it impossible to reuse the film package. Therefore, it will be impossible to refill a new film into the used film package container in order to reclaim a film package for reuse. (CX 3, col. 6, lines 8-18).

87. With respect to a second embodiment as shown in FIG.4, the '087 patent states (CX-3, col. 6, lines 48-51):

[T]he back cover section 3 is fixed to the main front body section 2 of the film package 1 in the same manner as in the previous embodiment.

88. In connection with a third preferred embodiment of the invention as shown in FIGS. 7-10 (CX-3, col. 3, ll. 28-37), the '087 patent states:

Reference is now had to Figs. 7 to 10 showing another preferred embodiment of the lens fitted film package. The lens fitted film package 1 comprises a main body section 50, a back cover section 52, and a front cover section 51 which are all made of plastic materials. These sections are assembled into a light tight box shaped film container. As will be described in detail later, these sections are fixedly assembled after having loaded the film patrone 20 and a film 21 into the main body section 50. Therefore, the film patrone 20 and the film 21 can by no means be removed by the user. (CX 3, col. 7, lines 4-13).

89. Later, the '087 patent, referring to Fig. 13, which is a cross sectional view of

the lens fitted photographic film package of Fig. 12, and referring to Fig. 14, which is an elevational sectional view of the lens fitted photographic film package of Fig. 12 viewed from the rear, Fig. 12 being a front perspective view of the lens fitted photographic film package of a fourth embodiment of the present invention (CX-3 col. 3, ll. 42-49), states:

In using the lens fitted film package thus compromised, after operating the shutter actuating member 120 to make an exposure, the film advancing knob 103 is rotated. As a result, as the spool 114 of the film container 110 is rotated in the clockwise direction as viewed in Fig. 13, the exposed film 21 is wound back into the light tight film container 110. Therefore, when the exposure of all the frames of the film 21 has been completed, the film is fully contained in the light tight film container 110. Consequently, the film container 110 can be removed by breaking or disassembling the film package even in daylight. (CX-3, col. 12, ll. 15-26).

90. Referring to FIG. 3 which is an exploded perspective rear view of the lens-fitted photographic film package of the FIG. 1 preferred embodiment (col. 3, lines 10-16), it is stated:

As the exposure is repeated in the same manner as described above, the film 21 is progressively drawn into the patrone 20. After the exposure of all frames of the film 21, the film package is forwarded to a photo-ship without removing the exposed film. There, the back cover section 3 is detached from the main front body 2 by the aid of, for example, an expanding jig so as to remove the patrone containing the exposed film 21. The patrone 20 is handled in the same manner as is conventional for removing the exposed film and subjecting it to the necessary processing for development and printing.

(CX-3, col. 5, lines 65-68, col. 6, lines 1-8).

91. Application Serial No. 07/087,388, which matured into the '087 patent, was filed on August 20, 1987. (CPX-3, application as originally filed, p. 1).

92. At the time of issuance, the '087 patent was assigned to Fuji Photo Film Co., Ltd.

93. The original application Serial No. 07/087,388 contained thirty two (32) original claims. Original claim 6 read:

6. A lens-fitted photographic film package having an externally operable member for effecting an exposure, comprising:

a light-tight casing which must be destroyed to open the same, having an opening through which said exposure is made when said externally operable member is operated;

a rolled film disposed on one side of said opening in said light-tight casing;

a removable light-tight film container having a film winding spool therein disposed on the opposite side of said opening in said light-tight casing from said rolled film, one end of said rolled film being attached to said film winding spool, and

means for winding said rolled film around said film winding spool.

(CPX-3 at 40-48)

94. Applicants in a "Material Information Disclosure Statement" received by the United States Patent Office on January 7, 1988 in "compliance with Rules 1.97 and 1.98, and in fulfillment of the duty of disclosure under Rule 1.56," made of record attached prior art. The prior art consisted of Hamada U.S. Patent No. 3,896,467, U. S. Patent No. 3,906,535 and Japanese document 5243303. (CPX-3).

95. In an office action mailed 1/27/88, the Examiner subjected the originally filed claims 1-32 to a restriction requirement between claims 1-22, drawn to a photographic film package, (Group I) and claims 23-32 (Group II) drawn to a method of making a photographic film package. (CPX-3).

96. In an amendment received by the Patent Office on February 29, 1988 applicants elected Group I (claims 1-22) without traverse and cancelled "[n]on-elected" claims 18 and 23-

32. They also added new claims 33-37. In an amendment received on March 14, 1988 new claim 38 was added. (CPX-3).

Claim 35, as filed on February 29, 1988 and from which claim 1 in issue originated, read:

35. A lens-fitted photographic film package having an externally operable member for effecting an exposure, comprising:

a light-tight film casing having an opening through which said exposure is made when said externally operable member is operated;

a rolled film disposed on one side of said opening in said light-tight casing;

a removable light-tight film container having a film winding spool therein disposed on the opposite side of said opening in said light-tight casing from said rolled film, one end of said rolled film being attached to said film winding spool;

means for winding said rolled film around said film winding spool; and

means responsive to operation of said externally operable member for allowing said film winding spool to rotate so as to enable said rolled film to be advanced by one frame after every exposure; said responsive means including:

a sprocket wheel driven by movement of said rolled film; and

a frame counter provided with at least one indication before a consecutive series of frame numbers and a cam member for disabling said responsive member, said frame counter being driven by said sprocket wheel. (CPX-3).

97. Claim 36, as filed on February 29, 1988 and from which claim 7 in issue originated, read:

36. A lens-fitted photographic film package comprising:

a light-tight film casing having an opening through which an exposure is made;

a light-tight film container having a film winding spool therein disposed on one side of said opening in said light-tight film casing;

a rotatable spool disposed on the opposite side of said opening in said light-tight film

casing from said light-tight film container; one end of said spool being exposed outside said light-tight film casing;

a film roll of which one end is attached to said film winding spool in said light-tight film container and which is rolled around said rotatable spool. (CPX-3).

98. Claim 37, as filed on February 29, 1988 and from which claim 8 in issue originated, read:

37. A lens-fitted photographic film package comprising a light-tight film casing and a rolled film contained in said light-tight film casing and a rolled film contained in said light-tight film package, said light-tight film package comprising:

a front casing section provided with a lens opening, a finder frame opening, and engaging openings;

a middle casing section with its back open and containing said rolled film therein, said middle casing section having engaging lugs which engage with said engaging openings of said front casing section and holding a lens behind said lens opening between said front and middle case sections; and

a rear casing section lightly-tightly closing said back of said middle casing section. (CPX-3).

99. In the office action mailed 6/06/88, claim 36 was rejected, along with Claims 1-5, under 35 U.S.C. § 102(b) as being clearly anticipated by UK application Serial No. 2, 138, 580A or Hamada. (CPX-3). Hamada refers to Hamada, U.S. Patent No. 3,896,467. (CPX-3, Material Information Disclosure Statement received by the Patent Office January 7, 1988, p. 4 (Form PTO-1449)).

100. U.K. Patent Application GB 2, 138, 580A disclosed a film winding mechanism for conventional camera. Thus, the specification states:

This invention relates generally to still cameras, and more particularly to cameras utilizing 35 mm film or the like having a film threading tongue which extends from a cassette, and provided with motor driven film advancing means which, upon loading the camera with film, automatically prewinds the film onto a take up spool and, after

each exposure has been made, advances the film back into the film cassette one frame length at a time. (CPX-3AA Col. 1, ll. 3-12)

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Today, 35 mm photographic film is most commonly provided in pre-manufactured and pre-loaded film cassettes. The cassettes are light tight and have a relatively short length of film or "leader", extending therefrom to enable the film to be engaged with a take-up spool rotatably mounted in a film receiving chamber on the interior of the camera. (CPX-3AA Col. 1, ll. 23-30).

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In accordance with a more specific aspect of the invention, the end of film switch includes a contact plate which extends about the periphery of the take up spool, and a contact arm fastened at one end of the camera, and biased so that the other end continuously engages with the contact plate. When film is wound at least partway onto the take up spool, it is interposed between the contact plate and the arm, thus holding the end of film switch open. At this point, when the proper steps for loading the camera have been followed, the segment of the film in the imaging area of the camera is a completely unexposed segment of the film just behind the film leader.

The end of rewind switch preferably includes an actuating pin slidably mounted within the camera and projecting into the film path to be responsive to the presence of the film in the imaging area. A film pressure plate keeps tension in the film until it passes by the pressure plate and this tension of the film against the actuating pin holds the end of rewind switch closed.

When all but the film leader is unwound from the take up spool as a last picture is taken, the motor becomes energized to drive the cassette spool. As the leader winding slips by said contact arm, the end of film switch closes. Both switches are thus closed to sustain motor energization to advance the remaining film, including most or all of the pre-exposed leader, into the cassette. The motor stops when the film leader passes by the pressure plate when there is no longer film tension required to hold the actuating pin in a switch closing position. The camera is then ready to be unloaded and reloaded. (Emphasis added) (CPX-3AA, col. 2. line 102- col.3 line 12).

101. Hamada U.S. Patent No. 3, 896, 467 disclosed a compact camera that can be utilized without requiring any skill in photography and that may be reloaded. Thus, the specification states:

The present invention generally relates to a photographic camera and, more particularly, to a compact camera which can be utilized without substantially requiring any skill of photography. (CPX-3H, col. 1, ll. 3-6)

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From the foregoing full description of the camera according to the present invention, it has now become obvious that the camera utilizes few parts, costing only a fraction of the price of the currently commercially available camera of similar kind.

Furthermore, its camera according to the present invention is simple in construction and easy to operate without substantially requiring any skill concerned of photography. Once the whole frames of the film have been exposed, the user or photographer is merely required to change [sic] the camera with another one of the same kind at his camera shop or to ask his camera shop to replace a new roll of film by [sic] the exposed film. (Emphasis added) (CPX-3H col. 11, ll. 4-16).

102. In the office action mailed 6/06/88, the Examiner also rejected claim 35 under 35 U.S.C. 102(b) as being clearly anticipated by either "Malloy Desormeaux [U.S. Pat. No. 4,687,311] or Lawther [U.S. Pat. No. 4,707,096]." Claim 37 was rejected under 35 U.S.C. 102(b) as being clearly anticipated by Great Britain Patent Specification No. 607,242 or Hamada U.S. Pat. No. 3,896,467 and claim 38 was rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yoneyama et al. U.S. Pat. No. 4,274,726. Claims 6 to 17, 19 to 22, 33 and 34 were "allowable over the prior art of record." (CPX-3).

103. In a response received by the Patent Office on September 6, 1988, the applicants amended Claim 36 as follows:

36. A lens-fitted photographic film package comprising:

a light-tight film casing which must be destroyed to open the same, having an opening through which an exposure is made;

a light-tight film container having a film winding spool therein disposed on one side of said opening in said light-tight film casing;

a rotatable spool disposed on the opposite side of said opening in said light-tight film casing from said light-tight film container; one end of said spool being exposed outside said light-tight film casing;

a film roll of which one end is attached to said film winding spool in said light-tight film container and which is rolled around said rotatable spool. (CPX-3, Amd. of 9/6/88, pp. 2-3) (underlining in original).

104. In the response received by the Patent Office on September 6, 1988, the applicants amended, inter alia, each of claims 35 and 37 to include the language "which must be destroyed to open the same" after the phrase - - a light-tight film casing - - - . (CPX-3).

105. Claim 37 is identical to claim 8 in issue with the exception that claim 8 has the phrase - -middle casing sections - - rather than "middle case sections" which change was made in the amendment filed February 21, 1989. (CPX-3).

106. In the response received by the Patent Office September 6, 1988, the applicants remarked with respect to amended claims 35, 36 and 37:

It is noted that claims 35-38, as originally presented, did not require that the film casing must be destroyed in order to open the same. This omission has been corrected by the present amendment, so that these claims now contain the distinctive feature of allowed claim 6.

In view of the fact that we seek only to conform the remaining claims to those already allowed, it is not believed to be necessary to give an extended discussion of the applied references. Suffice it to say only that they do not disclose the combination of an obligatorily destructible film casing, with the various other features claimed. (CPX-3, Amd. of 9/6/88, pp. 4-5).

Earlier in this same response, applicants remarked:

It is also noted that claims 1 and 6 differ from each other by the recitation in claim 6 that the film casing must be destroyed to open the same. Adding this recitation to claim 1 would make claim 1 a duplicate of claim 6, and so we have simply canceled claim 1. (CPX-3, Amd. of 9/6/88, p. 4).

107. In an office action mailed October 19, 1988 claims 2-17, 19-22, 33-39 were pending in the application and those claims were rejected. Claim 36 was rejected under 35 U.S.C. 102(b) as being clearly anticipated by "Heyer et al." U.S. Patent No. 2, 612, 092. Claim 37 was rejected under 35 U.S.C. 102(b) "as being clearly anticipated by the Netherland document." Claims 4-7, 11-17 and 35 as well as claims 2, 3, 19-22, 33 and 34 and claims 8, 10 and 11 and claim 38 and claim 39 were rejected under 35 U.S.C. 103 as being unpatentable over "the Netherland document in view of Lawther." (CPX-3).

108. In an amendment received in the Patent Office on February 21, 1989, claim 36 was amended by inserting after "roll" the phrase -- of unexposed film - -. Claim 36 then read as claim 7 in issue. In the same amendment it was argued that there are the following differences between the Heyer et al U.S. Patent No. 2,612,092 construction and that what is claimed. Thus it was argued that in the Heyer et al reference "there is no light-tight film container, only a spool 65" and that in the Heyer et al reference, "the member 70, which projects from the light-tight film casing 6, is on the wrong spool." Hence it was argued that claim 36 cannot be rejected as anticipated by Heyer at al under 35 U.S.C. 102(b). It was also argued that claim 36 cannot be rejected as obvious in view of Heyer at al. under 35 U.S.C. 103 "(although this rejection was in fact not applied), because there is no obvious way to provide a light-tight film container in Heyer at al in place of spool 65, nor to switch the member 70 from one spool to the other of Heyer al." (CPX-3).

109. With respect to the Examiner's rejection of claim 37 which ultimately became claim 8 in issue in the 6/06/88 Office action, applicants in their February 21, 1989 response argued:

Reconsideration is also respectfully requested, for the rejection of claim 37 as anticipated by the Netherlands document. Notice that claim 37 requires the middle casing section to have engaging lugs which engage with the engaging openings of the front casing section, the lens being held between the front and middle casing sections. There is no counterpart of this in the Netherlands document and no obvious way of providing it. Therefore, claim 37 is drawn to unobvious subject matter and is patentable.

110. With respect to the Examiner's rejection of claim 35, which ultimately became claim 1 in issue, in the 6/06/88 Office action, applicants in their response filed February 21, 1989 amended claim 6 to read:

6. A lens-fitted photographic film package having an externally operable member for effecting an exposure, comprising,
- a light-tight casing which must be destroyed to open the same, having an opening through which said exposure is made when said externally operable member is operated,
- a rolled unexposed film disposed on one side of said opening in an unexposed film roll receiving chamber in said light-tight case with its outermost turn exposed to side walls of said chamber,
- a removable light-tight film container having a film winding spool therein disposed on the opposite side of said opening in said light-tight casing from said rolled film, one end of said rolled film being attached to said film winding spool, said unexposed film having been drawn from said light-tight film container; and
- means for winding said rolled film around said film winding spool. - [underlined portion is amended matter]

Thereafter it was argued:

Reconsideration is respectfully requested, for the rejection of claims 4-7, 11-17 and 35 as unpatentable over the Netherlands document in view of LAWTHOR 4,707,096. Apart from claim 35, these claims depend, directly or indirectly, from claim 6. Claim 6, in turn, has been extensively amended so as to set forth with ample particularity and distinctness a new combination having no counterpart in the cited

references, alone or in any proper combination. Specifically:

Claim 6 is drawn to the new and obvious combination of a rolled unexposed film 23 disposed on one side of the exposure opening, and a removable light-tight film container 20 having a winding spool, disposed on the other side of that opening, in a light-tight film casing that must be destroyed to open it. Most of the unexposed film is disposed in that roll 23. Upon exposure, the film is drawn frame by frame into container 20.

This construction has two principal advantages:

1. The exposed film can be removed when the package is broken open, without the need to do this in a darkroom, because all the exposed film has been drawn into the light-tight container 20.
2. Only one container is needed: the unexposed film in the package as manufactured, prior to use, is disposed in that roll 23 of unexposed film which is disposed on the side of the exposure opening opposite the container for the exposed film. Claim 6 as now drawn makes it plain that there is no container surrounding the unexposed film. The cost of two containers is thus cut in half.

In the Netherlands patent, both the exposed film and the unexposed film are free from any containers. It is therefore necessary to break the package open in a darkroom, which can be a difficult operation. (By contrast, it is quite easy to load the film in the dark, in the course of manufacture, because a darkroom can be dedicated to this purpose in the manufacturing plant. But the unloading will not be done in the plant but rather at the place the film is developed.)

LAWTHER does nothing to overcome the shortcomings of the Netherlands document. True, LAWTHER teaches only one container; but that one container contains the unexposed film: in LAWTHER, the film moves in the opposite direction from in the present invention, from the container toward the spool 33. See column 2, lines 65 and 66 and column 3, lines 7-11 of LAWTHER.

Thus, LAWTHER would lead a person skilled in this art away from the present invention, not toward it.

So far as we know, it is an entirely new combination, in a light-tight casing that must be destroyed to open the same, to provide but a single

light-tight container in the case and the unexposed film in a roll on the opposite side of the exposure aperture from that container. Claim 6 is drawn to this new and unobvious combination and so is patentable, and with it the claims that depend therefrom.

Claim 35 as amended is directed to a feature that the projection means for disabling the winding control means becomes effective after all film frames capable of being exposed have been exposed. This feature is provided to solve a problem that a user must repeat the same winding operation as in taking pictures if he intends to wind up all the film portion into the film container in case there is no means for disabling winding control means, since the film leader (the free end of the film) will not be fully inserted into the film container even when the predetermined number of frames have been exposed. This of course is somewhat troublesome. By using the feature of claim 35, the winding control means will not stop the film advance every one frame after all the predetermined number of frames have been exposed. Such a feature is disclosed in the specification, from page 23, line 5 from the bottom, to page 24, line 13 (referred to as cam 61b). [Emphasis in original](CPX-3).

111. In the February 21, 1989 response, applicants added add claim 45 which became claim 15 of the '087 patent. It was argued that "[n]ew claim 45 corresponds to claim 36 but does not require that the light-tight film casing be destroyed to open the same." (CPX-3).

112. The Examiner in an Office Action mailed on March 10, 1989 allowed claims 36-39 and 45 and rejected claims 2-17, 19-22, 33-35 and 40-44 "under 35 U.S.C. 103 as being unpatentable over Wolfe in view of the Netherland document and Harvey." (CPX-3).

113. Applicants in a response received in the Patent Office on June 19, 1989 cancelled claims 2-17, 19-22, 33-34 and 44. They also, inter alia, amended claim 35 to read as claim 1 in issue. It was argued that:

At the interview, various amendments to certain of the retained claims were proposed, and it is believed that the Examiner looked with favor on

these. Thus, claim 35 is made more particular, so that it recites means for disabling the winding control means after the frame counter indicates there remains on the unexposed film no frame capable of being exposed. There is no such mechanism in WOLFE 3,752,050. Instead, in WOLFE, film advance can take place anytime the pusher 34 is selectively manually actuated and the film is stopped after every one-frame manually actuated and the film is stopped after every one-frame advance, regardless of the length of the film tail.

\* \* \*

The previous allowance of claims 36-39 and 45, is acknowledged with thanks, and of course these claims are maintained intact.

Notice that we cancel claim 6 and all the claims dependent from it. At the interview, the Examiner raised the question how claim 6 is patentable over U.K. 2 138 580A, cited in the corresponding U.K. application and made of record herein with our Amendment of February 29, 1988.

We have patentable distinctions over this U.K. patent. However, they are not well brought out in present claim 6. Moreover, we are now under final rejection, and the changes necessary to claim 6 would perhaps raise new issues that would require further consideration and/or search. To expedite the prosecution of the present application, therefore, and to place it promptly in condition for allowance, we make only the changes in the claims indicated above, and cancel claims 2-17. We will soon file a divisional application containing claims based on claim 6, amended so as to define invention more clearly over the U.K. reference. Therefore, we are not abandoning this subject matter, but are merely deferring its consideration to another application in which it can be fully and timely treated.

