

In the Matter of

**CERTAIN CONVERTIBLE
ROWING EXERCISERS**

Investigation No. 337-TA-212

USITC PUBLICATION 2111

AUGUST 1988



UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Paula Stern, Chairwoman
Susan Liebeler, Vice Chairman
Alfred E. Eckes
Seeley G. Lodwick
David B. Rohr
Anne E. Brunsdale

Address all communications to
Kenneth R. Mason, Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

_____)	
In the Matter of)	
CERTAIN CONVERTIBLE ROWING	)	Investigation No. 337-TA-212
EXERCISERS)	
_____)	

COMMISSION ACTION AND ORDER

Background

At the conclusion of the evidentiary phase of this investigation, the Commission's presiding administrative law judge (ALJ) (Judge Mathias) issued an initial determination (ID) of no violation of section 337 of the Tariff Act of 1930 (19 U.S.C. S 1337) on the ground that the patent in controversy, U.S. Letters Patent 4,447,071 ('071 patent), was invalid for anticipation (35 U.S.C. S 102) and for obviousness (35 U.S.C. S 103) in light of a prior art device known as the Beacon 3002 rower. The Commission determined to review and reverse the ID on the question of anticipation and to otherwise not review the ID. A Commission Action and Order (CAO) was issued on December 5, 1985, to implement the determinations. Subsequently, the Commission received four requests for action and a letter suggesting action, as specified below.

(1) On December 20, 1985, Weslo, Inc., a respondent in the investigation, filed a petition for reconsideration, based on an asserted error in footnote 2, page 1, of the CAO. The alleged error is that the footnote states that there was a stipulation to remove claim 2, 3, 10-13, and 18 from consideration in the investigation. The petition requests, first,

correction of the footnote to reflect that there was no such stipulation and, second, a Commission finding that the imported Weslo articles do not infringe those claims.

(2) Complainant Diversified Products Corp. (DP) moved, Motion No. 212-92-C, to amend the complaint and notice of investigation to delete all references to claims 2, 3, 10-12, and 18 of the '071 patent.

(3) Following Weslo's response to Motion No. 212-92-C, DP moved, Motion No. 212-93-C, to reply to that response.

(4) On December 31, 1985, DP sent a letter to the Commission in which it pointed out what it perceives as "incomplete" findings regarding infringement by Weslo, namely that the ID made no findings as to whether the Weslo devices infringe dependent claims 5-9, 13-15, and 17 of the '071 patent.

(5) Subsequently, the Commission investigative attorney (IA) moved, Motion No. 212-94-C, that the Commission direct the ALJ to make supplemental findings of fact and conclusions of law regarding infringement by Weslo of claims 5-9, 13-15, and 17 of the '071 patent.

Action

(1) The Commission has determined to grant the petition for reconsideration to the extent of correcting footnote 2, page 1, of the CAO and to deny the remainder of the petition. There was no stipulation such as described in the footnote. The footnote will be corrected to indicate that complainant limited its allegations and proof of infringement at the evidentiary hearing to claims 1, 5-9, and 14-17 of the '071 patent.

The remainder of the petition for reconsideration has been denied. Our Rules of Practice and Procedure limit such petitions "to new questions raised

by the determination or action ordered to be taken thereunder and upon which the petitioner had no opportunity to submit arguments." 19 C.F.R. S 210.60. Weslo submitted arguments regarding its alleged infringement of the '071 patent in its contingent petition for review. Moreover, as Weslo elected to treat claims 2, 3, 10-3, and 18 as withdrawn by DP (which election was apparently relied upon by the other parties), Weslo may not now disavow that election, argue that the claims remained in the investigation, and then conclude that it is entitled to findings of noninfringement.

(2) As we have denied the petition for reconsideration as to Weslo's requested findings of noninfringement of claims 2, 3, 10-12, and 18 of the '071 patent, Motion No. 212-92-C is denied as moot.

(3) Motion No. 212-93-C is granted.

(4) DP's letter of December 31, 1985, makes no request for action and the substance of the matters raised in the letter are dealt with in our decision on Motion No. 212-94-C. Accordingly, we take no action on the letter.

(5) Motion No. 212-94-C is denied because it is in substance a petition for reconsideration the subject matter of which is outside the scope of such petitions. 19 C.F.R. S 210.60.

Order


Accordingly, it is hereby ORDERED THAT-

1. The Commission grants the petition for reconsideration filed by respondent by Weslo, Inc. on the issue of the alleged error in footnote 2, page 1 of the Commission's Action and Order of December 5, 1985, and otherwise denies the petition;
2. Footnote 2, page 1, of the Commission's Action and Order of December 5, 1985, is amended to read "Complainant, without objection by respondents, limited its allegations and proof of

infringement at the evidentiary hearing to claims 1, 5-9, and 13-17 of the '071 patent";

3. The Commission denies Motion No. 212-92-C;
4. The Commission grants Motion No. 212-93-C;
5. The Commission takes no action in response to complainant DP's letter of December 31, 1985;
6. The Commission denies Motion No. 212-94-C; and
7. The Secretary shall serve copies of this Commission Action and Order upon each party of record to this investigation and publish notice thereof in the Federal Register,

By order of the Commission.


Kenneth R. Mason
Secretary

Issued: May 5, 1986

UNITED STATES INTERNATIONAL TRADE COMMISSION ; 1J 3,
Washington, DC 20436

In the Matter of)	
)	
CERTAIN CONVERTIBLE ROWING	)	Investigation No. 337-TA-212
EXERCISERS)	
)	

NOTICE OF COMMISSION DETERMINATION TO GRANT IN PART A
PETITION FOR RECONSIDERATION, TO DENY A MOTION TO
AMEND THE SCOPE OF INVESTIGATION, AND TO DENY
A MOTION TO REMAND FOR SUPPLEMENTAL FINDINGS

AGENCY: U.S. International Trade Commission.

ACTION: Notice is hereby given that the Commission has (i) granted a petition for reconsideration of its final action in the above-captioned matter to the extent of correcting a footnote in its Action and Order of Dec. 5, 1985, and denied the remainder of the petition; (ii) denied a motion to amend the scope of investigation by deleting reference to certain patent claims; (iii) denied a motion to remand the investigation to the presiding administrative law judge (ALJ) for supplemental findings regarding patent infringement; and (iv) granted a motion to file a reply brief.

FOR FURTHER INFORMATION CONTACT: Jack Simmons, Esq., Office of the General Counsel, telephone 202-523-0493. Hearing impaired individuals may obtain information on this matter by contacting the Commission's TDD terminal at 202-523-0002.

SUPPLEMENTARY INFORMATION: On December 5, 1985, the Commission issued an Action and Order in the above-captioned investigation in which it determined to review and reverse the initial determination (ID) on one issue and not to review the remainder to the ID. The Commission's determination had the effect of finding no violation of 19 U.S.C. S 1337 in the investigation on the ground that U.S. Letters Patent 4,447,071 (the '071 patent) was invalid for obviousness.

On December 20, Weslo, Inc., a respondent, petitioned for reconsideration to correct an error in footnote 2, page 1, of the Action and Order and to issue supplemental findings that Weslo articles do not infringe certain claims of the '071 patent. As the footnote is in error, the Commission has granted

the petition to the extent of correcting the footnote. The Commission has denied the remainder of the petition on the ground that, as the matter had been addressed in a petition for review, it could not be raised in a petition for reconsideration.

Complainant Diversified Products Corp. moved (Motion No. 212-92-C) to delete certain claims from the scope of the investigation. In light of the disposition of the petition for reconsideration, the Commission has denied the motion as moot. The Commission has granted complainant's motion (Motion No. 212-93-C) to reply to Weslo's response to Motion No. 212-92-C.

The Commission investigative attorney has moved (Motion No. 212-94-C) for resubmission of the investigation to the AU for supplemental findings of fact and conclusions of law regarding infringement by Weslo of certain dependent claims of the '071 patent. The Commission has denied this motion because it is in substance a petition for reconsideration the subject matter of which is outside the scope of such petitions.

Copies of the Commission's Action and Order and all other nonconfidential documents filed in connection with this investigation are 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, 701 E Street NW., Washington, D.C. 20436, telephone 202-523-0161.

By order of the Commission.

Kenneth R. Mason
Secretary

Issued: May 5, 1986

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of)	
CERTAIN CONVERTIBLE ROWING	)	Investigation No. 337-TA-212
EXERCISERS)	

COMMISSION MEMORANDUM OPINION

This opinion addresses four matters that have been raised by the parties after issuance of the Commission's Action and Order of December 5, 1985, in the above-referenced investigation. The petition for reconsideration is granted in part and denied in part, Motions Nos. 212-92-C and 212-94-C are denied, and Motion No. 212-93-C is granted.

I. Background

At the conclusion of the evidentiary phase of this investigation, the Commission's presiding administrative law judge (ALJ) (Judge Mathias) issued an initial determination (ID) of no violation of section 337 on the ground that there were no unfair acts or methods of competition within the meaning of section 337. That finding was premised on findings that the patent in controversy, U.S. Letters. Patent 4,447,071 ('071 patent), was invalid for anticipation (35 U.S.C. S 102) and for obviousness (35 U.S.C. S 103) in light of a prior art device known as the Beacon 3002 rower. The Commission determined to review and reverse the ID on the question of anticipation and to otherwise not review the ID. A Commission Action and Order (CAO) was issued on December 5, 1985, to implement the determinations. Subsequently, the Commission has received four requests for action and a letter suggesting action, as specified below.

(1) On December 20, 1985, Weslo, Inc., a respondent in the investigation, filed a petition for reconsideration, based on an asserted error in footnote 2, page 1, of the CAO. The alleged error is that the footnote states that there was a stipulation to remove claim 2, 3, 10-13, and 18 from consideration in the investigation. The petition requests, first, correction of the footnote to reflect that there was no such stipulation and, second, a Commission finding that the imported Weslo articles do not infringe those claims.

(2) Complainant Diversified Products Corp. (DP) moved, Motion No. 212-92-C, to amend the complaint and notice of investigation to delete all references to claims 2, 3, 10-12, and 18 of the '071 patent.

(3) Following Weslo's response to Motion No. 212-92-C, DP moved, Motion No. 212-93-C, to reply to that response.

(4) On December 31, 1985, DP sent a letter to the Commission in which it pointed out what it perceives as "incomplete" findings regarding infringement by Weslo, namely that the ID made no findings as to whether the Weslo devices infringe dependent claims 5-9, 13-15, and 17 of the '071 patent.

(5) Subsequently, the Commission investigative attorney (IA) moved, Motion No. 212-94-C, that the Commission direct the ALJ to make supplemental findings of fact and conclusions of law regarding infringement by Weslo of claims 5-9, 13-15, and 17 of the '071 patent.

II. DISCUSSION

A. The petition for reconsideration.

The Commission has determined to grant the petition for reconsideration to the extent of correcting footnote 2, page 1, of the CAO and to deny the

remainder of the petition. That footnote recites that there was a stipulation among the parties to remove claims 2, 3, 10-13 and 18 of the '071 patent from consideration in the investigation. There was no such stipulation. 1 /
Therefore, the footnote has been corrected to indicate that complainant limited its allegations and proof of infringement at the evidentiary hearing to claims 1, 5-9, and 14-17 of the '071 patent.

The portion of the petition for reconsideration that requests a Commission ruling that claims 2, 3, 10-13, and 18 are not infringed by the Weslo device is denied. Weslo submitted arguments regarding its alleged infringement of the '071 patent in its contingent petition for review. Our Rules of Practice and Procedure, however, limit petitions for reconsideration "to new questions raised by the determination or action ordered to be taken there under and upon which the petitioner had no opportunity to submit arguments." 19 C.F.R. S 210.60.

1/ In proposed prehearing stipulation No. 11, DP proposed to narrow the patent issues subject to investigation to claims 1, 5-9, and 10-13. Weslo refused to stipulate, stating that "Weslo assumes the statement is a unilateral withdrawal of claims 2, 3, 10, 11, 12 and 18 from this case. Weslo has no objections-to such withdrawal." Weslo's Response to DP's Proposed Stipulations. Weslo reiterated this view in its prehearing statement, at pages 10-12. No further action was taken on the proposed stipulation. Accordingly, there was no stipulation as described in footnote 2, page 1 of the CAO.

2/ Even if Weslo's petition were otherwise proper, Weslo elected to treat claims 2, 3, 10-3, and 18 as having been withdrawn by DP. Weslo's Response to DP's Proposed Stipulations; Weslo's Prehearing Statement at 10-12. This election was apparently relied upon by the other parties because they presented no evidence to specifically address these claims. Weslo may not now disavow that election, argue that the claims remained in the investigation, and then conclude that it is entitled to findings of noninfringement.

B. Motion No. 212-92-C.

By Motion 212-92-C, complainant DP has moved to formally delete claims 2, 3, 10-12, and 18 from the scope of the investigation. DP has stated that its purpose is to put to rest the issues raised by the Weslo petition for review discussed above. As we have determined to deny the petition for reconsideration regarding the requested findings of no infringement on the same claims, this motion has been denied as moot.

C. Motion No. 212-93-C.

Motion No. 212-93-C, complainant's motion to reply to Weslo's response to Motion No. 212-92-C, has been granted.

D. Complainant's letter.

DP's letter of December 31, 1985, points out what DP perceives to be "incomplete" findings regarding Weslo's alleged infringement of dependent claims 5-9, 13-15, and 17 of the '071 patent. The letter makes no request for action and we have considered, infra, the substance of the matters raised in the letter. Therefore, we have taken no action on DP's letter.

E. Motion No. 212-94-C.

The IA moved (Motion No. 212-94-C) to resubmit the investigation to the ALJ for supplemental findings of fact and conclusions of law as to whether the Weslo devices infringe claims 5-9, 13-15, and 17 of the '071 patent. As noted in the motion, the ALJ made findings of invalidity of all claims at issue, but made findings of infringement by Weslo regarding only the independent claims (1 and 16), not the dependent claims at issue here. The IA argues that this was "an inadvertent omission." In the IA's view (and in the view of DP, as

noted in its letter of December 31, 1985) this omission --

may prove material if, on appeal, [the U.S. Court of Appeals for the Federal Circuit] affirms the invalidity of independent claims 1 and 16 but finds any one or more dependent claims valid and reverses the Commission's decision.

Motion No. 212-94-C at 2. If this occurred, a remand would ensue which would necessarily entail supplemental findings and conclusions regarding the dependent claims. The IA argues that this proceeding may be avoided by making those supplemental findings now.

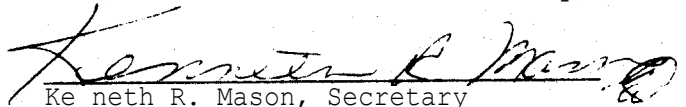
To the extent that the motion urges the Commission to issue supplemental findings of fact and conclusions of law, it is apparent that the motion goes to the merits of the investigation. Thus, the motion is, regardless of the name given to it, a petition for reconsideration.

Our rules, however, provide that a petition for review is the only avenue for bringing alleged defects in an ID to the Commission and that any issue not raised through the vehicle of a petition for review is deemed abandoned. 19 C.F.R. S 210.54(a) (2). Our rules further provide that a petition for reconsideration is limited, inter alia, to those matters on which "the petitioner had no opportunity to submit arguments." 19 C.F.R. S 210.60. Our rules on petitioni for review and for reconsideration implement an important policy objective: to permit the Commission to address all alleged errors in an ID at one time, avoiding piecemeal consideration.

DP and Weslo had the opportunity to address this issue in their respective petition for review and contingent petition for review. DP, Weslo, and the IA could have addressed these issues in their responses to the petition and contingent petition. Thus, Motion No. 212-94-C must be denied.

Certificate Of Service

I, Kenneth R. Mason, hereby certify that the attached NOTICE OF COMMISSION DETERMINATION TO GRANT IN PART A PETITION FOR RECONSIDERATION, TO DENY A MOTION TO AMEND THE SCOPE OF INVESTIGATION, AND TO DENY A MOTION TO REMAND FOR SUPPLEMENTAL FINDINGS, was served upon Robert Litowitz, Esq., and upon the following parties via first class mail, and air mail where necessary, on May 5, 1986.



Kenneth R. Mason, Secretary
U . International Trade Commission
701 E Street, N.W.
Washington, D.C. 20436

Behalf of Complainant

Harold J. Birch, Esq
Alan I. Cantor, Esq.
Banner, Birch, Male & Beckett
One Thomas Circle, N.W.
Washington, D.C. 20005

Behalf of Weslo & H.C. Enterprises

Joseph W. Berenato, III, Esq.
Schlesinger, Arkwright, Garvey & Fad^o
2001 Jefferson Davis Highway
Suite 607
Arlington, VA "•22202

Behalf of Respondent

Astar Data Int'l, Inc.
12101 South Edith
Alhambra, CA 91803

Behalf of Respondent

M.T.I., Inc.
P.O. Box 190
Menan, ID 83434

Behalf of Respondent

Sunstar Int'l, Inc.
24-16 Queens Plaza South
Long Island City, NY 11101

Behalf of Ever Young & Shinn Fu

J. Pierre Kolisch, Esq.
Kolisch, Hartwell & Dickinson
200 Pacific Bldg.
520 S.W. Yamhill Street
Portland, OR 97204

Behalf of Regponaont

National Sporting Goods Corp.
25 Brighton Ave.
Passaic, NJ 07055

Behalf of Respondent

Seasonal Merchandise
Development Co., Ltd.
P.O. Box 43-156
Taipei, Taiwan

Behalf of Weslo Design Int'l Inc.

V. James Adduci, II, Esq.
Adduci, Dinan & Mastriani
1140 Connecticut Ave., N.W.
Suite 250
Washington, D.C. 20036

CERTIFICATE OF SERVICE - Cont. ²

Behalf of Weslo & H.C. Enterprises

Thomas J. Rossa, Esq.
William S. Britt, Esq.
Trask & Britt
P.O. Box 1978
Salt Lake City, UT 84110

Behalf of Respondent

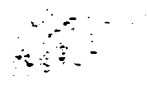
Pro-X, Ltd.
Suite 200
189 Reid Street
Hamilton, Bermuda

Behalf of Respondent

John Lee
c/o Weslo International, Inc.
P.O. Box 26-844
Taipei, Taiwan, R.O.C.

Behalf of Mailing List

Weslo International, Inc.
P.O. Box 26-844
Taipei, Taiwan, R.O.C.



GOVERNMENT AGENCISE:

Mr. Charles S. Stark
Antitrust Div/M.S. Dept of Justice
Room, 7115, Main Justice
Pennsylvania Avenue & Tenth Street, N.W.
Washington, D.C. 20530

Edward F. Glynn, Jr., Esq.
Asst Dir for Intl Antitrust
Federal Trade Commission
Room 502-4, Logan Building
Washington, D.C. 20580

Darrel J. Grinstead, Esq.
Dept of Health and Human Svcs.
Room 5362, North Building
330 Independence Avenue, S.W.
Washington, D.C. 20201

Richard Abbey, Esq.
Chief Counsel
ILS. Customs Service
1301 Constitution Avenue, N.W.
Washington, DX. 20229

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of)	
)	
CERTAIN CONVERTIBLE ROWING	)	Investigation No. 337-TA-212
EXERCISERS)	

COMMISSION ACTION AND ORDER

Background

On December 5, 1984, Diversified Products Corp. filed a **complaint with the Commission alleging unfair methods of competition and unfair acts in** the importation and sale of certain convertible rowing exercisers including, inter alia, direct infringement of claims 1-3 and 5-18 of U.S. Letters Patent 4,477,071 (the '071 patent) and direct infringement of claims 1-9 of U.S. Letters Patent 4,744,719 (the '719 patent), the effect or tendency of which was to destroy or substantially injure an industry, efficiently and economically operated, in the United States. 1/ 2/

1/ **By an initial determination (ID) (Order No. 30), issued June 27, 1985, the presiding administrative law judge (ALJ) granted complainant's motion to amend the complaint and notice of investigation by deleting all references to the '719 patent. The Commission determined not to review the ID. See 50 F. R. 31052 (1985).**

2/ Pursuant to a prehearing stipulation of the parties, claims 2, 3, 10-13, and 18 of the '071 patent were removed from consideration in the investigation. See Finding of Fact No. 33 of the ALJ's initial determination on the merits of the investigation.

On October 18, 1985, the presiding administrative law judge (ALJ) (Judge Mathias) issued an initial determination (ID) on the merits of the investigation. In that ID, he found the '071 patent invalid for anticipation (under 35 U.S.C. S 102) and for obviousness (under 35 U.S.C. S 103).

Action

The Commission has determined to review and reverse the ID on the issue of anticipation of the '071 patent by the prior art device known as the Beacon 3002 rower. The Commission has determined not to review any other portion of the ID.

The ID's findings on anticipation and obviousness are predicated on a prior art device known as the Beacon 3002 rower. The ALJ found that the Beacon 3002 rower anticipates the '071 patent in that the '071 patent reads literally on the Beacon 3002 rower in all respects, save the element of "generally perpendicular," describing the attaching means for the second user support. However, the ALJ found that the Beacon 3002 rower has the "full functional equivalent of the generally perpendicular attachment of the second user support" (ID at 195).

The Commission finds that the law of anticipation does not encompass the concept of functional equivalence. Anticipation requires "the presence in a single prior art reference disclosure of all elements of a claimed invention arranged as in that claim." Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1548 (Fed. Cir. 1983). See also Kalman v. Kimberly-Clark Corp., 713 F.2d 760 (Fed. Cir. 1983), cert. denied, 104 S.Ct. 1284 (1984). "It is elementary that an anticipation rejection requires a showing that each limitation of a claim must be found in a single reference, practice or device." In re Donohue, 766 F.2d 531, 534 (Fed. Cir. 1985). See also Studiengesellschaft Kohle, mbH,

Dart Industries, Inc., 726 F.2d 724, 726-27 (Fed. Cir. 1984); Ralston-Purina Company v. Far-Mar-Co, Inc., 772 F.2d 1570, 1574 (Fed. Cir. 1985). As the claim limitation of "generally perpendicular" is not met by the Beacon 3002 rower, the Beacon 3002 rower cannot anticipate the claims of the patent in controversy.

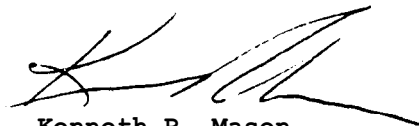
Accordingly, the Commission has determined to review and reverse the ID on the issue of anticipation. The Commission has further determined not to review any other portion of the ID and, therefore, all portions of the ID other than that concerning anticipation have become the Commission's determination.

Order

Accordingly, it is hereby ORDERED THAT--

1. The Commission grant the petition for review of complainant Diversified Products Corp. on the issue of anticipation of the '071 patent by the Beacon 3002 rower;
2. The ALJ's conclusion that the claims of the '071 patent are invalid as anticipated by the Beacon 3002 rower is reversed; and
3. The Secretary shall serve copies of this Commission Action and Order upon each party of record to this investigation and publish notice thereof in the Federal Register.

By order of the Commission.


Kenneth R. Mason
Secretary

Issued: December 5, 1985

CERTIFICATE OF SERVICE

I, Kenneth R. Mason, hereby certify that the attached Notice was served upon the following parties via first class mail and/or air mail where necessary, on December 5, 1985.

Kenneth R. Mason
Kenneth R. Mason, Secretary
U.S. International Trade Commission
701 E Street, N.W.
Washington, D.C. 20436

Behalf of Complainant

Harold J. Birch, Esq.
Alan I. Cantor, Esq.
Banner, Birch, McKie & Beckett
One Thamas Circle, N.W.
Washington, D.C. 20005

Behalf of Ever Young & Shinn Fu

J. Pierre Kolisch, Esq.
Kolisch, Hartwell & Dickinson
200 Pacific Bldg.
520 S.W. Yamhill Street
Portland, OR 97204

Behalf of Weslo & H.C. Enterprises

Joseph W. Berenato, III, Esq.
Schlesinger, Arkwright, Garvey & Fado
2001 Jefferson Davis Highway
Suite 607
Arlington, VA 22202

Behalf of Respondent

National Sporting Goods Corp.
25 Brighton Ave.
Passaic, NJ 07055

Behalf of Respondent

Astar Data Int'l, Inc.
12101 South Edith
Alhambra, CA 91803

Behalf of Respondent

Seasonal Merchandise
Development Co., Ltd.
P.O. Box 43-156
Taipei, Taiwan

Behalf of Respondent

M.T.I., Inc.
P.O. Box 190
Menan, ID 83434

Behalf of Weslo Design Int'l Inc.