114. In a Notice of Allowability mailed on 6/29/89 and responsive to interviews of 5/31/89 and 6/28/89 and the amendment of June 19, 1989 the Examiner stated that the allowed claims were 35-43 and 45-50. (CPX-3).

115. Following the filing of a petition for certificate of correction to the '087 patent on August 10, 1990, a certificate of correction issued which changed "a film roll of exposed film" in claim 7 to - - a film roll of unexposed film - -. The petitioner pointed out that by the amendment filed February 21, 1989 claim 36 was amended so as to insert, after "roll" "the

phrase - - of unexposed film - -; that had that amendment been correctly entered, claim 36, now claim 7 of the '087 patent, would have the proper text; and that the change was necessary in order that claim 7 accurately recites the subject matter of the invention which comprises a roll of unexposed film at the place in question, rather than exposed film. (CPX-3).

The '495 patent

116. Application Serial No. 111,416, which became the '495 patent, was filed on October 20, 1987. (CPX-1).

117. Fuji, Achiever, PSI, Argus and the staff stipulated that Achiever cameras that have a film roll receiving chamber having upper and lower projections formed on an inner surface thereof for supporting an outermost convolution of said film in the form of a roll at its upper and lower sides, as represented for example by RPX ACH 7, RPX ACH 8, CPX-241, CPX-178, CPX-301, CPX-304 and CPX-171, the only disputed claim element in claim 1 of U.S. Patent No. 4, 833, 495 is: "[a]light tight film case which must be destroyed." (SX-1, paragraph 22).

118. Fuji, Achiever, PSI, Argus and the staff stipulated that the only disputed claim element in claim 5 of U.S. Patent No. 4, 833, 495 is: "a light tight film case which must be destroyed to open same." (SX-1, paragraph 23).

119. In column 1 of the '495 patent, the specification states that: "the film package 1 comprises a front case section 2 and a rear case section 3 which are assembled integrally to form a generally rectangular box shaped light tight film case." (CX-1, col. 4 lines 7-10). The specification goes on to state that: "The film package 1 is preferably encased tightly in an outer case (not shown) which is formed with several openings for exposing the taking lens 4, finder

window 5, and shutter actuating member 6, and is made of printable cardboard or printable plastic sheet material." (CX-1, col. 4, lines 19-24).

120. The specification of the '495 patent, in the background of the invention, states:

As the lens-fitted photographic film package has no conventional back cover for allowing loading and unloading a film and no complex exposure control mechanism, a low manufacturing cost has been achieved. The lens-fitted photographic film package, after the exposure of all frames of the film, is forwarded to a photo shop or a photo laboratory without removing the film. There, the exposed film is removed by breaking open the film package and then developed to make prints therefrom while the film package without film is scrapped. The prints together with the film are returned to the customer. The lens-fitted photographic film package makes it easy to take pictures because there is no film loading and unloading. (Emphasis added) (CX-1 Col. 1, lines 17-30).

121. Figure 1 is a perspective view of the lens-fitted photographic film package of the present invention. (Col. 3, lines 19-20).

122. The specification describes a perspective view of the lens-fitted photographic film package of the present invention, shown in Fig. 1, and states "The rear case section 3 is fixed to the front case section 2 in any well known manner, for example by ultrasonic welding, so as not to be separable by the user." (Emphasis added) (Col. 4, lines 16-19).

123. The specification states:

As the exposure is repeated in the manner described above, the film 21 is wound up in the patrone 20 frame by frame. After the exposure of all frames of the film 21, the film package is forwarded to a photo shop without removing the exposed film 21. There, the rear case section 3 is detached from the front case section 2 by the aid of, for example, a dismantling jig and then the film patrone 20 with the exposed film 21 contained therein is removed. The film patrone 20 is handled in the same manner as conventional patrones to remove the exposed film 21 in order to process it for development and printing.

It is desirable to provide an openable portion 40 in the bottom wall of the rear case section 3. This openable portion 40 is defined by a circular groove 37 formed in the inner surface of the bottom wall of the rear case section 3 and is easily breakable along the groove 37. The openable portion 40 is broken from the rear case section 3

to form an opening in the bottom wall of the rear case section 3 so as to allow the film patrone 20 to be removed easily. For easy breaking of the openable portion 40, there is provided a tab 38, disposed in a recess 41 formed in the bottom wall of the rear case section 3. When the tab 38 is pulled, the openable portion 40 of the bottom wall of the rear case section 3 is easily broken and torn off along the groove 37, providing the opening through which the film patrone 20 can be removed without detaching the rear case section 3 from the front case section 2. The forming of this opening in the light tight case of the film package 1 prevents the light tight film case from being reused. In this way, the user is prevented from reusing the film case; and this in turn avoids the poor exposures that would result from such reuse. (Emphasis added).

124. Application Serial No. 111,416 which was filed on October 20, 1987 contained seventeen original claims. Those included independent claims 1,3,5, and 9. In a preliminary amendment received by the Patent Office on April 5, 1998, applicants canceled claims 1, 5 and 9 and added independent claims 18, 19, 20 and 21 as well as dependent claims 22, 23, 24 and 25. (CPX-1).

125. In an Office Action mailed July 5, 1988 the Examiner stated that claims 2-4, 6-8 and 10-25 were pending. In that action, claims 3 and 4 were rejected under 35 U.S.C. 103 "as being unpatentable over Watanabe in view of Wallace." Claim 18 was rejected under 35 U.S.C. 102(a) "as being anticipated by Watanabe." Claims 19, 20, 6 and 7 were rejected under 35 U.S.C. 102(a) "as being anticipated by Wong et. al." Claim 10 was rejected under 35 U.S.C. 103 "as being unpatentable over Wong et al." Claims 20 and 10-15 were rejected under 35 U.S.C. 103 "as being unpatentable over Steisslinger et al in view of Wong et al." Claims 21 and 24 were rejected under 35 U.S.C. 102(a) "as being anticipated by Steisslinger et al." Claims 21-23 were rejected under 35 U.S.C. 102(a) "as being anticipated by Fields." Claims 2 and 8 were objected to as being dependent upon a rejected base claim but were said to be allowable if rewritten in independent form "including all of the limitations of the base

claim and any intervening claim." Claims 16, 17 and 25 were said to be allowable if rewritten or amended "to overcome the rejection under 35 U.S.C. 112." (CPX-1).

126. In a response dated October 5, 1988 applicants, inter alia, amended claim 3 to read as claim 1 in issue, rewrote claim 16 as claim 28 which read as claim 9 in issue, with the exception of later adding the word "said" to the last clause of claim, amended claim 20 to read as claim 5 in issue, amended claim 21 to read as claim 6 in issue and rewrote claim 25 as claim 30 in independent form which became claim 11 in issue. (CPX-1).

127. In the response dated October 10, 1988 to the U.S. Patent Office Action of July, 5, 1988, the applicants, at pages 7 and 8, stated:

Claims 3 [became patent claim 1] and 4 have also been amended to sharpen their definition of the invention relative to the cited references. What is disclosed in Watanabe and Wallace 2,566,267 is not a lens-fitted film unit of which the film casing must be destroyed to remove a film, but only a conventional camera. In particular, Wallace discloses a spring-metal sheath that is provided with two pads and receives therein a film rolled on a spool (refer to the description at column 3, lines 66-73). This spring sheath serves as a magazine and therefore by no means teaches the feature of novelty of claim 3. It is recited from column 3, line 66 to column 4, line 20, that a film is protected from light between the spring-metal sheath and a spool flange when the spring-metal sheath is loaded in a camera and that a cam of a camera opens flanges of the spring-metal sheath to allow the film to be easily taken in and out of the spring-metal sheath when the spring-metal sheath is loaded into the camera.

Claim 3 is directed to the feature of novelty that the disposable film casing has a construction of a film supplying chamber. This feature is clearly distinguished from such a spring-metal sheath serving as a magazine. A magazine or magazine, in this invention, is not disposed in the film supplying chamber but rather in the film take-up chamber.

\* \* \*

As to claims 20 and 21 [became patent claims 5 and 6], Wong et al 4,455,074 discloses a pre-wind camera of the type having a camera back cover which can open and close. Therefore, these claims have been amended to require the light-tight film casing to be destroyed to open the same.

Neither STEISLINGER et al. 3,490,349 nor FIELDS 4,655,574 discloses camera of the type having a film casing which is to be destroyed to remove an exposed film.

It is noted that elements 15 and 13C of STEISLINGER et al. act on a film upon winding the film leader on a film take-up spool. The film, in the camera of STEISLINGER et al., is firmly held by a film take-up spool as its film leader.

Meanwhile, a film whose film end is firmly attached to a spool of a film patronne is hard to move even slightly unless the film is transported by a film winding-up or rewinding mechanism.

In view of the above, it is believed that the subject matter of the application of preventing undesirable movement of film as getting out of exposure position is by no means suggested by STEISLINGER et al.

FIELDS discloses a drop-in loading camera, which is so constructed as to insert a film patronne into the camera with its axis tilted in order not to prevent the slipping-off of each film frame from an exposure frame but to prevent a wide portion of film leader of the film previously withdrawn out of the film patronne from being caught by the camera body. [Emphasis added] [CPX-1]

128. In an Office Action mailed on November 21, 1988, the Examiner stated that claims 3, 4, 18, 20, 21 and 26-31 were pending in the application; that claims 3 (claim 1 in issue), 4, 20 (claim 5 in issue), 21 (claim 6 in issue), 26, 27, 30 (claim 11 in issue) and 31 were allowed; and that claim 18, 28 and 29 were rejected although it was indicated that claims 28 and 29 would be allowable if rewritten or amended "to overcome the rejection under 35 U.S.C. 112". The Examiner stated that in claim 28, line 15, "a container" should be structurally correlated with the film container on line 7 of claim 28, and that replacing "a" with the word "said" would correct this indefiniteness. Thereafter in an amendment received by the Patent Office on January 18, 1989 claim 28 was so amended to read as claim 9 (CPX-1).

129. In an Office Action mailed on January 27, 1989, the Examiner stated that claims 3 (claim 1 in issue), 4, 18, 20 (claim 5 in issue), 21 (claim 6 in issue), 26, 27, 28 (claim 9 in issue) 29, 30 (claim 11 in issue) and 31 were allowed. (CPX-1).

#### **The '774 Patent**

130. Application Serial Number 127, 286, which became the '774 patent, was filed December 1, 1987, and was the third filed application among the underlying patents in issue. (CPX-2).

131. The original application was filed with 18 claims, none of which became claims 14 or 15 of the '774 patent. (CPX-2, originally-filed application, pages 19-22).

132. The originally filed claims 1-3 of the '286 application read:

1. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, an empty film container enclosed in said light-tight film case and a rolled film with its one end retained in said empty film container which is enclosed in said light-tight film case, said light-tight film case having a back wall portion provided with a plurality of ribs extending in a direction along which a film is withdrawn from said film roll into said film container.

2. A lens-fitted photographic film package as defined in claim 1, wherein said ribs support and guide said film from the back.

3. A lens-fitted photographic film package as defined in claim 1, wherein said ribs are curved. (CPX-2, originally-filed application, page 19).

133. A Preliminary Amendment was received by the PTO on March 16, 1988 and presented additional new claims, including a new claim 22, which states:

22. A lens-fitted photographic film package comprising a light-tight film case with a taking lens attached thereto which is at least partially breakable so as to allow a film previously contained in said light-tight film case to be removed from light-tight film case, said light-tight film case having a back wall portion with its inner surface formed integrally with a plurality of projections distributed thereon to support said film placed in an exposure position. (CPX 2, Preliminary Amendment of March 16, 1988, p. 2).

134. In an Office Action mailed May 3, 1988, the Examiner rejected claims 1, 2 and 22, among other claims, under 35 U.S.C. § 103 as being unpatentable over B.R.(Dutch) in view of Horne et al. (CPX-2, Office Action of May 3, 1988, p. 2).

135. In the rejection dated May 3, 1998 the Examiner stated:

To provide the arcuate film guiding surface in B.R.(Fig. 2) with spaced ribs as suggested at 56C in Horne et al. (Fig. 8 and column 4, lines 10 to 19), if desired, would be obvious to one of ordinary skill in the art having these references before him. (CPX-2, Office Action of May 3, 1988, page 2).

136. In connection with claim 3, the Examiner stated:

claims 3, 18, 21, and 24 are rejected under 35 U.S.C. § 103 as being unpatentable over the references as applied to claims 2, 17, 19, and 23 above, and further in view of Maldarelli. To form the film-engaging ribs employed with a concave curve as suggested at 18, 18 in Maldarelli (FIGS. 2 and 4), if desired, would be obvious to one of ordinary skill in the art having these references before him. (CPX-2, Office Action of May 3, 1988, page 3).

137. An Amendment was received by the Patent Office on September 6, 1988, and among other things, added new claims 25 and 26, which ultimately became claims 14 and 15 of the '774 patent. (CPX-2, Amendment of September 6, 1988, pp. 3-4).

138. Original claims 25 and 26 of the '774 patent read:

25. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said to chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that supports the rear of the film emerging from said roll and that in cooperation with said rearwardly opening concave wall of said rolled film chamber maintains said rolled film in a substantially cylindrical roll.

26. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a

film take-up chamber and a back wall portion that closes said to chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that supports the rear of the film emerging from said roll and that in cooperation with said rearwardly opening concave wall of said rolled film chamber maintains said rolled film in a substantially cylindrical roll. (CPX-2, Amendment of September 6, 1988, pp. 3-4).

139. In the Amendment of September 6, 1988, the applicants also amended the specification to add additional description including:

Page 10, line 13, after "distortion." insert --As can be seen in Fig. 4, since the curved ribs 18 support the film roll 23 in the chamber 11 from the rear, the film roll 23 is not substantially deformed from its cylindrical shape.--.

Page 17, between lines 25 and 26, insert the following paragraph:

--As best seen in Fig. 6 at either end of the portion 98 of the rear case section 52 there are concave portions that face forward and overlie and rearwardly close the chambers 55 and 56 and, in the case of film roll chamber 56, maintain the film roll in its cylindrical configuration, as described above in connection with chamber 11--. (CPX-2, Amendment of September 6, 1988, pp. 1-2).

140. The Amendment of September 6, 1988 also amended claim 1 as follows:

1.(amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, an empty film [contained] container enclosed in said light-tight film case, and a rolled film with its one end retained in said empty film container which is enclosed in said light-tight film case, said light-tight film case having a back wall portion provided with a plurality of ribs integral with said back wall portion and extending in a direction along which a film is withdrawn from said film roll into said film container , said ribs having forward edges that are concave as seen in the edgewise direction of said film. said rib supporting and guiding said film from the back.--. (CPX-2, Amendment of September 6, 1988, p. 2).

141. In the Amendment of September 6, 1988, applicants requested reconsideration of the rejection of certain of the claims and commented:

The Dutch patent discloses a classic camera with an interior rear wall which is forwardly concave, so that the film is able to follow an arcuate path. However, as

shown in Fig. 2 of the Dutch patent, the film does not necessarily touch the rear wall. Therefore, the forwardly concave shape of the Dutch interior rear wall is simply an arbitrary matter of design: if the film does not touch it, it can have any desired shape; concave, flat or polygonal. (CPX-2, Amendment of September 6, 1988, pp. 4-5) (emphasis in the original).

142. In connection with the newly added claims 25 and 26, the applicants further commented:

New claims 25-28 have also been added. New claims 25 and 26 are drawn to the feature that is shown in Fig. 4, namely, that the rolled film 23 and the chamber 11 is sustained in its cylindrical configuration, both by the rearwardly opening concave, curved wall of chamber 11 and by the forwardly opening concave, curved portion of 18 that overlies chamber 11 and that supports the rear of the film emerging from the roll. (CPX-2, Amendment of September 6, 1988, pp. 6-7).

143. In an Office Action mailed October 12, 1988, the Examiner rejected claims 1, 25 and 26 stating:

claims 1, 5 to 9 and 25 to 28 are rejected under 35 U.S.C. § 103 as being unpatentable over B.R.(Dutch 6,708,486) in view of British 453,817 (Wolf) and Caviness (U.S. Patent No. 4, 329, 037). To provide the film guide in B.R. (Fig. 2) with arcuate ribs as suggested at 20c in Caviness (Figs. 2 and 3) and 10, 2 in Wolff (Fig. 3), if desired, would be obvious to one of ordinary skill in the art having these references before him. (CPX-2, Office Action of October 12, 1988, p. 2).

144. In an Amendment received February 18, 1989, claims 25 and 26 were amended as follows:

25. (amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said to chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film maintains said rolled film in a substantially cylindrical roll.

26. (amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film maintains said rolled film in a substantially cylindrical roll. (Underlined material represents amended language) (CPX-2, Amendment of February 18, 1989, pp. 2-3).

145. The Amendment of February 18, 1989 also amended claim 1 as follows:

1. (twice amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, an empty film container enclosed in said light-tight film case and a rolled film with its one end retained in said empty film container which is enclosed in said light-tight film case, said light-tight film case having a back wall [portion provided with] whose rear side is an outer side of said package, said back wall having a plurality of ribs integral with said back wall [portion] and extending in a direction along which a film is withdrawn from said film roll into said film container, said ribs having forward edges that are concave as seen in the edgewise direction of the film, said ribs contacting and supporting and guiding said film from the back of said film. (CPX-2, Amendment of February 18, 1989, p. 1).

146. In connection with the changes, the patentee commented:

The only other two independent claims in the case are claims 25 and 26. These are drawn to the concave wall of the rolled film chamber that overlies and contacts the rolled film in the chamber and maintains the rolled film in a substantially cylindrical roll. This concept is entirely missing from the Dutch patent, and is not supplied by either of the secondary references and so is unobvious and patentably vitalizes these amended claims. (CPX-2, Amendment of February 13, 1989, p. 5).

147. In an Office Action mailed March 1, 1989, claims 25 and 26 were again rejected, and the Examiner commented:

claims 25 and 26 are rejected under 35 U.S.C. § 103 as being unpatentable over the references as applied to claim 1 above, and further in view of Prontor-Werk (British). To form the film receiving compartments 3, 4 in B.R.(Dutch) with concave surfaces complimentary to the coils of film 5, 6 in B.R. (Fig.2) as suggested at 6, 7 in Prontor-Werk (Fig. 2 and p.2, lines 97 to 124), if desired, would be obvious to one of

ordinary skill in the art having these references before him. (CPX-2, Office Action of March 1, 1989, p. 3).

148. In an Amendment received by the Patent Office April 26, 1989, claims 25 and 26 were again amended as follows:

25. (twice amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said to chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having protuberances thereon that define a forwardly opening concave path for the film between said chambers, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film maintains said rolled film in a substantially cylindrical roll.

26. (twice amended) A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto and a rolled film, said case having a rolled film chamber, a film take-up chamber and a back wall portion that closes said to chambers, said rolled film chamber having a rearwardly opening concave, curved wall against which the outermost turn of the rolled film lies, said back wall portion having a forwardly opening concave curve portion that overlies said rolled film chamber and that contacts and supports the rear of the film emerging from said roll at regions of said film spaced from the longitudinal edges of the film and that in cooperation with said rearwardly opening concave wall of said rolled film chamber contacts the outermost turn of said rolled film maintains said rolled film in a substantially cylindrical roll.  
(CPX-2, Amendment of April 26, 1989, pp. 2-3).

149. In connection with the Amendment, the applicant commented:

In a nutshell: the weakness of the rejection is CAVINESS, and the claims have now been amended so as clearly to avoid CAVINESS.

As was pointed out in the previous amendment, CAVINESS discloses a structure in which the film is stationary, and so the edges 63 shown in Fig. 7 never contact a moving film. They serve as a film support, but not as a film guide. However the latest official action takes the position in effect that this is an insufficient distinction over CAVINESS.

Very well, we now make a sufficient distinction by reciting a positive relationship of parts that cannot be found in CAVINESS. Specifically, we now recite (claim 1) that there are a plurality of ribs spaced from the longitudinal edges of the film and in contact with portions of the film that are spaced from said longitudinal edges of the film. We now also recite (claims 25 and 26) that the back wall portion has a forwardly-opening concave, curved portion that overlies the rolled film chamber and that contacts and supports the rear of the film emerging from the roll at regions of the film spaced from the longitudinal edges of the film.

Why is this a structural distinction? Because in CAVINESS, the edges 63 are shown with such a spacing that they contact only the side edges of the film and that do not contact regions of the film spaced from those side edges.