V. James Adduci, II, Esq.
Adduci, Dinan & Mastriani
1140 Connecticut Ave., N.W.
Suite 250
Washington, D.C. 20036

Behalf of Respondent

Sunstar Int'l, Inc.
24-16 Queens Plaza South
Long Island City, NY 11101

CERTIFICATE OF SERVICE - Cont. ²

Behalf of Weslo & H.C. Enterprises

Thomas J. Rossa, Esq.
William S. Britt, Esq.
Trask & Britt
P.O. Box 1978
Salt Lake City, UT 84110

Behalf of Respondent

Pro-X, Ltd.
Suite 200
189 Reid Street
Hamilton, Bermuda

Behalf of Respondent

John Lee
c/o Weslo International, Inc.
P.O. Box 26-844
Taipei, Taiwan, R.O.C.

Bahalf of Mailing List

Weslo International, Inc.
P.O. Box 26-844
Taipei, Taiwan, R.O.C.

CERTIFICATE OF SERVICE- Cont. 3

GOVERNMENT AGENCIES

Mr. Charles S. Stark
Antitrust Div./U.S. Dept of Justice
Room 7115, Main Justice
Pennsylvania Ave & Tenth St., NW
Washington, DC 20530

Edward F. Glynn, Jr., Esq.
Asst Dir for Intl Antitrust
Federal Trade Commission
Room 502-4, Logan Building
Washington, DC 20580

rel J. Grinstead, Esq.
t. of Health & Human Svcs.
Room 5362, North Bldg.
330 Independence Ave., SW
Washington, DC 20201

Richard Abbey, Esq.
Chief Counsel
U.S. Customs Service
1301 Constitution Ave., NW
Washington, DC 20229

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of)
)
CERTAIN CONVERTIBLE ROWING)
EXERCISERS)
_____)

Investigation Vb... 337-TA-212 -

C,
rn
c.
C.4.)

NOTICE OF COMMISSION DECISION TO PARTIALLY REVIEW AND REVERSE INITIAL
DETERMINATION; COMMISSION DECISION NOT TO REVIEW THE REMAINDER OF
THE INITIAL DETERMINATION; TERMINATION OF INVESTIGATION
ON THE BASIS OF NO VIOLATION OF SECTION 337
OF THE TARIFF ACT OF 1930

AGENCY: U.S. International Trade Commission.

ACTION: Notice is hereby given that the Commission has determined (1) to review and reverse that part of an initial determination (ID) finding the claims of the patent in controversy invalid for anticipation, (2) not to review the remainder of the ID, and (3) to terminate the investigation on the basis that there is no violation of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337).

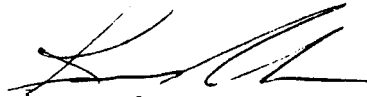
SUMMARY: The Commission has determined to review and reverse that part of an ID that found U.S. Letters Patent 4, 477,071 (the '071 patent) invalid for anticipation under 35 U.S.C. S 102. The Commission has determined not to review any other portion of the ID and, accordingly, the ID as to all other issues has become the determination of the Commission. The investigation is therefore terminated on the basis that there is no violation of section 337.

FOR FURTHER INFORMATION CONTACT: Jack Simmons, Esq., Office of the General Counsel, telephone 202-523-0493. Hearing-impaired individuals may obtain information on this matter by contacting the Commission's TDD terminal at 202-724-0002.

SUPPLEMENTARY INFORMATION: On October 18, the presiding administrative law judge issued an ID in the above-captioned investigation. The ID found the '071 patent invalid for anticipation and obviousness in light of a prior art device known as the Beacon 3002 rower. The ID further found that complainant Diversified Products Corp. had established all other elements of a violation of section 337.

The Commission determined to review and reverse that portion of the ID finding the '071 patent invalid for anticipation on the ground that all the elements of the claims of the patent do not read on the Beacon 3002 rower. The Commission determined not to review the ID as to any other issue. Accordingly, the ID became the determination of the Commission on all issues except anticipation, and the Commission determined that there was no violation of section 337.

By order of the Commission.

A handwritten signature in black ink, appearing to read 'K. R. Mason', with a stylized flourish at the end.

Kenneth R. Mason
Secretary

Issued: December 5, 1985

PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of

ZEBTAZW`CONVTRTIBtE`ROWING EXERCISERS)

Investigation No. 337-TA-212

INITIAL DETERMINATION

John J. Mathias, Administrative Law Judge

Pursuant to the Notice of Investigation in this matter (50 Fed. Reg. 2350, January 16, 1985), this is the Administrative Law Judge's Initial Determination under Rule 210.53(a) of the Rules of Practice and Procedure of this Commission. (19 C.F.R. 210.53(s)).

The Administrative Law Judge hereby determines that there is no violation of Section 337 of the Tariff Act of 1930, as amended (19 U.S.C. S 1337, hereafter Section 337), in the importation of certain Convertible Rowing Exercisers into the United States, or in their sale. The amended complaint herein alleges that such importation and sale constitute unfair methods of competition and unfair acts by reason of alleged infringement of claims 1-3, and 5-18 of U.S. Letters Patent 4,477,071. It is further alleged that the effect or tendency of the unfair methods of competition and unfair acts is to destroy or substantially injure an industry, effaf101y, 4R1 economically operated, in the United States.

?41. JO PII-.10

Zfl :t, d IC! (12

71-7 A I

) 7

Appearances

For COMPLAINANT: Diversified Products Corporation:

Harold J. Birch
Alan I. Cantor
Scott F. Partridge
Banner, Birch, McKie & Beckett
One Thomas Circle, N.W.
Suite 600
Washington, D.C. 20005

For RESPONDENTS: Weslo Design International, Inc. and B.C. Enterprises, Ltd.:

Thomas J. Rossa
Trask & Britt
P.O. Box 1978
Salt Lake City, Utah 84110

Joseph W. Berenato, III
Schlesinger, Arkwright, Garvey & Fado
Suite 607
2001 Jefferson Davis Highway
Arlington, Virginia 22202

V. James Adduci, II
Charles F. Schill
Adduci, Dinan & Mastroiani
1140 Connecticut Ave., N.W.
Washington, D.C. 20036

For the U.S. International Trade Commission.

Robert D. Litowitz

TABLE OF CONTENTS

	<u>Page</u>
PROCEDURAL HISTORY	
Abbreviations	8
 FINDINGS OF FACT	
I. JURISDICTION	9
II. PARTIES	11
III. PRODUCT IN ISSUE	16
IV. PATENT IN ISSUE	19
A. Background of the Invention	23
B. Prosecution History of the '071 Patent	31
V. THE EXPERTS	47
A. DP's Technical Expert -- Andrew T. Kostanecki	47
B. Weslo's Technical Expert -- Roger E. Kaufman	50
C. Weslo's Patent Expert -- Fred C. Mattern, Jr.	51
D. Evaluation	52
VI. VALIDITY OF THE '071 PATENT	53
A. Anticipation - 35 U.S.C. S 102	53
1. The Beacon 3002 Rower	53
2. The Beacon 3001 Rower	68
3. The Charters Patent	74
4. The Wilson Patent	79
5. The Welgemoed South African Patent	84
6. The H-4 Unit, Priority Document and Other Activities of Inventors and Complainant	86

TABLE OF CONTENTS - con't

	Page
B. Obviousness - 35 U.S.C. S 103	89
1. Level of Ordinary Skill in the Art	89
2. Scope and Content of the Prior Art	90
3. Differences Between the Prior Art and the Claimed Invention	100
4. Secondary Considerations	106
C. 35 U.S.C. § 112	109
D. Defenses of Failure to Claim Invention and Defective Oath	117
VII. ENFORCEABILITY OF THE '071 PATENT	118
A. Alleged Inequitable Conduct in the Prosecution of the '071 Patent	118
B. Weslo's Eleventh Affirmative Defense -- The Advisory Letters	127
C. Alleged Inequitable Conduct Before the ITC	130
VIII. INFRINGEMENT OF THE '071 PATENT	132
A. Infringement of Claims 1 and 16 of the '071 Patent ...	132
1. The BODY SHOP 360	132
2. The BODY SHOP 100 and 1000	137
3. Differences Between the BODYTONE 300 and the BODY SHOP 360	138
4. The Devices of Other Respondents	141
B. Complainant's Products	142
1. The BODYTONE Models	143
2. The Shapemaster 1000	144

TABLE OF CONTENTS - con't

	Page
IX. IMPORTATION AND SALE	.... 147
X. THE DOMESTIC INDUSTRY	.... 152
XI. EFFICIENT AND ECONOMIC OPERATION	.... 154
XII. EFFECT OR TENDENCY TO CAUSE SUBSTANTIAL INJURY	.... 157
A. The Exercise Equipment and Convertible Rowing Machine Markets .....	.... 157
B. The Health of the Domestic Industry	.... 161
C. Imports as a Cause of Substantial Injury	.... 165
1. Market Share	.... 165
2. Lost Sales and Price Competition	.... 171
D. Tendency To Substantially Injure	.... 186
OPINION	
I. INTRODUCTION	.... 190
II. JURISDICTION	.... 191
III. VALIDITY OF THE '071 PATENT	.... 192
A. Presumption of Validity	.... 192
B. Anticipation	.... 192
1. The Beacon 3002 Rower	.... 193
2. Other Prior Art Which Respondent Claims Anticipates the '071 Patent	.... 199
a. Beacon Model 3001 (RPX 8)	.... 199
b. The Charters Device	... 200
c. The Wilson Patent	.... 204
d. The Welgemoed South African Patent	.... 205
e. The H-4 Unit and Related Arguments of Respondent	..... 206

TABLE OF CONTENTS - Cont'd

	Page
C. Obviousness	208
1. Level of Ordinary Skill in the Art	209
2. Scope and Content of the Prior Art	213
3. Differences Between the Prior Art and the Claims at Issue	219
a. Charters	222
b. Wilson	224
c. Smith in Combination with Grosser	225
d. Beacon 3001	225
e. Beacon 3002	227
4. Secondary Considerations	230
5. Conclusion as to Obviousness	234
D. 35 U.S.C. § 112	234
E. Allegations of Failure To Claim Invention and Defective Oath	237
IV. ENFORCEABILITY OF THE '071 PATENT	238
A. Alleged Inequitable Conduct Before the PTO	238
. Alleged Patent Misuse	246
1. Weslo's Eleventh Affirmative Defense - The Advisory Letters	246
2. Weslo's Charges of Robinson-Patman Violations	248
C. Alleged Inequitable Conduct Before the ITC	248
V. INFRINGEMENT	250
VI. IMPORTATION AND SALE	251
A. Weslo	251
B. Other Importers	252

TABLE OF CONTENTS - Cont'd

	Page
F ND Tray	..... 253
VII. EFFICIENT AND ECONOMIC OPERATION	..... 255
VIII. INJURY	..... 258
A. Market Overview	..... 259
B. Substantial Injury	..... 261
1. Market Share Analysis	..... 263
2. Lost Sales/Price Competition	..... 265
C. Tendency To Substantially Injure	..... 275
D. Additional Affirmative Defenses Raised by Weslo	..... 278
1. Qualitative Advantages of the BODY SHOP	..... 278
2. The Need for Multiple Sources of Supply	..... 280
3. The Presence of Non-Infringing Substitutes	..... 281
IX. PENDING MOTIONS	..... 283
A. Complainant's Motion for Default	..... 283
B. Other Motions	..... 284
CONCLUSIONS OF LAW	..... 286
INITIAL DETERMINATION AND ORDER	..... 288
APPENDIX: Exhibit Lists	

PROCEDURAL HISTORY

On December 5, 1984, a complaint was filed with the U.S. International Trade Commission pursuant to 19 U.S.C. S 1337 (Section 337) on behalf of Diversified Products Corporation (DP), 309 Williamson Ave., P.O. Box 100, Opelika, Alabama 3'803. Amended complaints were filed on December 14 and 24, 1984. The amended complaint of December 24, 1984 alleged unfair methods of competition and unfair acts in the importation of certain convertible rowing exercisers into the United States, or in their sale, by reason of alleged: (1) infringement of claims 1-3 and 5-18 of **U.S. Letters Patent 4,477,071**; and (2) infringement of claims 1-9 of **U.S. Letters Patent 4,488,719**. **The effect or tendency of these alleged unfair acts and unfair methods of competition was alleged to be to destroy or substantially injure an industry, efficiently and economically operated, in the United States. Complainant further requested that the Commission institute an investigation, and after a full investigation, issue a permanent exclusion order and permanent cease and desist orders.**

After consideration of the amended complaint, the Commission ordered, on January 4, 1985, that an investigation be instituted pursuant to subsection (h) of Section 337 to determine whether there is a violation of subsection (a) of Section 337 as alleged in the amended complaint. Notice of institution of such investigation was published in the Federal Register on January 16, 1985. (50 Fed. Reg. 2350).

The following ten parties were named as respondents in the Notice of Investigation:

H.C. Enterprise Co., Ltd.
P.O. Box 26-842
Taipei, Taiwan

Ever Young Industries Co., Ltd.
11th Floor, No. 624
Ming Chuan East Road
Taipei, Taiwan

Seasonal Merchandise Development Co., Ltd.
P.O. Box 43-156
Taipei, **Taiwan**

Pan's World International, Ltd.
7th Floor, NO. 22
Chung-Cheng Road, Shih-Lin
P.O. Box 58937
Taipei, Taiwan

Astar Data International, Inc.
1201 South Edith
Alhambra, California 91803

Sunstar International, Inc.
24-16 Queens Plaza South
Long Island City, New York 11101

M.T.I., Inc.
P.O. Box 190
Menan, Idaho 83434

National Sporting Goods Corporation
25 Brighton Aveune
Passaic, New Jersey 07055

Weslo Design International, Inc.
750 Mountainview Drive
P.O. Box 10
Logan, Utah 84321

Shinn Fu Company of America, Inc.
1004 Andover Park East
Tukwila (Seattle), Washington 98188

Robert D. Litowitz, Esq. and Deborah S. Strauss, Esq., Office of Unfair Import Investigations, were named Commission investigative attorneys, party to this investigation. Chief Administrative Law Judge Janet D. Saxon was the designated Administrative Law Judge in this investigation.

The following respondents filed letters in response to the complaint and notice of investigation: National Sporting Goods Corp. (National), on January 18, 1985; Sunstar International Import-Export Ltd. (Sunstar), on January 21, 1985; Seasonal Merchandise Development Co., Ltd. (Seasonal), on January 31, 1985; MTI, Inc. (MTI), by letter dated January 29, 1985; Pan's World International Ltd. (Pan's World), on February 7, 1985; and Astar Data International Corp. (Astar), on March 11, 1985. With respect to each of the foregoing letters, Judge Saxon issued separate notices indicating that these letters were deemed to be answers to the complaint and notice of investigation. Respondents Ever Young Industries Co., Ltd. (Ever Young) and Shinn Fu Co. of America Inc., (Shinn Fu), responded to the complaint and notice of investigation on February 12, 1985. Respondent Weslo Design International, Inc. (Weslo U.S.) filed a response to the amended complaint on February 11, 1985. By letter filed February 11, 1985, respondent H.C. Enterprise Co., Ltd. (H.C. Enterprise) notified the Commission through counsel for Weslo U.S. that H.C. Enterprise did not intend to respond to the complaint and notice or to participate in the investigation.

By Order No. 6, issued March 29, 1985, Administrative Law Judge Saxon suspended this investigation as to respondent Weslo U.S. On May 2, 1985, the

Commission issued notice of its Determination To Review and Reverse Initial Determination Partially Suspending Investigation. (50 Fed. Reg. 19496, May 8, 1985).

Order No. 17, issued May 13, 1985, granted complainant's motion to amend the complaint and notice of investigation by joining as respondents the following three parties:

Weslo International, Inc.
P.O. Box 26-844
Taipei, Taiwan R.O.C.

Pro-X Ltd.
Suite 200
189 Reid St.
Hamilton, Bermuda

John Lee
c/o Weslo International, Inc.
P.O. Box 26-844
Taipei, Taiwan R.O.C.

Pro-X Ltd. (Pro-X) filed a petition for review of this initial determination. By order of June 12, 1985, the Commission issued notice of its determination not to review Order No. 17. (50 Fed. Reg. 25476, June 19, 1985). The amended complaint and notice of investigation were served on each of these respondents on June 19, 1985. Neither respondent Weslo International, Inc. (Weslo Taiwan), nor respondent John Lee entered an appearance or responded to the complaint and notice.

On May 13, 1985, Chief Administrative Law Judge Saxon reassigned this investigation to Administrative Law Judge John J. Mathias. A preliminary conference was held before Judge Mathias on May 22, 1985. Appearances were

made on behalf of complainant DP, respondent Weslo U.S. and the Commission Investigative staff.

By Order No. 29, issued June 25, 1985, respondent H.C. Enterprise was
a found in default and certain procedural sanctions were imposed. The Commission issued notice of its decision not to review this initial determination on July 24, 1985. (50 Fed. Reg. 31053, July 31, 1985). Order No. 43, issued July 24, 1985, found respondent Pan's World in default and imposed certain procedural sanCtiOns. The Commission determined not to review this initial determination by order of August 19, 1985. (50 Fed. Reg. 35167, August 29, 1985).

Order No. 30, issued June 27, 1985, was an initial determination granting complainant's second motion to amend the complaint and notice of investigation by deleting all reference to U.S. Letters Patent 4,488,719 ('719 patent). The Commission issued notice of its decision not to review Order No. 30 on July 24, 1985. (50 Fed. Reg. 31052, July 31, 1985).

Order No. 40, issued July 22, 1985, was an initial determination granting joint motions to terminate this investigation as to respondents Seasonal,, Sunstar, National, Shinn Fu, and Ever Young on the basis of settlement and consent order agreements. By order of August 23, 1985, the Commission determined to review and reverse Order No. 40. (50 Fed. Reg. 36157, September 5, 1985).

On August 9, 1985, respondent Weslo U.S. filed a motion to correct its amended response of May 16, 1985 to the complaint and notice of investigation. (Motion Docket No. 212-81). The purpose of this motion is to provide complete copies of certain exhibits that were identified in the amended response, but for which incomplete copies were attached to the amended response as originally filed. The amended exhibits included in this motion are identified as H-1, U.S. Letters Patent 2,855,200 to Blickman, I-1, Figures 1-14 of U.S. Letters Patent 2,855,200, and 1-2, Figures 2, 2a and 3 of U.S. Letters Patent 3,614,097 to Blickman. There is no opposition to this motion. Therefore, Motion 212-81 is hereby granted.

On August 19, 1985, Weslo U.S. filed a motion to amend the pleadings to conform to the evidence so as to add Affirmative Defense Twenty to Weslo U.S.'s amended response. (Motion Docket No. 212-85). This motion is opposed by complainant. For the purpose of giving full consideration to all affirmative defenses, as more fully stated hereinafter, Motion 212-85 is granted.

A prehearing conference was held in this matter on August 12, 1985. The hearing commenced immediately thereafter before Administrative Law Judge John J. Mathias to determine whether there is a violation of Section 337 as alleged in the complaint, as amended, and set forth in the amended notice of investigation. Appearances were made on behalf of complainant DP, respondent Weslo U.S., and the Commission investigative staff. No other respondents appeared at the hearing. The hearing concluded and the record closed on August 23, 1985.

The issues have been briefed and proposed findings of fact and conclusions of law submitted by the participating parties. The matter is now ready for decision.

This initial determination is based on the entire record of this proceeding including the evidentiary record compiled at the final hearing, the exhibits admitted into the record at the final hearing, and the proposed findings of fact and conclusions of law and supporting memoranda filed by the parties. I have also taken into account my observation of the witnesses who appeared before me and their demeanor. Proposed findings not herein adopted, either in the form submitted or in substance, are rejected either as not supported by the evidence or as involving immaterial matters.

The findings of fact include references to supporting evidentiary items 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 each finding.

The following abbreviations are used in this Initial Determination:

Tr. - Official Transcript, usually preceded by the witness' name and followed by the referenced page(s);
CX - Complainant's Exhibit, followed by its number and the referenced page(s);
CPX - Complainant's Physical Exhibit
RX - Respondent's Exhibit, followed by its number and the referenced page(s);
RPX - Respondent's Physical Exhibit;
SX - Staff Counsel's Exhibit, followed by its number and the referenced page(s);
SPX - Staff's Physical Exhibit;
CF - Complainant's Proposed Finding;
RF - Respondent's Proposed Finding;
CB - Complainant's Post Hearing Brief;
RB - Respondent's Post Hearing Brief;
SB - Staff Counsel's Post Hearing Brief;
CRB - Complainant's Post. Hearing Reply Brief;
RRB - Respondent's Post Hearing Reply Brief;
SRB - Staff Counsel's Post Hearing Reply Brief;
FF - Finding of Fact;
WS - Witness Statement, usually preceded by the exhibit number and the name of the witness and followed by the referenced page(s);
CRF - Complainant's Reply Finding;
RRF - Respondent's Reply Finding

FINDINGS OF FACT

I. JURISDICTION

1. Service of the Complaint and Notice of Investigation was perfected on all respondents. (Notice of Investigation of January 8, 1985; letters of June 19, 1985, from the Secretary of the Commission to Weslo International, Inc., Pro-X Limited, and John Lee).

2. Respondents Weslo Design International, Inc. (Weslo), Shinn Fu Co. of America, inc. (Shinn Fu) and Ever Young Industries Co., Ltd. (Ever Young) all entered appearances through counsel and responded to the Complaint and Notice of Investigation. (Letter of January 31, 1985 from Trask & Britt to the Secretary of the Commission; response of Weslo to Amended Complaint dated February 9, 1985; RX 340, Stipulation No. 2; response of Shinn Fu and Ever Young, dated January 25, '1985).

3. Respondent H.C. Enterprise Co., Ltd. (H.C. Enterprise) entered an appearance through counsel but did not respond to the Complaint and Notice of Investigation. (Letters of January 31 and February 9, 1985 from Trask & Britt to the Secretary of the Commission).

4. Respondent Pro-X, Ltd. (Pro-X) entered a limited appearance through counsel for the purpose of opposing complainant's Motion To Amend the Complaint and Notice of Investigation To Add Pro-X, John Lee and Weslo

International, Inc. (Weslo Taiwan). (Opposition of Proposed Respondent Pro-X, Ltd. to Diversified Products' Motion to Amend the Complaint and Notice of Investigation (Motion Docket No. 212-21), dated April 29, 1985; Petition for Review of Initial Determination Amending Notice of **Investigation**, filed by Pro-X on May 30, 1985).

5. **Respondents National Sporting Goods Corporation (National), Sunstar International, Inc. (Sunstar), Seasonal Merchandise Development Co., Ltd. (Seasonal), M.T.I., Inc. (M.T.I.) and Pan's World International, Ltd. (Pan's World) and Astar. Data International, Inc. (Astar) each entered an appearance by letter filed with the Secretary of the Commission. Administrative Law Judge Janet D. Saxon deemed these letters to be answers to the Complaint and Notice of Investigation. (Letter dated January 14, 1985 to the Secretary of the Commission from National, and Notice to All Parties dated January 23, 1985; letter dated January 21, 1985 to the Secretary of the Commission from Sunstar, and Notice to All Parties dated February 1, 1985; letter dated January 26, 1985 to the Secretary of the Commission from Seasonal, and Notice to All Parties dated February 4, 1985; letter dated January 29, 1985 to the Secretary of the Commission from M.T.I., and Notice to All Parties dated February 8, 1985; letter dated February 1, 1985, to the Secretary of the Commission from Pan's World and Notice to All Parties dated February 8, 1985; letter dated February 6, 1985 to the Commission from Astar, and Notice to All Parties dated March 12, 1985).**

6. Respondents Weslo Taiwan and John Lee have neither entered appearances nor responded to **the** Complaint and Notice of Investigation.