How do we know this is true? We know it is true in two ways:

1. Comparison of CAVINESS, Fig. 7 and Fig. 8 shows it; and
2. Fig. 2 shows that 124 is swung over on top of 20C, it contacts 20C flatly. Therefore, the film could not possibly extend edgewise beyond the edges 63 or else 24 could not close over on 20C. In other words, by the very construction of CAVINESS, film 20E cannot be taller than 20C; and so the edges 63 cannot contact portions of the film 20E spaced from the longitudinal edges, that is, the horizontal edges in Fig. 8 of CAVINESS.

Why is this construction acceptable in CAVINESS? Simply because the film 20E in CAVINESS never moves.

Why would not this construction be acceptable in the present invention? Simply because the film in the present invention moves: a moving film supported from its rear only at its very longitudinal edges could buckle between the supports in the course of movement. (CPX-2, Amendment of April 26, 1989, pp. 3-5).

150. On May 9, 1989, a Notice of Allowability was mailed by the Examiner and included an indication of allowance of claims 25 and 26, which became claims 14 and 15 of the '774 patent. (CPX-2, Notice of Allowability of May 9, 1989, p. 1).

151. In the Summary of the Invention, the specification states: According to a feature of a preferred embodiment of the present invention, reinforcing ribs are provided on an inner side of the back wall of the film case of the film package. In this case, the reinforcing ribs extend in the direction of advance of the film an serve as a reinforcing means not only to avoid deformation of the film but also

to support accurately the film in the correct exposure position.

According to a feature of another preferred embodiment of the present invention, the reinforcing member is in the form of a tongue like platform, by which two sections of the film cases are connected. By the provision of the platform member, the two sections are accurately positioned with respect to each other upon assembly. (Emphasis added) (CX-2 Col. 2, lines 22-36).

152. At column 3, line 51 to column 4, line 5 the specification states:

On the inner surface of the back wall of the rear case section 3, there is provided a plurality of reinforcing ribs 18 formed integrally with the back wall as is shown in detail in Fig. 3. The reinforcing ribs 18 extend lengthwise over the back wall, preventing the rear case from being deformed by an external force. Each reinforcing rib has a gently concavely curved front surface 18a shaped complementarily to the shape of the curved film guiding and supporting tracks 15. The reinforcing ribs 18, when the rear case section 3 is attached to the front case section 2, gently press the film 26 extending between the film roll 23 and the film patrone 20 against the supporting tracks and finally hold the film 26 in cooperation with the supporting tracks 15. In this way, the film 26 is held stably in the exposure position without shifting vertically and/or waving over the exposure frame 10. (Emphasis added) (CX-2).

153. Fig. 4 of the '774 patent is a cross sectional view of the lens-fitted photographic film package of Fig. 1. (CX-2, Column 2, lines 53-54).

154. The specification, at column 5, lines 3-17, states:

As was previously described, the rear case section 3 is provided with reinforcing ribs 18 shaped complementarily to the shape of the supporting tracks 15 of the exposure frame 10 for pressing the portion 26 of the film 21 against the supporting tracks 15 so as to place and hold it in the focal plane of the taking lens 4. From the point of view of manufacturing cost and retail price, it is preferable to use a plastic single lens for the taking lens 4. Although the plastic lens produces some distortion, the curved supporting tracks 15 and the curved reinforcing ribs 18 help to reduce this distortion. As can be seen in Fig. 4, since the curved ribs 18 support the film roll 23 in the chamber 11 from the rear, the film roll 23 is not substantially deformed from its cylindrical shape. (CX-2).

155. The specification, at column 7, lines 4-16 states:

The rear case section 52 which has a generally L shaped configuration comprises a back wall 93 and a bottom wall 94. In the back wall 93 there is an opening 95 in

alignment with the tunnel like view finder 88 through which an object is viewed. There is also formed in the back wall 93 of the rear case section 52 a rectangular opening 96 in the back wall 93 which receives therein a film advancing knob 60 with its outer periphery flush with, or even below, the outer surface of the back wall 93 of the rear case section 52. Inside the back wall 93 of the rear case section 52 is a portion 98 having a curved surface for supporting the film 21 thereon and guiding it therealong. (CX-2).

156. Fig. 6 of the '774 patent is an exploded perspective view of the lens-fitted photographic film package of Fig. 5.

157. The specification, at column 8, lines 46-51, states:

As best seen in Fig. 6, at either end of the portion 98 of rear case section 52 there are concave portions that face forward and overlie and rearwardly close the chambers 55 and 56 and, in the case of film roll chamber 56, maintain the film roll in its cylindrical configuration, as described above in connection with chamber 11. (Emphasis added) (CX-2).

#### The '649 Patent

158. Application Serial No. 314,215, which matured into the '649 patent, was filed on February 22, 1989. (CPX-5, division-continuation program application transmittal form, p. 1).

159. This application is a division of Serial No. 87,388, which was filed on August 20, 1987 and issued as the '087 patent. (CPX-5, division-continuation program application transmittal form, p. 1).

160. Thus, the prosecution history of the '649 patent includes the prosecution history of the underlying '087 patent.

161. The method claims as originally filed with the '388 application included a claim 31 which states:

31. A method for assembly a lens-fitted photographic film package which comprises a

light-tight casing having an exposure opening, a rolled film disposed on one side of said exposure opening, and a light-tight container disposed on the opposite side of said exposure opening from said rolled film, said container having therein a film winding spool attached to one end of said rolled film, said method comprising the following steps:

placing said light-tight container in which the greater part of said film is contained in a film-container-receiving chamber formed on said opposite side of said exposure opening in a main body section of said light-tight casing;

attaching a leader portion of said film withdrawn from said film container in a spool provided in a film roll receiving chamber formed on said one side of said exposure opening in said main body section of said light-tight casing;

fitting a back cover section to said main body section so as to make said lens-fitted photographic film package light-tight; and

rotating from outside said package said spool in said film roll receiving chamber so as to wind said film around said spool (CPX-5, originally filed application, pp. 47-48).

162. In a Preliminary Amendment filed with the '388 application, a new claim 33, among others, was added and states:

33. A method as defined in Claim 31, wherein said spool is rotated from outside said package by inserting a tool within a recess in an exposed end of said spool and turning said tool (CPX-5, Preliminary Amendment, p. 2).

163. The Examiner issued an Office Action on January 16, 1990 and rejected application Claim 31 as follows:

Claims 31-32 are rejected under 35 U.S.C. § 103 as being unpatentable over Harvey. Harvey teaches (figure 1) a film package comprising a light-tight casing 18 having an exposure opening 34, a roll of film enclosed in a light-tight container 10 (figure 1), film advancing means 194, and a back cover 28. Light-tight casing 18 is received in chamber 22 and the film leader is attached to spool 110 and subsequently wound about the spool 110 by the advancing means 194. The method of Claims 31-32 would have been obvious over Harvey in that during use of the light-tight camera of Harvey, 35mm size film patronne 110 is inserted into chamber 22, the film leader of the film withdrawn from patronne attached to the spool 110, the back cover is closed, and the film is wound about the spool 110 from outside the package by advancing means 194. (CPX-5, Office Action of January 16, 1990, pp. 2-3).

164. The applicants filed a Petition for a Complete Action which was received by the Patent Office on February 5, 1988 indicating that the Preliminary Amendment with Claims 33-36 should be considered in the Examiner's Action. (CPX-5, Petition for a Complete Action on the Merits).

165. The Examiner issued a further Action on February 13, 1990 and maintained the rejection of claims 31-32 on the basis of Harvey as set forth in the previous Office Action. (CPX-5, Office Action of February 13, 1990, p. 3).

166. With respect to new Claim 33, the Examiner stated:

Claim 33 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims. (CPX 5, Office Action of February 13, 1990, p. 5).

167. An Information Disclosure Statement was received by the Patent Office on May 14, 1990 and presented two Japanese references with translations of the claims. (CPX-5, Information Disclosure Statement of May 14, 1990).

168. One reference, Japanese Unexamined Utility Model Publication No. 53-127934 was accompanied by a translation of the claims which read:

a camera in which an exposed film is previously wound on a take up spool (6) and the exposed film is rewound on a spool in a film cartridge (3) to be received in said film cartridge (3) one frame each exposure. (CPX-5, Information Disclosure Statement, p. 3; CPX-21).

169. The Japanese unexamined Utility Model Publication No. 48-46622 was also accompanied by a translation of the claim which read:

a film loading device of a camera in which a film contained in a film cartridge is wound from said film cartridge on a take-up spool immediately after inserting said film cartridge in said camera and is rewound into said cartridge by each exposure (CPX-5, Information Disclosure Statement of May 14, 1990, p. 4; CPX-21).

170. In an Amendment received by the Patent Office on May 14, 1990, applicant stated:

Rewrite claim 31 as follows:

--37 . A method for assembling a lens-fitted photographic film package which comprises a light-tight casing having an exposure opening, a roll of unexposed film disposed on one side of exposure opening, and a light-tight container disposed on the opposite side of said exposure opening from said film, said container having therein a film winding spool attached to one end of said film, said method comprising the steps:

placing said light-tight container in which the greater part of said film is contained in a container-receiving chamber formed on said opposite side of said exposure opening in a main body section of said light-tight casing such that a leader portion of said film withdrawn from said light-tight container is attached to a spool and is placed together with said spool in a film roll receiving chamber formed on said one side of said exposure opening in said main body section of said light-tight casing;

fitting a back cover section to said main body section so as to form said light-tight casing, one end of said spool being exposed outside said light-tight casing;

temporarily connecting rotational apparatus to said exposed end of said spool; winding a major portion of the length of film on said spool in said film roll receiving chamber by rotating said spool by said rotational apparatus; and

disconnecting said rotational apparatus from said exposed end of said spool.

Rewrite claim 33 as follows:

--38. A method as defined in claim 37, wherein said rotational apparatus is a rotatable tool inserted within a recess in said exposed end of said spool.-- (CPX-5, Amendment of May 14, 1990, pp.1-2) (emphasis added).

171. In the Amendment of May 14, 1990, the applicants in part commented:

Claim 31 has been rewritten as new Claim 37....

Claim 37 is thus intermediate in scope between Claim 31 and allowed Claim 33.

In the present invention, the novel and unobvious subject matter set forth in previous Claims 31 and 33 consists in its broadest aspect in rotating from outside the package the spool in the film roll receiving chamber, by temporary engagement of a rotating apparatus with an exposed end of the spool, as to wind the film around the spool prior

to the exposure of any of the film. In this way, there is provided a roll of unexposed film in the film roll receiving-chamber on the opposite side of the exposure opening from the light-tight container. This is the product which is sold to the customer. When the customer uses the product, he or she winds the film back into the light-tight container frame by frame after each exposure.

This method is very useful in the production of what might be called single-used cameras, that is, photographic film packages which are used only for the exposure of the film that is initially packaged therein, and that are not reloaded. The method of the present invention makes such a package practical, in which no rewinding of the film is needed following the last exposure, by the step of rotating the spool in the film roll receiving-chamber from outside the package so as to wind the film around the spool prior to the exposure of any of the film.

It also makes the product cheaply, because no rotational apparatus need be provided as a portion of what is sold to the customer....

The rotational apparatus can thus be used on an endless series of film packages. (CPX-5, Amendment of May 14, 1990, pp. 3-4).

172. On June 15, 1990 the Examiner issued a Notice of Allowability indicating that the allowed claims included claims 34-38, and claim 37 became Claim 9 of the '649 patent. (CPX-5, Notice of Allowability of June 15, 1990).

173. The '649 patent states with respect to one described method:

The lens-fitted photographic film package according to the present invention is assembled by the steps of winding a film withdrawn from a light-tight film container in a roll in darkroom;

loading the rolled film and the light-tight film container in respective receiving chambers formed in a main body section of the lens-fitted photographic film package;

fitting a back cover section to the main body section so as to close light-tightly the lens-fitted photographic film package; and

sealing the lens-fitted photographic film package so that it cannot be inadvertently opened.

174. Under the subheading "Brief Description of the Drawings" the '649 patent

states:

FIG. 12 is a front perspective view of the lens-fitted film package of a fourth embodiment of the present invention;

FIG. 13 is a cross-sectional view of the lens-fitted film package of FIG. 12;

FIG. 14 is an elevational sectional view of the lens-fitted photographic film package of FIG. 12 viewed from the rear;

FIG. 15 is a plan view of a film loading device used for assembly the lens-fitted photographic film package of FIG. 1;

FIG. 16 is a front view of the film loading device of FIG. 15;

FIG. 17 is a side elevational view of the film loading device of FIG. 15;

FIG. 18 is a perspective illustration showing a base plate on which the film loading device of FIG. 15 and a semi-assembly of the lens-fitted photographic film package of FIG. 1 are placed;

FIG. 19 is a schematic illustration showing an automatic assembly line for lens-fitted photographic film packages according to the invention;

FIG. 20 is a plan view showing a part of the automatic assembly line of FIG. 19;

FIGS. 21 (A), (B) and (C) are perspective views showing various spool shafts for use with the film loading device of FIG. 15; and

FIGS. 22 (A) and (B) are exploded perspective and cross-sectional views, respectively, showing a spool shaft with a sleeve for use with the film loading device of FIG. 15. (CX 5, column 3, line 45- col. 4, line 4).

175. The '649 patent further states with reference to FIG. 3:

When assembling the film package 1, a roll 23 of 135-size film 21, and a film patrone 20 in which the film 21 is held at its end by a spool 28 and the film patrone 20 are put in the receiving chambers 11, 12, respectively, prior to fixing together the two sections 2 and 3. This film 21 is of the type having 35mm image frames, which is defined as 135 film by ISO.

The above-described film loading operation is, in this embodiment, performed by the aid of a film loading jig which is shown by double dotted lines in FIG. 3. In greater

detail, the unexposed film 21 is withdrawn from the film patrone 20 by and is wound around a cylindrical spool member 22 of the film loading jig as a film roll 23 in many convolutions. The film patrone 20 is held by a gripping arm 25 of the loading jig and that part of the film extending between the film roll 23 and the film patrone 20 is supported by a plate member 27 of the loading jig in such a way as to be slightly lifted into a curve.

The film patrone 20 and the film 21 held by the loading jig can be inserted into the respective receiving chambers 11 and 12 through respective bottom openings 11a and 12a by moving the loading jig toward the main front body section 2 until the top of the spool 28 (see FIG. 2) of the film patrone 20 is brought into engagement with the fork 14. During this film loading operation, since the part 26 of the film 21 is lifted, the perforations in the edge of the film 21 will not be caught by the teeth of the sprocket wheel 16.

After having loaded the film roll 23 and the film patrone 20 in the above-described manner, the gripping arm 25 unclamps the patrone 20 and the cylindrical spool member 22 is resiliently deformed to remove the film 21. The deformation of the cylindrical spool member 22 is allowed due to the provision of a slit 22a therein which receives one end of the film 21. Then the loading jig is returned while the film roll 23 and the film patrone 20 remain in the respective receiving chambers 11 and 12. (CX-5, column 4, line 51-column 5, line 14).

176. The '649 patent next states:

The film loading and film package assembly has to be done in the dark room. (CX-5, column 5, lines 33-34).

177. The '649 patent states in connection with another method:

Alternatively, the film patrone 20 and the film roll 23 may be loaded in such a way as to wind the film 21 around the cylindrical spool member 22 of the loading jig after the loading of the film patrone in the patrone receiving chamber 12. In this case the film is wound while raised at an angle between 30° and 45° with respect to the film roll receiving chamber 11. After the film 21 is fully wound around the cylindrical spool member 22, the rolled film 23 is placed in the film roll receiving chamber 11 and then the cylindrical spool member 22 is removed. (CX-5, lines 40-50).

178. Later, the '649 patent states with reference to FIG. 8:

Upon loading film, the film 21 is withdrawn from the film patrone 20 which is well

known to those skilled in the art and already commercially available, and the withdrawn part of the film is wound in a film roll 23. Then the film patrone 20 and the film roll 23 are loaded in the main body section 50 through the openings 55a and 56a. This loading operation is done in a darkroom. It is to be noted that the film 21 may be withdrawn from the film patrone before or after the loading of the film patrone into the main body section 50. (CX-5, column 7, lines 20-30).

179. The '649 patent also states with reference to FIG. 13:

As is shown in FIG. 13, behind the taking lens 101 is a shutter mechanism 107 supported by an exposure frame 108. On the right hand side of the exposure frame 108 as viewed from the front of the main body section 100 of the film package, there is a film-container-receiving chamber 111 for receiving a light-tight film container 110. On the other hand, on the left hand side of the exposure side frame 108, there is a film-receiving chamber 112. In the film-receiving chamber 112 is a spool shaft 113 supported for rotation. The film which is not yet exposed is wound up around the spool shaft 113. The leading end 21a of the film 21 is attached to a spool 114 supported by the film container 110 for rotation. The part of the film 21 between the film receiving chamber 112 and the film container 110 in the film-container-receiving chamber 111 passes behind the exposure frame 108.

In FIG. 14, showing the main body section 100 as viewed from the rear thereof, the spool 114 of the film container 110 is engaged by a fork 116 projecting partially from the bottom of the container receiving chamber 111. The fork 116 is formed integrally with a shaft of a gear 115 which is rotated with a film advancing knob 103 through an idler gear 117. Upon rotating the film advancing knob 103, the film is wound around the spool 114. This spool shaft 113 disposed in the film-receiving chamber 112 projects outside the film-receiving chamber 112 but is spaced from the bottom of the main body section 100.

At the bottom of the spool shaft 113 is formed a groove 113a which can be engaged by the tip of a screw driver in order to be rotated to wind the film 21 there around. The groove 113a may have a particular shape suitable for a special tool rather than usual screw drivers in order to prevent the winding or rewinding of the film 21 by users. (CX-5, col. 11, lines 28-63).

180. As to the method of loading the camera shown in FIGS. 12-14, the '649 patent states:

According to the above-described construction, the lens-fitted film package is assembled in the following way. At first the film container 110 with the leading

portion of the film 21 withdrawn and the trailing end fixed to the spool 114 is loaded in the film container receiving chamber 111 of the main body section 100. After fixing the end of the leader portion of the film 21 to the spool shaft 113 of the film-receiving chamber 112, the back cover section 119 is fixed to the main body section 100 so as to form a light-tight rectangular box-shape film package. Then a screw driver, for example, is inserted through an opening formed in the bottom wall of the main body section 100 to engage with the groove 113a at the spool shaft 113, thereby turning the spool shaft 113 in the counter clockwise direction as viewed in FIG. 13 in order to wind up the film 21 around the spool 113 in the film-receiving chamber 112. This film winding operation can be formed in the day-light because the film package is maintained light-tight. (CX-5, col. 11, line 28-col. 12, line 14).

181. The '649 patent states in connection with a further method:

Reference is now had to FIGS. 15 to 17 showing, by way of example, a film loading apparatus for automatically loading a film roll and a film patrone into the main body section of the lens-fitted film package shown in FIGS. 1 to 3. The film loading apparatus 150 is mounted on a base plate 152 which will be described in detail later. On the base plate 152 are frames 152a and 152b, as is clearly seen in FIG. 18, by which the main body section 2 and the back cover section 3 are adjusted in position. (CX-5, Col. 12, lines 40-49).

182. The '649 patent later states:

An air cylinder 169 with a gear 170 attached to its rear end is rotatably supported by the swingable arm 160 through a bearing 168. By the gear 170, which is prevented from moving axially, the cylinder 169 is rotated to drive a spool 172 which is urged by a spring incorporated in the cylinder 169 to protrude forwardly. When air is released from the air cylinder 169, the spool 172 is retracted from a position shown in FIG. 15 to position its forward end below the bottom surface of the main body section 2. When the air cylinder 169 rotates, the spool 172 and cylinder 169 are rotated. (CX-5, col. 13, lines 36-40).

183. The '649 patent also states:

The shaft 159 which serves as a pivot for the swingable arm 160 is provided with a ratchet 175 in engagement with the teeth of the gear 170 so as to prevent the gear 175 from being rotated in the counterclockwise direction. (Section 13, Lines 31-35)

184. The '649 patent states:

The film loading apparatus thus constructed is installed along an automatic assembly line as shown in FIGS. 19 and 20. FIG. 19 illustrates schematically the automatic assembly line and FIG. 20 shows the relative position of the base plate 152 and a loading station 177. (CX-5, col. 13, lines 36-40).

185. The '649 patent further states with respect to this method embodiment:

In the dark room 180 are carried out the steps of making a film roll 23 by withdrawing unexposed film 21 from the film patrone 20 without exposing it to light, engaging the spool 28 of the film patrone 20 with the fork 14 by inserting the patrone axially into the film-patrone-receiving chamber 12 of the main body section 2, inserting the rolled film 23 into the film roll receiving chamber 11, removing the spool 172 from the film roll 23, and securing the back cover section 3 to the main body section 2. (CX-5, col. 13, lines 49-58).