II. PARTIES

7. Complainant **Diversified Products Corporation (DP)** is an Alabama corporation having its principal place of business at 309 Williamson Avenue, Opelika, Alabama 36803. DP has been engaged for over 20 years in the manufacture and sale of physical fitness and sports equipment. In 1976, DP was merged into the Liggett Group, and continued to operate essentially on an autonomous basis under the same management as before. In 1980, the Liggett Group was acquired by Grand Metropolitan PLC, a British conglomerate based in London, England. Subsequently, DP was reorganized under Grand Met U.S.A., a new U.S. subsidiary of Grand Metropolitan PLC. (CX 3, at 1; Pilgrim CX 272, at 10; RX 290, at 1-6).

8. Respondent **Weslo Design International, Inc. (Weslo or Weslo U.S.)** is a domestic corporation organized and existing under the laws of the State of Utah, with its principal place of business in Logan, Utah. Weslo U.S. was incorporated in 1977, and began selling exercise equipment products in 1981. Those products include an imported line of BODY SHOP exercise machines made in Taiwan by Weslo International, Inc. (Weslo Taiwan). (Stevenson W.S., RX 325, at 2-4; CX 321, Stipulation Nos. 1, 3; RX 340, Stipulation Nos. 1, 3).

9. Respondent **Weslo International, Inc. (Weslo Taiwan)** is a Taiwanese company which at least in part is owned and operated by respondent John Lee. Weslo Taiwan manufactures and exports exercise equipment, including BODY SHOP exercise machines, to the United States. Prior to the formation of respondent

Pro-X, Ltd., this exercise equipment was manufactured by John Lee at the same manufacturing facility under the name Kai Hsien Enterprise Co., Ltd.

BOGY

SHOP exercise machines shipped to Weslo U.S. by Weslo Taiwan first are sold to respondent Pro-X, Ltd., which then resells those products to Weslo U.S.

(Watterson Dep., CX 264, at 67-71; Stevenson, Dep., CX 246, at 167-72, 176; Stevenson, Tr. 1077, 1094-95, 1101-02; CX 267, at 4-10),.

10. Respondent Pro-X, Ltd. (Pro-X) is a Bermuda trading company which purchases exercise equipment, including BODY SHOP exercise machines, from Weslo Taiwan and resells them to Weslo U.S.

(Hancey Dep., CX 247, at 12-17, 67; CX 258; CX 267, at 7-10).

11. Respondent H.C. Enterprise Co., Ltd. (H.C. Enterprise) is a Taiwanese corporation having a place of business at P.O. Box 26-842, Taipei, Taiwan, R.O.C. H.C. Enterprise is at least in part owned and operated as a trading company by John Lee. H.C. Enterprise has exported exercise equipment, including BODY SHOP exercise machines, to the United States. (CX 112, 116; Watterson Dep., CX 264, at 71-74, 316-18; CX 267, at 4, 7).

12. Respondent John Lee is a Taiwanese national having an address in care of Weslo Taiwan, and who at least in part owns and operates Weslo Taiwan and H.C. Enterprise and, in the past, Kai Hsien Enterprise Co., Ltd.

C (Hancey, CX 247, at 12-15, 67; Watterson Dep., CX 264, at 71, 317-18; CX 267, at 4; CX 319).

13. Respondent Pan's World International, Ltd. (Pan's World) is a Taiwanese corporation having a mailing address at P.O. Box 58937, Taipei, Taiwan R.O.C. Pan's has exported exercise equipment, including convertible rowing exercisers, to at least respondent M.T.I., Inc. in the United States. (Letter of February 1, 1985, from Pan's to the Secretary of the Commission; McDonald Dep., CX 241, at 11, 13, 34-40).

14. Respondent M.T.I., Inc. (M.T.I.) is an Idaho corporation having offices at P.O. Box 190, Menan, Idaho 83434. M.T.I. imports and sells in the United States exercise equipment, including convertible rowing exercisers, exported from Taiwan by at least Pan's World. (Letter of January 29, 1985 from M.T.I. to the Secretary of the Commission; CX 48; McDonald Dep., CX 241, at 11-13, 34-40).

15. Respondent Ever Young Industries Co., Ltd. (Ever Young) is a Taiwanese corporation having a mailing address at 11th Floor, No. 624, Ming Chuan East Road, Taipei, Taiwan R.O.C. Ever Young has exported exercise equipment, including convertible rowing exercisers, to the United States for distribution by at least respondent Shinn Fu Co. of America, Inc. Ever Young and DP have entered into a Consent Order Settlement Agreement. An Initial

Determination granting a Motion to Terminate as to Ever Young based on this Consent Order Settlement Agreement has been reversed by the Commission.

(Response of Shinn Fu and Ever Young at 2; CX 49-50; Joint Motion of DP and Ever Young to **Terminate as to Ever Young (Motion Docket No. 212-39); Order No. 40, issued July 22, 1985; Notice of Determination to Review and Reverse, issued August 23, 1985).**

16. Respondent Shinn Fu Co. of America, Inc. (Shinn Fu) is a Missouri corporation having corporate offices at 1004 Andover Park East, Tukwila (Seattle), Washington 98188. Shinn Fu has close ties with Ever Young, and has imported exercise equipment, including convertible rowing exercisers into the United States from Ever Young. DP and Shinn Fu have entered into a Consent Order Settlement Agreement. An Initial Determination granting a Motion to Terminate as to Shinn Fu based on this Consent Order Settlement Agreement has been reversed by the Commission. (Response of Shinn Fu and Ever Young at 2; CX 49-50; Joint Motion of DP and Shinn Fu to Terminate as to Shinn Fu (Motion Docket No. 212-38); Order No. 40, issued July 22, 1985; Notice of Determination to Review and Reverse issued August 23, 1985).

17. Respondent Seasonal Merchandise Development Co., Ltd. (Seasonal) is a Taiwanese corporation having its principal office at 301 Chen Kung Road, Section 2, P.O. Box 43-156 Taipei, Taiwan R.O.C. Seasonal or its associated companies have offered for sale or intended to import and sell in the United States certain convertible rowing exercisers. DP and Seasonal have entered into a Consent Order and Settlement Agreement. An Initial Determination granting a Motion To Terminate as to Seasonal based on this Consent Order

Settlement Agreement has been reversed by the Commission. (CX 51; Joint Motion of DP and Seasonal to Terminate as to Seasonal (Motion Docket No. 212-30); Order No. 40, issued July 22, 1985; Notice of Determination to Review and Reverse issued August 23, 1985).

18. Respondent National Sporting Goods Corporation (National) is a New Jersey corporation having corporate offices at 25 Brighton Avenue, Passaic, New Jersey 07055. National allegedly has offered for sale in the United States a certain imported convertible rowing exerciser. DP and National have entered into a Consent Order Settlement Agreement. An Initial Determination granting a Motion to Terminate as to National based on this Consent Order Settlement Agreement has been reversed by the Commission. (Complaint, 1 26; Joint Motion of DP and National to Terminate as to National (Motion Docket No. 212-32); Order No. 40, issued July 22, 1985; Notice of Determination to Review and Reverse, issued August 23, 1985).

19. Respondent Sunstar International, Inc. (Sunstar) is a New York corporation having corporate offices at 24-16 Queens Plaza South, Long Island City, New York 11011. Sunstar allegedly has offered for sale in the United States a certain imported convertible rowing exerciser. DP and Sunstar have entered into a Consent Order Settlement Agreement. An Initial Determination granting a Motion to Terminate as to Sunstar based on this Consent Order Settlement Agreement has been reversed by the Commission. (Complaint, 1 25; Joint Motion of DP and Sunstar to Terminate as to Sunstar (Motion Docket No. 212-31); Order. No. 40, issued July 22, 1985; Notice of Determination to Review and Reverse, issued August 23, 1985).

20. Respondent Astar Data International, Inc. (Astar) is alleged to be a California corporation having offices at 1201 S. Edith, Alhambra, California 91803. It is alleged that Astar imports convertible rowing exercisers from **respondent Pan's World and sells such rowing exercisers** in the United States. **(Amended Complaint, 1 21).**

III. PRODUCT IN ISSUE

21. The product in this investigation is a multi-purpose physical, exercising apparatus which has been denominated a convertible rowing exerciser. The device is constructed to be a compact and adaptable apparatus, which in a horizontal orientation operates as a ground-supported rowing exerciser, but which, when the rowing frame is reoriented (upended) to a vertical position on the attached bench, allows the user to perform a range of other exercises. Thus, the apparatus allows a user to perform rowing and other aerobic exercises when the frame is in a horizontal position, and a range of anaerobic, weight training type exercises when the frame is in an upright position. (CX 1, Background and Summary of Invention; Kostanecki W.S., CX 275, at 6-7).

22. Complainant's convertible rowing exercisers are sold under the trade name "BODYTONE." The first model of the BODYTONE, the BODYTONE 300, was initially offered for sale in the United States in late January'or early February 1983 at the National Sporting Goods Association (NSGA) trade show in Chicago, Illinois. Since 1983, the BODYTONE 300 has been complainant's basic convertible rowing exerciser. (Pilgrim W.S., CX 272, at 12; CPX 2).

23. Complainant DP has added a number of different versions of the BODYTONE to its product line: (a) the BODYTONE 310 and 320 are slight variations of the BODYTONE 300 and are manufactured for sale to specific retailers; (b) the BODYTONE 250 is a lower-priced version of the BODYTONE 300, (CPX 11); (c) the BODYTONE 500 is a modified version of the BODYTONE 300 which features an oversize backboard with a red wet-look vinyl fabric as opposed to the standard black fabric, (CPX 3); (d) the BODYTONE 600 is an upscale version of the BODYTONE 300, featuring rowing arms that can be pivoted 360°; and (e) the BODYTONE 700 is an upscale version of the BODYTONE 300, featuring inclinability of the rower frame. (Thompson W.S., CX 276 at 9; Stroh W.S., RX 324, at 6; RX 290, at 22).

24. DP manufactures, exclusively for Sears, Roebuck & Co. (Sears), the Shapemaster 1000, a convertible rowing exerciser designed by Sears. (Stroh W.S., RX 324, at 5).

25. Respondent Weslo sells convertible rowing exercisers under the name "BODY SHOP." Weslo introduced the BODY SHOP 360, its basic convertible rower, to the trade in late 1983 and commenced sales in January 1984. (Stevenson WS, RX 325, at 5, 8-9; Thompson WS, CX 276, at 7; CPX 5).

26. Weslo sells four basic models of the BODY SHOP rower: (a) Model 7660 is the BODY SHOP 360, Weslo's basic rower, featuring orbital rowing arms that can be pivoted 360°; (b) Model 7650 is the BODY SHOP 360 with a butterfly attachment which allows the user to perform exercises directed to development of the chest muscles; (c) Model 7640 is the BODY SHOP 100, a lower-priced,

stripped-down version of the BODY SHOP 360; and (d) Model 7651 is the BODY SHOP 1000, a deluxe higher-priced version of the BODY SHOP 360 which features an attachment which permits abdominal and back exercises to be performed. (Stevenson WS, RX 325, at 14; CX 139).

27. Weslo sells to Sears, the following models of convertible rowing exercisers:

<u>Sears Model No.</u>	<u>Description</u>
28667	Weslo BODY SHOP 100 with Leg Lift attachment
28680	Weslo BODY SHOP 360 with Butterfly attachment
28681	Weslo BODY SHOP 1000

(Stroh W.S., RX 324, at 5-6; CX 323, at 633, 635; CX 183; Stroh Dep., CX 245, at 135-39; Stevenson, Tr. 1091-92; SX 20).

28. Pan's World has exported to the United States, and M.T.I. has imported and sold in the United States, a convertible rowing exerciser known as the Multi-Gym (M.T.I. Model No. MG207). Some Pan's World units have been given a model designation "Pan's 207." (CPX 6; CX 47, 48, CX 68, at 500456; CX 70, at 500467; CX 71, 84, 223, 224; CX 232, at 500456; McDonald Dep., CX 241, at 26, 44).

29. Ever Young has exported to the United States, and Shinn Fu has imported and sold in the United States, convertible rowing exercisers designated "Ever Young Bronze Rowing Machine" or "Powerpack Compact Rower and Multi-Gym." (CX 49, 50, 67; CPX 7).

IV. PATENT IN ISSUE

30. The patent at issue is U.S. Letters Patent 4,477,071 ('071 patent), entitled "Convertible Rowing Exercising Apparatus," which was filed in the U.S. Patent and Trademark Office (PTO) on March 14, 1983 and issued on October 16, 1984. (CX 1).

31. The three named inventors of the '071 patent, Peter L. Brown, Patrick C. Fitzpatrick and Frederick' W. Lloyd, assigned their rights in the '071 patent to BODYTONE, Ltd., the company formed by them to exploit their invention. (CX 2; Fitzpatrick WS, CX 271, at 10; CX 321, Stipulation No. .6).

32. On November 12, 1982, Bodytone and complainant DP signed an exclusive license agreement granting DP exclusive worldwide rights to manufacture and sell the BODYTONE convertible rowing exercisers under all patents corresponding to the then pending United Kingdom application, and granting to. DP exclusive rights in the trade name BODYTONE. In return DP agreed to pay a royalty on-all: units sold under the agreement. (CX 3; Pilgrim WS, CX 272, at 7; CX 321, StipulationiNo.

33. DP has alleged infringement of claims 1, 2, 3 and 5-18 of the '071 patent. For purposes of trial, DP limited its allegations of infringement to claims 1, 5-9 and 13-17 of the '071 patent. Claims 1 and 16 are independent claims; claims 5-9 and 13-15 depend from claim 1; claim 17 depends from claim 16. (Amended complaint, 1 32; Notice of Investigation; DP's Proposed Stipulation No. 11, filed July 15, 1985; CX 1).

34. Independent claim 1 readt as follows:

1. A ground-supported physical exercising apparatus capable of use in any of a plurality of orientations, and adapted to be selectively used as a rowing machine or for performing other typeLof exercises, comprising:

a generally horizontal frame;

at least one pivoted movable lever operatively connected to said frame and having a handle adapted to be grasped and moved by a user's hand;

resistance means operatively,coupledto. : said lever for providing resistance to the movement of said lever;

alongitudinaltrack attached to said frame.;

a first user support comprising a seat slidable along said track;

oot bracing means for bracing the user's feet;

ground-engaging auxiliary Support means for stably supporting the apparatus with said frame in an upright position;

a second user support; and

attaching means for.lirmly.attaching said-second user support to the apparatus adjacent the lower end of and generally perpendicular to;said upright frame so that the user can grasp and move said handle while supported on said second user support, thereby increasing the range of exercises which can be performed with.the apparatus-

(CX 1, col. 3, 11. 31-55).

35. Dependent claims 5-9 and 13-15 read as follows:

5. Physical exercising apparatus according to claim 1 wherein said auxiliary support means includes ground-engaging means on the underside

of said second user support, whereby said second user support serves to support said frame when said frame is in its upright position.

6. Physical exercising apparatus according to claim 5 wherein said auxiliary support means includes ground-engaging means on said **frame**.

7. **Physical exercising apparatus according to claim 5 wherein said attaching means comprises coupling means for detachably coupling said second user support to said frame.**

8. Physical exercising apparatus according to claim 7 wherein said frame includes a longitudinal member, and said coupling means couples one end of said second user support to one end of said longitudinal member.

9. Physical exercising apparatus according to claim 8 wherein said coupling means comprises cooperating male and female coupling elements at said ends of said second user support and said longitudinal member.

13. Physical exercising apparatus according to claim 7 wherein said second user support comprises a bench.

14. Physical exercising apparatus according to claim 1 wherein said attaching means comprises coupling means for detachably coupling said second user support to said frame.

15. Physical exercising apparatus according to claim 14 further comprising track mounting means on the underside of said second user support for mounting said second user support on said track.

(CX 1, col. 3, 1. 66-col. 4, 1. 18; col. 4, 11. 32-41).

36. Independent claim 16 reads as follows:

16. Physical exercising apparatus comprising:

a frame including a longitudinal member adjustable in length;

two levers pivoted to said frame on opposite sides of said longitudinal member, each of said levers having a handle at its distal end adapted to be grasped and moved by a user;

a fluid cylinder interconnecting said frame and an intermediate portion of each lever for providing resistance to the movement of the lever;

a track secured to said frame **parallel to said longitudinal member;**

a seat slidable along said track;

a pair of footrests on said frame on opposite sides of said longitudinal member for bracing the user's feet;

frame support means beneath said frame for supporting said frame in a generally horizontal position;

a bench removably coupled to said frame adjacent one end of said longitudinal member generally perpendicular to said longitudinal member and said seat; and

ground-engaging means on the underside of said bench, whereby said bench serves to - support said frame in an upright position.

(CX 1, col. 4, 11. 42-66).

37. On July 1, 1985, counsel for DP requested a Certificate of Correction from the PTO to delete from claim 16 the phrase "adjustable in length." (CX 511).

38. Dependent claim 17 reads as follows:

17. Physical exercising apparatus according to claim 16 further comprising track coupling means on the underside of said bench for coupling said bench to said track.

(CX 1, col. 4, 1. 67 - col. 5, 1. 2).

39. Complainant DP **and its licensor (now renamed Brown Fitzpatrick Lloyd Patent Ltd. (BFL)) presently are asserting the '071 patent against**

domestic manufacturers or distributors of allegedly infringing convertible rowing exercisers in nine civil actions filed in various United States Districts Courts. These civil action, along with a declaratory judgment action filed by one of these manufacturers against DP and BFL, have been consolidated for pretrial proceedings under multidistrict litigation in the United States District Court for the District of Delaware. The accused infringers in these civil actions are as follows:

Allegheny International Exercise Co. (Allegheny)
Ajay Enterprises Corporation (Ajay)
Weslo Design International, Inc. (Weslo)
Columbia Manufacturing Co. (Columbia)
Beacon Enterprises, Inc. (Beacon)
Saw Mill River Industries, Inc. (Saw Mill)
Rocket Industries, Inc. (Rocket)
Roadmaster, Inc. (Roadmaster)
Walton Mfg. Co. (Walton)
Billard Barbell Co. (Billard)

(CX 55, 56, 58-66, CX 321, Stipulation No. 8).

A. Background of the Invention

40. Patrick Fitzpatrick and Frederick Lloyd, two of the named inventors, were partners-in a tool making business which as of August 1979 was housed at Moat Farm in Hertfordshire, England. When the recession of 1980 and 1981 caused a downturn in their toolmaking business, Mr. Fitzpatrick and Mr. Lloyd decided to attempt to develop a product of their own. Since both Mr. Fitzpatrick and Mr. Lloyd are sports enthusiasts, and they were aware that the British leisure industry was flourishing at that time, they decided to investigate the feasibility of designing and manufacturing small machinery in

the leisure and exercising field. (Fitzpatrick W.S., CX 271 at 3-4; Fitzpatrick, Tr. 33-34).

41. Mr. Lloyd is an experienced tool maker by trade. After considerable experience in the maintenance and manufacture of machine tools and jigs, Mr. Lloyd began his own engineering firm under the name Lloyd Tools in 1976 or 1977. Lloyd Tools was a general engineering company involved in making, designing and repairing many kinds of machinery. (Fitzpatrick WS, Cx 271, at 1-2; Fitzpatrick, Tr. 32-33).

42. After completing his basic secondary school education, Mr. Fitzpatrick undertook a two year apprenticeship with a general engineering company in England, which included a course in general engineering. General engineering in England involves the use of machinery employed in manufacturing operations, for example, milling, turning and welding. This training involves, for the most part, mechanical hands-on experience with manufacturing machinery. Subsequently, Mr. Fitzpatrick held a number of jobs involving skilled manual labor, including floor laying, electrical trouble shooting, sewing machine maintenance and pipe fitting. Mr. Fitzpatrick then joined Mr. Lloyd in his business. (Fitzpatrick WS, CX 271, at 1-2; Fitzpatrick, Tr. 32-33).

43. In deciding what type of product to manufacture, Messrs. Fitzpatrick and Lloyd investigated the market to find a type of product that they felt they could competitively market. They determined that there were too many different types of exercise bicycles, and found that jogging machines

were too expensive for them to manufacture. In the area of rowing machines, they were attracted by the Puch TuntUri machine, but felt that a rowing machine would be much more attractive if its versatility could be increased to perform additional exercises. (Fitzpatrick, Tr. 34-39, 44-45; Fitzpatrick WS, CX 271, at 4; CX 234).

44. In March or April of 1981, Fitzpatrick and Lloyd designed and constructed a prototype dinghy simulator, but came to the conclusion that, due to its ability to provide only one exercise, it would have very limited appeal. At about the same time, they constructed a sailboard carrier, which they also found to be of limited marketability. (Fitzpatrick WS, CX 271, at 4-5; Fitzpatrick, Tr. 45-46; RX 337).

45. In about April of 1981, Fitzpatrick and Lloyd designed and constructed a prototype multi-exerciser. The machine was inclinable by means of an adjustable vertical leg slidable into, and adjustably pinned, to a socket at one end of the machine. The device also included a hydraulic cylinder, which provided resistance. The hydraulic cylinder was mounted below the machine body and was connected to a pair of pivoted handles mounted on the body. The user sat or reclined on a long bench fixed to the device. Depending on the position of the cylinder, the user could do either pulling or pushing exercises. The machine did not incorporate a sliding seat, but did have a pair of footrests. As an additional feature, this multi-exerciser had a pair of bicycle pedals so that the user could do a reclining pedalling exercise. In the various configurations of this device, the user could also perform a rowing exercise, overhead pills, sit-ups, sit-ups on an inclined

angle, and a type of bench press. (Fitzpatrick WS, CX 271, at 5-6; Fitzpatrick, Tr. 49-53; CX 235).

46. In June or July 1981, Peter Brown, whose greenhouse construction business was located next to Fitzpatrick and Lloyd's business, became interested in Fitzpatrick and Lloyd's exercising equipment project. Although Mr. Brown is a qualified dentist, he was at that time the proprietor of a company called Valmieco Ltd., whose primary product was polythene sheet covered tunnel greenhouses. Mr. Brown had business expertise and experience in packaging bulk}, structures into small packages. Believing that Mr. Brown's expertise could help their enterprise, Mr. Fitzpatrick and Mr. Lloyd decided to form an equal partnership with Mr. Brown. Their operation was moved adjacent to Mr. Brown's premises and the new venture was incorporated under the name Pico Exercise Equipment, Ltd. (Fitzpatrick WS, CX 271, at 6-7).

47. In August and September of 1981, Brown, Fitzpatrick and Lloyd designed a single arm rowing exerciser and a double arm rowing exerciser. These rowers did not incorporate a telescoping frame. In October of 1981, Fitzpatrick purchased a Puch Tunturi double arm rower for evaluation. Mr. Fitzpatrick stored the Tunturi rower by standing it upright. Believing that the Tunturi cover was too large to be conveniently stored, Fitzpatrick and Lloyd modified their prototype single and double arm rowers to incorporate telescopingly collapsible frames that could be collapsed for storage. These were designated the H-1 and H-2 machines. (CX 236; Fitzpatrick WS, CX 271, at 7-9; Fitzpatrick, Tr. 39).

48. Around this time, Fitzpatrick and Lloyd constructed a second multi-purpose rowing exerciser. It featured as user supports a sliding seat and a removable bench that could be used to perform rowing exercises as well as push-pull exercises. (SX 77; Fitzpatrick, Tr. 110-13).

49. In April 1982, Brown and Fitzpatrick took the two prototype H-1 and H-2 machines as well as their second multi-purpose exerciser to two mail order companies. There was some interest shown in the multi-exerciser concept, but the machine was criticized as being too large. (Fitzpatrick WS, Cx 271, at 8).

50. The inventors continued their development efforts. One of their ideas was to develop a line of exercisers with a common square subframe of the H-2 rower to which pivoted movable handles and resistance means were attached. On April 22, Mr. Fitzpatrick hung such a subframe on a door to see if he could make a wall mounted exercise device. (Fitzpatrick, Tr. 23-24, 60; Fitzpatrick WS, CX 271, at 8-9).

51. When the subframe was hung on the wall, Fitzpatrick, Lloyd, and Brown realized that, if they could make the subframe free standing on the floor and stable in an upright position, it could be used to perform the same range of exercises such as squats and curls as the wall-mounted unit, and could also be used to perform rowing exercises with the frame in a horizontal position. (Fitzpatrick, Tr. 23-24, 28; Fitzpatrick WS, CX 271, at 8-9).

52. It occurred to them that the frame could be made stable and free standing by attaching a square tube socket, similar to the one they **had used** as an incline mechanism in their first multi-exerciser, to the frame and by inserting into the socket a bench like the one used on their first multi-exerciser. (Fitzpatrick WS, CX 271; Fitzpatrick Tr., at 104-07).

53. Mr. Fitzpatrick welded the square tube socket onto the frame and this created a 90° angle. They did not experiment with or consider any other angles. (Fitzpatrick WS, CX 271, at 9; Fitzpatrick, Tr. 121-22).

54. After the bench had been inserted into the tube socket, but before Mr. Fitzpatrick or Mr. Lloyd attempted to use the device standing up, blocks or stabilizers were put under the machine on either side of the frame to make it stable; the machine could not be operated without these stabilizers. (Fitzpatrick, Tr. 104-07, 115-17; Kostanecki, Tr. 732-33).

55. Initially, the inventors used as their second user support a piece of plywood secured by brackets to a metal tube. (Fitzpatrick, Tr. 106-07, 118).

56. At first, Brown, Fitzpatrick and Lloyd intended to include an adjustable incline feature similar to that used in their inclinable multi-exerciser. With this feature, it was necessary to pin a supporting foot at a selected height in the socket at the foot end of the machine. The pin also was used when the bench was installed. During use with the rowing frame in the upright position, however, they many times forgot to install the **pin in**

the socket and discovered that the pin was not required during use in the upright position to maintain the attachment between the bench post and the socket. In fact, they discovered that during exercise in the upright position, the forces on the socket and post connection were such that the two were drawn together, rather than pushed apart. Accordingly, when it was decided not to use the adjustable incline feature in their production model (named the H-4 Multi-Gym) because of its added costs, the pin was regarded as an unnecessary cost item, and was eliminated. (Fitzpatrick WS, CX 271, at 11; Fitzpatrick, Tr. 62-62; CX 235, 239; SX 77).

57. On May 7, 1982, the inventors made their first visit to a patent agent. On May 25, 1982, they filed U.K. Patent Application Serial No. 8215206. (Fitzpatrick WS, CX 271, at 10).

58. The inventors subsequently filed patent applications on the invention in other countries, including the United States. All of these were assigned to Bodytone Ltd., the name of which was subsequently changed to Brown, Fitzpatrick, Lloyd Patent Ltd. (Fitzpatrick WS, CX 271, at 10; CX

59. During the summer of 1982, the inventors geared up for mass production of their new H-4 Multi-Gym, and also decided to exhibit it for the first time (along with their other products) at the International Sports and Leisure Exhibition (ISLE) in Birmingham, England in late September 1982. A brochure was prepared at their direction for use at the exhibition, and a single prototype of each machine was prepared for display. (Fitzpatrick WS, CX 271, at 11; CX 160).

60. On the first day of the ISLE show, a gentlemen named Raymond (Buddy) Pilgrim, Executive Vice President of DP, approached the Bodytone stand, introduced himself and expressed keen interest in the H-4 Multi-Gym. Before leaving the ISLE show, Mr. Pilgrim had negotiated a preliminary agreement and immediately thereafter shipped the H-4 prototype back to DP's headquarters in Opelika, Alabama for further evaluation. (Fitzpatrick WS, CX 271, at 11-12; Pilgrim WS, CX 272, at 3-6).

61. Mr. Pilgrim returned to DP's offices in Opelika, Alabama on Friday, October 8, 1982. On Monday, October 11, Mr. Pilgrim reviewed the brochures that he had acquired from Bodytone at the ISLE show. The H-4 sample arrived at DP by about October 13, 1982. Upon its arrival, Messrs. Pilgrim, James and Silberman studied the H-4 prototype and were impressed by its unique features and potential as a successful product. (Pilgrim WS, CX 272, at 6; Silberman WS, CX 273, at 4-5; RX 343; Pilgrim Dep., RPX 31, Vol. III, at 98-99).

62. Mr. Pilgrim subsequently returned to England to negotiate the terms of a formal license agreement with Bodytone Ltd. An agreement was reached, and the formal license agreement was signed in Opelika, Alabama by Mr. Fitzpatrick on behalf of Bodytone Ltd. on November 12, 1982. (Fitzpatrick Ws, Cx 271, at 12-13; Pilgrim WS, CX 272, at 6-7; CX 3).

63. After obtaining the rights to manufacture the Bodytone H-4 unit, DP began in earnest to develop a convertible rower for introduction into the United States market. (Silberman WS, CX 273, at 5-7).

64. The license agreement reserved in Bodytone Ltd. the right to manufacture and sell a limited number of H-4 Multi-Gyms. Pursuant to this reservation, Bodytone Ltd. did manufacture and sell approximately 1500 such units in Europe, all without a pull pin in the socket to which the bench post is attached. (Fitzpatrick WS, CX 271, at 13; Pilgrim WS, CX 272, at 8; Fitzpatrick, Tr. 127-28).

65. DP made certain changes in the construction and design of the Bodytone H-4 Multi-Gym after acquiring the rights to this invention. One of the modifications suggested by Mr. Silberman, and adopted by DP, was to secure the bench to the main frame by use of a safety pull-pin so that the bench could not come apart if the device were improperly used. This was done out of an abundance of caution, for product safety reasons. (Silberman WS, CX 273, at 7).

66. The BODYTONE 300 Multi-Gym was introduced to the U.S. trade in February 1983 at the National Sporting Goods Association Show in Chicago. First shipments of BODYTONE 300's began in April 1983. (Pilgrim WS, CX 272, at 12; Silberman WS, CX 273, at 9).

B. Prosecution History of the '071 Patent

67. The subject patent application was filed in the PTQ on March 14, 1983, and assigned Serial No. 475,189. Named as inventors were Peter L. Brown, Patrick C. Fitzpatrick and Frederick W. Lloyd. The application claimed priority under 35 U.S.C. § 119 based on United Kingdom Patent Application No.

8215206, filed May 25, 1982. Twenty claims were submitted with the application as filed. The application was filed and prosecuted by Mr. Alan I. Cantor, also one of counsel for complainant DP. (CX 4, at 1/2-30; RX 340, Stipulation No. 4).

68. The application which matured into the '071 patent, Serial No. 475,189, was accompanied by two additional applications, filed on March 14, 1983 in the name of Brown, Fitzpatrick and Lloyd. Each application was directed to a distinct feature of the various products of Bodytone Ltd., i.e., the H-2, H-3 and H-4 exercise devices. (CX 160). All three of these applications were filed on March 14, 1983, were assigned consecutive serial numbers and were examined by the same examiner, Richard Johnson. (The three applications are referred to herein as Inventions 1, 2 and 3, respectively). Accordingly to Mr. Cantor, Invention 1 (Serial No. 475,189) involved a free-standing rowing machine which could be converted by reorientation into a different type of free-standing exerciser in conjunction with a second user support or bench. Invention 2 (Serial No. 475,188) dealt with the collapsibility of a rowing machine, specifically the particular type of telescoping structure embodied in Bodytone's H-2 and H-4 exercise devices. This second application matured into U.S. Patent No. 4,488,719 (the '719 patent).^{1/} Invention 3 (Serial No. 475,187) dealt with the convertibility

1/ The '719 patent had been asserted by complainant DP in this investigation, but has been dropped by order pursuant to stipulation. DP intends to seek reexamination of the '719 patent.

of a rowing machine by mounting it on a wall. (CX 4, 160, 500, 501; Cantbr, Tr. 1344-45, 1497).

69. in application Serial NO. 475,181 (Invention 1) original claim 1 read as follows:

1. A physical exercising apparatus, comprising:

a frame;

at least one movable handle operatively connected to said frame and adapted to be grasped and moved by a user;

resistance means operatively coupled to said handle for providing resistance to the movement of said handle;

frame support means connected to said frame for supporting said frame either in a generally horizontal position or in a generally upright position, thereby increasing the range of exercises which can be performed with the apparatus; and

user support means including first and second generally perpendicular user supports connected to said frame with the same first user support generally parallel to said frame, so that said first user support is generally horizontal when said frame is in its generally horizontal position, and said second user support is generally horizontal when said frame is in its generally upright position.

(CX 4, at 7).

70. On December 13, 1983, the applicants filed an Information Disclosure Statement citing the following:

Selnes	U.K. 1,326,263	(CX 28)
Elia	U.K. 1,101,009	(CX 27)
Abplanalp	U.K. 438,1.28	(CX 25)
Martucci	U.S. 3,892,404	(CX 14)

(CX 4, at 31-60; RX 340, Stipulation No. 6).

71. Mr. Cantor submitted a copy of each of the cited patents, and made the following statements about each of the references:

Selnes U.K. 1,326,263 discloses a multi-purpose exercising apparatus which is adapted to be either floor-mounted or secured in an upright position to a ladder-like structure 22 (Figures 5 and 6). In addition, a portion [of] the apparatus 7, 8 is adjustable in length (see Figure 1).

Elia U.K. 1,101,009 discloses a rowing type exerciser wherein the length of the frame is adjustable by means of telescoping members (see Figure 1: elements 16-19).

Abplanalp U.K. 438,128 discloses a rowing type exerciser wherein the length of the frame may be telescopingly adjustable (see page 3, line 124 through page 4, line 9).

Martucci U.S. 3,892,404 discloses a track-type exerciser having variable length, telescoping frame members.

It is submitted that the above cited references, taken alone or in combination, fail to disclose or suggest applicant's invention.

(CX 4, at 31-32).

72. The PTO examiner issued the first Office Action in the application for the '071 patent on April 10, 1984. Claims 1 through 3 and 6 were rejected under 35 U.S.C. S 103 as being unpatentable over Selnes (U.K. 1,326,263). The examiner commented that the "first and second" user supports recited in claim 1 can be read as the seats 18 and 24 [Figure 61 of Selnes." Claims 1 through 13 were rejected under 35 U.S.C. S 103 as being unpatentable over Yurdin (U.S. 4,372,551). The examiner read the unnumbered pedals in Yurdin as the claimed "movable handle" of claim 1 and stated that "the features recited in claims 2 through 13 can be found in the structure of Yurdin." Claims 16 through 20 as

filed were allowed. (CX 4, at 61-64; RX 340, Stipulation No. 7).

73. Examiner Johnson also cited the following references in this Office Action:

Brentham	U.S. Des.	263,978	(CX 5)
Bryon	U.S.	432,598	(CX 6)
Paul	U.S.	2,209,034	(CX 9)
Brentham	U.S.	4,240,627	(CX 17)
Yurdin	U.S.	4,372,551	(CX 23)
Clausen	U.S.	1,801,223	(CX 7)
Amerrec 610 and 660			
Rowing Machines Brochure of 3/82			(CX 39)

These "non-applied patents" were cited to "further show the state of the art." (CX 4, at 61-64; RX 340, Stipulation No. 5).

74. A paper entitled "Protest Under 37 C.F.R. 1.291(a)," dated May 23, 1984, allegedly was filed in the PTO in May 1984 by Myron Amer. A copy of the protest was received by mail by applicants' attorney on May 29, 1984. The protest makes reference to a "multi-purpose rowing exerciser." (RX 340, Stipulation No. 9; CX 4, at 67-69).

75. The protest dated May 23, 1984 contained an excerpt from a Sears 1980 catalog showing a multi-purpose rowing exerciser resembling the Beacon 3001'. (RPX 8). The protestor described the device as:

a physical exercising apparatus . . . having force resistive, movable handles. . . . Two generally perpendicular user supports . . . (for rowing) and . . . (for weight lifting when the unit is turned 90°) enable the apparatus to be used in two different positions, 90° different in orientation, so as to increase the range of exercises which can be performed.

(CX 4, at 68).

76. Following the Office Action of April 10, 1984, the applicants, through their attorney, conducted a personal interview with the examiner on July 25, 1984. At that interview, at least two additional items of prior art were discussed, namely:

Sears Fall/Winter 1980 **Catalog, page 560**
U.S. Letters Patent No. 3,473,843 (Hart)

A revised claim 1, then numbered claim 21, was discussed. (CX 4, at 65-66; RX 340, Stipulation No. 8).

77. During the interview with the examiner on July 25, 1984, the applicants' attorney showed the examiner documents illustrating the BODYTONE 300 machine and the BODY SHOP 360 machine. Copies of these documents were submitted as attachments to the Amendment of July 27, 1984. (CX 4, at 65-66, 85-90; RX 340, Stipulation No. 10).

78. In a summary of the interview on July 25, 1984, the examiner indicated that proposed claim 21 appeared to be allowable, but that a further search would be made. The summary also indicates that U.S. Patent No. 3,437,843 (Hart) was discussed. (CX 4, at 65).

79. Following the personal interview, Mr. Cantor prepared and submitted an Amendment dated July 27, 1984. Claim 1 was cancelled and replaced by a new independent claim 21 as follows:

21. A physical **exercising apparatus capable of use in any of a plurality of orientations, and adapted to be selectively used as a rowing machine or for performing other types of exercises, comprising:**

a generally horizontal ground-engaging frame;

at least one pivoted movable lever operatively connected to said frame and having a handle adapted to be grasped and moved by a user's hand;

resistance means operatively coupled to said handle for providing resistance to the movement of said handle;

a longitudinal track on **said frame**;

a first user support comprising a seat slidable along said track;

foot bracing means on said frame for bracing the user's feet;

ground-engaging auxiliary support means for stably supporting the apparatus with said frame in an upright position;

a second user support; and

attaching means for firmly attaching said second user support to said frame generally perpendicular to said track and adjacent the lower end of said upright frame so that the user can grasp and move said handle while supported on said second user support, thereby increasing the range of exercises which can be performed with the apparatus.

The references discussed at the interview were discussed in the Remarks section in the Amendment, and copies of the documents showing the BODYTONE 300 and the BODY SHOP 360 convertible rowers were attached as exhibits. Also, attached as exhibits were copies of brochures showing the Pan's 207 convertible rower, and the Bodytone H-4 Multi-Gym. (CX 4, at 76-96; RX 340, Stipulation No. 10).

80. In the Remarks section of the Amendment of July 27, 1984, Mr. Cantor described the invention in the following manner:

The invention is a physical exercising apparatus of the type normally designed for performing rowing-type exercises. Hence, as recited in claim 21 the device includes a generally horizontal ground-engaging frame; at least one pivoted lever operatively connected to the frame and having a handle adapted to be grasped and moved by a user's hand; resistance means operatively coupled to the handle for providing resistance to its movement; a longitudinal track on the frame; and first user support comprising a seat slidable along the track; and foot bracing means on the frame for bracing the user's feet. The salient feature of the device is its ability to be upended and stably supported with the frame in an upright position, with a second user support--generally perpendicular to the track--attached to the frame at its lower end. This feature allows the user to grasp and move the handle while supported on the second user support, thereby increasing the range of exercises which can be performed with the apparatus.

(CX 4, at 79).

81. Mr. Cantor further described the crucial structural elements which effect convertibility, and distinguished this invention from the prior art:

the structural elements which enable this conversion to take place are ground engaging auxiliary support means for stably supporting the apparatus with the frame in an upright position; a second user support; and attaching means for attaching the second user support to the frame generally perpendicular to the track and adjacent the lower end of the upright frame. . . . ET)he prior art utterly is devoid of even a suggestion that a rowing-type exerciser can be provided with a second user support perpendicular to the track and means for stably supporting the unit on the floor in an upended configuration for performing exercises other than rowing.

(CX 4, at 79).

82. In discussing the prior art references cited by the examiner in the first Office Action, Mr. Cantor described the Yurdin patent (U.S. 4,372,551) as an angularly adjustable "cardiac stress table" having a back support, a seat and a foot pedal crank resistance unit. Yurdin was distinguished from the subject application as follows:

The entire table is pivotably mounted on a frame so as to be tiltable to a variety of positions, placing varying levels of stress on the patient's body during testing. In contrast to applicant's claimed exerciser, this unit has no pivoted lever or handle adapted for hand engagement and movement, and no track and sliding seat which would enable it to function as a rowing machine.

(EX 23; CX 4, at 79-80).

83. The Amendment of July 27, 1984 also addressed the examiner's application of Selnes (U.K. 1,326,263) to the subject invention. Mr. Cantor described and distinguished the Selnes disclosure as follows:

Selnes discloses a versatile exercise unit which in one configuration (Figure 4) can be used for performing rowing-type exercises. However, resistance is afforded by means of cables and the user's own body weight, rather than by a pivoted lever and handle. The unit can be used in the vertical position (Figures 5 and 6) when supported on a wall or other vertical surface. Thus, there is no "ground-engaging auxiliary support means for stably supporting the apparatus with the frame in an upright position." Furthermore, there is no "second user support" or "attaching means for firmly attaching said second user support to said frame generally perpendicular to said track and adjacent the lower end of said upright frame."

In Figure 6, seat 24 hangs loosely by cables 20 and is not firmly attached to the frame: the frame 1 and crossbar 10 and associated supports merely function to provide an elevated support or hanger for what is, in effect, a swing on which the user can sit and lift his own weight.

(CX 28; CX 4, at 80).

84. Respondent Weslo urges that under the doctrine of file wrapper estoppel DP is **estopped** from denying that the term "firmly attaching" is based upon the pin **used by DP to secure** the bench to the post. (RB, at 11; RF 3296-B301). Respondent argues that the language "firmly attaching" was added to overcome the examiner's rejection over Selnes and that without the pin there would have been no basis to distinguish over Selnes and the patent would not have been granted. (RF B297-98).

85. As noted in FF 83, the "firmly attaching" language was not the only distinguishing feature over Selnes -- the amendment first cited to the lack of pivoted levers and handles, ground-engaging support means, and second user support. Moreover, there is no mention of use of a pin to secure the post and socket in distinguishing over Selnes through the lack of "attaching means for firmly attaching. . . ." (CX 4, at 80). It is simply noted that in Selnes the "seat hangs loosely by cables and is not firmly attached to the frame." (CX 4, at 80). The prior experience of the inventors, DP's own experience, and the demonstration in the courtroom have conclusively shown that the post and socket mechanism of the '071 device provide a firm attachment without the pin. (FF 56, 65; Kaufman, Tr. 1744-49). Thus, the use of a pin was not necessary to distinguish the pending application over Selnes in this regard. The post and socket provide a firm attachment, especially when contrasted to Selnes, which employed a seat (swing) which hung loosely from the frame on cables. (CX 4, at 80). Moreover, the pending claim 21, did not provide for such a pin (CX 4, at 77) and claim 1, as it was ultimately issued required no such pin. (CX claim 1).

86. In the July 27 Amendment, Mr. Cantor briefly described the remaining prior art disclosed in the Information Disclosure Statement of December 13, 1983, and addressed the non-applied patents cited by the examiner in the first Office Action. In addition, the following references were cited and discussed:

Rubin	U.S.	3,173,415	(CX 10)
Meyer	Sweden	126,662	(RX 39)
Vigor	France	1,081,419	(RX 36)
Grosser	U.S.	4,275,882	(CX 18)
Rogers	U.S.	4,319,747	(CX 20)

Applicants submitted that the claimed invention was patentable over the cited prior art. (CX 4, at 82-83).

87. The Protest dated May 23, 1984 submitted by Mr. Amer, which discloses a multi-purpose rowing exerciser displayed on page 560 of the 1980 Sears Fall/Winter catalogue, was also addressed by Mr. Cantor in the July 27 Amendment. The following remarks were made concerning the Sears catalogue:

On that page, in the upper right hand corner, appears a rowing machine having a foot-bracing means in the form of an oblique cushion. The cushion can double as a backrest with the user facing opposite the conventional rowing direction so as to be able to perform seated chest press-type exercises by manipulating the handles. The device is not intended to be used with the frame in the vertical position, nor is it capable of such use because it cannot stably be supported as is with the frame in an upright position. It also appears in the inset photograph that the track is articulated such that the brackrest can tilt further back for a better and more comfortable body position. This would make the unit even more unstable if upended.

(CX 4, at 81-82, 94-96).

88. On August 7, 1984, the PTO examiner issued a Notice of Allowability, which indicated that the claims were allowed in view of the applicant's Amendment, filed on July 30, 1984, the interview between Mr. Cantor and the examiner, summarized on the Examiner Interview Summary Record, and an attached Examiner's Amendment. The examiner also attached a Notice of References Cited, which references were considered to be pertinent to the claimed invention, but the claims were deemed to be patentable thereover. The additional references cited by the examiner were the following:

Hart	U.S. 3,473,843
Kverneland	U.S. 3,586,322
Sears 1980 Fall/Winter Catalog	page 560.

(CX 4, at 97-99).

89. In connection with the Protest filed with the PTO which cited the Sears catalog, the examiner stated the following:

The Sears publication does not appear to disclose the existance [sic] of supports to enable the device to be used in a vertical position as required by the claims in the application. It is not apparent exactly how the device is **to be operated when it is to be used "for additional exercises" and the protestor has failed to show the relevance of the device to the exercising apparatus claimed in this application.**

(CX 4, at 97-99).

90. On August 7, 1984, the PTO mailed a Notice of Allowance of the application. On August 9, 1984, applicants requested expedited processing of the issuance of the application into a patent so that the applicants could assert their rights against several infringing devices that were being marketed in the United States. (CX 4, at 100-02).

91. After allowance of the application, on August 29, 1984, applicants filed a Petition and Amendment After Allowance to broaden allowed claim 21 so that it would literally embrace the Ajay OCTA-GYM. That device was not identified by name in the Petition. (CX 4, at 103-07; RX 340, Stipulation No. 11; CPX 8).

92. In the remarks section of the Amendment, Mr. Cantor indicated that the requested amendment would broaden the claims "only to a minor extent by eliminating a few unduly restrictive limitations not essential to patentability." Mr. Cantor further stated:

It now has been determined that this belatedly considered unit infringes the spirit--if not the letter -

of the claims allowed by the Examiner by application of the doctrine of equivalents. It is clear, however, that the claims could be broadened slightly to literally embrace this competitive unit, while remaining fully within the realm of patentability circumscribed by the prior art. All that applicants are seeking by this petition, therefore, is to be able to claim now what they were entitled to claim all along.

The essential and novel concept of the invention is the provision in a rowing-type exerciser of a second user support which is firmly attached to the apparatus adjacent the lower end of, and generally perpendicular to the frame when the frame is upright. As recognized by the Examiner during the personal interview of July 25, 1984, the prior art as a whole fails to disclose or even suggest this inventive concept. It is not essential to patentability to recite that the second user support attaches directly to the frame; that the second user support is generally perpendicular to the track; or that the track is mounted on the frame. Rather, it is the stable orientation of the second user support relative to the upright frame that is important, and that imparts to the inventive exercise device versatility heretofore unavailable in conventional ground-supported rowing machines. (Emphasis in original).

(CX 4, at 104-05).

93. In the amendment, claim **AL** (now claim 1) was amended: (1) to insert the limitation "ground-supported" in the preamble; "ground-engaging" was deleted from the "generally horizontal frame"; (2) the description of the resistance means was changed from resistance means coupled to a "handle" to resistance means coupled to a "lever"; (3) the longitudinal track was changed from being "on" the frame to being "attached to" the frame; (4) applicants removed the requirement that the "foot bracing means" be attached to the frame; and (5) the requirement for a "second user support" was altered to call for a second user support "adjacent the lower end of and generally perpendicular to the frame" rather than merely "generally perpendicular to the track." Claim 16 was broadened by removal of the limitation "adjustable in length" from the description of the frame. (CX 4, at 103-04; see FF 37 supra).