186. The '649 patent also states:

The convertor 178 brings the film loading apparatus 150 on the base plate 152 to the darkroom 180. Therein the film loading device 150 is operated at a rewinding station 187 which is also provided with a driving gear and a supporting member 183, engageable with the gear 170 of the air cylinder 169. The driving gear drives the gear 170 to turn in the clockwise direction viewed in FIG. 16. As the gear 170 turns, the spool 172 is rotated to withdraw the film 21 from the film patrone 20 and wind it therearound. (CX-5, col. 14, lines 33-43)

186a. The '649 patent further states (CX-5):

As the film 21 is above the main body section 2 during the winding thereof, the film 21 is protected from getting scratches on the surfaces thereof. (CX-5, col. 14, lines 61-64).

187. The '649 patent then states:

After the film roll 23 has been formed and the spool shaft 172 stops, the driving gear 182 and the supporting member 183 are returned to their initial positions. Then the base plate 152 moves to the next operating station, namely a film installing station 188. (CX-5, col. 15, lines 1-5)

188. The '649 patent later states:

When the swingable arm 160 reaches a position shown by double dotted lines in FIG. 16 to align horizontally the spool shaft 172 with the ejecting rod 165, and hence the film roll 23 with the film patrone 20, the film roll 23 is inserted into the film-roll-receiving chamber 11 from above. (CX-5, col. 15, lines 45-50).

189. The '649 patent also states:

When the movable frame 158 returns after the film patrone 20 and the film roll 23 have been received in the respective receiving chambers 11 and 12, (CX-5, col. 16, lines 8-10)...

The base plate 152 is then moved to the next station, namely the back cover fitting station 195 in the darkroom 180. (CX-5, col. 16, lines 15-17).

190. In the file history, the Harvey patent, U.S. Patent No. 4, 397, 535, in the specification, states:

To load the camera, the film cassette 10 is inserted into the film supply chamber 22 with the film leader 14 lying along the guide rails 26 and 27. Then the cover door 28 is closed. (CPX-5, Col. 2, lines 58-61).

191. The specification of the Harvey patent states:

When the cover door 28 is closed, a cover door latch lever 68 enters a slot 69 in the camera body portion 20 and closes a motor drive switch (not shown). The closing of the motor drive switch energizes a motor 92 having an output shaft 94 connected to the drive transmission mechanism 58 via a drive gear 96, as shown in Fig. 2. The transmission 58 comprises a drive train gears 98, 100, 102 and 104, and a friction clutch 106, interposed between the gears 102 and 104, and transmits the drive of the motor 92 to the gear segment 56 of the index gear 52. As shown in Figs. 3C and 3D, the coupling of the drive power from the motor 92 to the gear segment 56 causes the index gear 52, the pawl wheel 48, and the threading roller 54 to rotate through one revolution.

During rotation of the threading roller 54 by the motor 92, the frictional engagement between the roller's cylindrical outer surface portion 64 and the edge portion 14a of the film leader 14 advances the film leader past a film guide member 93, into the take-up chamber 24, and into engaging relationship with film capturing means, for example, one of a plurality of film capturing posts 108 are positioned at equally spaced intervals about the periphery of a film take-up spool 110 rotatably mounted

within the take-up chamber. As shown in Fig. 3D, when the index gear 52 completes one revolution, the gear segment 56 disengages from the drive train gear 104, the pawl arm 44 re-engages the tooth 46, and the threading roller 54 is held stationary with its flat outer surface portion 60 again positioned as it was initially, i.e., confronting and spaced from the edge portion 14a of the film leader 14. (CPX-5, Column 3, lines 30-62).

192. The Harvey patent specification states:

From the foregoing it can be seen that each time the camera cover door 28 is closed, the threading roller 54 is driven for one revolution to advance the film leader 14 to the camera take-up spool 110 for engagement of the film leader by one of the film capturing posts 108. Then, the threading roller 54 is held stationary and out of engagement with the film during its further advancement by the motor 92 for exposure purposes and during rewinding of the film by means (not shown) back into the film cassette 10. To remove film from the camera 18, the operator depresses a release button 114 which disengages the cover door latch 68 permitting the cover door 28 to be swung open. (CPX-5 column 4, lines 38-50.)

#### The '857 Patent

193. Application Serial No. 409,420, which became the '857 patent, was filed on September 19, 1989, which was after the filing of Application Serial No. 087,388, which became the '087 patent, on August 20, 1987 and was a division of Application Serial No. 087,388, which became the '087 patent. As filed it had thirty two claims. (CPX-4, Division-Continuation Program Application Transmittal Form following application as originally filed, p. 1).

194. In a Preliminary Amendment dated September 19, 1989, the applicants canceled claims 1 and 4 and amended original claim 6, which became claim 1 in issue, to read:

6. A lens fitted photographic film package having an externally operable member for affecting an exposure, comprising:

a light tight casing [which must be destroyed to open same,] having an opening through which said exposure is made when said externally operable member is operated;

a rolled unexposed film disposed on one side of said opening in an unexposed film roll receiving chamber in said light tight casing with its outermost turn exposed to side walls of said chamber and its innermost turn surrounding an empty space;

a removable light tight film container having a film winding spool therein disposed on the opposite side of said opening in said light tight casing from said rolled film, one end of said rolled film being attached to said film winding spool; [and]

means for winding said rolled film into said light tight film container and around said film winding spool; and

means defining a film passage in said light tight casing, wherein said light tight casing must be destroyed to expose said film passage (Emphasis in original) (CPX-4)

195. In the preliminary amendment, the applicant stated:

The above claims 2, 3 and 5-18 were divided out of parent application Serial No. 07/087,388, [application for the '087 patent] and now recite structure supporting the single use function in a somewhat different way.

\* \* \*

At the conclusion of the prosecution of 07/087,388 [application for the '087 patent] the Examiner inquired how the subject matter of claim 6 is unobvious in view of any of the SRL (sic. SLR (Single Reflex Lens) cameras in which the unexposed film is fully withdrawn from the cartridge prior to the first exposure, and then is rewound into the cartridge one frame at a time.

The answer to that question is as follows:

The present invention is in the field of lens fitted photographic film packages having a light tight casing which must be destroyed to open same. Such packages are what might be called single use packages, because the customer receives them pre-packaged, with film in place ready to make the first exposure; and when all of the exposures are made, the customer turns in the package, which is opened only at that time and in due course receives the developed film. To take more pictures, the customer buys another package, and so on.

These packages are not cameras that are opened to insert the film and having a motor that winds out the unexposed film when the loaded camera is closed, and in which the user again opens the camera to remove the cartridge with the exposed film rewound into it. Such cameras have complicated and hence costly structure, and are not practical unless used for a long period of time with many successive rolls of film.

By contrast, the film package of the present invention must be made as simple in structure and hence as inexpensive as possible, so that its cost will be very little more than the cost of an ordinary roll of film. This leads to certain structural expedients which are not at all obvious upon consideration of a standard SRL camera. One of those unobvious measures that have been taken in the present invention is as shown on, for example, the right-hand side of Fig. 2 of our drawings. There, it will be seen that the unexposed film in the package is wound up in a roll, with the outermost turn of the roll exposed to the side walls of its chamber and its innermost turn surrounding an empty space. This is the simplest and least expensive construction imaginable. It would be utterly impossible in an SRL camera, for how would the unexposed film ever be disposed in the chamber in that configuration?

But this arrangement is possible with the present invention, in which the film is first loaded into the open package under darkroom conditions, and then the package is closed and sealed. See for example our Figure 3, for a diagrammatic representation of how this is done.

The film package will not thereafter be opened again, until all of the exposures have been made and most of the film has been wound into the light-tight film container.

As claim 6 as amended herewith clearly brings out this distinction over the prior art with amply particularity, it is believed that it is allowable. New claims 33 and 34 depend from claim 6, and recite further structure consistent with the single-use function.

New base claims 35, 38, 41 and 44 correspond to allowed claims 35-38 of the parent, but now adopt language similar to that of claim 6 as amended herewith, relative to structure supporting the single-use function. (Emphasis added) (CPX-4, Preliminary Amendment dated September 19, 1989 at 7-8).

196. In the preliminary amendment claim 33, which became claim 11 in issue, as well as claims 34 to 37, claim 38 which became claim 22 in issue, and claims 39 to 46 were added.

197. The claims of the '857 patent were allowed in a notice mailed April 12, 1990 without further objection. The notice did cite Wolfe U.S. Patent No. 3,752,050 (CPX-4).

The '400 patent

198. Application Serial No. 454,972, which became the '400 patent, was filed on

December 22, 1989. (CPX-6, originally filed application, p. 1).

199. The specification states:

Fig. 10 is a perspective view of a lens-fitted photographic film package according to another preferred embodiment of the present invention;

Fig. 11 is an exploded perspective view of the LFFP of Fig. 10;

Fig. 12 is a fragmentary cross-sectional view showing a film container receiving chamber of the lens-fitted photographic film package of Fig. 10;

Fig. 13 is a fragmentary cross-sectional view showing a film container receiving chamber similar to but turned 90° from Fig. 12;

Fig. 14 is a view of the LFFP package of Fig. 10 to which ultrasonic welding is being applied. (CX-6, column 3, lines 28-41).

200. The specification, in reference to Figs. 10-14, states:

Reference is now had to Figs. 10-14 showing another preferred embodiment of the film package 1B. The lens-fitted film package 1B comprises a middle case section 50, a front case section 51, and a rear case section 52 which are all made of plastic materials. These sections 50, 51, 52 are assembled into an integral light tight box shaped film case. As will be described in detail later, these sections 50, 51 and 52 are fixedly assembled after having loaded an empty film patrone 20 and a film 21 in the middle case section 50. Therefore, the film patrone 20 and the film 21 cannot be removed by the user. (Emphasis added) (CX-6, Column 7, lines 18-29).

201. The specification states:

When assembling the film package 1B, the rear case section 52 is first fitted to the middle case section 50 in such a way as to place the bottom cover section 100 and the bottom wall 102 below the base place 53 of the middle case section 50 so as to cover the openings 55a and 56a of the film patrone and film roll receiving chambers 55 and 56. At this time, the respective vertical grooves 52a(R) and 52a(L) of the rear case section 52 and the semi-circular groove 108 of the bottom cover section 100 receive the corresponding rails 58a and 108a of the middle case section 50. Due to the construction of the film package 1B, by fixing the rear case section 52 to the middle case section 50 in which the film patrone 20 and the film roll 23 have been previously loaded, the film 21 is contained light-tightly. Thereafter, the fixing of the front case section 51 is effected by fitting the rear edge of the

front case section 51 into the transverse groove 52a of the rear case section 52 and then by engaging the hooked lugs 106 of the bottom cover section 100 with the small square openings 90 and 107 formed in the front wall of the front case section 51, respectively. Thereafter, the rear case section 52 is fixedly attached to the middle case section 52 along the right side vertical groove 52a(R) and the left side vertical groove 52a(L) of the rear case section 52 by ultrasonic welding.

(CX-6, Column 8, line 59 to Column 9, line 16)

202. The specification states:

This ultrasonic welding may preferably be performed by applying an ultrasonic welding horn 111. For applying an ultrasonic welding, as is shown in FIG. 14, the front case section 51 is supported by a supporting tool 112 having a pair of supporting arms 113. The arms 113 are inserted into recesses 51a formed in both side walls of the front case section 51 of the assembled film package 1B with the rear side up. By pressing on the case section 52 with the ultrasonic horn 111, the rear case section 52 is welded to the middle case section 50 along the side vertical grooves 52a(R) and 52a(L). The rear case section 52 is also welded to the front case section 51 at the upper and lower ends of each side vertical groove 52a(R), 52a(L).

(CX-6, Column 9, lines 17-30).

203. Under the subtitle "SUMMARY OF THE INVENTION", the '400 patent specifications states:

The two case sections are fixedly attached to each other in any well known manner, for example by means of ultrasonic welding, so as not to be separable. This inseparable light-tight film case forces users to avoid any reuse of the lens-fitted photographic film package after the removal of the film. (Emphasis added) (CX-6, col. 2, lines 52-59).

204. In the file history of the '400 patent, the specification of the Prontor patent states:

A particularly inextricable connection of the housing parts may be achieved by the fact that one of the housing parts at least has two hook shaped extensions and the other housing part two recesses serving to receive the hook ends. (CPX-6L, Prontor patent at page 2, lines 31-36).

205. The specification of the Prontor patent states:

In addition to this measure, according to another feature of the invention the housing parts may have moulded on their inner wall such shoulders and recesses that on joining together the housing parts, the film material can only be removed by first destroying the packaging. The object of this arrangement is in the first place to prevent the magazine from being opened accidentally and that is ensured that the film material can be removed therefrom in a darkroom after destroying the magazine. (CPX-6L, page 2, lines 19-30).

206. [THERE IS NO FINDING 206].

207. Claim 14 of the '400 patent issued from originally number claim 44. (CPX-6, Examiner's worksheet, SSL905-none-0043599).

208. Original claim 44 was added to the case by a Preliminary Amendment dated received May 7, 1991 and was articulated as a rewriting of independent claim 37. (CPX-6, SSL905-none-0043564-65).

209. Original claim 37 was added to the case via an Amendment dated July 11, 1990. (CPX-6, SSL905-none-0043536-37).

210. Original claim 37 is a dependent claim, depending from original claim 27. Original claim number 27 was added to the case via a Preliminary Amendment received December 22, 1989. Original claim 27 reads:

27. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, a separate empty film cartridge having a spool therein rotatable about an axis of rotation, said film cartridge being enclosed in said light-tight film case on one side of said lens, an unexposed rolled film with its one end retained on said spool in said film cartridge, said unexposed rolled film being disposed on the other side of said taking lens with its outermost turn in contact with said film case, said light-tight film case comprising a main case section which has a film cartridge receiving chamber with an opening at its bottom for removably receiving said film cartridge and a rolled film receiving said film cartridge and a rolled film receiving chamber for receiving said rolled film, a rear case section which is

securely fixed to the rear side of said main case section and cannot be disassembled therefrom, and a third member sealing said opening at the bottom of said film cartridge receiving chamber, said third member being disposed only on said one side of said lens in alignment with said axis and openable to expose said opening of said film cartridge receiving chamber so as to allow said film cartridge to be removed, said film package being devoid of means for advancing a film rolled on a said cartridge from said one side of said lens into a rolled configuration on said other side of said lens.

(CPX-6, SSL905-none-0043528).

211. Claim 31, which was added via Preliminary Amendment received December 22, 1989, contains the "must be destroyed" language. Claim 31 reads:

31. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, a separate empty, film cartridge having a spool therein rotatable about an axis of rotation, said film cartridge being enclosed in said light-tight film case on one side of said lens, an unexposed rolled film with its one end retained on said spool in said film cartridge, said unexposed rolled film being disposed on the other side of said taking lens with its outermost turn in contact with said film case, said light-tight film case comprising a main case section which has a film cartridge receiving chamber with an opening at its bottom for removably receiving said film cartridge and a rolled film receiving chamber for receiving said rolled film, a rear case section which is securely fixed to the rear side of said main case section and cannot be disassembled therefrom, and a third member sealing said opening at the bottom of said film cartridge receiving chamber, said third member being disposed only on said one side of said lens in alignment with said axis and openable to expose said opening of said film cartridge to be removed, and a film passage between said film cartridge receiving chamber and said rolled film receiving chamber formed by parts of said main and rear case sections; said film passage being not exposed until said light-tight film case is destroyed.

(CPX-6, SSL905-none-0043529-30).

212. In the Office Action of July, 23, 1990, the Examiner's rejection arguments related to the "must be destroyed" language are directed at claim 31 which ultimately lead to claim 16 of the issued patent. The Examiner stated:

Claim 31 is rejected under 35 U.S.C. § 103 as being unpatentable over Prontor (British 1, 060, 937) in view of Voigtlander (German 949, 324). Prontor shows a lens fitted photographic film package (Figs. 1 to 3) comprising a light tight film case 1, 2 (Fig. 1 and page 1, lines 46 to 58) with a taking lens 13 fitted thereto, a separate rotatable film receiving spool 9 (Figs. 2 and 3 and page 2 lines 103 to 108) on one side of the lens, an unexposed rolled film 3 (Fig. 3 and page 2, lines 101 to 103) with one end retained on spool 9 (Fig. 3 and page 2, lines 108 to 112), the unexposed film being disposed on the other side of the lens 13 with its outermost turn in contact with the film case (Fig. 3 and page 2, lines 114 to 124), the film case comprising a main case section 1 and a rear case section 2 (Figs. 1 and 2, page 2, lines 70 to 96) which are fixed together and cannot be disassembled therefrom without destroying the light tight film case, a third member 9b (Fig. 2 and page 2, lines 101 to 108) sealing the opening for the film receiving spool, and a film passage (Fig. 3) between the film receiving spool and the rolled film receiving chamber 6 formed by parts 1 and 2, said film passage being not exposed until said light tight film case has been destroyed. (CPX-6, SSL905-non-0043540). [Emphasis added]

213. In the same Office Action, concerning the rejection specific to claim 27, no arguments were made vis-a-vis the destructibility of the light tight case. The Examiner stated:

Claim 27 is rejected under 35 U.S.C. § 103 as being unpatentable over the references as applied to claim 31 above, and further in view of Crumrine. Crumrine shows a camera (Figs. 1 to 5) which has means 47 (Fig. 4) to prevent winding of film out of the film take-up on one side of lens 10 into the rolled film on the other side of the lens as recited in the last 4 lines of claim 27. To similarly provide the Prontor film package so that it is devoid of means for advancing the film from the take-up side to the loaded film side as suggested in Crumrine, if desired, would have been obvious to one of ordinary skill in the art having these references before him at the time the invention was made.

(CPX-6, Office Action of July, 23, 1990, SSL905-none-0043543-44).

214. There were no arguments related to destructibility advanced in connection with claim 27 in the further Amendment dated February 4, 1991. (CPX-6, SSL905-none-0043549).

215. In the Amendment After Final Rejection dated May 3, 1991, Fuji's patent attorney rewrote dependent claim 37 in independent form as claim 44, which did not include

any "must be destroyed" language and added new claim 46, which was the rewritten version of dependent claim 40, which depended originally from claim 31, and which did contain the "must be destroyed language". Claims 44 and 46 read:

44. A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, a separate empty light-tight film cartridge having a spool therein rotatable about an axis of rotation, said film cartridge being enclosed in said light-tight film case on one side of said lens, an unexposed rolled film with its one end retained on said spool in said film cartridge, said unexposed rolled film being disposed on the other side of said taking lens with its outermost turn in contact with said film case, said light-tight film case comprising a main case section which has a film cartridge receiving chamber with an opening at its bottom for removably receiving said film cartridge and a rolled film receiving chamber for receiving said rolled film, a rear case section which is securely fixed to the rear side of said main case section and cannot be disassembled therefrom, and a third member sealing said opening at the bottom of said film cartridge receiving chamber, said third member being disposed only on said one side of said lens in alignment with said axis and openable to expose said opening of said film cartridge receiving chamber so as to allow said film cartridge to be removed, said film package being devoid of means for advancing a film rolled on a said cartridge from said one side of said lens into a rolled configuration on said other side of said lens, wherein said third member is covered by an outer cover that cover that covers also at least a portion of said light-tight film case.

46 A lens-fitted photographic film package comprising a light-tight film case with a taking lens fitted thereto, a separate empty light-tight film cartridge having a spool therein rotatable about an axis of rotation, said film cartridge being enclosed in said light-tight film case on one side of said lens, an unexposed rolled film with its one end retained on said spool in said film cartridge, said unexposed rolled film being disposed turn in contact with said film case, said light-tight film case comprising a main case section which has a film cartridge receiving chamber with an opening at its bottom for removably receiving said film cartridge and a rolled film receiving chamber for receiving said rolled film, a rear case section which is securely fixed to the rear side of said main case section and cannot be disassembled therefrom, and a third member sealing said opening at the bottom of said film cartridge receiving chamber, said third member being disposed only on side one side of said lens in alignment with said axis and openable to expose said opening of said film cartridge receiving chamber so as to allow said film cartridge to be removed, and a film passage between said film cartridge receiving chamber

and said rolled film receiving chamber formed by parts of said main and rear case sections, said film passage being out exposed until said light-tight film case is destroyed, wherein said third member is covered by an outer that covers also at least a portion of said light-tight film case.

(CPX-6, SSL905-none-0043562).

216. Claim 44 was allowed and issued as claim 14. Claim 31 was allowed and issued as claim 16. (CPX-6, Notice of Allowability dated May 3, 1991, SSL905-none-0043577).

#### Infringement

217. Complainant's expert Bellows was supplied with samples of single use cameras of respondents. Bellows termed those samples as referenced samples. He also referred to the samples as reference specimens. (Bellows CX-725, Q&A 29; CX 750). The samples were identified by Bellows as follows:

- Type 1 - Miyako Model M-2 (Linha) - Exhibit CPX-160
- Type 2 - REI Photo Service (OptiColor) - Exhibit CPX-161
- Type 3 - Jazz Model DZ50 (Jazz) - Exhibit CPX-162
- Type 4 - Opticam (Opticolor) - Exhibit CPX- 163
- Type 5 - FastShot Outdoor (Fastshot) - Exhibit CPX-164
- Type 6 - Wedding Message Camera (PSI) - Exhibit CPX-165
- Type 7- FunPak (Dynatec) - Exhibit CPX-166
- Type 7A - Fun Pak with flash (Dynatec) - Exhibit CPX- 167
- Type 8 - Picture Place (Jazz) - Exhibit CPX-168

(Bellows CX-725, Q&A 29; CX-750). Bellows was given the following single use camera sold by the identified respondents:

#### Achiever:

- Achiever Ti01, without flash, Type 6 (variant in appearance only) - Exhibit CPX-170
- Achiever T201, with flash, Type 6 (variant in appearance only) - Exhibit CPX-171
- Achiever T203, with flash, Type 6 - Exhibit CPX-172

**Ad-Tek:**

Ad-Tek "Canisius College Alumni," with flash, Type 1 - Exhibit CPX-173

**Argus:**

Argus "Just Once," with flash, Type 4 - Exhibit CPX-174

Argus "Just Once," without flash, Type 8A (variant bezel, flash-type housing) - Exhibit CPX-175

Argus "Just Once," Type Undefined (features from both Type 8 and Type 4) - Exhibit CPX-176

Argus "Beach Camera," without flash, Type 5 - Exhibit CPX-177

Argus "Waterproof," without flash, Type 6 - Exhibit CPX-178

**Boecks:**

Boecks "35 mm Camera with Flash," with flash, Type 4 - Exhibit CPX-179

Boecks "Julia Sauer TLX," without flash, Type 4 - Exhibit CPX-180

Boecks "Zipcam," with flash, Type 4 - Exhibit CPX-181

**Boshi:**

Boshi "Take 1, Boshicolor," with flash, Type 2 - Exhibit CPX-182

Boshi "Boshi," with flash, Type Undefined (appearance of Type 5, internal supply spool as in Types 6 and above) - Exhibit CPX-183

**China Film:**

China Film F800, with flash, Type 2- Exhibit CPX-184

China Film F900, with flash, Type 3 - Exhibit CPX-185

China Film F1000, with flash, Type 4 - Exhibit CPX-186

China Film "Memories of Our Wedding (Solo)," with flash, Type 4 - Exhibit CPX-187

**Dynatec:**

Dynatec "FunPak," with flash, Type 4 - Exhibit CPX-188

Dynatec "FunPak," without flash, Type 4 - Exhibit CPX-189

Dynatec "FunPak," with flash, Type 7- Exhibit CPX-190

Dynatec "FunPak," with flash, Type 7A - Exhibit CPX-191

Dynatec "FunPak," with flash, Type 7A - Exhibit CPX-192

Dynatec "FunPak Outdoor," without flash, Type Undefined (features similar to Types 2 and 4) - Exhibit CPX-193

Fast Shot:

Fast Shot "Camera with Film and Flash," with flash, Type 1 - Exhibit CPX-194

Forcecam:

Forcecam "Force," with flash, Type 4 - Exhibit CPX-195

Haichi:

Haichi "Fast," without flash, Type Undefined - Exhibit CPX-196

Jazz:

Jazz "Jazz Model DZ50," with flash, Type 2 - Exhibit CPX-197

Jazz "Jazz Model DZ35," without flash, Type Undefined (features similar to Type 6) - Exhibit CPX-198

Jazz "Metro," with flash, Type 3 - Exhibit CPX-199

Jazz "Bell & Howell," with flash, Type 4 - Exhibit CPX-200

Jazz "CVS Picture Place," with flash, Type 8 - Exhibit CPX-201

Klikit:

Klikit "Kilkit," with flash, Type 4 - Exhibit CPX-202

Klikit "fuikit," without flash, Type 6 - Exhibit CPX-203

Linfa:

Linfa "Miyako Model M-2," with flash, Type 1 - Exhibit CPX-204

OptiColor:

OptiColor "One-Time, Fred Meyer," with flash, Type 2 - Exhibit CPX-205

OptiColor "REI," with flash, Type 2 - Exhibit CPX-206

OptiColor "Halloween Camera," with flash, Type 2 - Exhibit CPX-207

OptiColor "Opticam," with flash, Type 4 - Exhibit CPX-208

OptiColor "Seattle Film Works," with flash, Type 4 - Exhibit CPX-209

OptiColor "One-Time Underwater Camera," without flash, Type 6 - Exhibit CPX-210

Penmax:

Penmax "Top Shooter," with flash, Type 4 - Exhibit CPX-211

Penmax "Kingswood Day Camp," without flash, Type Undefined (features

similar to Type 5) - Exhibit CPX-212

**PhilmEx:**

PhilmEx "Aeroflot," with flash, Type 4 - Exhibit CPX-213

**PSI:**

PSI "Smile Time" with flash, Type 7A - Exhibit CPX-214

PSI "Smile Time" without flash, Type 7A - Exhibit CPX-215

**Rainbow:**

Rainbow "The Color Machine," with flash, Type 2 - Exhibit CPX-216

**Rino:**

Rino "AND," with flash, Type 4 - Exhibit CPX-217

**Sakar:**

Sakar "Sport Shot," with flash, Type 2 - Exhibit CPX-218

Sakar "Sport Shot," with flash, Type 2 - Exhibit CPX-219

Sakar "Sport Shot," without flash, Type Undefined (features similar to  
Types 2 and 4, no viewfinder lens) - Exhibit CPX-220

Sakar "Super Mario 64," with flash, Type 4 - Exhibit CPX-221

**T.D.A. Trading:**

TDA Trading "Sun Lite," without flash, Type 5 - Exhibit CPX-222

**Vantage:**

Vantage "Sharp Shot," without flash, Type Undefined (no visible film supply  
spool like Types 1 through 5, a rigid cassette closure like Type 8, otherwise appearance  
unlike any type) - Exhibit CPX-223

**Vivitar:**

Vivitar "Brites," with flash, Type 6 (with a bezel variant) - Exhibit CPX-224

Vivitar "Brites," with flash, Type 6 (with a bezel variant) - Exhibit CPX-225

Vivitar "Brites," without flash, Type 6 (with a bezel variant) - Exhibit CPX-226

(Bellows CX 725, Q30; CX 750).

Boshi

218. Jazz has four steady suppliers of LFFPs, viz. Peji, Ginfax, Boshi, and Vastfame, and has also given a spot order to Rino and an order to Mass Chance. (Lorenzini, Tr. at 2943).

219. Boshi is about 10 percent of Jazz's supply. (Lorenzini, Tr. at 2944).

220. Mr. Lorenzini Jazz's President has visited the Ginfax facility twice, the Peji facility once, and the Boshi facility once. (Lorenzini, Tr. at 2856).

221. Mr. Lorenzini and Mr. Burkhard went the Boshi factory and made a video recording, which was shot by Mr. Burkhard. The other two reloading facilities Mr. Lorenzini visited were not willing to allow a videotape to be made. (Lorenzini, Tr. at 2875-77).

222. The process of reloading done at the Boshi factory is shown in the videotape, which contains the index numbers in seconds on the screen, which are referenced below. (Lorenzini, Tr. at 2879; RJZPX 4).

223. At 13:14 on the video, shells are shown that have already been through an opening process in which most of the welds have been removed. (Lorenzini, Tr. at 2880).

224. At 21:93, a small screwdriver is used to take the front cover off to access the counter. (Lorenzini, Tr. at 2880).

225. At 49:11, a worker is shown with a razor blade in her hand. Mr. Lorenzini testified that he is not sure what she is doing at that point, but she is either working with the counter or completing the opening of the take-up spool area. (Lorenzini, Tr. at 2880).

226. At 110:43, the front covers are snapped back on. (Lorenzini, Tr. at 2880).

227. At 130:76, a washer is slipped under the back to raise the back so there is room. (Lorenzini, Tr. at 2881).

228. At 143:98, a rework station is shown. (Lorenzini, Tr. at 2881).

229. At 210:03, cleaning the inside and outside of the camera with air is shown. (Lorenzini, Tr. at 2882-83).

230. At 219:68, a worker applies electrical power to the capacitor and tests the flash. (Lorenzini, Tr. at 2883).

231. At 250:87, a clip is put on the exterior of the camera to give an orientation so the film is spooled correctly in the darkroom. (Lorenzini, Tr. at 2884).

232. At an additional station, an operator picks up the camera, takes out the washer, puts film into the camera, and uses a block to extend the tongue of the film so it will be of sufficient length to reach into the take-up spool. (Lorenzini, Tr. at 2885).

233. At 409:97, the film has already been loaded into the camera and the door has been closed, and an operator tapes each edge of the camera. (Lorenzini, Tr. at 2888).

234. At 436:31, extra film doors can be seen, which are used when cameras without film doors are involved. (Lorenzini, Tr. at 2889).

235. At 531:10, Lorenzini testified:

THE WITNESS: On this table, you will see actually two different implements that are used to help load the film or get the film from one chamber to another. What you see taped on the table, for lack of a better reference, I refer to them as fishhooks. Well, that fishhook is used to disengage the clutch on the gears in the rewind so it can be reverse wound when we put the film, the film gets wound in the chamber.

The item that you see in the little pink tray is a little clip that goes on -- that clips on to the end of the film that is in the small take-up chamber. The

purpose of that clip will be at the next step when it goes into the dark box, they will roll through an automatic drive, the film out of the cassette into the second chamber, that will be driven by the small thing that's in the pink tray engaging with the -- what do you call, drill spinner and it's able to spin backwards or counter-clockwise because this has disengaged the clutch.

236. At 602:82, an infrared video monitor of the dark box is shown, in which at the top a hand takes the camera to a little spinner that spins the film, and a second set of hands takes the spinning tool off of it. (Lorenzini, Tr. at 2891).

237. At 656:04, the batteries are placed in, and the fishhook and clip are removed. (Lorenzini, Tr. at 2891).

238. At a following step, a worker winds the flash, makes sure that the counter is set correctly, and flashes the flash to make sure the flash and the battery work. (Lorenzini, Tr. at 2892).

239. At 730:61, a worker is shown putting the decorative inner carton on the camera. (Lorenzini, Tr. at 2892-93).

240. At 753:20, another air brush is shown. (Lorenzini, Tr. at 2893).

241. At 823:07, a person at the top of the screen is shown putting the camera that now has with the inner box on it into a plastic sleeve. (Lorenzini, Tr. at 2893).

242. At 836:85, the plastic sleeve that was slipped over the camera in the previous frame is sealed around the camera. (Lorenzini, Tr. at 2893).

243. At 910:10, the outer, or the box that the consumer sees, box is put on the package. (Lorenzini, Tr. at 2894).

244. At 919:95, the final packing step is shown, with the worker preparing to place the product into the master cartons. (Lorenzini, Tr. at 2894).

245. At 925:26, an off line quality control (QC) check for at least the battery is shown. Mr. Lorenzini did not know what other things that the inspectors may have been checking. He testified that "[t]hey're probably checking the recycling time on the battery or the flasher." (Lorenzini, Tr. at 2895).

246. At 934:77, a table is shown where they are preparing the film to interface with the drive mechanism in the Fuji camera. Lorenzini testified:

the Fuji camera has a little cog drive and film as it comes from the manufacturer does not have a cog drive so what they have to do is . . . the word we use in the industry is crimp the film, they have to put a small crimp in it . . . .

At the top of the screen in front of the pink tray is just a little heater and it heats up these little crimp things. [An] operator picks those off of the little heat table, put[s] them into a small press, does two rolls at a time, and handles the little crimps with pliers because they're hot.

The second operator . . . then takes the little warm crimping tool out of the film and just puts it back on the heater and it recycles. There's a third person that sits at the front of the table that keeps introducing new film and taking the old film off the table. (Lorenzini, Tr. at 2895-96).

247. At 1011:65, a drill press breaks the welds that Fuji puts on these cameras to make them difficult to open. (Lorenzini, Tr. at 2896).

248. At 1032:99, the operator is operating a drill press, opening the film take-up door and then reattaching the cover to the front of the camera. (Lorenzini, Tr. at 2897).

249. At the Boshi factory, the front covers are removed from the cameras twice during the process. (Lorenzini, Tr. at 2981).

250. Lorenzini testified as to the Boshi video (Tr. at 2980 to 2983):

Q Will you go to 21:93. Actually why don't we play, continue to play the video, that's faster. Could we stop here at 24:82? I see on the table just above the end of the camera, in the hand of the worker, I see several black specs. Are those camera bodies, are those camera doors?

A I don't believe so.

Q Are they pieces of plastic that have fallen off during the process of removing the covers?

A I don't believe so. I have no idea what they are, other than they look like dirty spots to me.

Q How many times are the front covers removed from the cameras in this process?

A Twice.

Q And in each occasion, does the worker take care to release each of the many hooks separately?

A I think the worker tries to get the cover off as efficiently as they can. And I cannot testify to the care they take.

Q And is it also fair that the covers are separated from the bodies and are recounted at a later time but not necessarily the same body with the same cover?

A That's my observation, also.

Q And that's also true in the first separation of the bodies at --

A I'm not totally clear with that but the second one I agree.

Q Let's keep going. Could we stop here? And again, this work station has black spots also. Is that somebody going around with ink, is that your understanding or are they piece of plastic?

A I cannot testify just what they are.

JUDGE LUCKERN: We're at 50:48.

MR. ROSENTHAL: Keep going. Stop. Could we back up a little bit

to -- stop.

BY MR. ROSENTHAL:

Q At 56:50, we see the worker with what looks like a blade cutting something in the vicinity of the counter and shutter control mechanism; is that fair?

A It's also in the vicinity of the -- of the spool, the take up spool.

Q And on that side of the take up spool, isn't the advance wheel located? We're not looking at the door side.

A Yeah, we are looking at the -

Q At the advance wheel side; is that correct? Is that correct, sir?

A We're looking at the front side near the take up.

Q Take-up wheel. And do you know if there's a weld in that location?

A I do not know. You'll have to ask someone else.

JUDGE LUCKERN: And you're looking at 56:50.

MR. ROSENTHAL: 56:50.

BY MR. ROSENTHAL:

Q Could some stop or release be cut at this point in the process?

A During my prior testimony, I mentioned I did not know exactly what she was doing at this step, whether she was resetting the counter or trying to facilitate ease of opening with that cutting some weld. I testified I don't know exactly what she's doing.

Q Do you know how long this particular assembly line has been functioning at Boshi?

A No, I don't.

Q Do you know whether or not Boshi has other assembly lines?

A I believe this is the Boshi's only reloaded single-use camera line.

251. At the Boshi factory, the camera is cleaned with an air gun with the back still attached to the front cover and partially open by a washer. Lorenzini's understanding of this "whole air brush thing" is to bush the dust off of it, in and out." (Lorenzini, Tr. at 2984).

252. According to Mr. Lorenzini, he "wouldn't eat off the floors of the Boshi factory. (Lorenzini, Tr. at 2984).

253. Mr. Lorenzini is not sure when the step of resetting the frame counter, i.e. the dial that tells one what from one is on, performed in the Boshi factory. (Lorenzini, Tr. at 2985).

254. The Boshi factory applies black tape to the camera body to help light-tightness. (Lorenzini, Tr. at 2985).

255. The empty camera body RJZPX 2 has a piece of plastic broken off by the film door which would need tape to make it light-tight. (Lorenzini, Tr. at 2986).

256. One of the welds that is cut at the Boshi factory is the door to the film take-up chamber. (Lorenzini, Tr. at 2992).

257. Fuji's expert, Alfred Bellows viewed the videos taken in the Boshi factory that reloads empty one-time-use camera bodies for Jazz and others. (Bellows, CX-725 at Q&A 95, 96, 97).

258. Regarding the videotape produced by Respondent Jazz at the Boshi factory, Exhibit CPX-470, Bellows characterized the first step in the process, although some activities at the end of the tape in fact precedes the first activity shown, was the first worker (worker 1)

removing the empty single-use-camera body from a bulk shipping carton and placing it in a machine which appears to be grinding, sanding or milling down the Fuji Film logo on the cover surrounding the taking lens. In the second step, the next worker (worker 2) takes the empty single-use-camera body and uses a chisel-like blade in a hand press to cut the side weld next to the film canister receiving chamber. The next worker (worker 3) removes the front cover from the empty single-use-camera body in step 3, and then another worker (worker 4) takes the camera body without the front cover at this point and puts it in a hand press with a chisel-like blade which cuts the film door on the film receiving chamber step 4. The front cover is then put back on the empty one-time-use camera body in step 5, although no effort appears to be made to match covers with bodies. (Bellows, CX-725 at Q&A 99-101). The administrative law judge has reviewed the video (CPX-470) taken at the Boshi factory and finds that Bellows' characterization of the Boshi process accurate.

259. Bellows characterized that the following steps seemed to occur at a different part of the factory than the previously stated steps. Step 6 appears to be the next worker (worker 5) removing the front cover again by loosening the top side tab then the bottom side tab and then sliding the tool up underneath the cover by the flash unit on the top right corner of the one-time-use-camera body and forcing the front cover off of the body. The next worker (worker 6) takes some sort of slim tool which looks like a razor blade but may not be sharp and inserts the tool under the counter wheel and is either cutting or prying one of the mechanisms below the counter wheel step 7. It is unclear from the video what this worker is achieving, but it may involve resetting the cam on the frame counter wheel to permit resetting the counter. The next step (step 8) is the placement of the front cover back on the one-time-

use-camera body by worker 7. The rear cover is then pulled away from the main body at the corner near the advance wheel, with the rear cover still being partially held in place by two uncut welds. In step 9, a metal ring is then placed inside the film canister chamber holding the back cover apart from the middle body section by worker 8. A worker is next shown removing tape from previously remanufactured one-time-use camera bodies but the role of this step in the process is unclear, so that I will not count this worker or step. The next worker (worker 9) tests the flash unit by charging and discharging the flash in step 10. The next step, step 11, one sees a worker (worker 10) with some sort of fastening mechanism in front of her, this step is not shown on the video, but a similar looking fastening device appears on the case of the LFFP as it progresses further down the line. (Bellows, CX-725 at Q&A 102).

260. Bellows characterized that in the next step, step 12, the worker (worker 11) measures the leader of film against a block and then, in step 13, places the film into the one-time-use camera body. The worker then manipulates the leader into the gap between the middle and back sections in step 14, then pulls out the metal ring which is holding the body open in step 15. In step 16, worker 12 tapes the body of the LFFP with both cellophane and black electrical tape. At this stage they also adhere new film doors where they are not present, which is step 17. At this stage, in the next step, step 18, a worker is also seen clipping off the engaging tabs on the film canister film door. The next worker (worker 13) using a small metal hook tool and a piece of black electrical tape, performs step 19 and takes a small tool and inserts the hook of it in between the film wheel and the engaging pawl and then pulls the hook back and tapes it down along the back cover of the empty one-time-use camera body. Mr. Bellows believes that this is one of the three steps necessary in order to disengage the stopping

mechanism in order to reload film in the one-time-use camera body. (Bellows, CX-725 at Q&A 103).

261. Bellows characterized that the next stage is film loading. The film loading is done in a dark box with an infra-red camera showing what is occurring on a monitor. Before the camera is inserted into the black box, a spindle is inserted which engages the film in the film receiving chamber, in step 20; by worker 14. We are only shown a worker grabbing one of these spindles but not the actual insertion of the spindle and the engaging of the film leader. When the single-use-camera body is placed inside the dark box it is placed on a jig and pushed toward a machine which, in step 21, winds the film. The worker (worker 15) appears to turn the thumb wheel backward while the film is winding, which is step 22. The camera is then handed within the dark box to a second worker, worker 16 who in step 23 removes the spindle and the side clamp, step 24, and tapes the film receiving door shut in step 25. The hands of worker 17 are also visible on the video, facilitating the above steps. (Bellows, CX-725 at Q&A 104).