94. On August 30, 1984, the examiner mailed notice to the applicants that the requested amendment had been entered. (CX 4, at 108).

95. On September 19, 1984, Mr. Cantor filed a Citation of Additional Prior Art under 37 C.F.R. S 1.56. (CX 4, at 130-94). On the next day, September 20, a duplicate of that Citation was filed along with a Petition Under 37 C.F.R. 5 1.183 for Waiver of 37 C.F.R. 5 1.312 to Consider Additional Prior Art. (CX 4, at 109-25). As stated by Mr. Cantor:

This late citation is occasioned by (1) the receipt by the undersigned, on September 11, 1984, of certain prior art alleged by counsel for an infringer to be material to the invention; and (2) by the almost concurrent realization that certain other prior art cited in two corresponding foreign applications--while earlier considered by applicants' attorneys--inadvertently was overlooked when other files were being checked for additional prior art to be cited to the Examiner as part of the response to the first Office Action.

(CX 4, at 130). With regard to the pertinency of the prior art and the reason for its citation, Mr. Cantor stated in the Petition:

Applicants have asserted in their citation that all the additional prior art is no more pertinent than that already of record, and does not affect the patentability of the claims. Despite this characterization, had it been possible applicants certainly would have disclosed this prior art much earlier so that the Examiner, by applying his special expertise, could have determined its pertinency.

(CX 4, at 110).

96. The prior art submitted with the Citation consisted of the following references:

Prior art cited by counsel for alleged infringer:

Kulkens	U.S. 3,902,717	(CX 15)
Blickman	U.S. 3,614,097	(CX 13)
Tells	U.S. 4,357,110	(CX 21)
Evans	U.S. 4,284,272	(CX 19)
Silberman	U.S. 3,369,966	(CX 22)
Amerrec	610 Rowing Machine Publication of February 1982	(CX 231)

Prior art cited in two foreign applications:

Gymking	U.K. 1,004,500	(CX 26)
Kverneland	U.S. 3,586,322	(CX 12)
Buchman	French 2,322,037	(CX 31)
Selnes	U.K. 1,326,263	(CX 28)
Jouk	French 2,151,551	(CX 30)
Patentec	French 2,416,700	(CX 32)
Thor	W. Ger. 2,347,029	(CX 37)
Mannet	French 2,511,879	(CX 33)

(CX 4, at 112-22). Of this prior art, the Amerrec 610 Rowing Machine publication, and the Kverneland and Selnes references had earlier been cited to or by the examiner. (See, FF 70, 73, 88, supra).

97. In this Citation of Additional Prior Art, Mr. Cantor also identified the following items of prior art which had arisen in connection with the corresponding Spanish application:

Welgemoed British Design Registration No. 982,354	(CX 29)
Rowing Machine Brochure of Walton Mfg. Co.	(CX 40)
Huffy Corp. Catalog, pp. 14-17.	(CX 41)
Welgemoed Spanish Industrial Model No. 90,956	(CX 29)
Welgemoed South African Patent No. 77/1230	(RX 28)
Welgemoed South African Patent No. 78/5724	(RX 27)

Mr. Cantor asserted that each of these references was merely cumulative.

Finally, Mr. Cantor identified and described the following two references:

Thomson	U.S. 1,866,868	(CX 8)
Landon	U.K. 419,982	(CX 24)

Mr. Cantor asserted that none of the foregoing references or references earlier cited disclosed or suggested the claimed invention. (CX 4, at 120-22).

98. On September 21, 1984 the Director of PTO Group 330 mailed notice to the applicants of the decision to deny the petition for consideration of additional prior art. This decision was stated to be based on M.P.E.P. 609, under which citations of additional prior art after allowance of the claims are not ordinarily considered by the examiner unless the citation is accompanied by:

A statement by the applicant or his attorney . . . that, in the judgment of the person making the statement, the information cited (1) raises a serious question as to the patentability of the claimed subject matter, or (2) is closer than that of record, or (3) is material to the examination of the application as defined in 37 C.F.R. 1.56

In view of the applicants' statements that the cited prior art "is no more pertinent than that already of record, and does not affect the patentability of the claim," and that certain prior art is "marginally relevant," "merely cumulative in nature" or "of general interest," and that applicant's counsel did not take the position that in their judgment the cited art was material within the meaning of Rule 1.56, there was not sufficient basis under M.P.E.P. 609 to justify entry of the cited prior art. Accordingly, applicant's petition was denied. (CX 4, at 128-29).

99. Application Serial No. 475,189 issued as the '071 patent on October 16, 1984. (CX 1, 4).

V. THE EXPERTS

A. DP's Technical Expert Witness -- Andrew T. Kostanecki

100. Andrew T. Kostanecki is an industrial designer by profession. He has over 25 years experience in industrial design combining traditional design practice with the dynamics of the creative process and problem solving theory to uncover insights that are crucial to the development of new products. His company, Andrew T. Kostanecki, Inc., has a broad client base including manufacturers of various liesure products (including exercise equipment), business equipment, consumer products, medical/scientific products, capital equipment and packaging. (CX 275; Kostanecki WS, at 1). Mr. Kostanecki has been working in the exercise equipment field for the last eight years, as a design consultant for one of his client, AMF Corporation. (Kostanecki, Tr. 636).

101. Approximately 30% of Mr. Kostanecki's time over the last eight years has been spent designing exercise equipment. In the last three years, approximately 50% of Mr. Kostanecki's time has been spent working on products for AMF. (Kostanecki, Tr. 632).

102. Mr. Kostanecki's design activity is divided between two fundamental areas: design development and conceptual development. (Kostanecki, Tr. 637).

103. Design development typically involves taking a product conceived by the client and refining its design so that the product will be appealing to consumers and capable of being manufactured by the client. (Kostanecki, T 637-38).

104. In conceptual development, the industrial designer assists the client in inventing or creating a new product. (Kostanecki, Tr. 638-39). Approximately 85% of Mr. Kostanecki's time is devoted to design development. (Kostanecki, Tr. 662-63).

105. In designing exercise equipment, Mr. Kostanecki has worked with exercise physiologists in attempting to determine the best sizes and shapes for products with which he has been involved. (Kostanecki, Tr. 639-40).

106. Mr. Kostanecki has participated in designing more than a dozen pieces of exercise equipment ranging from a hand grip to rowing machines. (Kostanecki, Tr. 661-62).

107. Mr. Kostanecki was engaged in design development of the invention disclosed in RX 18, U.S. Letters Patent No. 4,275,882 (Grosser). The fundamental concept of this product had been developed by several persons other than Mr. Kostanecki. As brought to Mr. Kostanecki, the product consisted of a wall mounted hydraulic exerciser to which a bench could be attached at a 90° angle to the vertical frame. Mr. Kostanecki designed "graphic support devices" including wall charts and instructional materials. He was also involved in selecting the color scheme for the product and the materials used in constructing the product. (Kostanecki, Tr. 664-65, 669).

108. His design contributions merely facilitated use of the device. The Grosser device -- marketed as the Spectrum 2000 -- was not a commercial success. Consumers were unwilling to accept a product that had to be attached to a wall. (Kostanecki, Tr. 693-94).

" 109. Mr. Kostanecki also participated in the design and development of a large, expensive, sophisticated rowing machine which is currently sold by AMF under the name Benchmark 920. This rower was brought to Mr. Kostanecki after the concept had been developed by someone else. (Kostanecki, Tr. 670-71, 802).

110, Mr. Kostanecki was consulted to a limited extent about graphics and minor design aspects of another rowing machine, a hydraulic rowing exerciser called the Lifestyler 1500, for AMF. (Kostanecki, Tr. 800).

111. Omitted.

112. In his work in the exercise equipment field, Mr. Kostanecki has been honored by Industrial Design Magazine for design excellence in the design of two products he designed for AMF. (CX 199, at 13). He also received an award for design excellence from the Industrial Designers Society of America for the Benchmark 920 Electronic Rower which he designed for AMF. (CX 275, Kostanecki WS, et 2; CX 197; CX 198). The Sharper Image Catalog, April 1985, describes this latter device as having exclusive integral software "programmed to fully reproduce the fluid, continuous movements of shell rowing." (CX 197, at 2). Mr. Kostanecki and his firm received eleven separate design awards during the period 1966-1982, including the two Industrial Design Magazine

awards for AMF exercise equipment mentioned above. (CX 199, at 3). These do not include the award for the Benchmark 920 Rower, which was granted in 1984. (CX 275, Kostanecki WS, at 2).

B. Weslo's Technical Expert Witness -- Roger E. Kaufman

113. Roger E. Kaufman is a Professor of Engineering in the Department of Civil, Mechanical, and Environmental Engineering at George-Washington University. He received a Bachelor of Science in Mechanical Engineering from Tufts University in 1962, and a Master of Fine Arts in Theatre Engineering from the Yale Drama School in 1965. He received a Masters of Engineering in 1968 from the Division of Machines and Structures of Rensselaer Polytechnic Institute and a Doctor of Philosophy from Rensselaer Polytechnic Institute in the Division of Machines and Structures in 1969. (RX 327, Kaufman WS, at 1; Kaufman, Tr. 1619-20).

114. Dr. Kaufman is the president of Kintech, Inc., a firm which he founded to develop and market computer systems used by many Fortune 500 companies, including DuPont, General Dynamics, Proctor & Gamble, Douglas Aircraft, Xerox and the like. Dr. Kaufman also is the proprietor of Kaufman Associates, a general Engineering Consulting Firm. Among his consulting clients have been firms such as General Motors International Harvester, DuPont, Proctor and Gamble, Herman Miller and (RX 327, Kaufman' WS, at 2).

115. Dr. Kaufman was the recipient of the American Society of Mechanical Engineers' 1976 Mechanism Committee Award for "outstanding contributions to the field of mechanism design of theory." Additionally, he

was the recipient of the "Best Paper Award" at the 14th ASME Mechanisms Conference in September 1966. (RX 327, Kaufman WS, at 2).

116. From 1969 to 1976 Dr. Kaufman was on the faculty at the Massachusetts Institute of Technology in the Department of Mechanical Engineering. During the 1970-71 year, he held the title of "DuPont Assistant Professor of Mechanical Engineering" at MIT. From 1973 to 1976 he was an Associate Professor at MIT. From 1976 until recently he was a lecturer at MIT. (RX 327, Kaufman WS, at 2).

117. At both G.W. and MIT, Dr. Kaufman has been responsible for teaching a variety of graduate and undergraduate courses in areas such as mechanical engineering design, mechanism design, engineering systems design, product design, systems modeling, computer science, descriptive geometry and drafting, honors research, and a variety of special projects courses. He has also taught short courses and seminars on engineering for engineers in industry and sections of short courses for college engineering faculty. (RX 327, Kaufman WS, at 3, 1 9).

118. Dr. Kaufman has had no experience with exercise equipment, or those engaged in designing or making exercise equipment, other than his employment in connection with this investigation. (Kaufman, Tr. 1675-77).

C. Weslo's Patent Expert -- Fred C. Mattern, Jr.

119. Mr. Mattern is a registered patent attorney and a former Examiner-in-Chief and Member, Board of Appeals of the United States Patent and

Trademark Office. He also has a Bachelor of Science Degree in Mechanical Engineering. (RX 321, Mattern WS, at 1-2). He has given opinion testimony related to a number of the technical issues involved herein. (RX 321, Mattern WS, 5-41).

120. As in the case of Dr. Kaufman, Mr. Mattern's past endeavors are devoid of any substantial prior experience with exercise equipment, or the designers and makers thereof. (Mattern, Tr. 1844). He testified that of the thousands of cases he considered while an Examiner or on the Appeals Board, he may have dealt with some patents involving exercise equipment but he does not recall any such matters. (Mattern, Tr. 1842-43).

D. Evaluation

121. Each of the above experts are well qualified in their respective field. Each has given testimony related to the technical issues of this investigation. In evaluating and weighing such testimony I am constrained to note Mr. Kostanecki's considerable experience in the field of exercise equipment, including rowing devices, and the absolute lack of any such experience by Dr. Kaufman and Mr. Mattern. (FF 100-119). It is obvious that Mr. Kostanecki is in a far better position than Dr. Kaufman and Mr. Mattern to testify as to the perceptions and understandings of a person of ordinary skill in the art, although he himself is obviously one of more than ordinary skill in the art. (Compare FF 100-111 with FF 230-232, *infra*, which define one of ordinary skill in the art). Mr. Kostanecki's experience in this art, and his associations with those who work in the art, put him in a much better position

to testify as to such matters, than respondent's experts. Moreover, I find that in a number of areas of their testimony, respondent's experts are prone to be quite advocative and overly-technical in their analysis. (See, e.g., FF 207, 215 n.8, 284 n.12, 285, 286, 291-94). Although, Mr. Kostanecki's testimony is not completely devoid of such advocacy (Kostanecki, Tr. 2003-04, 2007, 2012), I have found his testimony to be generally more useful, especially in evaluating areas dependent upon the skill, knowledge and understanding of a person of ordinary skill in the relevant art.

VI. VALIDITY OF THE '071 PATENT

A. Anticipation

1. The Beacon 3002 Rower

122. Leonard Weiss is the president of Beacon Enterprises, Inc. ("Beacon") and Sawmill River Industries ("Sawmill"), both of which are located at 937 Sawmill Road, Yonkers, New York 10710. Mr. Weiss has been involved in manufacturing and selling exercise equipment since 1955, when Sawmill entered the exercise equipment business. (RX 322, L. Weiss WS, at 1, 11).

123. Eugene Weiss was associated with Beacon until March 15, 1985. Until that time Eugene Weiss served as president of Beacon whose exercise equipment was manufactured by Sawmill. Eugene Weiss is Leonard Weiss' brother. (E. Weiss, Tr. 2134-36).

124. In the summer of 1978 a representative or representatives of Welgemoed Mini-Gym (Proprietary) Limited ("Welgemoed"), a South African

company, visited Leonard Weiss at his Yonkers office and presented to him a prototype and photos of a multi-function rower. Mr. Weiss was asked if Beacon/Sawmill would be interested in manufacturing and selling this multi-function rower. (RX 322, L. Weiss WS, at 1, 1 2).

125. Previously, representatives of Welgemoed had demonstrated this rower to Carl F. Stroh, the buyer of exercise equipment for Sears, Roebuck and Co. Mr. Stroh was not interested in purchasing this product directly from Welgemoed, but suggested that the Welgemoed representatives visit Beacon Enterprises to explore an agreement under which Beacon would manufacture under a license from Welgemoed to sell exclusively to Sears in the United States. (RX 324, Stroh WS, at 3, 1 6).

126. The Welgemoed rower shown to Mr. Weiss and Mr. Stroh was similar to the rower shown in the Sears Fall/Winter 1980 catalog at page 560, item 2 (RX 342) and to RPX 8. The product was a dual-arm rowing exerciser that had spring loaded cylinders as resistance means. It had a double railed main frame on which there was a bench and a rolling removable seat. (RX 324, Stroh WS, at 3).

127. At the front end of the rower was a large rectangular pad. On the back of the pad were two metal posts which could be inserted and pinned into corresponding metal tubes extending at an angle from the rowing frame. The pad or bench served as a footrest when the device was used for performing rowing exercises with the user facing the front of the rower. In addition, a user could sit with his back against the pad facing the rear of the rower and perform push/pull exercises. The removable footrest/backrest cushion extended

at an angle to the rowing frame and enabled the device to be stored in an upright position, when the rower frame was leaned against a wall. (RX 322, L. Weiss WS, at 2, 1 4; RX 324, Stroh WS, at 3, 1 7; Rx 323, Glusky WS, at 2, 1 5).

128. In the Summer of 1978, Sawmill/Beacon and Welgemoed entered into an informal license under which it was agreed that Sawmill River Industries, Inc. would manufacture a rower based upon the Welgemoed design. (RX 322, L. Weiss WS, at 1, 1 2).

129. Two models of the Welgemoed rower were ultimately commercialized by Sawmill and were offered for sale by Beacon: (1) the Beacon 3001 shown in RX 342; and (2) the Beacon 3002 shown in RX 269. (RX 322, L. Weiss WS, at 1-2, 1 3; RPX 8; RPX 9).

130. The Beacon 3001 was modeled after the original Welgemoed rower shown to Leonard Weiss in 1978. It resembled RPX 8, except that it had spring loaded cylinders in place of the hydraulic cylinders in RPX 8. (L. Weiss, Tr. 1432; Stroh, Tr. 1271-72).

131. The Beacon 3001 is not free standing in the upright position. (Stroh, Tr. 1273; Kaufman, Tr. 1810).

132. Beginning in 1979, the 3001 was sold through the Sears catalog for approximately two years before being discontinued. A total of 4,196 model 3001 rowers were sold by Sears in 1981. (RX 323, Glusky WS, at 3, 1 8; RX 289).

133. The Beacon 3002 was an upgraded version of the model 3001. The 3002 was equipped with pivotable legs at the rear of the rower and smaller

non-pivoted legs at the front of the rower. The legs were added so that the angle of the rower to the floor could be varied. The addition of the small legs at the front of the 3002 made the device freestanding and stable in the upright configuration. In this position the front legs and the footrest acted together as supports so that the rower was stable when standing upright. (RX 322, L. Weiss WS, at 3, 1 7; L. Weiss, Tr. 1434-36).

134. The 3002 was sold exclusively through the Montgomery Ward catalogue. It was first sold in April 1981 and a total of 463 units were sold in calendar year 1981. The 3002 was not a successful product and was discontinued after a year or so. (RX 323, Glusky WS, at 4, 1 11; RX 289; RX 333, attachment A).

135. In the Fall of 1980, the 3002 rower was demonstrated to John K. Kucera, the buyer for exercise equipment for Montgomery Ward, at the Beacon offices in Yonkers, New York. During the presentation, the 3002 was demonstrated in the vertical position and exercises were performed on the device while it was in the vertical or upright position. Present at the demonstration were Leonard and Eugene Weiss, and another unidentified Beacon employee. (Kucera, Tr. 1386-88).

136. Mr. Leonard Weiss maintains that he demonstrated the 3002 model rower in the upright position to all buyers who visited the Yonkers facility. (RX 322, L. Weiss WS, at 4, 1 8). Mr. Glusky, a Beacon employee has testified that this device was demonstrated in the upright position to Mr. Carl Stroh, a buyer for Sears, Roebuck & Co. (RX 323, Glusky WS, at 4-5, 1 12). However,

Mr. Stroh had no recollection of such a demonstration.. (Stroh, Tr. 1284-85). In this regard, it must be noted that the unsupported statements of Leonard Weiss and Mr. Glusky of **Beacon** Enterprises are self-serving, and thus entitled to little weight unless independently corroborated, since **Beacon Enterprises** is currently being sued in a civil action by complainant DP for infringement of the '071 patent through an entirely different product later marketed by Beacon. (CX 55, 56, 65; L_i Weiss, Tr. 1457-58).^{2/} Further, the only sales of this device were to, Montgomery Ward. (RX .3234 Glusky WS at 4, 1 11). Thus, the only corroborated demonstration of the 3002 rower in an upright position was that made to Mr. Kucera.

137. The instruction manual for, the 3002 did not show that the 3002 could be used or stored in the upright position. (RX 278; L. Weiss, Tr. 1438).

138. Each element of claim 1 of the '071 patent, or its equivalent, is present in the Beacon 3002 device. (RPX 9; FF 139-58).

139. The Beacon 3002 device is a ground-supported physical exercising apparatus which is freestanding on the footrest and short legs and, therefore, is capable of use in both the horizontal and vertical orientations. (RPX 9).

^{2/} In this regard see FF 172-80, below, concerning the credibility of these witnesses in connection with the 3001 device.

140. The Beacon 3002 has a frame made of rectangular tubular sections which is "generally horizontal" when the device is being used as a rower. This frame is also directly comparable to the "generally horizontal'fraMe" found on the BODYTONE rowers. (RX 341, Kaufman Supp. WS, at '2, 1 125).

141. The Beacon 3002 has two movable levers pivoted to the frame. One is hinged to the frame on each side. They are operatively connected to the frame by means of a hinge joint. Each lever has a handle adapted to be grasped and moved by the user's hand. (RX 341, Kaufman Supp. WS, at 3, 1 128).

142. Resistance means operatively coupled to said lever for providing resistance to the movement of said lever are found in the Beacon 3002 in the form of the two hydraulic cylinders. These cylinders are *operatively coupled" to the levers. Their sole reason for existence is to "provide resistance to the movement of said lever(s)". (RX 341, Kaufman Supp. WS, at 3, 1 127).

143. A longitudinal track is found in the Beacon 3002. The circular cross Section metal side rails welded to the rectangular tubular sections work in conjunction with the hardboard surface to provide a track. The side rails also serve as a major structural component of the frame, The longitudinal track elements are attached to the frame and, indeed, function as both a part of the track and a part of the frame. (RX 341, Kaufman Supp. WS, at 3, 1 128).

144. The Beacon 3002 incorporates a first user support in the form of a rolling seat which can slide (roll) along the track. (RX 341, Kaufman Supp. WS, at 3, 1 129).

145, The padded board-found on the Beacon apparatus serves as a "foot bracing means for bracing the user's feet" when the device is used as a rower. It has a strap to help hold the user's feet to the padded surface. The footrest is attached at an angle of 64° from the horizontal frame. (Kaufman, Tr. 1760761, 1909; Kostanecki, Tr. 2008).

146. The "ground-engaging auxiliary support means for stably supporting the apparatus with said frame in an upright position" are found in the Beacon 3002. The small feet at the front of the rower and the footrest/backrest cushion described earlier serve to stably support the Beacon 3002 apparatus with its frame in an upright position. Such "ground-engaging auxiliary support means for stably supporting the apparatus with said frame in an upright position": found in the Beacon 3002 are the equivalent of those in the Bodytone devices. (RX 341, Kaufman Supp. WS, at 5, 1 133; RPX 9). Such support means stably support, this device in an upright position both when the exerciser is in use and when it is not. (RPX 9; Glusky, Tr. 1475-76).

147. The padded board on the Beacon 3002 serves as a "second user support." It serves a variety of roles on this device. Among such roles are: it serves as a footrest or footbracing means; it serves as a brace, along with the small front feet, to help hold the device in an upright position; it **serves as** a backrest in certain exercises; it serves as a detachable **bench; and** it serves as an alternate to the sliding seat as a user support. (RX 341, Kaufman Supp. WS, at 5, 1 134; RPX 9; Glusky, Tr. 1475-76). In view of its ability to be used as an alternate user support, it

can be considered a "second user support" within the meaning of the '071 patent. (Glusky, Tr. 1475-76).

148. Claim 1 of the '071 patent also requires "attaching means for firmly attaching" the second user support to the apparatus. (CX 1). On the Beacon 3002 the second user support found above is attached to the apparatus by way of two posts and two sockets, one on the left and one on the right. The sockets and posts are, in addition, "firmly attached." In fact, they are held together by means of pins which are inserted through matching holes in the sockets and posts. (RPX 9).

149. Claim 1 of the suit patent further provides that the second user support be attached to the apparatus "generally perpendicular to said upright frame so that the user can grasp and move said handle while supported on said second user support, thereby increasing the range of exercises which can be performed with the apparatus." (CX 1).

150. The "second user support" on the 3002 device is attached at an angle of 64° from the horizontal frame, measured at the rear of the padded board. (Kaufman, Tr. 1760-61; Xostanecki, Tr. 2008). It is thus about 26° off the perpendicular. This is not "generally perpendicular." (FF 151-53 infra).

151. The patent, as well as the testimony of Mr. Fitzpatrick, one of the inventors, makes it clear that "generally perpendicular" means 90°, or as close thereto as possible. This is the plain meaning of the words and all

figures of the patent showing the second support Attached show it with this relationship to the horizontal frame (CX Figs. 3, 6a-6d). Mr. Fitzpatrick, one of the inventors testified that "generally perpendicular" means:

It's as close as possible to 90°, right angles ... we wanted it at 90°, and it just gave you, yes, a tolerance, each side of it.