262. Bellows characterized that back in room light, in step 26, the next worker (worker 18) removes the fastening device, the taped tool, and inserts a battery. The next worker (worker 19) then tests the flash by charging the flash with the new battery in step 27 and shooting one frame with the lens covered with black cloth in step 28. Worker 20 then takes the camera and puts the cardboard inner covering on the loaded one-time-use camera body by placing the body within the cardboard, step 29, and affixing it with a hot glue gun, step 30. After the cardboard inner wrapper is placed on with hot glue, the entire body is then put in a cellophane wrapper in step 31 by worker 21, and sealed in step 32 by worker 22. The

now remanufactured one-time-use camera is then placed in an outer cardboard box in step 33, which box is also sealed with hot glue in step 34 by worker 23. (Bellows, CX-725 at Q&A 105).

263. Bellows characterized that in a preliminary step shows at the end of the video, is the alteration of the film canister which is performed by a group of three workers. The first (worker 24) prepares the canister spool for molding by placing a circular retaining ring around the circumference of the spool, step 35, so as to prevent deformation during the heat molding process. A next worker (worker 25) positions heated but loose dies which are used to mold the teeth to the inner circumference of the spool of the film cassette in step 36 so it can matingly engage with the teeth on the Fuji advance wheel. The heated dies are handled with pliers and placed into a tool which holds two film cassettes that have been equipped with metal retaining rings previously mentioned. The hot dies are forced by the tool into contact with the end of the spool of the film canister and using heat and pressure mold the aforementioned teeth into the spool of the film cassette. The molded film cassettes are then removed, allowed to cool for a few seconds, and passed to a third worker (worker 26) who removes the dies and the retaining rings from the film cassettes in step 37. The cassettes, now modified to fit remanufactured Fuji cameras, are now ready for loading into the camera in the process I just described. The tape then ends. (Bellows, CX-725 at Q&A 106).

#### Peji

264. The remanufacturing procedure at the Peji factory is described by Mr. Lorenzini and includes the following steps:

- a. The Quicksnap is cut open at three points with some type of tool.

(Lorenzini, Tr. at 2992:23-2993:17).

b. The camera is put into some type of mechanical fixture, a lever is pulled and the plastic is cut so that the back can be opened. (Lorenzini, Tr. at 2994:3-7).

c. After the camera is cut open in the fixture, factory workers check the flash, the kicker, the shutter and the film advance mechanism. (Lorenzini, Tr. at 2995:2-10). The check the flash, Peji inserts a battery into the battery compartment and presses the flash button and then the shutter to see if the flash fires. (Lorenzini, Tr. at 2995:17-23). After checking the flash, a cleaning step is performed and then the camera is sent to a loading area. (Lorenzini, Tr. at 2995-21-2996:4).

d. Loading the film takes place in a dark box. (Lorenzini, Tr. at 2996:10-17). Within the dark box, film is pulled from the canister into a roll, then the canister and film roll and placed back in the camera and a rubber band is used to hold the back cover so that tape can be put on. (Lorenzini, Tr. at 2997:5-17).

265. Jazz admits that steps a, b, c, and d in the preceding finding "accurately and fully describes the process utilized by the Peji factory in reloading LFFPs. (JORCFF 2263).

266. In Ginfax, also described by Mr. Lorenzini the first step in to cut open the camera, then there is checking of the flash and film advance mechanism. Film is loaded in a dark box, in which a motor pulls the film out of the canister into a roll and then the roll and canister are placed into respective portions of the camera. (Lorenzini, Tr. at 3000:7-3001:12).

Jazz admits that those steps accurately describes the process used by Ginfax in reloading LFFPs. (See JORCFF 2264).

San Harbor

267. OptiColor's current sole supplier of recycled single-use cameras is San Harbor. (Lass, Tr. at 1866).

268. Jazz obtains recycled single-use cameras from San Harbor. (Lorenzini, Tr. at 2943).

269. Argus obtains its recycled single-use cameras from for Vastfame. (Pearson, Tr. at 3438). Complainant argued that San Harbor is another name for Vastfame (CFF 2212).

270. San Harbor is located in China. (Lass, Tr. at 1866).

271. As to what San Harbor "recycles" Lass testified:

Q Does Opticolor expect that its supplier will use every Fuji camera body that it receives in the reconditioning?

A No, that is not possible.

Q What is the expectation and the criteria in that regard?

A The expectation, somewhere in the neighborhood of 80 to 85 percent, I believe -- neighborhood of 80 to 85 percent are used. This is a floating number. Not all of the cameras that come through the recycler are able to be reused.

(Lass, Tr. at 1882-1883).

272. In a videotaped deposition in Hong Kong (CPX-469) Corinna Linn testified that she is general manager of a factory in Xiamen, Fujian, China. The factory in Xiamen Xianjiang Plasticity Company limited. As general manager she is responsible for all the operational matters in the factory. (ROCX-52 at 15, 22).

273. San Harbor is the parent company of Xianjing Id. at 17. The "reconditioning" was started in the China plant in 1994 Id. at 50. When San Harbor receives cameras, the film door has been opened to remove the film and the cardboard packing has been removed. Some of them also don't have the film door. Sometimes when the film door is opened, sometimes the hook will be missing as well. Id. at 53. In deposition Lin testified that upon receiving the cameras, "we first sort them and to separate different models." When asked how many approximately are damaged at the "initial sorting", Lin in deposition testified that "[w]e don't usually count them or have a record of them, but generally it is about 5 she was not sure whether through here own knowledge of the production process, she could estimate what percentage was determined to be unusable at the initial inspection and sorting stage. Id. at 57. Fuji was barred from inspecting San Harbor's factory in China. Also Ms. Linn did not appear at the hearing so her credibility could not be examined.

274. Fuji USA obtains empty one-time-use camera bodies directly from photofinishing laboratories across the United States. The photofinishers are given a large pre-addressed box into which to toss the empty shells. (Soares, CX-715, Q&A 5). The spent shells are shipped in these large boxes, called gaylords, from the photofinishers or from Fuji warehousing facilities across the country. (Soares, CX-715, Q&A 6).

275. Photo 1 of CX-718 accurately shows what a gaylord looks like. A substantial percentage of the empty bodies received are severely damaged as shown in photograph 2 of CX-718. When the shells arrive at Fuji, they are literally dumped onto a table for sorting as shown in photograph 3 of CX-718. (Soares, CX-715, Q&A 8).

276. As shown in Exhibit CX-718, the shells are separated in Carlstadt by original

manufacturer. Workers at the sorting facility separate Fuji bodies from Kodak and Konica bodies. The Kodak bodies are returned to Kodak as part of an exchange program. There is also a box for scrap where empty film canisters, caps, broken shells and various other trash photofinishers typically toss into the box with the empty bodies that is sent to Fuji as shown in photograph 4 of CX-718. This type of debris exists in most gaylords, evidencing that the photofinishers use the same gaylords in which they collect shells to throw other items they view as trash. Any previously remanufactured empty body shells will be left on the conveyor belt and end up in the scrap pile. (Soares, CX-715, Q&A 9).

277. The shells which are received at Carlstadt have generally been severely "disrespected" by the photofinishers. Many times the shells are broken or damaged, or completely separated. Because Fuji's objective is to retrieve the flash unit, any shell whose front cover has been damaged will be sent to the scrap pile. (Soares, CX-715, Q&A 12).

278. OptiColor presented one live witness at the hearing. The witness was Mickey Lass, president of OptiColor, Inc. (Tr. at 1863). OptiColor sells both "recycled and new cameras and within that category it sells a flash, nonflash and underwater model also. The "recycling" Lass referred to is a "reconditioning process". Approximately 80% of last fiscal year's camera sales were generated by the "recycled product" with the remaining 20% from the never version cameras. Achiever is OptiColor's supplier of the newly manufacturing single-use camera while the current supplier of the recycled cameras is San Harbor (Tr. at 1866). OptiColor is a wholly owned subsidiary of Seattle Film Works, Inc. (Tr. at 1867).

279. Lass testified (Tr. at 2060 to 2061):

Q So someone at San Harbor creates a record, the Lims obtain the

information from that record, they told Rob Brammer, he told you and then you tell us in court, is that how it works?

A That's fair, yes.

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286. Mr. Brammer has not visited San Harbor's new factory in Xiamen. (ROCX-52, CX-326).

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Changzhou

292. Lee Li Yu is employed by China Products, Inc. and is President of that company. (RDYNA 32 at 1).

293. China Products is an independent broker or sourcing agent which helps direct located factories inside China which can produce any number of needed goods (RDYNA 32 at 1).

294. China Products has assisted Dynatec in outsourcing a variety of products, and specifically with relationship to this action Dynatec asked China Products back in 1996 to source or locate a factory that could provide reloaded single use cameras. China Products was successful in finding a factory which could produce reloaded single use cameras for Dynatec. (R-DYNA 32 at 2).

295. Dynatec's single use cameras which are sold as FunPak cameras result from the reloading of several different types of single use cameras. First are the cameras which were

originally made by Eastman Kodak which were originally called either Kodak FunSaver 35 with Flash or Kodak Max which is also called the Kodak FunSaver pocket. Additionally, some Dynatec FunPack cameras result from the reloading of Fuji bodies of both flash and non-flash models. (R-DYNA 32 at 2).

296. Initially all of the cameras both flash and non-flash which were made for Dynatec resulted from the reloading of previously used one-time use cameras, however, there was a time prior to the initiation of this action where, unbeknownst to either Yu or Dynatec, the non-flash from the reloading of previously used one-time used cameras, however, there was a time prior to the initiation of this action where, unbeknownst to either me or Dynatec, the non-flash or outdoor models of FunPak cameras were made from newly manufactured shells and parts instead of from the reloading of previously used cameras. After this action began and Dynatec became aware that its outdoor cameras were resulting from newly-manufactured shells, Dynatec requested the factory to only provide it with camera which were reloaded. (R-DYNA 32 at 2, 3).

297. Yu visited the Chinese factory that provider reloaded single use cameras to Dynatec many times over the past several years and have had an opportunity to see each of the different models of cameras reloaded. (R-DYNA-32 at 3).

298. Referring to CPX-190 which was identified as a Dynatec reloaded camera reloaded from a Kodak product. Yu described the reloading process used by the Changzhou supplier in reloading CPX-190 on behalf of Dynatec as follows. (Tr. at 3216 to 3226):

A Sure. The first will be remove the cardboard paper on this cover, and taking off the battery, if there's one attached to; then open the back, the back panel. If there's a side panel attached to, most of the time the

photoprocessor took them out because they need to take the cartridge film, cartridge out of this -- out of this -- out of this cavity.

So if there's a side panel on them, first remove the side panel. If there's no side panel attached to, just remove the back cover. After that, adjust the film, film counter to the -- sorry -- then after that we replace the winding wheel, and if it's originally from Kodak. If it's a used one, we don't need to replace it.

Now, after that we reset the counter to the proper number.

Q Now, at some point in this process you also remove the battery; is that correct?

A The battery was removed after the cardboard cover was removed.

\* \* \*

Q How is it then that you accomplished the removal of the back panel?

A Basically there are four latches on each side of -- on each side of the back panel; and also there is latches that on the bottom, just unlatch them and open them up.

Q Then you described a step for removal of the battery for the flash cameras. What is the next step in the procedure that is incorporated by the Changzhou supplier?

A You mean the Max?

Q For reloading this particular camera shell, that is CPX-190.

A You mean after you unlatch them or after you remove the battery?

Q After you unlatch and remove the back panel.

A Oh, yeah. After you open the back panel, the procedure will be replace the winding wheel, then adjust the counter. After that --

Q When you say "the counter," what counter is that?

A It's a white wheel, white wheel film counter, has numbers on

them.

\* \* \*

Q What is the purpose for the film counter, Mr. Yu?

A The film counter -

\* \* \*

THE WITNESS: Film counter is used to count how many exposures was taken.

BY MR. LAYCOCK:

Q What then is the next step?

A The next step will be the winding the unexposed film from the canister on to a plastic spindle. After -- after winding all the unexposed film on to that plastic spindle, the spindle is full of film, and then put both canister and the spindle back to the -- back to the respective cavities.

\* \* \*

Q What's the next step in the process used to reload the CPX-190 exhibit?

A After that, put back the back panel, then insert the battery, the new battery on to the camera; apply the -- apply the Dynatec cardboard cover on it, and then it is done.

\* \* \*

Q Are these the steps that you testified that you observed being practiced by the Changzhou Company?

A Yes.

Q And is it your understanding that these are the steps that are always followed for the reloading of this particular camera shell on behalf of Dynatec?

A Yes.

Q I'd like you to now take before you Exhibit RPDYNA 19.

A I have RPDYNA 19 in front of me.

\* \* \*

Q Do you recognize RPDYNA 19 as a Dynatec Fun Pak camera with flash?

A Yes.

Q And are you able to identify the camera shell that has been reloaded to result in the Fun Pak camera with flash?

A Yes.

Q What is it?

A It is the loaded with the Kodak Max shell with the Dynatec package.

Q Would you please describe for the Court the process steps followed by the Changzhou supplier in preparing this camera on behalf of Dynatec?

A Sure. The process -- the process will be first remove the -- whatever cardboard cover on the shell, and open the back panel by unlatching the four latches, two latches on each side as well as the two latches on the top, one is on top of on the bottom, the opening, and open the back panel and take out the batteries in it.

After that, replace the winding wheel and reset the film counter. After that it will be, you know, winding unexposed film from canister on to a spindle.

Once the spindle is full of film and put both canister and the film, the spindle with film back to respective concavities. And after that, insert a new battery, close the back panel. And apply the -- apply the Dynatec cover on them and it's done.

Q The procedural steps that you have just described, are those the same steps which you have observed and learned are a part of the process incorporated by the Changzhou Company in preparing this particular camera?

A Yes.

Q Thank you. I'd like you to now take before you Exhibits RPDYNA 4 and RPDYNA 5.

A I have RPDYNA 4 and 5 here.

Q Are these the same exhibits that you identified as being Dynatec Fun Pak cameras made from Fuji shells?

A Yes.

Q Is the process for reloading each of the exhibits RPDYNA 4 and 5 similar?

A Similar except the outdoor does not have a flash unit.

Q Would you please describe the process incorporated by the Changzhou Camera Company in preparing these particular cameras on behalf of Dynatec?

A Sure. The procedure of reloading the Dynatec flash camera with Fuji recycled Fuji shell are the same as the Kodak one, remove the cardboard box in this step. And then remove the battery at the bottom, and then open the -- open the front cover by unlatching the latches on both side and top and bottom, open the front cover, and taking off the flash unit, then taking off the shutter, the mechanical unit what we call the shutter mechanism.

And after that, the factory uses a cutter to cut the bottom cap of film supplying chamber.

\* \* \*

Q How is the cutting procedural step accomplished, Mr. Yu?

A They have a tool sitting on the table and insert the camera in and there's a cutter from top and goes down, and cuts that particular part, cutting -- cutting it in half so the bottom is still connected to the body itself.

Q And what is it that is cut, Mr. Yu?

A They're cutting the bottom cap, bottom cap of the film, what Fuji

calls the film supply chamber.

Q Would you please continue in your description of the procedural steps used by the Changzhou Company in preparing particular cameras.

A Sure. After it's open, they use -- the factory uses a flexible tape, like a leader attached to the end of the unexposed film. And then winding the film back into the canister only leaves that tape out, protruding out; then insert that -- insert that tape into the film take-up chamber, and then also from that chamber into that channel where the shutter mechanism sits there.

And after that, they insert a whole canister into that film take-up chamber. Then pull the tape, same -- pull the tape and the film out of that canister. Once it's pulling out and remove that tape, and then fit the fitted film into that -- into that film supply chamber, then using a winding tool, stick into the opening part of -- opening bottom part of the film supply chamber and winding the film into that chamber.

Q Is there a film counter in the RPDYNA Exhibits 4 and 5?

\* \* \*

THE WITNESS: Yes. There is a film counter.

Before we insert the -- you know, before we insert, put that film counter back, the shutter mechanism back, we adjust, the factory is readjusting the film counter.

BY MR. LAYCOCK:

Q So that is -- is that an additional procedural step followed in the preparation of these cameras?

A Yes, it is, it's an additional one.

Once the film was winding into that film supply chamber, it's sealed, the bottom, the bottom cap of the film supply chamber where it was cut, and we put back the film -- put back the shutter mechanism with a counter adjusted to the proper number.

And then reattach the flash unit, after that and then they will put the cover, front panel back to the -- to the place, and insert the -- insert a new battery and put a cap on top of -- on the top of the lens so to cover the logo.

And once that is done, will apply the cardboard paper, Dynatec's package on to the camera and the film.

Q Are those the procedural steps that are always followed by the Changzhou Company in preparation of the Fuji shells?

A Yes.

299. Yu testified that he has personally disassembled and reassembled the different modes of camera skills according to the processes employed by the Changzhou Camera Co. (R-DYNA-34).

300. Yu testified (R-DYNA-34):

10. Based on my personal observation of the reloading procedures employed by the Changzhou Camera Co., discussions with Changzhou Camera Co. personnel, as well as my own disassembly and reassembly of the various cameras according to the procedures employed by the Changzhou Camera Co., I testify that the steps for reloading the three types of reloaded camera shells referred to paragraph 7 are as described in paragraphs 11 to 16.

11. For the Kodak FUNSAVER 35 WITH FLASH, Exhibit A [attached to R-DYNA-34] provides a diagram of the camera with its significant parts disassembled. The basic procedure for reloading this camera is as follows:

Step 1. Removal of the battery and cardboard cover.

Step 2. Removal of the back panel 1, which is held to the main body 2 by four extruding pins, two of which are shown as 3, 4 (the side panel 5 has already been removed by the photo finisher)

Step 3. Resetting the film counter to show the proper number of film exposures which will be loaded into the camera and

replacement of the winding wheel.

Step 4. Winding unexposed film from a film canister is wound onto the plastic spindle 6 and the spindle, now full of film, and the film canister are repositioned back into their respective cavities.

Step 5. The back panel 1 and side film panel 5 are reattached to the main body 2 and a new battery is inserted.

Step 6. Dynatec Fun Pack cover applied.

12. Where the side panel 5 of the camera shell has been lost in shipment, or is otherwise unusable, a new side panel is molded on site by Changzhou Camera Co.

13. The winding wheels on the Kodak cameras are typically replaced with winding wheels compatible with standard 35mm film cartridges purchased by Chanzhou Camera Co. although it is possible to reload used Kodak film canisters with unexposed film, relabel the canister and thereby eliminate the need to replace the winding wheel. A true and correct copy of a photograph of a Kodak 35mm film cartridge and Kodak winding wheel is attached as Exhibit B [attached to R-DYNA-34].

14. For the KODAK MAX, or Kodak FUNSAVER POCKET, Exhibit C provides a diagram of a version of said camera which depicts the significant part of the camera disassembled. The basic procedure for reloading this camera is as follows.

Step 1. Removal of Kodak labeling.

Step 2. Removal of the back panel 18 from the main body 12 by unlatching the four hooks 30 which hold the back panel to the front panel or casing portion.

Step 3. Removal of the battery for flash cameras only.

Step 4. Resetting the film counter (not shown) to

show the proper number of film exposures which will be loaded into the camera and replacement of the winding wheel.

- Step 5. Winding unexposed film from a film canister is wound onto the plastic spindle (also not shown) and the spindle, now full of film, and the film canister are repositioned back into the respective cavities.
- Step 6. Replacement of the battery for flash cameras only.
- Step 7. The back panel 18 is reattached to the main body 12 and Dynatec Fun Pak labeling is applied.
15. On both models of Kodak cameras, no parts need be broken during the reloading process.
16. For the typical Fuji cameras, Exhibit D [attached to R-DNYA-34] provides Figures 2 and 3 from United States Patent No. 5,436,685 ("the '685 patent") which depict a version of a Fuji camera with its significant parts disassembled. The basic procedure for reloading this camera is as follows. The bold numbers in the following description correspond to the numbers in Figures 2 and 3 of the '685 patent and Exhibits E-O include photographs of the actual process employed for the reloading of this camera.
- Step 1. Removal of the battery for flash cameras only and cardboard cover. Exhibit E [attached to R-DNYA-34].
- Step 2. Removal of the front cover 21. Exhibit F [attached to R-DYNA-34].
- Step 3. Removal of the flash circuitry 26 and what Fuji calls the mechanical or phototaking unit 25. Exhibits G and H [attached to R-DYNA-34].

- Step 4. Opening what Fuji calls the film supplying chamber 42 by cutting the ultrasonic weld which seals a cap to the bottom of the film supplying chamber. Exhibit I.
- Step 5. Resetting the film counter. Exhibit [attached to R-DYNA-34].
- Step 6. Attaching a piece of tape to the end of the unexposed film protruding out from the film canister, winding the unexposed film back into the film canister which leaves only the flexible tape extending out from the film canister, inserting the tape into what Fuji calls the film take-up chamber 43 and then inserting the film canister into the film take-up chamber. Exhibit K [attached to R-DYNA-34].
- Step 7. Pulling the film out of the film canister with the attached tape, removing the tape from the film and feeding the film from the film canister into the film supplying chamber 42. Exhibit I [attached to R-DYNA-34].
- Step 8. Closing and sealing the cap under the film supplying chamber.
- Step 9. Reintroduction of the mechanical or photo-taking unit 25 and flash circuitry 26 to the main body. Exhibits M and N [attached to R-DNYA-34]
- Step 10. Reattaching the front cover 21 (Exhibit Q [attached to R-DYNA-34]).
- Step 9. Application of the Dynatec Fun Pak cover.
- 17. The winding wheel on Fuji's cameras is not typically replaced in the Fuji cameras.
- 18. The most common repair of the Fuji camera bodies that is

undertaken is the replacement of the cap below the what Fuji calls the film take-up chamber with a newly molded cap.

19. No repairs costing over \$0.20 in new parts is ever made. Cameras not subject to repair are simply discarded.
20. The Changzhou Camera Co. is now supply Dynatec with both flash and nonflash Fun Pak cameras made only from reloaded camera bodies.

301. At the hearing Yu testified that paragraphs 11, 14 and 16 of RDYNA-34 accurately described the process steps incorporated by the Changzhou factory in their reloading process for the Kodak Fun Saver 35 camera with flash. (Tr. at 3241).

302. Yu has been at the Changzhou factory more than ten times. (Tr. at 3248).

303. Yu's October 1998 visit to the Changzhou factory basically reassured the accuracy of the steps set forth in R-DYNA-34 which was executed on July 29, 1998. (Tr. at 3249).

304. Yu in his October 1998 visit to the Changzhou facility reassured the accuracy of the steps in R-DYNA-34. In that visit he did learn some minor details such as the tool used to rewind the film. (Tr. at 3250).

305. Yu testified that the tool used to rewind the film was four or five inches long, that it is a crank; that it is a manual mechanical device; that the tool is used only for Fuji shell and not the Kodak Max shell. (Tr. at 3249-50).

306. Yu testified that the actual physical winding of the film performed when loading a Kodak Max shell at the Changzhou facility is done by the worker winding it by hand. He described the procedure as follows. (Tr. at 3251 to 3252):

Q How is the actual physical winding of the film performed when

loading a Kodak Max shell?

A The workers winding them by hand. And if you want, I can describe the procedure.

Q Yes, please.

A First, you know, put a tape to the end of the unexposure film and stick the tape on to the plastic spindle.

Q Which plastic spindle is that?

A The plastic spindle used by the factory.

Q Is this a newly made piece that fits into the camera?

A No, it's -- some are new; some are recycled.

Q When they are recycled, is that because there is a spool already contained in the shell of the Kodak Max camera?

A Yes.

Q And when it has to be inserted new, is that because the spool was lost during the processing of the shell?

A The -- some of the films that they're using are basically film pancakes so basically they have to find a new spool.

Q Well, if the spool is already in the camera, why would they need to add a spool, just because it's pancake film?

A No, because the -- sometimes the spool does not work very well so you replace them.

Q And where do these replacement spools get manufactured?

A I don't know, I don't have -

Q Does the factory make them?

A No, they don't.

Q They're not molded at the factory?

A No.

307. Yu has no idea what percentage of the Kodak Max shells are made at the Changzhou factory utilize newly molded spools. (Tr. at 3252). There is a spool in the Kodak Fun Saver camera when the shell is received at the factory before the spool is reloaded. (Tr. at 3252-53).

308. With respect to operations at the Changzhou factory, Yu testified (Tr. at 3254 to 3257):

Q Are you aware of any shells of Kodak Fun Saver LFFPs that arrive at the Changzhou factory without the spool?

A No.

Q Do you know if there are molding machines at the Changzhou factory for molding spools for the Kodak Fun Saver shell?

A No.

Q Do you know if the Changzhou factory purchases new spools to use in reloading the Kodak Fun Saver?

A I know they replace some of them.

Q And do you know where they get them?

A No, I don't.

Q If they replace them, isn't it true that they have to be a newly manufactured part, Mr. Yu?

A Not necessarily.

Q Where would they come from?

A There are a lot of photo shops all over the places that have spools,

you can buy them.

Q So the spool that is used to wind the film in a Kodak Fun Saver camera is a commercially available product?

MR. GRIFFIN: Objection, mischaracterization of his testimony.

JUDGE LUCKERN: Overruled.

THE WITNESS: I should say you can, you can get them.

BY MR. DECARLO:

Q And where can you get them, Mr. Yu? I believe you testified that you can get them at photo shops all over the place. Can you identify one in the greater metropolitan area of this city where you get with a spool for a Kodak Fun Saver?

A I'm talking about a factory in China.

Q So those are the photo shops all over the place that you were referring to earlier, there's the photo shops in China?

A Correct.

Q What about in the United States?

A I haven't done the research. I cannot answer that question.

Q You mentioned three factors earlier in connection with your knowledge about the Changzhou processes, your observations; is that correct?

A Correct.

Q Demonstrations given to you by the Changzhou employees, is that the second factor?

A Correct.

Q And then you said your personal experience, was that correct?

A Correct.

Q Now, you have personal experience loading cameras at the Changzhou factory, you personally?

A I have experience of loading the factor -- loading the cameras, several places.

Q And did you load them at the factory, did you -- strike that.

Did you participate in the assembly of cameras at the Changzhou factory?

A I did not work -- I did not actually working in an assembly line, but I did reassemble or disassemble the cameras at the factory.

Q Which kind of single-use camera did you reload?

A All three of them.

Q When was that?

A Kodak Fun Saver, Max and the Fuji.

Q And when was that?

A Several times, including my trips in May.

Q Did anyone accompany you on your trip in May?

A I'm sorry, say again.

Q Did anyone accompany you -

JUDGE LUCKERN: "Did anyone accompany you on your trip in May?"

THE WITNESS: Yeah, I was with Mr. Gledhill.

BY MR. DECARLO:

Q Were you present during any videotaping at the factory?

A At the time Mr. Gledhill did the videotape the loading procedures.

Q Now, when you said your personal experience, was that done at the direction of someone at the factory, were you being taught by someone at the factory?

A No, after the -- observations and the demonstrations, I did it by myself just to reassure the procedures were correct.

Q So you were validating that the procedures undertaken by the Changzhou factory were the correct procedures?

A Yes.

309. Yu did not observe the assembly line running the day in May 1998 when Yu visited the Changzhou factory with Gledhill. In May there were no assembly line running because at the time there were no purchase order placed. (Tr. at 3259).

310. The Gledhill videotape (CPX-407) discloses a "bench" demonstration.

311. Some steps performed at the Changzhou factory were performed in a darkroom and those steps were demonstrated to Yu outside the darkroom so that one could understand what actually takes place in the dark. (Tr. at 3260).

312. Yu testified that he wrote R-DYNA-34 (Tr. at 3269, 3270).

313. Regarding R-DNYA-34, Yu testified (Tr. at 3269 to 3274):

JUDGE LUCKERN: Let me ask you this: The very last paragraph, is something that you're aware of in your declaration, I see the very last paragraph: I hereby declare that all statements made herein are my own knowledge are true, et cetera, et cetera, where did you -- how did you know about that statement? I'm looking -- look at the declaration, this is 34, and the very, the very fifth page in the very last paragraph, is this something that you -- I don't know -- are you a lawyer, sir?

THE WITNESS: No, I'm not, but I had some kind of draft that, you know, previously so I just copied that format.

JUDGE LUCKERN: Where did you get the draft?

Where did you get the draft?

THE WITNESS: Because I have done this several 13 times.

JUDGE LUCKERN: You've done it several times?

THE WITNESS: Yes, from my previous experience.

JUDGE LUCKERN: Are you through with your questioning?

BY MR. DECARLO:

Q Could you describe the previous proceedings wherein you created declarations of this type?

A Could you explain to me again?

MR. DECARLO: Let's move on.

JUDGE LUCKERN: Let me just -- I asked you where did you get the draft, where did you get did draft and you, your testimony is because I have done this several times.

You've done it several times? And then you've said it yes, from my previous experience. That's the way you testified and the question is: Could you describe what this previous experience is or, you know, the past that you have just testified to. Sure.

THE WITNESS: I had one incident that's back several years ago, we did -- we did some kind of product for another company and they were in court because of the dispute on the patent in issue. So they, you know, they asked me to do the witness, that's how I got acquainted with this kind of wording.

BY MR. DECARLO:

Q Could you describe for me how you wrote the information on the first page, starting from the top up until it says the word "declaration"?

A You mean where did I get this?

Q Uh-huh.

A I got it from the attorney.

Q Which attorney?

A Mr. Griffin.

Q Was he your attorney at that time?

A No, no. I mean, he's not my attorney but it's the format of this thing, he asked me to write down on my declaration. Asked me, you know, what is the format.

Q And what did you do after you made your pencil and paper draft and sent it -- you wrote out -- I'm sorry, pen and paper and you didn't review that with any attorney at that point you said, correct?

A No, I typed it into the computer, finished.

Q So you typed it all in yourself?

A Correct.

Q And then after you typed it all in, did you print 8 it out?

A I did.

Q And then you signed it?

A Right.

Q And then did you attach the exhibits?

A The exhibits, some of them as far as the photographs, I did not from the videotape. I have to rely on the attorney to copy them from the videotape.

Q Which attorney was that?

A Mr. Griffin.

Q What did Mr. Griffin give you?

A He gave me this pictures downloaded from 20 videotape.

Q What videotape is that?

A The tape that you have saw.

Q The tape that you made with Mr. Gledhill?

A Correct.

Q Did you ask Mr. Griffin what images he should somehow capture from this video?

A Basically supporting my steps, my declaration, that's whatever picture needs.

Q So the pictures were put on it after you wrote it; is that what you are saying?

A I don't know when he made a copy of the downloaded the video, so but, you know, I finished it, I got -- I finished the drafting and then I got the pictures, put them together.

JUDGE LUCKERN: Let me ask you this: Just as an example, for example on paragraph 13 of this exhibit, would you turn to paragraph 13 of this exhibit? And that's on page 3 of this exhibit.

THE WITNESS: Yes.

JUDGE LUCKERN: And would you read to yourself paragraph 13?

THE WITNESS: You want me to?

JUDGE LUCKERN: Just read to yourself, to familiarize yourself with it. Now my question is, you end up on this paragraph 13 you say: A true and correct copy of a photograph of a Kodak 35 millimeter film cartridge and Kodak winding wheel is attached as Exhibit B.

Now, are those your words and this is what you put in to it and/or is this -- did these words come from somebody else or what?

THE WITNESS: These are my words.

JUDGE LUCKERN: And you had identified these as Exhibits B, C, D, E, on your own; is that what you are telling me now? Whatever B, I mean there's a lot of exhibits here but these are the exhibits that you put on it on your own. You are under oath now, sir.

THE WITNESS: Yes, uh-huh.

JUDGE LUCKERN: All right. That's what you say. Go ahead, Mr. DeCarlo.

BY MR. DECARLO:

Q You have the declaration before you, could you turn to Exhibit A?

A Yes.

Q Where did you obtain that sketch, did you make it yourself?

A No, actually this is the -- the documents I guess, about this suit, court document, I should say the plaintiff or what should I say, I require -- asking a copy of the documents, the picture from the attorney.

314. Yu did see the videotape that was made by Mr. Gledhill at the Changzhou factory which was a demonstration of the reloading of a Fuji camera. (Tr. at 3291, 3292).

315. Yu recalls no demonstration of a reloading of a Kodak camera. (Tr. at 3292).

316. Yu with respect to the videotape made by Mr. Gledhill at the Changzhou factory testified (Tr. at 3293, line 13, 3294, line 8):

Q How would one viewing that videotape without sound obtain an understanding of the loading operations of the Kodak camera that were being described by the woman in the video?

A As I said, my observation is not solely based on the videotape, of the deposition from the videotape.

Q Well, I'm speaking about a person other than you who was actually there, how would a person like me watching the videotape who wasn't there obtain an understanding of the reloading of the Kodak camera from watching the videotape without sound?

MR. LAYCOCK: Your Honor, this calls for speculation.

JUDGE LUCKERN: I'm going to overrule the objection,

overrule the objection. You can have redirect, the objection is overruled.

THE WITNESS: No, you cannot.

MR. DECARLO: Was there an answer?

JUDGE LUCKERN: He said, "no, you cannot," I thought is that what you said, Mr. Yu?

THE WITNESS: Yes.

Mass Chance

317. On September 1, 1998 Lisa A. Jacob and David Sife attorneys with complainant's counsel along with James Tuttle, counsel for China Film and Kelvin Chan, Manager of Purchasing and Retailing of the{ } Factory, Clement Lam of the Hong Kong office of the law firm of Linklaters & Paine, Jason Zhang, an attorney admitted to practice in the People's Republic of China, as well as a videographer and his assistant from Smith Bernal (a Hong Kong court reporter service), traveled to Shenzhen, China in order to visit the{ } Factory. (Jacob CX-770, at 1).

318. Based on discovery responses to date and my observations while at the{ } Factory, that factory is supplying remanufactured one-time-use cameras to at least the following respondents:

Boecks Camera LLC  
China Film Equipment Corp.  
Jazz Photo Corp.  
P.S.I. Industries, Inc.  
Vantage Sales, Inc.

Both in deposition and at its plant inspection, { } Factory representatives refused to identify their customers or to confirm that the foregoing were customers. (Ex. 1, K. Chan

Dep. at pp. 15-18; 70-72). (CX-770 at 2).

319. On September 1, 1998 Ms. Jacob and Mr. Sifre were informed by Mr. Tuttle that there were actually two assembly lines at work reloading empty Kodak one-time-use bodies and that they would be allowed to film one of the assembly lines but not the other because in the other a product was being made for a client other than China Film. Thereafter they went to the second floor of the factory building where an approximately one half of the manufacturing process, up to the point of film reloading were viewed and video taped. (Jacob CX-770 at 3, 4).

320. With respect to what was seen and happened on the second floor on September 1, 1998 at the factory, Jacob testified (CX 770 at 4 to 8):

11. Q: Could you describe what you saw?

A: At the beginning of the conveyor belt forming a part of the assembly line, there were several boxes with spent shells in them. when I bent down to open one box, I saw inside numerous Fuji no-flash type empty camera bodies as well as Kodak no-flash type empty camera bodies. An unnamed individual who worked at the factory immediately stepped in front of me and closed up the box.

12. Q: Could you describe the room?

A: The room contained two assembly lines, one performing pre-loading activities and one line performing post-loading activities.

13: Q: What was occurring on the "pre-loading" line?

A: On the pre-loading line, which was video taped, I observed the workers using a screwdriver to pry the back cover off of the Kodak empty one-time-use camera bodies, from which the paper cover had previously been removed by other workers. I further observed black pieces of plastic being snapped off of the shells in

the area of the fastening snaps located on a new shell, which were video taped.

14. Q: What happened after the backs were pried off?

A: After the backs were pried off, some of the back covers, which appeared broken or from which the film door was missing, were set aside. A second worker then, using a tool, smoothed out the rough places where pieces of plastic had broken off from the inside of the main body, resulting in still more pieces of plastic falling out of the body.

15. Q: What happened next?

A: We were initially only allowed to observe the activities going on in the second line.

The second line consisted of the post-loading activities and packaging activities.

16. Q: What occurs on the post-loading line?

A: I observed the workers using glue to adhere the back cover to the front cover where tape was not holding the body together securely. A rubberband would then be applied to fix the glue. Once the glue had set, the camera would be sent along for packaging.

17. Q: Did you observe what brand of one-time-use cameras were being packaged?

A: The second line was packaging SmileTime brand cameras.

18. Q: What happened next?

A: After some further delay and a dispute, Mr. Jacob Xu finally did allow us to film some but not all of the post-loading manufacturing process. According to Mr. Tuttle, the partial refusal to permit filming was because the products being packaged were not those of Respondent. Mr. Xu would not allow us to film the packaging of the SmileTime cameras or the boxes they were being packed in which contained the inscription "P.S.1. Industries, Boca Raton, Florida" (a Respondent) in large

black letters. In a deposition on August 12, 1998, Dominic Seminara of P.S. I. Industries named Mass Chance as a supplier of its Smile Time brand cameras. (Exhibit 2, Seminara dep. at p. 51).

19. Q: What happened next?

A: We were then lead to a room outside of the factory owner's office where a table demonstration was set up. We were informed that there was no reloading of film being done at the factory that day. Further, any reloading was done in the dark and therefore we would not be able to film it anyway.

20. Q: Can you describe the demonstration?

A: On the table, two workers demonstrated in the light how an empty Fuji one-time-use camera body is loaded with film. In the process shown to us, a hole is drilled in the cover of the film receiving chamber.

21. Q: Were there holes in the cameras produced by China Film?

A: No. Every sample produced to us by China Film has an intact cover, i.e. there is no hole in any camera we have seen from China Film. At an early stage of our investigation, we did see remanufactured Fuji one-time-use cameras with such a hole but, to my knowledge, such a product has not been used in any remanufactured Fuji one-time-use camera examined by us since this investigation was instituted.

22. Q: Did you draw a conclusion from this fact?

A: Yes. I believe that the film loading process shown to us could not be the same process actually used to load the Fuji cameras remanufactured by the Mass Chance Factory.

23. Q: What else occurred during the demonstration?

A: During the demonstration I asked several questions regarding cutting of the welds and alteration of the film canister. We were allowed to see the alteration process of the film canisters. However, we were not allowed to film this procedure because Jacob Xu asserted that it was a trade secret.

24. Q: How is the film canister altered?

A: The film canister is altered by sliding a conventional 35 mm film canister beneath a buzz saw in order to cut off the top of the spool. Then, a separately molded film spool portion with peripheral gear teeth apparently designed to mate with the film advance wheel on Fuji one-time-use cameras is then glued onto the spool.

25. Q: Did you observe anything else?

A: As we were being led from the room where the canisters are altered, I noticed a film canister with Fuji's logo on it sitting in a box. I picked up the film canister and asked Jacob Xu whether he was using Fuji film. He informed us that they did not use Fuji film but rather 3M or Agfa, but that they do recycle Fuji film canisters which have been previously used. He informed us that the spooling was done on the factory premises. I asked if we would be allowed to see the spooling of film into canisters. He informed us that we would not be allowed to see this process. I further asked if we would be allowed to see the initial sorting process, however, Mr. Xu refused this request as well.

26. Q: Did anything else happen during your visit?

A: After lunch, a group of the gentlemen accompanying me, including David Sifre, went upstairs to use the men's room. When David Sifre returned from the men's room he informed me that he had accidentally gone up to the third floor of the factory building. He further informed me that there was some sort of manufacturing or assembly line process going on of one-time-use camera bodies but that he could not get close enough to see what type of Fuji or Kodak one-time-use camera bodies were being worked on. He said at the time that he had seen a conveyor belt, at least ten to twelve workers and piles of one-time-use cameras. Mr. Sifre then asked Mr. Tuttle what was going on the third floor and whether we could see that process.

27. Q: What was Mr. Tuttle and Mr. Xu's response?

A: Mr. Tuttle informed him that it was off limits and that he did not know why. We persisted in asking Mr. Jacob Xu if we could see what was going on the third floor. Mr. Xu informed

all of us that there was nothing going on the third floor and that there was nobody up there, rather it was being used for storage.

321. Respondent China Film, on October 1, 1998, extended an additional, re invitation to complainant to make yet a further, additional visitation to the supplier{ }recycle plant in Shenzhen, China, on the additional dates of October 21, or 22, or 23, 1998, if desired by complainant [CX-118, Respondent China Film's October 1, 1998 Answers to complainant's Second Set of Interrogatories, Interrogatory & Answer No. 40(c)].

Sakar

322. Ralph Sasson, the Sakar official responsible for purchasing one-time-use cameras, testified that he dealt only with a trading company, { } and neither had contact with nor knew the name of the factory. (CX-441 at 8:25-10:17). In a letter dated October 16, 1998, Mr. Tuttle advised that Sakar's supplier, identified as { } offered a plant visit on October 26-30. (CX-782).