(Tr. 77-78).

Mr. **Silberman, Senior** vice President of DP, who is an industrial designer, with **many years experience in** research and development in the exercise **equipment field (CX 273, SilberMan WS, at 1-2)**, testified that

Perpendicular to me as a designer would be 90°. Generally perpendicular would be something that is so obvious to you as to be close enough to 90° to consider it perpendicular.

(Tr. 472).

In fact, even Dr. Kaufman, who takes the position that the term "generally perpendicular" is not **adequately** defined in the **patent (RX 327, Kaufman WS, at 16)**, has himself used the term "generally" when referring to the angular orientation of the bench **and** the frame in the Weslo BODY SHOP 360 device. testified

There is (sic) some manufacturing tolerances and clearances, but the orientation is determined generally by the fact that there is a post sticking up at right angles out of the frame. . . . (Tr. 1719) (Emphasis added).

The relationship isn't, I suppose, intended to be a 90° relationship.' The front surface

of the bench, of course, is a padded cushion. But you could say that the major dimensions would define some sort of. a- plane which is at 90°, yes. (Tr. 1720).

Moreover, Mr. Thomas Bosse, lead counsel for Weslo in this investigation, described the relationship between the post and frame on the BODY SHOP 360, as **"generally perpendicular," in an affidavit he filed in the U.S. District Court for the District of Utah, Northern Division, in related litigation. (CX 361, at 3).**

152. A comparison of the BODY SHOP 360 with Figs. 3₄ 6a-6d of the '071 patent and DP's BODYTONE 300 unit reveals that all of these devices are identical with respect to the alignment between the bench and the frame. (CPX 5, CPX 2; CX 1).

153. Based on the weight of the evidence herein, i find, therefore, that the term "generally perpendicular" is definite in meaning and is intended to provide for an angular relationship between the, second user support and the frame of 90°, or as close thereto as possible considering manufacturing tolerances. , (FF 151-52).

154. Though the padded board on the 3002 device is not attached "generally perpendicular" to the upright frame, the interaction between it and the small front feet is such that, together they provide the functional equivalent of the generally perpendicular seconduser support of the '071 patent. They support the apparatus in the upright position and the user may stand on the padded board and "grasp and move said handle while supported" on

the padded board,' "thereby increasing the range of exercises which can be performed by the apparatus." (Glusky, Tr. 1475-76; Kucera, Tr. 1386-88; RPX 9).

155. Complainant and its expert maintain that the range of exercises which can be performed on the 3002 device is not increased by placing it in the upright position, on the ground that any attempt to perform exercises on this device in an upright position is "an unsatisfactory endeavor and of questionable utility, and that the 'exercises' performed were unconventional if not actually harmful to the user." (Kostanecki, Tr. 2003-04, 2007, 2012).

156. However, nothing in the patent specifies that the exercises to be performed on the suit patent device are to be of any particular quality or benefit. (CX 1; Kostanecki, Tr. 2054-60, 2062). In fact, Mr. Kostanecki admitted that Figs. 6a - 6d of the '071 patent (those showing its use in the upright position) do not show appropriate positions for the performance of the exercises suggested. (Kostanecki, Tr. 2054-60). Moreover, he testified further that CPX.12, the point of purchase display for the DP BODYTONE device, illustrates an incorrect and unsafe position for the performance of the squat exercise. (Kostanecki, Tr. 2060-61). Additionally, there is some question concerning the ability of the BODYTONE device, or any of the convertible rower-exercisers, to provide legitimate exercises in this regard. (Kostanecki, Tr. 2062-64; RX 271). A Consumer Reports survey on rowing machines and home gyms found that

So paltry were the possible benefits of this gym work that our consultants decided to rate the multi-gyms solely as rowing machines.

(Rx 271, at 450).

157. Accordingly, I find that the quality of the additional range of exercises which can be performed on the 3002 device, when it is used in the upright position, is not relevant to the issue of anticipation. (FF 156).

158. In view of the above facts, it is found that the Beacon 3002 device includes each element of claim 1 of the '071 patent, or its functional equivalent. (FF 138-57).

159. The Beacon 3002 device also includes each element of claim 16 of the '071 patent, or the functional equivalent thereof. The Beacon 3002 is a physical exercising apparatus comprising:

(a) a frame including a longitudinal member
(RPX 9):^{3/}

(b) two levers pivoted to said frame on opposite sides of said longitudinal member, each of said levers having a handle at its distal end adapted to be grasped and moved by a user. (FF 141, supra);

(c) a fluid cylinder interconnecting said frame and an intermediate portion of each lever for providing resistance to the movement of the lever (FF 142, supra);

^{3/} Claim 16, as issued by the PTO, provides that this frame and horizontal member are "adjustable in length." The adjustability feature was deleted during prosecution of the '071 patent. Therefore, such phrase is not a proper part of the claim. A Certificate of Correction has been filed but not yet acted on. (FF 37, 94, supra).

(d) a track secured to said frame parallel to said longitudinal member. (FF 143);

(e) a seat slidable along said track (FF 144);

(f) a pair of footrests on said frame on opposite sides of said longitudinal member for bracing the user's feet (FF 145) ⁴ 6

(g) frame support means beneath said frame for supporting said frame in a generally horizontal position (RPX 9; DP's Comments on staff's Proposed Finding B106, at 12);

(h) a bench removably coupled to said frame adjacent one end of said longitudinal member generally perpendicular to said longitudinal member and said seat (RPX 9; FF 145-47, 149-53) ⁵ /; and

(i) ground engaging means on the underside of the bench, whereby said bench serves to support said frame in an upright position. (On the bottom of this bench in the 3002 there are two tubular members. When the apparatus is tipped on end, these tubes become ground engaging. They, along with the small front feet, serve to support the frame in an upright position, as is illustrated by the fact that the Beacon 3002 exerciser will stand upright with the bench attached, but will fall over when the bench is removed).

(RPX 9; RX 341, Kaufman supp. WS, at 10, 1 147).

160. The Beacon 3002 apparatus also anticipates dependent claims 5-9, 13-15 and 17 of the 071 patent. ¹ (FF 161-70).

4/ Complainant admits that the footrest/backrest of the 3002 is the functional equivalent of the pair of footrests specified in claim 16. (DP's Comments on Staff's Proposed Finding 8105, at 12).

5/ As noted in FF 150, 154, the bench on the 3002 device is at an angle of 64° and is thus not "generally perpendicular" to the longitudinal member. However, it and the small front feet are the functional equivalent of the generally perpendicular bench of claim 16.

6/ Claims 2-4, 10 and 18-20 were not in issue in this proceeding. (PHC, Tr. 286, 290). Therefore, I will make no findings concerning these claims.

161. Claim 5 provides that the auxiliary support means of claim 1 include ground-engaging means on the underside of the second user support, whereby said second user support serves to support said frame in the upright position. (CX 1, claim 5). The 3002 device has this feature. the posts on the underside of the bench, to which the bench is attached, are the parts which make contact with the ground. (FF 1541; RPX 9).

162. Claim 6 provides that the auxiliary support means of claim 5 includes ground-engaging means on the frame. (CX 1, claim 6). I have already found that the small feet on the underside of the frame comprise part of the auxiliary support means. (FT 154).

163. Claim 7 provides that the attaching means in claim 5 "comprises coupling means for detachably coupling' the second user support to the frame. (CX 1, claim 7). When the pins are removed from the holes on the sockets and posts which attach the padded board to the frame on the 3002, one can easily uncouple the bench from the frame. (FF 148; RPX 9).

164. Claim 8 calls for physical exercise equipment according to claim 7 wherein the frame includes a longitudinal member and the coupling means couples one end of the second user support to the end of the longitudinal member. (CX 1, claim 8). The 3002 device has a longitudinal member and the sockets, posts and pins of that device couple the footrest/backrest/second user support to the member. (FF 148; RPX 9).

165. Claim 9 is dependent upon claim 8 and provides for male and female coupling elements at the ends of the second user support and the

longitudinal member. (CX 1, claim 9). The posts and sockets coupling the bench and the longitudinal member are male and female coupling elements. (RPX 9).

166. Claim 13 calls for "physical exercise apparatus according to claim 7 wherein said second user support comprises a bench." (CX 1, Claim 13). The '071 device has a padded board which is variously described as a "second user support" or a "bench." (CX 1: Col. 1, ll. 38-39, 45-50, 62-63; Col. 2, ll. 46-60). **The padded board on the 3002 apparatus serves the same function as the padded board on the '071 device. (Fr 154).**

167. **Claim 14 provides that the attaching means of claim 1 comprises coupling means for detachably coupling the second user support to the frame. (CX 1, claim 14). The coupling means on the 3002 device allows the padded board or bench to be detached from the frame. (FF 148, CPX**

168. Claim 15 provides that the second user support of claim 14 have track mounting means on the underside of the bench for mounting the second user support on the track. (CX 1, claim 15). Fig. 4 of the patent reveals clips 26 attached to the underside of the bench which **are intended to** clip to the rails 9 as shown on Fig. 2 **of** the patent. (CX 1). **The footrest/backrest/bench on the Beacon 3002 does not have this feature. The posts on the underside do not even fit snugly between the side rails, let alone "mount" on the track. (RPX 9). However, the Beacon 3002 has the functional equivalent of this feature, in that the hardboard surface between the tracks serves the same function. With the slidable seat removed, one can lie on it, just as on**

the mounted bench in Fig. 2, and perform additional exercises with the device in a horizontal position as in Fig. 6e. (CX 1: Col. 2, 11. 59-63, Figs. 2, 4, 6e; RPX 9).^{7/}

169. Claim 17 is similar to claim 15, except that it is dependent upon claim 16, instead of claim 14. (CX 1, claim 17). Again, the hardboard surface between the tracks of the Beacon 3002 serves the same purpose as the bench coupled to the track in the '071 device. (RPX 9). It therefore provides the full functional equipment of the "track coupling means" of claim 17. (CX 1: Col. 2, 11. 59-63; Figs. 2, 4, 6e).

170. In view of the above findings I must find that the Beacon 3002 rower-exerciser anticipates claims 1, 5-9, and 13-17 of the '071 patent and that such claims are, therefore, invalid under 35 U.S.C. 102 (a) and (b). (FF 139-69).

2. The Beacon 3001 Rower

171. The Beacon 3001 device is the same as the 3002, except that it does not have the legs under the frame and it has spring loaded cylinders as

^{7/} Dr. Kaufman is clearly mistaken in his testimony in connection with claims 15 and 17 in his comparison of the Beacon 3002 device to the '071 device. He has equated the track mounting means of claim 15 and the "track coupling means" of claim 16, with the posts mounted on the underside of the Beacon 3002 footrest and their attachment to the sockets welded to the longitudinal members of the Beacon device. (RX 314, Kaufman Si:pp. WS, at 14, 11 160-61). This is not what claims 15 and 17 provide. The specification and Figs. 2 and 4 of the '071 device reveal that the "mounting means" and "coupling mean" are intended to mount the second user support directly and horizontally on the rails. (CX 1, Col. 2, 11. 59-63; Figs. 2, 4, 6e)•

the resistance means, rather than the hydraulic cylinders of the 3002. (RPx 8, 9; L. Weiss, Tr. 1432).

172. It is claimed by Leonard Weiss and Steven Glusky of Beacon Enterprises that the Beacon 3001 model (RPX 8) is capable of use in the upright position. (RX 322, L. Weiss WS, at 2; RX 323, Glusky WS, at 3). Leonard Weiss, claims further to have used the 3001 in 1979 in the upright position to perform other than conventional rowing exercises, such as squats." (RX 322, L. Weiss WS, at 2). He also alleges that he demonstrated the 3001 device to Carl Stroh, the exercise equipment buyer for Sears, with the frame in the vertical position. (RX 322, L. Weiss WS, at 3; L. Weiss, Tr. 1431-32).

173. Mr. Stroh categorically denies ever seeing the 3001 device demonstrated in an upright position. He testified that

... I understood it to be stored in an upright fashion but never to have been presented or represented to be used in anything other than a horizontal plane, although there were a variety of different exercises that a user could do on the product.

(Stroh, Tr. 1281).

174. Mr. Leonard Weiss admits that there is nothing in the instruction manuals for the 3001 (or the 3002) concerning use of the device in the upright position. (L. Weiss, Tr. 1453-54; RX 278).

175. It is, also admitted that the legs which were added to the Beacon 3002 rower, which make it freestanding, were not added for that purpose, but

rather for the purpose of spacing the device from the floor to facilitate its use in rowing and to provide angular adjustability. (L. Weiss, Tr. 1434-35; RX 323, Glusky WS, at 4).

176. Mr. Weiss and Beacon Enterprises are not "disinterested" third parties to the present investigation. Beacon Enterprises is currently being sued in U.S. District Court by DP, for infringement of the '071 patent through the sale of another product. (CX 55; 56, 65; L. Weiss, Tr. 1457-58).

177. Mr. Weiss' brother, Eugene, was president of Beacon Enterprises from 1975 - March 1985. As such, he had responsibility for the sales activities of Beacon. (E. Weiss, Tr. 2134-35). Eugene Weiss did not recall any use of the 3001 (or the 3002) rower in an upright position until after DP gave Beacon Enterprises notice by letter of February 23, 1984, that DP intended to enforce any BODYTONE patents which issued from then pending applications. (E. Weiss, Tr. 2137-48; RX 59, at 59-9). He also testified that neither the 3001, nor the 3002, were designed or engineered for anything but use in a horizontal position. (E. Weiss, Tr. 2145; See also, L. Weiss, Tr. 1452).

178. Beacon did not show the 3001 rower as being used in the upright position **in the instruction sheet** and presentations published for this device. (L. Weiss, Tr. 1454).

179. If Beacon Enterprises had believed the 3001 device was a convertible rowing exerciser capable of use in the upright position, it would have made many more modifications in the later 3002 model, to make it more

adaptable and more usable in that position. The ability to stand the 3002 model on end, after the modifications thereto, was clearly an accidental result. (Fe 175). It cannot be doubted, when looking at the 3002 device, that it would have been desirable, and easily accomplished, to modify it so that it more closely resembled the other convertible rower-exercisers on exhibit in this investigation, or at the very least so that it was more stable, with a longer and more perpendicular second user support upon which to stand, sit, kneel, or lie, for the purpose of performing other exercises. (Compare RPX 8 and 9 with CPX 1-10, 11 and RPX 1, 24-25). **It is inconceivable to me that Mr. Weiss would not have made such modifications, had he perceived the 3001 device as usable in the upright position.**

180. All of the above facts lead me to discredit the testimony of L. Weiss and Mr. Glusky concerning the use and usability of the Beacon 3001 rower in an upright position. (FF 173-79). It is clear that these witnesses have a financial stake in the outcome of this investigation. Further, the other evidence of record is contradictory of their testimony. (FF 173-79; See also FF 181-84, infra).

181. My observations of the courtroom demonstrations of the 3001 device in an upright position, as well as my own attempts to use this device in this manner, lead me to find that the device not only is not freestanding in the upright position, but is very shaky and unstable in the upright position while in use, and is difficult to mount unaided, especially in the sitting (curling), or lying (bench press) positions. For instance, I have noticed during such demonstrations and use that this device requires, for all practical purposes, the assistance of another, or some other outside support,

mounting it in the **sitting** or **lying**: positions to do curls and presses. Further, the movement of **the** upright board during use is quite pronounced and really renders the device unsuitable for performing any significant "range" of exercises when in this position. **The** instability and awkwardness **of this**,; **device in the upright position is directly attributable to-its lack of certain critical elements of the '071 device. (FF 182-84, infra).**

182. First it lacks the "ground-engaging auxiliary support means for stably supporting" the device in the upright position as required in claim 1, or the "ground-engaging means on the underside of the bench" whereby the bench serves to support the frame stably in an upright position,-of claim 16. already noted, I find that the 3001 device is not stable in the upright position, even when someone is using the device while standing ; kneeling. sitting or lying on the footrest. (FF 181). Moreover, if the words of claim 1 are to be given their plain meaning, the ground-engaging auxiliary support means of claim 1, must require that a device which reads on the '071 claims be freestanding when in the upright. position. This language is clear and unambiguous. It states:

ground-engaging auxiliary support means for
- stably supporting the apparatus with said
frame in an upright position.

(CX 1, claim 1). (Emphasis added)

There is nothing in the claims, specification or figures of the '071 patent which suggests that anything else, such as the weight of the user, or leaning it against a wall, can supplement the "auxiliary support means" in order to "stably support" the apparatus in the upright state. Although the language of claim 16 in this regard may not be quite so specific ("ground-engaging means

on the anbeai:te of bench, whereby bench serves to sJp,,ort i.
frame in an upright position") it must be read in light of the other claims
and the specification and figures of the '371 patent. In that light it is
clear that such "ground-engaging" means must make the device free standing
wiltu in the upright position. Claim 1 and Figs. 3, and 6a-6b make it clear
that this is the intent and meaning of the patent. (See RX 327, Kaufman WS,
at 17, 1 50). In so finding, I discount the testimony of the experts herein.
That of respondent's experts is too advocative• in this regard to be worthy of
consideration and that of complainant's expert, while generally supportive, is
partially contradictory. (See, ____ RX 327, Kaufman WS, at 15; RX 321,
Mattern WS at 6; Kostanecki, Tr. 708, 806, 807)..•

183. Nor does the 3001 device have a second user support or bench
attached to the frame in a "generally perpendicular" manner, as is required by
the claims of the '071 patent. Just as in the 3002 model, the
footrest/backrest of the 3001 rower is set at an angle of 64° from the frame.
Thus, it is 26° off the vertical. (RPX 8). In the case of the 3001 device
there are no small front feet to counteract this angle, so as to produce the
functional equivalence of the "generally perpendicular" alignment of the '071
patent. (RPX 8). The result is the instability, awkwardness, and general
unsuitability of the device for use in the upright position. (FF 181).

184. Nor, in light of these facts, does the 3001 rower have a "second
user support" or "bench" within the meaning of the '0.71 patent. The padded
board at the end of the frame on this apparatus is simply a footrest/backrest
and nothing more. (RPX 8). It was designed and engineered solely for that
purpose (E. Weiss, Tr. 2145; L. Weiss, Tr. 1452), and the limitations of the
overall structure of the 3001 rower are such, that this padded board cannot

transcend such limited purpose. (FF 181, 183).

3. The Charters Patent

185. The Charters patent (U.S. Letters Patent No. 1,966,848, dated July '17, 1934) relates to a combined exercise and amusement device for children. As illustrated in the patent, it comprises a rowing machine for children which includes attached amusement devices intended to persuade or coerce children to make use of the apparatus. (RX 6, at 1, 11. 1-5, 9-12, 19-24, 84=.86). A miniature, built to scale, model of this device has been constructed by respondent's engineering expert, Dr. Kaufman. (RPX 16; Kaufman, Tr. 1691).

186. It is respondent's contention that the Charters patent anticipates the '071 device. (RB, at 6-7).

187. The Charters device does not include certain critical elements of the '071 patent, namely, a "slidable seat," a "second user support" or "bench" within the intent and meaning of the '071 patent, nor the capability of providing a "range" of additional exercises when put in an upright position. (FF 188-97, infra). Accordingly, it cannot anticipate the '071 patent.

188. One of the elements of both independent claims of the '071 patent (Claims 1 and 16) is "a seat slidable along said track." (CX It is clear from the claims, specification and figures that the seat must be freely slidable along the track of such a device during use in the horizontal mode. (CX 1 Col.":1, 11. 35738; Col. 2, 11. 31-33). Indeed, the testimony of

respondent's expert, Dr. Kaufman, shows that, as a general rule, rowing exercisers employ slidable seats which slide back and forth during use. (.Kaufman, Tr. 1712). In fact, all of the rowing exercisers in evidence in this investigation have some type of wheel and track mechanism, which facilitates the smooth sliding back and forth of the seat during use in the rowing, or horizontal, mode of the exercisers. (CPX 1-9, 11; RPX 1, 8-9, 24-25).

189. Although respondent's expert has testified that the seat on the Charters device is slidable during use and has constructed his model to illustrate this alleged fact (Kaufman, Tr. 1710; RPX 16), the specification of the Charters patent belies this contention. (FF 190-91, infra).

190. It is true that the Charters patent specification states at one point that the seat "is mounted on a transverse brace member 6 in turn secured at its opposite ends to hollow sleeve members 7 which are slidably mounted on the longitudinally disposed rails 1." (RX 6, at 1, 11. 97-101). However, the specification specifically notes that such slidability is solely for the purpose of adjusting the position of the seat with relation to the footrest in order to accommodate the length of the child's legs. (RX 6, at 1, 11. 101-08). In fact, the specification further provides

The mode of operation of the device will be obvious. The seat member 5 is adjusted to the stature of the child. . . The stationary seat, as distinguished from a movable or sliding seat, necessitates the full application of the muscles required to operate the mechanism. . . .

(RX 6, at 2, 11. 60-71). (Emphasis added).

moreover, claim 6 of the Charters patent provides that the device described therein have

a stationary seat adjustabl. mounted on said support... (RX 6, at 3, 11. 90-91).

The Charters device includes set screws in the sleeve members 7 which ensure that the seat will not slide at all during use. (RX 6, at 1, 11. 101-04). Accordingly, the seat on the charters device does not slide back and forth during use.

191. Furthermore, it is quite doubtful that the seat on the Charters device could slide smoothly back and forth during use, even if the set screws were loosened or omitted entirely. The specification notes that in the preferred embodiment, this device is comprised of "metal pipe sections connected by suitably disposed elbow joints or members." (RX 6, at 1, 11. 91-95). Dr. Kaufman presumed that the various components of the Charters device were pieces of tubular material like a pipe. (Kaufman, Tr. 1823-24). Dr. Kaufman constructed his miniature scale model of the Charters rower of smooth brass tubing. (RPX 16). Even with this construntion there is significant metal on metal friction, partially impeding-slidability, when one puts thumb pressure on the seat and slides the seat back and forth. The size of RPX 16, and the materials from which it was constructed, do not allow one to determine the degree of impedece from friction which would be present in a full-size model made ofi for example, iron pipe, when in use with someone sitting on the seat. Therefore, RPX 16 is not dispositive of the issue of slidability of the seat in this device. ' My examination of the rowing

exercisers in evidence herein, and other rowing exercisers covered by prior art patents in evidence reveals that where a sliding seat is employed in such devices, there is generally a wheel and track type mechanism used to provide a freely sliding seat. (CPX 1-9, 11; RPX 1, 8-10, 24-25; RX 1-3, 8, 10-15, 25-29, 31-34, 41-42, 51). This leads me to conclude that the metal-on-metal construction of the sleeve members and rails of the Charters device would not provide a "sliding seat" within the obvious intent and meaning of the '071 patent.

192. Further, the Charters patent does not disclose or teach the addition of a "second user support" or "bench," which is required by the '071 patent. (RX 6; CX 1). It is respondent's contention and that of its expert, Dr. Kaufman, that the standard 19 terminating at its upper end in an annular support or ring member 20, constitutes a second user support or bench. (RX 6, at 2, 11. 17-20; RF 83; RX 327, Kaufman WS, at 3, 1 108). However, it is admitted that nothing in the Charters patent suggests that it be used in this manner. (RX 327, Kaufman WS, at 39, 1 108). Respondent and its expert rely upon the fact that the miniature, scale model constructed by Dr. Kaufman (RPX 16) will stably stand upright, supported by the standard and annular ring, when turned on end. (RX 327, Kaufman WS, at 39-40, 1109).

193. The miniature model of the Charters device does indicate that this device would stand freely and stably on end, supported by the standard and annular ring, when tipped up on end. (RPX 16). However, this is still not evidence that the Charters device includes a "second user support" or "bench" within the intent and meaning of the '071 patent.

194. Aside from the fact that there is admittedly no teaching in the Charters patent that this device should be tipped on end (RX 327, Kaufman WS, at 39, 1 108; Kaufman, Tr. 1642), there is no evidence whatsoever to show that a user could stand, sit, kneel or lie on the standard and/or annular ring to perform an increased "range of exercises" with this device. In short, there is no second user support in the Charters patent. (FF 195-97, below).