323. Akira Fukano is employed by Photo Film, Co. Ltd. He has a degree in industrial engineering and a Masters Degree in production engineering. He went to work for Fuji in 1974. His current job title is General Manager, Products Planning and Development Division, Optical Products Division and he has had that position since June 1998. (CX-610 at 1, 2).

324. Toshiyuki Ogura is employed by Fuji Photo Film Co., Ltd. He is General Manager of the LF Department of the Ashigara factory. The LF Department is responsible for the design, development, manufacture and recycling of film-with-lens products. Ogura defined those cameras as single cameras pre-loaded with film inside a patrone or cassette

which can take a photo easily with just a push of the shutter and he also called them disposable or one-time-use cameras. (CX-600 at 1, 2).

325. Ogura is a graduate of the Mechanical Engineering Department of the Tokyo Institute of Technology and started work with Fuji Photo Film Co., Ltd. in 1970. In 1987, he participated in the development of an automated camera assembly line for the LFFP product model. In 1990, he participated in the development of an automated assembly line from injection molding to finished product for LFFP products. From 1992 to 1998, he helped establish the automatic recycling factory of the Recycling Division of the LF Business Department, referred to as LFR. Ogura also helped develop new automatic assembly lines and recycling facilities as needed during the period from 1992 through 1998. As General Manager of the LF Department Ogura has overall responsibility for the functioning of the department, supervising the various aspects of the division and coordinating with other divisions within the company to insure that effective, high quality LFFPs are designed, manufactured, and available for sale. (CX-600 at 1, 2).

326. Herbert Baer is employed by Fuji Photo Film U.S.A. Inc. (Fuji U.S.A.) headquartered in Elmsford, New York. Fuji U.S.A is an indirect wholly owned subsidiary of Fuji Japan. Baer is Group Marketing Manager, Consumer Markets Division of Fuji U.S.A. and is responsible for the marketing of one-time-use cameras in the United States, among other products. He has had responsibility for the marketing one-time-use cameras in the United States since 1992. (CX-614 at 1).

327. A photoprocessor usually throws the empty one-time-use camera body into a box or other container and then disposes of the empty camera bodies. When the product was

first introduced, photoprocessors were instructed to throw out the empty camera bodies after removing the batteries for recycling. Starting in the early 1990's, Fuji U.S.A. established a recycling program in the United States for the purpose of collecting empty one-time-use camera bodies to for recycling. Fuji asked for the processors to return the empty one-time-use camera bodies to Fuji U.S.A., which in turn shipped them to a third-party recycling company which salvaged paper, plastic and other components using traditional recycling techniques. Today, most photoprocessors sell the empty camera bodies to the original manufacturer of the cameras, although some are sold to third parties who collect such camera bodies. Baer is sure that there still are some photoprocessors who throw the camera bodies away. Fuji pays{ }per empty body plus the cost of handling and shipping. Fuji also has an agreement with Kodak by which the two companies exchange camera bodies returned to them for recycling, which are manufactured by the other. (Baer CX-614 at 4, Q&A 19, 20).

328. Fuji has the arrangements with large processing laboratories whereby Fuji collects the empty camera bodies from them. Under arrangements, Fuji compensates these large processors for turning over the empty camera bodies to Fuji. Fuji is also trying to make arrangements with other film processors, but has not always been successful. (Ogura CX-600 at 140, Q&A 52).

329. When Fuji receives the "pure" empty Fuji one-time-use camera bodies with flash they are{

} (Fukano, CX-610 at Q&A 26).

330. The current procedure at Fuji for dealing with collected empty one-time use camera bodies returned to Fuji is that the empty LFFP bodies are sorted, off-site, to screen out non-Fuji products. Those of Kodak and Konica are returned to Kodak and Konica. Those, which have been remanufactured by third parties, are also separated. (Fukano CX-610 Q&A 24).

331. Fuji Greenwood has never reused whole empty one-time-use camera bodies. (Fukano CX-610, Q&A 29).

332. The license agreements with Kodak, Konica and Concord{

} (CX-622; CX-621; CX-623 at par. 2.3; Ogura, Tr. at 649).

333. San Harbor has paid \$0.90 for Fuji flash LFFP body. (ROCX-145).

334. Fuji has paid{ }per Fuji's spent shell plus the cost of shipping and handling. (Soares CX-715 Q&A 5).

335. None of the sample produced to Fuji by China Film had a hole in the cover of

the film receiving chamber. (CX-770, Q&A 21).

336. A person of skill in the art to which the Fuji patents in issue pertain is a person with a degree in Mechanical Engineering, either at the Baccalaureate or Masters level, and several years of pertinent experience working in the field of camera design and/or engineering. (Bellows CX-725, Q&A 21).

337. Single-use cameras made under Fuji's patents have become a great commercial success. (CX-608 represents the sales volume of Fuji LFFPs manufactured in Japan and either sold in Japan or exported, on an annual basis. (Ogura, CX-600 at Q&A 44). In the first year, { }film-with-lens products were sold in Japan, while in the most recent year covered by the chart, { }films-with-lens products in Japan. (Ogura, CX-600 at Q&A 45, 45, CX-608).

338. The claimed one-time-use cameras having a film cartridge inside a light-tight case with the film unwound from the cartridge and positioned on the opposite side of the lens from the cartridge within the light-tight case was commercially successful throughout the world, and these design elements contributed to that commercial success by permitting the user to take high quality pictures without having to touch the film, and permitting processing by delivery of the entire camera to a photo-processor who can readily remove the film cartridge and develop the film using conventional equipment. (Ogura, CX-600 at Q&A 46-Q&A 50; Snook, Tr. at 1237:1-3; Bear, CX-614 at Q&A 39-41; CX-617).

339. Kodak, Konica and Concord have taken licenses under the patents in suit. (CX-621; CX-622; CX-623).

340. Fuji worked from about 1970 through 1986 before developing a commercially

successful one-time-use camera. (Omura, Tr. at 1465).

341. The one-time-use camera formed by mounting a film cartridge on one side of a lens and a roll of film around from the cartridge on the other in a light-tight case designed so that its user could not easily reload the film, but a photoprocessor could easily extract the cartridge for processing achieved commercial success by reason of its design. (Baer, CX-614C at Q&A 40, Q&A 41; Omura, CX-600 at Q&A 46-Q&A 51).

342. Fuji first learned of the sale of remanufactured one-time-use cameras in the United States in around 1994. (Ogura Tr. at 858; ROCX-144 at Int. 2).

343. Fuji was aware that its used single-use camera empty bodies were being remanufactured into new single-use cameras prior to 1992. However, such remanufacture was not being performed in the United States and did not involve any of the respondents in this action. (Ogura, Tr. at 858).

344. Fuji first learned that OptiColor was selling infringing one-time-use cameras in the United States in the course of Fuji's pre-filing investigation in 1997. (ROCX-144 at Int. 2; CX-197; CX-198).

345. In 1997 Fuji conducted an investigation to determine the identity of the persons involved in violations of Section 337 in preparation for filing a complaint in the ITC. (Baer, CX-614 at Q&A 48).

346. OptiColor's Lass testified (Tr. at 1993, 1994):

Q Can you recall anyone from Fuji ever telling anyone from Seattle Film Works that Fuji affirmatively saying we're going to let you continue to sell recycled Fuji single-use cameras?

A I do not recall that.

347. Jazz named six entities as its suppliers in a supplement to its response to the complaint (CX-204). These entities, in addition to respondents Rino and Boshi, were Ginfax Development Limited of Hong Kong, Tom Da International Enterprise Co. of Hong Kong, Advance Tech International Ltd. of Hong Kong and Vastfame Investment Ltd. of Hong Kong. (CX-204).

348. At a deposition of Ms. Jesse Szeto, Managing Director of Jazz's Hong Kong subsidiary responsible for purchasing one-time-use cameras, Szeto identified ten different sources of one-time-use cameras located in China and Korea. (Szeto, CPX-236 at 10, 11, 13, 14, 26-30).

349. Respondent OptiColor has identified four foreign suppliers, two of which are neither respondents nor identified by Jazz. (CX-289 at Int. 10). Respondent Dynatec identified still another foreign manufacturing supplier. (CX-130).

350. Foreign manufacturers do not necessarily put their own names on their products sold in the United States. Jazz's President Lorenzini could not identify from inspection of an outside box of a Jazz LFFP the source of a Jazz single use camera by looking at it. (Tr. at 2853, 2955).

351. A Fuji investigation uncovered one-time-use cameras with no identification as to their source, although they did state that they were made outside the United States. The investigation determined that numerous entities other than respondents are involved in the "remanufacture" and sale of "remanufactured" one-time-use cameras. During the course of the investigation, entities went out of business and new entities came into business. (Baer CX-614, Q&A 40 to 52; CPX-680 to CPX-683).

352. There is a growing market for LFFPs in general, which sellers of "remanufactured" LFFPs are taking advantage of by selling at reduced prices. (Baer CX-614, Q&A 50-42, 48-57).

353. The respondents have had no difficulty in distributing their products both at retail and in the premium markets. (e.g. ROCX-23; CX-215; Lorenzini, Tr. at 2860).

354. Kodak is licensed by Fuji to sell one time use cameras{  
} (Snook, Tr. at 1284, CX-621). {  
} (Snook, Tr.  
at 1237).

355. Heidke, Jazz's technical expert estimated that, based on viewing the Boshi videotape, a reloading facility could be set up on China with \$10,000 and 1200 square feet. (Heidke, Tr. at 3094).

356. The entire Boshi operation is about 1200 square feet and has no major capital investment, according to Mr. Lorenzini (Lorenzini, Tr. at 2898).

357. Discovery of the respondents concerning their selling prices revealed Achiever selling at an average price of \$2.395 per camera, Argus selling at approximately \$4.00 per camera, China Film selling at \$2.80 per camera, Dynatec selling at between \$2.50 and \$3.33 per camera, Jazz selling at between \$3.49 and \$4.08 per camera, {  
}PSI selling at from \$3.76 to \$8.95 depending on make and customer,  
and Sakar selling at \$3.50 per camera. (CX-830). On the other hand, the non-manufacturing respondents were paying their suppliers prices that ranged from a low of \$2.10 on the part of Dynatec{  
}with Dynatec paying from \$2.10 to

\$2.70, Jazz paying from \$2.40 to \$2.60,{

}and Sakat

paying about \$2.65. (CX-830).

358. With respect to Dynatec's Read ability to reload a Kodak LFFP with the assistance of a kit, on direct examination he testified (Tr. at 3562 to 3565):

Q Okay. If you could just proceed, then, Dr. Read, please.

A At this point, I'm going to open the camera kit and just spill out its contents onto the ELMO. Some of these tools are not specific to this body, some of them are. I'll just run through the tools real quickly. I do not know why the rubber band is in there. On the instructions they have a rubber band wrapped around the camera body at this point. That's not required. There is a replacement film advance wheel here. This is one of the noncastellated varieties, so they're giving you a replacement wheel as part of the kit so that if you want to use noncastellated film canisters in these bodies, you can.

I also believe they sell these in large lots so that an operation could buy hundreds of them at a time to reload camera bodies.

There are two torques wrenches here that will mate with the torque socket on the spindle and film reservoir, and there are three release keys. These keys are part of the kit for winding the film from one side to the other. And in fact, I'm going to use this one, the large one. And this simply plugs into place on top of the camera like that, so you hold that in place, take one of these torques wrenches, but it in here -- the small one. If I can get that in place.

\* \* \*

MR. GRIFFIN: Off the record for a second.

MR. ROSENTHAL: I think we should be on the record, your Honor.

JUDGE LUCKERN: I can't hear. If I can't -- Carmen probably can't hear, so let's stay on the record. Don't say anything unless you say it loud so the reporter can know what you're saying.

MR. ROSENTHAL: Your Honor, I would like it on the record and in front of the ELMO.

THE WITNESS: This camera spindle here is -- I can't tell in the lighting here, actually let me move it over in the light. I can't even tell under the light. This spindle has either been damaged or is not the original equipment that goes with this camera. I'm not sure, but my torques key will not fit in there, so I'm just going to use a regular screwdriver here.

Now, this doesn't affect the operation I'm doing at all, I'm just changing tools that I'm going to use to wind this, and at this point I'm going to -- it sounds like the tape has fallen off, I'm going to open this and check. I'm not turning it, that's what the problem is.

MR. DE CARLO: Your Honor, we can't hear the witness.

JUDGE LUCKERN: Just speak up, please, Dr. Read.

I don't know if we've got it on the transcript.

BY MR. GRIFFIN:

Q I'm going to hand the witness another exhibit and I'll be right back. Can we go off the record for a second while we grab another exhibit?

JUDGE LUCKERN: We'll go off the record.

(Discussion off the record.)

JUDGE LUCKERN: Back on the record. Go ahead, Mr. DeCarlo. Back on the record please. Go ahead, say what you're saying now.

MR. DE CARLO: Your Honor, we can see on the screen that he's still manipulating the camera. It was also apparently speaking and we couldn't hear it. Whatever difficulty he's having at this point we want clearly articulated on the record, and it's not happening.

JUDGE LUCKERN: Could you say what you were doing so the

record is clear? In other words, whatever you're doing with this camera, it ought to be on the record, because this is in evidence, the camera is in evidence.

THE WITNESS: I was simply continuing to try to see if I could insert some sort of tool into the spindle to advance it. I have not changed the state of the camera at all since the last time it was under the ELMO.

## CONCLUSIONS OF LAW

1. The Commission has in rem jurisdiction, subject matter jurisdiction and in personam jurisdiction.
2. There has been an importation of certain lens-fitted film packages in issue which are the subject of the unfair trade allegation.
3. There is a domestic industry defined by claims in issue.
4. The claims of the patents in issue are valid and enforceable and there is no implied license with respect to estoppel.
5. Accused lens-fitted film packages of respondent Achiever infringe  
Patent `495 Claims 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claim 7  
Patent `857 Claim 22  
Patent `649 Claim 9  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `168 Claim 1
6. Accused lens-fitted film package of respondent Ad-Tek infringe  
Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13  
Patent `288 Claims 1, 7
7. Accused lens-fitted film packages of respondent Argus infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7, 8  
Patent `857 Claims 1, 19, 22  
Patent `649 Claims 1 and 9  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13  
Patent `288 Claims 1, 7

**8. Accused lens-fitted film packages of respondent BPS infringe**

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8,  
Patent `857 Claims 1, 19, 22  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

**9. Accused lens-fitted film packages of respondent Boecks infringe**

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

**10. Accused lens-fitted film packages of respondent Boshi infringe**

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7, 8  
Patent `857 Claims 1, 19, 22  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13  
Patent `288 Claims 1, 7

11. Accused lens-fitted film packages of respondent China Film infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

12. Accused lens-fitted film packages of respondent Dynatec infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7, 8  
Patent `857 Claims 1, 19, 22  
Patent `649 Claims 1 and 9  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13  
Patent `288 Claims 1, 7

13. Accused lens-fitted film packages of respondent Fast Shot infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent '111 Claim 1  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

14. Accused lens-fitted film packages of respondent Forcecam infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

15. Accused lens-fitted film packages of respondent Haichi infringe

Patent `495 Claims 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7, 8  
Patent `857 Claims 1, 19, 22  
Patent `649 Claim 9  
Patent `400 Claims 14, 16

16. Accused lens-fitted film packages of respondent Jazz infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7, 8  
Patent `857 Claims 1, 19, 22  
Patent `649 Claim 1

Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

17. Accused lens-fitted film packages of respondent Klikit infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7, 8  
Patent `857 Claims 1, 19, 22  
Patent `649 Claims 1 and 9  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

18. Accused lens-fitted film packages of respondent Linfa infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

19. Accused lens-fitted film packages of respondent OptiColor infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7, 8  
Patent `857 Claims 1, 19, 22  
Patent `649 Claims 1 and 9  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11

Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

20. Accused lens-fitted film packages of respondent Penmax infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

21. Accused lens-fitted film packages of respondent PhilmEx infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

22. Accused lens-fitted film packages of respondent PSI infringe

Patent `495 Claims 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 7  
Patent `857 Claims 19, 22  
Patent `649 Claims 1, 9  
Patent `400 Claims 14, 16  
Patent `168 Claim 1

23. Accused lens-fitted film packages of respondent Rainbow infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claims 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

24. Accused lens-fitted film packages of respondent Rino infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

25. Accused lens-fitted film packages of respondent Sakar infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `111 Claim 1  
Patent `200 Claims 1, 15, 23, 25  
Patent `685 Claims 1, 28  
Patent `168 Claims 1, 13

26. Accused lens-fitted film packages of respondent T.D.A. infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claims 1, 8  
Patent `857 Claims 1, 19  
Patent `649 Claim 1  
Patent `400 Claims 14, 16

27. Accused lens-fitted film packages of respondent Vantage infringe

Patent `495 Claims 1, 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claim 1  
Patent `857 Claim 19  
Patent `649 Claim 1  
Patent `168 Claim 1

28. Accused lens-fitted film packages of respondent Vivitar infringe

Patent `495 Claims 5, 6, 9, 11  
Patent `774 Claims 14, 15  
Patent `087 Claim 7  
Patent `857 Claim 22  
Patent `649 Claim 9  
Patent `400 Claims 14, 16  
Patent `364 Claims 1, 11  
Patent `168 Claim 1

29. Complainant has not sustained its burden in establishing infringement by respondent Opticam.

30. Complainant has not sustained its burden in establishing infringement of the design patents in issue, viz., the D '101, D '722 and D '750 patents.

31. The respondents, involved in alleged remanufacturing, are recreating the patented single use camera of complainant and its licensees and hence their actions are impermissible reconstruction.

32. Respondents, with the exception of respondent Opticam, are in violation of section

337, based on their importation into the United States, sale for importation, and/or sale within the United States after importation of articles that infringe valid and enforceable United States patents.

33. Based on respondents' violation of section 337, it is recommended that a general exclusion order be entered.

34. Based on respondents' violation of section 337, it is recommended that cease and desist orders be entered against the following twenty-one domestic respondents, viz., Ad-Tek, Argus, Boecks, BPS, Dynatec, Fast Shot, Forcecam, Haichi, Innovative, Jazz, Klikit, Labelle, OptiColor, Penmax, PhilmEx, PSI, Rainbow, Sakar, TDA, Vantage, and Vivitar.

35. A bond of 100% of entered value during Presidential review is recommended.

## ORDER

Based on the foregoing opinion, additional findings of fact, conclusions of law, and the record as a whole, and having considered all of the pleadings, evidence and arguments presented orally and in briefs, as well as certain proposed findings of fact, it is the administrative law judge's final initial determination that there is a violation of section 337 in the importation into the United States, sale for importation, and the sale within the United States after importation of certain lens-fitted film packages. It is also the administrative law judge's recommendation that cease and desist orders against domestic respondents and a general exclusion order should issue and that a bond of 100% of entered value during Presidential review should be imposed.

The administrative law judge hereby CERTIFIES to the Commission his final initial and recommended determinations together with the record consisting of the exhibits admitted into evidence and ALJ Ex. 1 (U.S. Patent No. 4,222,690). The pleadings of the parties filed with the Secretary and the transcript of the hearing, including closing arguments, are not certified, since they are already in the Commission's possession in accordance with Commission rules of Practice and Procedure.

Further it is ORDERED that:

1. In accordance with Commission rule 210.39, all material heretofore marked in camera because of business, financial, and marketing data found by the administrative law judge to be cognizable as confidential business information under Commission rule 201.6(a) is to be given in camera treatment continuing after the date this investigation is terminated.
2. Counsel for the parties shall have in the hands of the administrative law judge

those portions of the final initial and recommended determinations which contain bracketed confidential business information to be deleted from any public version of said determinations, and all attachments thereto, no later than March 12, 1999. Any such bracketed version shall not be served by telecopy on the administrative law judge. If no version is received from a party it will mean that the party has no objection to removing the confidential status, in its entirety, from the initial and recommended determinations.

3. The final initial determination portion of the "Initial and Recommended Determination," issued pursuant to Commission rule 210.42(h)(2), shall become the determination of the Commission forty-five (45) days after the service thereof, unless the Commission, within forty-five (45) days after the date of such service of the initial determination portion shall have ordered review of that portion or certain issues therein or by order has changed the effective date of the initial determination portion. Any findings and recommendation, made by the administrative law judge in said recommended determination portion, issued pursuant to Commission rule 210.42(a)(1)(ii), will be considered by the Commission in reaching a determination on remedy and bonding pursuant to Commission rule 210.50(a).

  
Paul J. Luckern  
Administrative Law Judge

Issued: February 24, 1999