195. Dr. Kaufman has candidly admitted that:

the second user support is a bit of a question ...
(Kaufman, Tr. 1642).

Indeed, it is difficult to see how anyone could reasonably be expected to stand, sit, kneel or lie on the round pipe or tubing from which the annular ring and standard are to be constructed, and then perform various exercises such as squats, presses, curls, etc. Dr. Kaufman's only allusion to this problem is a brief suggestion that one could put a cushion across the annular ring and "then sit or stand on that cushion...." (Kaufman, Tr. 1692). However, he admits that there is nothing in the Charters patent which teaches the desirability or utility of such an addition. (Kaufman, Tr. 1642, 1692, 1706).

196. I must find, therefore, that the Charters patent does not include a "second user support" or "bench" as required by *claims* 1 and 16 of the '071 patent.

197. Finally, Dr. Kaufman's testimony on cross-examination reveals that the dimensions and configurations of the Charters device, as illustrated

by his scale model, would make it difficult, if not impossible to do exercise while lying, sitting, or kneeling (if this were possible) on the annular ring of this device, or even to do squat type exercises while standing on it. The dimensions of the scale model are such that the oars would not be accessible enough to perform such exercises on a full-sized model built to this scale. (Kaufman, Tr. 1811-17). Therefore, it has not been shown that the Charters patent, even if it taught that the device should be stood on end, provided for a structure which "thereby increase[s) the range of exercises which can be performed with the apparatus." (CX 1, claim 1). Although Dr. Kaufman suggests that the dimensions and configuration of the Charters device could be modified to allow such additional range of exercises (Kaufman, Tr. 1811-17), it is clear that there is nothing in the patent which suggests or teaches that modifications might be made for this purpose. (Kaufman, Tr. 1642, 1692, 1706; RX 327, Kaufman WS, at 39, 1 108).

198. Accordingly, I must find that, absent certain critical elements of the suit patent, the Charters patent cannot anticipate any of the claims of the '071 patent. (FF 187-97).

4. The Wilson Patent

199. The Wilson patent, U.S. Letters Patent 881,521, dated March 10, 1908, combines "the parts of a Morris Chair in such a manner as to cooperate with exercising mechanisms." (RX 2, at 1, 11. 11-14). The chair in this device can be converted to a rowing machine in one configuration, and a treadmill in another configuration. (RX 2; CF 118 and Weslo's Comments thereon).

200. This device has a rectangular "frame" which remains stationary and in its original position in both the rowing and treadmill operations, though the structure of the device goes through certain reconfigurations in adapting to these usages, as is illustrated in Figs. 2, 3 and 4. (RX 2). The "frame" is never reoriented for any purpose. The pivotable two-piece chair back 4 (having an inner "frame" 12) may be lowered to a horizontal position. The arms of the chair may be pivoted (folded) outwardly and secured. Biased oars 35 can be mounted on the chair arms. (RX 2; CF 118 and Weslo's Comments thereon).

201. The original chair seat and the lowered back 4 each carries part of a track upon which a roller-fitted sliding seat 17 is mounted. A footrest 34 folds out of the chair bottom to complete the rower structure. When the back 4 is in its original upright position, an internally contained rectangular section 12, having a series of mounted rollers, is folded down to contact the floor and to provide an upwardly slanted surface usable as a treadmill 19. (RX 2; CF 119, to which Weslo has no objection -- Weslo Comments to DP Proposed Findings).

202. Dr. Kaufman constructed a model of the Wilson device which is in evidence as RPX 10. It is his and respondent Weslo's contention that the Wilson patent anticipates claims 1, 5-9, 13 and 14 of the '071 patent. (CF 120, with Weslo's Comments thereon).

203. Claims 1, 5-9, 13 and 14 of the '071 patent (claims 5-9, 13 and 14 are all dependent claims) comprise an apparatus wherein the "frame" is reoriented from a "generally horizontal" position to an upright position, for

the purpose of providing an increased range of exercises which can be performed with the levers (oars) thereof. (CX 1, claim 1). The "frame" in the Wilson device always remains in its original position and is never reoriented to an upright position, or any other position. (Kostanecki, Tr. 2033; CF 118, 121, and Weslo's Comments thereon).

204. The Wilson patent also does not include a "second user support" within the intent and meaning of claim 1 of the '071 patent. The "second user support" according to claim 1 is attached at the lower end of the upright frame in such manner that the user can stand, sit, kneel or lie thereon and, while thereon, grasp and move the handles of the levers (oars) "thereby increasing the range of exercises which can be performed with the apparatus." (CX 1, claim 1). Figs. 6a-6d of the '071 patent, as well as the summary and specification thereof, specify that the suit patent is one in which the frame and oars are reoriented in such a way that the user, while supported, may utilize the oars to perform exercises other than rowing type exercises, and, more specifically, exercises such as push-ups, pull-ups, press-ups and squatting to standing exercises. (CX 1; Figs. 6a - 6d; Col. 1, 11. 41-44; Col. 3, 11. 9-16).

205. It is respondent's position that the treadmill mechanism of the Wilson device is the "second user support" called for in the '071 patent. (RX 327, Kaufman WS, at 38, 1 106; RF 98). This treadmill, when employed as shown in Fig. 2 of the Wilson patent, is pivoted down from the back of the chair so that it forms a ramp between the chair seat or frame and the ground. The user is intended to grasp the outer edge of the chair back, which remains erect

when the treadmill is pivoted downward, so as to steady or support himself while using the treadmill. (RX 2, at 1, 11. 106-10).

206. This latter usage of the treadmill certainly does not comport with the "second user support of the '071 device as described in FF 204, supra. The '071 second user support is a passive device which supports the user of the device while he grasps the handles of the levers and performs an increased "range" of exercises such as push-ups, pull-ups, press-ups and squats. (CX 1; KoStanecki, Tr. 2034).

207. Recognizing this fact, respondent and its expert propose that the braking device on the treadmill, which is designed to increase the tension on the rollers when used as a treadmill (RX 2, at 1, 11. 88-106), can be tightened to the point where the rollers cannot turn, and then one could stand or sit on the treadmill and perform exercises. (RF 98; Kaufman, Tr. 1775-79). Aside from the fact that the treadmill (or bench as Dr. Kaufman would then describe it -- Tr. 1778) would still be in an inclined position and thus quite unsuitable for performing other than the treadmill exercises for which it was intended, this mechanism still would not be the same or the equivalent of the '071 second user support. One could not support himself on this "bench" and perform an additional "range of exercises" with the levers (oars) of the device. The oars would still be in the horizontal mode, the same as during the rowing exercises. (RPX 10; Kaufman, Tr. 1779). Consequently, the only exercise that could possibly be performed thereon would be rowing exercises -- and those would have to be done without the benefit of a sliding seat and while perched on an uncomfortable, slanted support.

(Kaufman, Tr. 1779). This theory of respondent and its expert is a perfect example of the extremes of advocacy to which the experts herein were prone to undertake.

• 208. In view of these facts, I find that the Wilson device does not include a "second user support" or "bench" within the intent and meaning of claims 1, 5-9, 13 and 14 of the '071 patent. (FF 204-07).

209. The Wilson device also does not have a "ground-engaging auxiliary support means for stably supporting the apparatus" in an upright position.. As noted in FF 200, 201, 203 supra, the frame of the Wilson device is not reoriented into an upright position at any time during the use of this device. The treadmill certainly does not provide auxiliary support means, since it does nothing to contribute to the "support" of this device. (RPX 10). The only support for this device in any configuration is the substructure of the chair. (RPX 10; Kostanecki, Tr. 2033).

210. Finally, even if the treadmill could be considered a second user support or bench within the intent and meaning of the '071 patent, it is not attached to the apparatus adjacent the lower end of and generally perpendicular to the upright frame. In the first place the frame is not upright. It remains in the horizontal. (FF 203). The treadmill when lowered into position for use extends at a decided angle both from the horizontal frame (seat of the chair) and the portion of the chair back which remains erect. (RPX 10). Thus, the Wilson device also is missing this element of the '071 claims' in question.

211. Accordingly, I find that the Wilson patent does not anticipate claims 1, 5-9, 13 or 14 of the '071 patent. (FF 200-10).

5. The Welgemoed South African Patent

•

212. The Welgemoed South African Patent No. 78/5724 discloses a conventional rower having a generally horizontal frame with a track, a slidable seat which is mounted on the track with rollers, a pair of levers operatively connected to the frame, a resistance means for resisting movement of the levers and a foot-bracing means for the user's feet. (RX 327, Kaufman WS, at 35-36, 1 99). It has a standard 13 which is attached to, and extends upwardly from, the forward portion of the frame. The upright standard carries a pair of pivoted pedals which permit the user to perform pedalling exercises. There is a padded cushion or board which extends between the side rails of the frame and beneath the seat. The user may be supported on this cushion while operating the pedals. (RX 27; RX 327, Kaufman WS, at: 35-36, 11 99-100).

213. Respondent Weslo contends that this patent anticipates claim 1 of the '071 patent. (RF B114).

214. First, there is no showing or suggestion in this patent, or indeed in the testimony of respondent's experts, that this device is capable of being reoriented from the horizontal to a vertical position by tipping it into the upright position. (RX 27; RX 327, Kaufman WS, 11 99-100; RX 321, Mattern WS, 1 75). It would seem obvious that the pedal structure on the standard would impede any effort to stand this device on end. (RX 27). Thus,

the device cannot have "ground-engaging auxiliary support means" for s ably supporting the apparatus in an upright position.

215. It also does not have a "second user support" within the intent and meaning of claim 1 of the '071 patent. Claim 1 requires that its second user support be attached in a generally perpendicular manner to the upright frame, in such a manner that the user, while supported on the second user support, can grasp and move the handles "thereby increasing the range of exercises which can be performed with the apparatus." (CX 1, claim 1). The padded cushion of the Welgemoed device is not attached in the prescribed manner and cannot be used in the prescribed manner. (RX 327, Kaufman WS, at 1 99). Indeed, the only use for this cushion suggested by respondent's expert was support for the user when he "operated the pedals." (RX 327, Kaufman WS, 1 99). This clearly does not come within the provisions of the express language of claim 1--the user can not support himself thereon and "grasp and move" the handles to perform an increased range of exercises thereon with the frame in an upright position. (CX 1, claim 1). ^{8/}

216. Accordingly, the Welgemoed patent in question does not anticipate claim 1 of the '071 patent. (FF 214-15).

^{8/} The testimony of respondent's experts as to this Welgemoed device is another good example of the extremes of advocacy exhibited by the experts herein. (RX 321, Mattern WS, 11 75-76; RX 327, Kaufman WS 11 99-100). Such advocacy has impaired my ability to rely upon the expert opinion in this record in many critical areas.

6. The H-4 Unit, The Priority Document and Other Activities
of the Inventors and Complainant

217: The named inventors of the suit patent prepared a prototype of their device, which they designated the Bodytone Ltd. H-4 Multi-Gym, and which they displayed at the trade show in Birmingham, England in September 1982. A brochure was also prepared and distributed at that trade show, illustrating the H-4 device, as well as other exercising equipment they had designed. (CX 271, Fitzpatrick WS, at 11; CPX 1, RPX 30; CX 160).

218. The prototype H-4 (CPX 1, RPX 30) is substantially the same as the device illustrated in the '071 patent, with exceptions such as the throughholes 13a and 14a for the pin or bolt. (RPX 30; CX 1).

219. The brochure (CX 160) illustrates the H-4 device and several modes of its operation.

220. It was at the Birmingham trade show that Mr. Pilgrim of complainant DP approached the inventors and expressed interest in the H-4 Multi-Gym. In accordance with a preliminary agreement with the inventors, Mr. Pilgrim took the H-4 device back to the United States so that he could discuss it with his associates at DP. (FF 60-61). Mr. Pilgrim and his associates, Messrs. James and Silberman then examined the device, used it and discussed it, and became very enthusiastic about it. (FF 62; CX 272, Pilgrim WS, at 6). Subsequently, an exclusive, world-wide licensing agreement was entered into between DP and the inventors. (FF 63; CX 271, Fitzpatrick WS, at 12; CX 272, Pilgrim WS, at 6-7).

221. Patent application was made by the inventors in the **U.K.**, for this device, and filed on May 25, 1982; application Serial No. 8,215,206. (CX 271, Fitzpatrick WS, at 10). Subsequent to the agreement with DP, application for the suit patent was filed in the United States. The '071 patent claims priority on the aforesaid U.K. patent. (CX 1).

222. The priority document filed with the PTO in the file wrapper of the suit patent erroneously fails to disclose the ground-engaging auxiliary support means of claim 1 (feet such as feet 30 in Fig. 1 of the '071 patent). (Kostanecki, Tr. 732-33, 820-22). **Mr. Fitzpatrick, one of the inventors, - admits that in making the drawings for the U.K. application he mistakenly omitted such feet. (Fitzpatrick, Tr. 68).**

223. The device, as disclosed in said priority document minus such feet, would not be stable in use with the frame in an upright position. (Kostanecki, Tr. 734-37, 820-22).

224. The second user support in the H-4 Multi-Gym is connected to the frame through a beam and socket arrangement. (RPX 30). The inventors originally used through-holes and a pin, to pin the beam and socket in position. (Fitzpatrick, Tr. 61-62). They later found that the beam and socket arrangement provided a sufficiently secure attachment of the bench so that the pin was unnecessary for the safe operation of the device in an upright position. It was therefore eliminated. (CX 271, Fitzpatrick WS, at 11; Fitzpatrick, Tr. 62; See FF 57, supra).

225. During the development of the BODYTONE 300 by complainant DP, out of an abundance of caution, for product safety reasons, DP added the

tThrough-holes and pin back onto the device. (FF 66; CX 273, Silberman at 7). The through-holes and pin are unnecessary for the purpose of providing a firm attachment of the bench to the frame. The demonstration at the hearing established the fact that the bench (second user support) is firmly attached during use of the BODYTONE 300, even when the pin is not used. (Kaufman, Tr. 1745-49; FF 86).

226. The '071 patent does not refer to the through-holes and pin arrangement in any of the claims. Claim 1 simply requires "attaching means for firmly attaching said second user support to the apparatus...." Claim 16 requires only "a bench removably coupled to said frame..." (CX 1, claims 1, 16). However, the preferred embodiment described in the specification and Figs. 2 and 4 do provide for such through-holes and pins (CX 1, Col. 2, 11. 41-52).

227. I find that nothing in the claims of the '071 patent requires through-holes and a pin for the purpose of "firmly attaching" or "removably coupling" the bench or second user support to the frame. (CX 1, claims 1-20). The through-holes and pin in the BODYTONE 300 device were added strictly as a product safety precaution and such product and the '071 patent device do not require their presence in order to provide a firm attachment of the **bench to the frame**. (FF 85-86, 224-25).

228. A prototype of the BODYTONE 300 **was** shown to the trade at the NSGA show in Chicago. in February 1983. The prototype included the through-holes and pin. (CX 273, Silberman WS, at 7, 9).

229. The application which gave rise to '071 patent was filed March 14, 1933. (CX 1).

230. It is unnecessary to determine whether the '071 patent is entitled to the U.K. application priority date of May 25, 1932, since all of the above activities were those of the inventors, or of complainant DP acting as agents of the inventors. (See, Opinion, infra).

B. Obviousness

1. Level of Ordinary Skill in the Art

231. One who is skilled in the art can be someone with no formal education, but with some experience in mechanical arts, to one with college level training. One of ordinary skill appears to be someone with a high school degree with some post-high school technical training or experience in the mechanical arts, such as a draftsman, a tool and die maker, or other similar individual. Familiarity with basic mechanical concepts, whether acquired through formal education or experience, and some interest in physical exercise equipment is the level of skill that is appropriate to be involved in the design and manufacture of physical exercise equipment. (RX 321, Mattern WS, 11 56-57; RX 329, Kaufman WS, 11 36-39).

232. The credentials of several individuals who have successfully designed physical exercise equipment is illustrative of the level of ordinary skill in this art. Patrick C. Fitzpatrick, one of the inventors named in the

'071 patent, has mostly mechanical hands-on experience with manufacturing machinery, and has not pursued a degree in higher education. (See FF 42, supra). Inventor Frederick W. Lloyd is an experienced tool maker by trade. (See FF 41, supra). Inventor Peter L. Brown, a former dentist, had experience in designing and manufacturing knock-down structures in the form of greenhouses.' (See FF 46, supra). Ira J. Silberman, himself a patentee with regard to home exercise equipment (RX 18, RX 22, RX 24) has an undergraduate degree in industrial design, and extensive experience in mechanical design, including twenty years of designing home exercise equipment. (CX 273, Silberman WS, at 1-2; Silberman, Tr. 351, 462).

233. Most of the product designers who work in complainant's R&D group under Mr. Silberman are degreed designers or engineers.. (CX 373, Silberman WS, at 2). In Mr. Silberman's experience in the field of exercise equipment, however, not all such designers have engineering degrees. (Silberman, Tr. 489).

2. Scope and Content of the Prior Art

234. Weslo has cited more than seventy prior art references which it alleges are pertinent to the teachings of the '071 patent. (RF B116-B138). Of these references, Weslo principally relies on eight: the Beacon 3001 (RPX 8); the Sears 1980 Fall/Winter catalog, page 560 (CX 38); U.K. Patent No. des. 982,354 (Welegmoed) (RX 233); the Beacon 3002 (RPX 9); Montgomery Ward 1981 Fall/Winter catalog, page 675 (RX 331); U.S. Letters Patent No. Des. 256,707 (MacLaren-Taylor) (RX 25); U.S. Letters Patent No. 881,521 (Wilson) (RX 2); and U.S. Letters Patent No. 1,966,848 (Charters) (RX 6). The Beacon 3001 is

substantially represented in the Sears catalog and Welgemoed British design patent; the Beacon 3002 is substantially represented in the Montgomery Ward catalog and the U.S. design patent to MacLaren-Taylor. (RF B137, 8140).

235. During prosecution of the application which matured into the '071 patent, the examiner considered nineteen **items of prior art** before allowing the claims. (FF 68-99, supra). Of the items principally relied on by Weslo, only **the Beacon 3001, as it appeared in the Sears catalog, was considered by the examiner.** (FF 76, 77, 89). An additional nineteen prior art references were cited to the examiner after notice of allowance of the claims, but there is nothing in the file history to suggest that the majority of these references were considered by the examiner. (FF 95-98, supra).

236. U.K. Patent Specification No. 1,326,263 to Selnes for a **Training and Exercising Apparatus** was published in August 1973. The objectives of this invention are to provide an apparatus that: can be used for approximately 60 different exercises; makes little noise and can be used by any person ranging from athletes to children; is small, lightweight, simply constructed and reasonably priced; has no friction elements, brakes or cog-wheels; and can be folded up when not in use for easy storage. This apparatus is constructed so that it can be used placed on the floor or hanging on a wall, and can be adjusted to be used for walk-and-run training, rowing apparatus, gymnastic apparatus, push and stretch apparatus, and swing or playing apparatus for children. For resistance type exercises, resistance is provided by the user's own weight. (CX 28, at 1, 11. 36-56, 79-89; CX 275, Kostanecki WS, at 25).

237. The Selnes multi-purpose exercise apparatus has two user supports, one a rowing seat, and the second a self-supported swing-like seat

which is suspended from a davit-like construction when the frame is mounted on a wall. When the device is used for rowing exercise, the rowing seat rolls on wheels on the horizontal frame, and rowing action is accomplished by means of a cord and pulley arrangement. (CX 28, at 2, 11. 106-22; at 3, 11. 4-9. Figs. 4,, 6; CX 275, Kostanecki WS, at 25).

238. U.S. Letters Patent 3,892,404 to Martucci for an Exercise Device issued in July 1975. The object of this invention is to provide a lightweight, inexpensive, portable exerciser which can be assembled and disassembled quickly and easily. The device is designed to be used by people of all ages, sizes and weights to perform a large number of body exercises, and to provide maximum versatility without the need for installation or maintenance. Resistance type exercises employ the users own body weight as resistance means. (CX 14, col. 1, 11. 25-55).

239. The Martucci device consists of a variable length track which can be adjustably elevated at one end. There is an adjustable carriage device which is movably mounted on the track, and selectively adjustable to be either flat or configured as a seat, with the seat back adjustable to different angles. A cord and pulley device having handles at the ends of the cord can be fixed to either the carriage or the foot rest. This apparatus can be used for a modified rowing exercise and other types of exercise. (CX 14, col. 1, 1. 59- col. 2, 1. 48; RX 327, Kaufman WS, at 1 77).

240. U.S. Letters Patent 1,801,223 to Clausen for an Exercising Apparatus issued in April 1931. The object of this invention is to provide an apparatus that will allow different types of exercises, and can be used with

the user in either a standing, sitting, prone or hanging position. The device consists of a ladder-like structure which may be used in a horizontal position, or vertically affixed to a wall or suspended from a ledge or lintel. A pair of arms are rotatably attached to a rung of the ladder which is, equipped with a ratchet device to provide resistance for the movable arms. In the horizontal position, a user can perform a rowing type exercise by sitting on a stationary seat and moving the arms back and forth. In the vertical position, the user may also do a variety of exercises by grasping and moving the arms. (CX 7, at 1, 11. 1-11, 31-57; at 2, 11. 10-20, 36-49, Figs. 1, 2).

241. U.S. Letters Patent 3,586,322 to Kverneland for a Combined Rowing Apparatus and Exercising Apparatus issued in June 1971.. This apparatus consists of a substantially rectangular frame on which can be mounted a sliding seat carriage when the frame is in the horizontal position. The frame can also be used in the vertical position by mounting on a wall. The seat carriage is attached to tension springs which are attached to the front of the frame. A pair of handles are connected to lines which are attached to pulleys on either side of the frame, which are connected to a second pair of tension springs. A cross bar is mounted at the front of the frame to act as a foot rest in the horizontal position of the frame and as a hand grip when the frame is mounted vertically. Thus, in the horizontal position, the device may be used as a rowing machine, and in the vertical position it may be used for arm exercises. (RX 11).

242. The Amerec 610 and 660 rowing machines are conventional rowing machines consisting of a horizontal frame, a seat which rolls on the frame

with ball bearing rollers, a pair of rowing oars with resistance provided by adjustable dual hydraulic cylinders, and pivoting foot rests. These devices are intended, to be small and compact, for indoor use, and can be stored on end for easy storage. In addition to rowing, these machines can be used for push-pull exercises, presses, squats and sit-ups. All of these additional exercises are performed with the frame in a horizontal position. (CX 39; CX 4, at 80).

243. U.S. Letters Patent 2,855,200 to Blickman for a Home Exercising Apparatus (Blickman I) issued in October 1958. The object of this invention is to provide a home exercise apparatus which provides different exercise facilities, including horizontal bars, spring pulls, bicycling and swimming. The device is intended to be light weight, durable, strong and compact so that it can be mounted on a closet door and folded onto the door for storage in the closet when not in use. The Blickman I device is constructed so that a vertical frame can be mounted on a door or wall. There is a pair of bars which when placed in a horizontal position and supported on the floor at the opposite end of the frame by a foldable leg, support a movable seat, which can be used for rowing type or swimming type exercises. When these horizontal bars are placed in the vertical position, they can be used for a chinning exercise. Resistance is provided on this apparatus by cables mounted on the closet door which are connected to multiple spring pull cable rolls. (RX 8; Kostanecki, Tr. 703-05, 708-10).

244. U.S. Letters Patent 3,614,097 to Glickman for a Weight Lifting Exercising Apparatus (Blickman II) issued in October 1971. This patent provides improvements over the Blickman I apparatus, principally to afford a

greater variety of exercises. Thus, this device is also a wall mounted apparatus, which uses weights as the resistance means. As with Blickman I, there are horizontal bars supported by folding legs, which extend from the wall mounted structure and accept a slidable seat so that a rowing type exercise can be performed. (RX 12; CX 4, at 133).

245. U.S. Letters Patent 4,275,882 to Grosser for a Home Exercise Gym issued in June 1981. This invention relates to a multipurpose exercise device which can be installed as a home gym. As shown in the patent, this device is mounted on a wall and can be adapted to perform lever exercises or pull cord exercises while the user is positioned on the floor or a bench. Resistance is provided on this device by hydraulic piston-cylinder type shock absorbers. These shock absorbers can also be disconnected from the wall frame and mounted to the exercise lever to serve as dead exerciser weights. The device may also be set up with a pulley cord system. This invention was commercially marketed as the Spectrum 2000. Although the Grosser patent suggests that the device can be adapted to be free standing, nothing in the claims or specification describes a structure which might accomplish this, and the Spectrum 2000 was not shown or marketed in that configuration because of the clumsiness of the base. This device is not designed to be used with the frame in a horizontal position. (RX 17; CX 201; CX 275, Kostanecki WS, at 26).

246. U.S. Letters Patent 4,319,747 to Rogers for a Convertible Exercise Bench and Accessory Apparatus issued in March 1982. The object of this invention is to provide a multi-purpose or combination bench exercising apparatus wherein a variety of exercises can be performed on a single exercise bench. This objective is accomplished by attaching a variety of accessories

to a basic exercise bench frame. These accessories are mounted on the bench by means of a socket type arrangement affixed to the end of the bench. (RX 19; CX 4, at 83).

247. U.S. Letters Patent 192,274 to McLaughlin for an Exercising Machine issued in June 1877. This invention is adapted for use in private houses, and is referred to by the inventor as "the parlor rowing apparatus." The device occupies little space, allows for variation in the length of the limbs and the degree of resistance exerted, and can readily be reconfigured from a rowing apparatus to a "health lift." The rowing apparatus is comprised of a slidable seat which moves on the main body, foot rests, two extension pieces, and hooks adapted to be connected to handles and india-rubber stretchers or coil springs. A rowing exercise can be accomplished by the user by using either two handles connected to the stretchers or springs or only one handle. To perform a health lift, the seat may be removed from the main body and placed on the floor, and the rubber stretchers with the handles attached may be affixed to the seat. The user then stands on the seat and performs vertical pulls. (Rx 327, RX 40; Kaufman WS, at 1 111).

248. There are a number of conventional rowing machines which appear on this record in the form of patents, to Elia (U.K. Patent No. 1,101,009, issued in 1968), Abplanalp (U.K. Patent No. 438,128, issued in 1935), Bryon (U.S. Letters Patent No. 432,598, issued in 1890) and Smith (U.S. Letters Patent Des. 268,278 issued in 1983), as well as in commercial brochures, ed., Puch Tunturi, Walton 525 Rowing Exerciser and 533 Aerow Challenger, and Huffy rowing machines. These devices are all characterized by at least a horizontal frame, a slidable seat, foot rests and either oars,

levers or handles. Resistance may be provided by either a cable and pulley arrangement, springs, pistons or hydraulic cylinders. (CX 6, 27, 40, 41, 234; RX 26, 30).

249. U.S. Letters Patent 4,372,551 to Yurdin for a Cardiac Stress Table issued in February 1983. The object of this invention is to provide a combination nuclear cardiac imaging table and stress testing system which is capable of being rotated or pivoted from a vertical to horizontal position and which is fully mobile and easily adjustable to accommodate patients of varying sizes. The stress testing is accomplished with a pedal actuated stress - imposing unit which is operated by the patient with his feet. (CX 23; CX 275, Kostanecki WS, at 25; CX 4, at 79-80).

250. U.S. Letters Patent Des. 263,978 to Brentham for a physical exerciser issued in April 1982. This patent discloses the ornamental design for a multi-purpose exerciser which has a chair-like frame which positions the user adjacent portions of the unit for performing leg or upper body exercises. This device does not perform any kind of rowing exercises, and the frame does not reorient into any other position. (CX 5; CX 4, at 80).

251. U.S. Letters Patent 4,240,627 to Brentham for a Multi-Purpose Exercising Device issued in December 1980. This invention relates to a multi-purpose leg and arm exercising device for strengthening arm and back muscles, hip abduction and adduction muscles and ham string muscles. A primary object of the invention is to provide a device which isolates leg and arm muscles to efficiently strengthen the muscles by controlling the rate of movement of the arm or leg throughout the range of movement. This device is

equipped with a pair of so-called rowing arms which are equipped with a Eluij flow resistance cylinder. These rowing arms provide arm resistance in a rowing motion, but the apparatus does not appear to be designed to accommodate a true, complete rowing exercise. Further, the chair-like body support members are adjustable, but the frame of the device is not reorientable. (CX 17; CX 4, at 81).

252. U.S. Letters Patent 3,473,843 to Hart for a Double Purpose Chair was issued in October 1969. This invention relates to a chair which has pivotally interconnected frame sections which in one position form a chair-back and front and back legs which support a removable seat, and in an alternative arrangement provide a pair of horizontal parallel tracks on which the movable seat can be placed and a pair of sculling devices hinged to the chair back so that the user can simulate a sculling action. (RX 10).

253. French Patent No. 1,081,419 to Vigor for a physical exercise apparatus was published *in* December 1954. This device consists of elastic cables and means to attach the cables to the user's body, such as by a belt, head attachment, handles and stirrups. In one arrangement of this device, the cables are attached to a platform, a belt and handles that are grasped by the user. In a sitting position, with the platform situated beneath the user's feet, the belt attached to the user's waist, and grasping the handles, resistance is provided from the cables by the user extending his legs against the platform. (RX 36, Fig. 7).

254. Swedish Patent No. 126,662 to Meyer issued in 1949. This device consists of a small platform which runs on wheels on top of which is affixed

an angularly movable platform which serves as a foot bracing means. Spring cables with handles attached are affixed to the movable platform. The user may stand on the platform, and grasp the handles of the spring cables to perform vertical exercises. Alternatively, the user may sit on a cushion and grasp the handles of the spring cables and extend his legs, pushing against the platform, resistance being provided by the springs. In this arrangement, the platform rolls on the floor on the wheels and the upper foot brace attachment assumes an angle appropriate to the position of the user's feet.

(RX 39, Figs. 3-5).

255. U.S. Letters Patent 4,369,966 to Silberman for a Folding Exercise Apparatus issued in January 1983. This invention relates to a "simple and versatile folding exercise apparatus which enables the user to perform a wide variety of weight training exercises." This device is comprised of

an upstanding frame and a bench pivoted to the frame for movement between a laterally extended use position and an upright, compact storage position juxtaposed with the frame. The apparatus includes barbell support cradles, a rope and pulley weight pull device, a lat bar device with squat rack and chinning bar, and readily detachable devices for performing curling, sit-ups, leg lifts and head lifts.

(RX 22, Abstract).

256. The patents to Blickman (RX 8, 12), McLaughlin (RX 40), Smith (RX 2*) and Silberman (RX 22) were not considered by the examiner in allowing the claims of the '071 patent to issue. (FF 70-76i 86, 88). Weslo has cited these, and other patents to Silberman, commercial structures, such as the DP GYMPAC, and a multitude of other patents and commercial devices as being pertinent to the teachings of the '071 patent. (RF 144-55; RB at 13-14).

Although these references may all disclose physical exercise apparatus, and thus contain similar elements to those present in the structure of the '071 device, making them generally relevant to the teachings of the suit patent, I find that Weslo has made no showing that any of these references are more pertinent than the art actually considered by the examiner. (Compare FF 236-42, 245, 246, 248, 252-54, with FF 243, 244, 247, 255.

3. Differences Between the Prior Art and the Claimed Invention

257. The prior art set forth in FF 70, 71, 236-42, 245-46, 252-54e supra was considered by the examiner in allowing the claims of the '071 patent, and the examiner found the '071 claims to be nonobvious over this - prior art. (FF 88). As to the prior art references set forth in FF 243, 244, 247, 255, supra, and others cited by Weslo, although Weslo has asserted that these references are pertinent to the teachings of the '071 patent, it has not been shown that these references are more pertinent than those actually considered by the examiner. (RE 144-55). Therefore, in evaluating the differences between the prior art and the claimed invention, I will focus only on those items of prior art on which Weslo principally relies for its allegations of anticipation and obviousness, several of which are items not considered by the examiner in allowing the '071 claims to issue. (FF 234, 235).

258. The Charters patent (U.S. Letters Patent 1,966,848) discloses a combined exercise and amusement device, and its structure has previously been described herein. (FF 185-97). Not only is Charters a single purpose exercise device that only is described as performing a rowing exercise, but the device is also missing the following critical elements of the '071

teaching: (1) a slidable seat (2) a second user support; and (3) a structure which would allow a user to perform an additional range of exercises while supported on a second user support with the frame in an upright position. (FF 187-97).

259. Although it would certainly be obvious and well within the abilities of one skilled in the art to provide a slidable seat on the Charters device (See, FF 191-248), there is nothing in Charters that teaches or suggests either fitting the device with a second user support or the desirability or ability to reorient the frame in an upright position for the purpose of performing an additional range of exercises. (FF 195-97). Therefore, I find that, viewed without the intrusion of hindsight, Charters is simply a type of single exercise rowing machine that is no more pertinent than other rowing machines considered by the examiner. In view of the limited teaching fairly suggested by this patent, and the several critical differences between this device and the '071 claims, I find that the Charters patent does not render obvious the teachings of the '071 patent. (FF 258, 185-97).

260. The structure of the Wilson Chair disclosed in U.S. Letters Patent 881,521 has also been described previously. (FF 199-211). This device is a chair which can be converted into a rowing exerciser or a treadmill. (FF 199). Unlike the teachings of the '071 patent, Wilson does not disclose or suggest any of the following necessary elements:- (1) a frame which can be reoriented from a horizontal to upright position; (2) a second user support attached to the apparatus adjacent the lower end and generally perpendicular to the upright frame which supports the user and allows him to grasp the rowing arms to perform an additional range of exercises; or (5)

ground-engaging auxiliary means for stably supporting the apparatus in an upright position. (FF 200-10).

261. The substantial differences between the Wilson chair and the structure disclosed in the '071 claims, and the essentially different teaching of the Wilson patent prevent this disclosure from remotely suggesting the invention of the '071 patent. (FF 199-211). Furthermore, I cannot conceive, not has it been suggested, how Wilson could be combined with any other reference to arrive at the '071 invention. Therefore, I find that the Wilson patent does not render obvious the claims of the '071 patent.

262. The '882 patent to Grosser discloses an exercise system in which a hydraulic shock absorber has an adjustable connection to the exercise lever to provide variable resistance forces to exercise. This shock absorber can also be mounted to the lever as a dead weight and a pulley-cord system can be added so that multiple exercises can be performed with the same unit. This exerciser has a main vertical frame which has top and bottom cross members arranged and apertured so that the unit can be fastened to adjacent wall studs of conventional homes. This vertical frame can be mounted with an L-shaped exercise bench. One end of the bench stands on the floor and the other end is supported by the vertical frame from a hook mounted on the frame. (RX 17, Abstract, col. 1, ll. 37-43, 67- col. 2, ll. 11, Figs. 3, 4). As indicated above, this device is not capable of being reoriented to a horizontal position. (FF 245).

263. The Smith '278 design patent discloses an ornamental design for a rowing machine. This design shows a rowing machine having a seat situated on

a frame, foot rests situated on a cross-piece at the end of the frame, a
Levers connected to hydraulic cylinders or shock absorbers.' On the
cross-piece'At the end of the frame, near the foot rests, there appears to be
a pair of protruding feet, presumably to allow the device to be stood on end
for storage purposes. As this is a design patent, there is no written
description of the structure of this device. Furthermore, as a single purpose
rowing machine, this device does not teach or suggest either multiple
exercises, or reorientation of the frame into a vertical position to perform
an additional range of exercises. (RX 26; Kaufman WS, RX 327 at 110).

264. I find that the Smith and Grosser references do not lend
themselves to being combined, as has been suggested by Dr. Kaufman, in that
there is no teaching in Smith of how to attach an L-shaped bench such as
Grosser's so as to make the Smith rower reorientable from a horizontal to a
vertical position for an increased range of exercises. (FF 245, 263). The
bench of Grosser does not even support the Grosser device. Rather the bench,
itself, is supported by the frame which is hung on the wall in Grosser. (RX
17, Col. 2, 11. 1-4, Figs. 3, 4). Dr. Kaufman has not explained how or why,
one of ordinary skill in the art would attach the Grosser bench to the Smith
rower to make the latter reorientable for use in an upright position. (RX
327, Kaufman WS, at 40, 110). Thus, a combination of Grosser' and Smith does
not render obvious the teachings of the '071 patent. Clearly Grosser or Smith
individually do not disclose or suggest the invention of the '071 patent. (FF
245, 262, 263).^{9/}--

9/ Although Weslo has proposed, in a very conclusory fashion, the
combination of many prior art references, there has been no showing of the
manner of making these proposed combination, or that such combinations would
be obvious to a person of ordinary skill in the art. (See RF B150-B160).
Thus, there is no evidence on this record to support the desirability or the
suggestion of combining any other items of prior art.

265. The structure and operation of the Beacon 3001 has also been examined in connection with Weslo's claims of anticipation. (FF 171-84). This device was also considered by the examiner during prosecution of the '071 patent application. As noted herein, as well as by the examiner, this device principally lacks ground engaging auxiliary support means for stably supporting the device in an upright position. (FF 89, 173-82). Therefore, I have also found that the 3001 does not disclose a second user support within the meaning of the '071 claims. (FF 183-84).

266. The **differences between the Beacon 3001 and the claims of the '071 patent are occasioned by the fact that the Beacon 3001 was specifically designed to be a horizontal exercise machine, thus the padded foot rest is angled to act as a foot rest, and not to act as second user support generally perpendicular to the upright frame. (FF 183-84). Therefore, the differences in structure between the 3001 device and the '071 claims, together with a fair evaluation of the use reasonably suggested by the Beacon 3001, as disclosed, for example in the Sears 1980 catalog, lead me to find that the Beacon 3001 device does not render obvious the claims of the '071 patent. (See, FF 89).**

267. The structure of the Beacon 3002, including the additional features **of the 3002 that did not appear on the Beacon 3001, have also** already been described. (FF 138-69). In addition, I have found that the Beacon 3002 anticipates **the claims of the '071 patent. (FF 170). The** evidence shows that the Beacon 3002 **was not specifically designed** so that the rowing frame could be reoriented in an upright position, and a range of additional exercises performed. Thus, the fact that the structure of the Beacon 3002 allowed it to be so reoriented was essentially accidental. (FF 175).

268. The fact that the Beacon 3002 mainly differs from the 3001 by the addition of legs on the bottom of the frame confirms that this device was intended to be used in the horizontal position, with the added feature over the 3001 to be able to incline the rowing frame. (FF 175). Thus, I have found that the padded foot rest is not situated "generally perpendicular" to the rowing frame. (FF 150-54). Nevertheless, I have found that every structural element of claims 1 and 16 of the '071 patent, or its functional equivalent, is present in the Beacon 3002, and that the legs at the end of the frame, in conjunction with the padded foot rest constitute the "ground-engaging auxiliary support means" for stably supporting the frame in an upright position, and are functionally equivalent to the generally perpendicular second user support. (FF 154, 170). Thus, the only element explicitly missing from the Beacon 3002 is the perpendicular relationship between the rowing frame and the foot rest/back rest/ second user support. (FF 154). The evidence shows that Mr. Weiss appreciated the ability to use the Beacon 3002 in the upright orientation, as can be seen from his demonstration to the Montgomery Ward buyer, Mr. Kucera, and the record clearly demonstrates its ability to function in this position. (FF 135).

269. In view of the wealth of prior art on this record which discloses a perpendicular relationship between exercise frames and benches (FF 243-46), and other references which teach reorientation of an exercise frame from a horizontal to vertical position, (FF 236-37, 240-41), I find that it would have been obvious to a person of ordinary skill in the art to make minor adjustments to the Beacon 3002 device such that it would read literally on every element of the '071 claims and render obvious the teachings of the '071 patent. (Kostanecki, Tr. 2029).

4. Secondary Considerations

270. The DP BODYTONE 300 Multi-Gym was introduced to the market at the NSGA trade show held in Chicago in February 1983. At this show, the BODYTONE 300 generated much interest and enthusiasm, apparently due to its design, utility and compactness. When the product was first shipped to consumers in April 1983, it also was well received, to the point that DP's inventories were quickly depleted and they were experiencing difficulty meeting outstanding orders by the fall of 1983. (CX 272, Pilgrim WS, at 12; CX 273, Silberman WS, at 9; CX 274, Hoff WS, at 3-4; Hoff, Tr. 507-11; CX 295).

271. The DP BODYTONE 300 has been highly successful commercially. Shipments of the BODYTONE 300 began in April 1983, and by the end of September 1983, DP had shipped 65,000 units. (CX 272, Pilgrim WS, at 12-13). For FY 1984, DP forecast total sales of 138,000 rowing exercisers. (CX 178, 1985 Plan Total; CX 172, at 1). However, within the first three months of the fiscal year (October-December 1983), DP had already shipped 122,632 BODYTONE convertible rowers. (CX 105). Actual sales in FY 1984 of the BODYTONE convertible rowers totaled 592,000. (CX 172, at 1; CX 105, 187; See also FF 469-77, infra).

272. Prior to January 1984, advertisement of the BODYTONE 300 was primarily accomplished through hand-out sheets and point of purchase materials. At the retail level, DP's customers advertised the BODYTONE 300 in local newspapers or flyers. Beginning in January 1984, the BODYTONE 300 was featured in DP's national mass media advertising campaign. (CX 272, Pilgrim WS, at 12-13, 17; CX 276, Thompson WS, at 4, Thompson, Tr. 537; CX 43, 104; CPX 12).

273. It is not disputed that DP's extensive advertising has contributed significantly to the growth of the convertible rowing exerciser market as a whole. (CX 272, Pilgrim WS, at 18). Despite the appearance of competitive convertible rowers, and DP's resulting drop in market share from the 100% it enjoyed into the fall of 1983, DP's sales of convertible rowers have continued to increase. (CX 272, Silberman WS, at 19; CX 187-88). Since December 1984 there has been a decline in demand for consumer products, including exercise equipment in general. (CX 272, Pilgrim WS, at 20-21). Nevertheless, DP's sales of BODYTONE convertible rowers continued to increase, and sales for fiscal year 1985 are expected to exceed sales during fiscal year 1984. (Pilgrim, Tr. 257-59).

274. The success of the BODYTONE convertible rower has made it the best performing product ever marketed by DP (from the standpoint of sales dollar volume, return on investment and profitability), and the best performing product in the home exercise equipment market since 1980. (James, Tr. 1125). The BODYTONE 300 received the first ever Chairman's Innovation Award of Grand Metropolitan PLC from a field of 32 entries. (CX 272, Pilgrim WS, at 13; CX 90, 91).

275. In the experience of Sears, the market for rowing exercisers during 1984 was one of dramatically accelerating sales. The level of sales exploded to the point that, during 1984, Sears' suppliers were unable to meet the level of demand for the product. Sales in 1985 up to the time of trial were continuing to accelerate, and it is Sears' expectation that production requirements will be greater for 1985 than they were for 1984. (RX 324, Stroh WS, at 1 17).

276. The Beacon 3001 rowing machine was first sold to Sears in 1979. This model was sold through the Sears catalog for approximately two years, and then was discontinued. In 1981, Sears sold a total of 4,196 of the Beacon 3001 rowers. This product was shown in the Sears catalogue and in Sears' instruction booklet for the 3001, for use only in the horizontal position. (RX 323, Glusky WS, at 3; RX 324, Stroh WS, at 4; RX 27B, 289, CX 38).

277. The Beacon 3002 was, demonstrated to the buyer for•Montgomery Ward by Beacon in the fall of 1980, as a "Deluxe Hydraulic Rower." The deluxe feature of this rower was the ability to vary the angle of the frame relative to the ground. The Beacon 3002 was sold exclusively through Montgomery Ward, beginning in April 1981. During 1981,-a total of 463 units were sold. The Beacon 3002 was discontinued after about a year. The Montgomery Ward catalogue shows the 3002 only in a horizontal position. (RX 323, Glusky WS,. at 4; Kucera w.S., RX 333, at 3-4; RX 289, 331). Mr. Leonard Weiss did not consider rowing exercisers to be an important segment of his business at that time. (RX 322, L. Weiss WS,. at 5). He was "just very glad that they [Montgomery Ward] bought the product. . . . " (L. Weiss, Tr.,1455).

278. The apparatus disclosed in the Grosser,patent was marketed under the name Spectrum 2000. This device was never made freestanding because the supporting framework was too bulky to be practical. The Spectrum 2000 was, not a commercially successfully product in part because,it was discovered that consumers were not willing to mount the device on-the wall. (CX 275, ostannecki WS, at 26; Kostannecki, Tr. 693-94).

279. Upon consideration of the overall teachings of the prior art, and differences between the most pertinent prior art and the claimed invention, together with an evaluation of the significant commercial success of the BODYTONE device, I find that, with the exception of the Beacon 3002, the teachings of the prior art would not have rendered obvious the teachings of the '071 patent. (FF.234-69). However, in view of the structural similarities of the Beacon 3002 and its demonstrated ability to be used to perform a range of exercises with the frame in an upright position, I find that the claims of the '071 patent would have been obvious to a person of ordinary skill in the art at the time of the invention in light of the Beacon 3002 device. (FF 264-66).

C. 35 USC S 112

280. The '071 patent discloses and claims a structure which may be used to perform exercises. Claims 1, 5-9, and 13-17 all define structure. None of the claims of the '071 patent are method claims (CX 1).

281. It is Weslo's position that a number of terms used in claims 1 and 16 of the '071 patent are vague and indefinite and that there is nothing in the file wrapper history or the specification which clarifies or explains such terms. It is thus urged that the '071 patent is vague and indefinite in such respects. The terms "generally horizontal," "frame," and "frame in an upright position," "auxiliary support means," "stable," "generally perpendicular," "firmly attaching," "removably coupled," and "frame support means" are urged to be without commonly accepted definitions within the exercise equipment designers trade and without definition in the specification and file wrapper history of the '071 patent. (RF 226-256; RB, at 16-18). It

is also urged that "tipping" is a key, element or feature of claims 1 and 16, and that such key element is not recited., (R8, at 18).

282. As for the term "generally horizontal" adequate definition and guidance is afforded by 'the overall disclosure of the '071 patent, when considered by one of ordinary skill in the art, applying common sense understanding of what is disclosed. (CX 275, Kostanecki WS, at 8; Kostanecki, Tr. 726-28).^{10/} The claims and specification make it clear that this device is to be used as a rowing machine in one orientation. (CX 1; col. 1, 11. 41-44; col. 3, 11. 18-23). Mr. Kostanecki has pointed out that claim 1 a reveals device which starts out as a rowing machine. (CX 275, Kostanecki WS, at 7-8). One of ordinary skill in the art would then interpret "generally horizontal" in this light. (CX 275, Kostanecki WS, at 8). As Mr. Kostanecki has explained;

Rowers are generally horizontal. . . . (Tr. 726).

(Blut bearing in mind that the context of the patent and the context of the invention is a rower, when you tell me that when it says that it is generally horizontal, I am thinking about it in terms of its life as a rower. I suppose that if I continued to tip the device up to the point where no longer did it make sense as a rower, that probably would suggest to me that that probably is not horizontal, because my understanding of rowers is that they are going to be done in essentially a horizontal . . . mode. (Tr. 728).^{11/}

10/ One of ordinary skill in the art is defined supra at FF 231-33, in connection with the issue of obviousness.

11/ Fig. 6i shows the '071 device set at a slight angle while in use in the rowing mode (CX 1, Fig. 6i; Kostanecki, Tr. 725), so it is clear that some angulation, within the parameters of its practical use in this' mode, allowed. (Kostanecki, Tr. 725-728).

283. Respondent in RF B231, also avers that the word "frame" is not defined in the specification, which refers instead to a "framework" and illustrates the entire framework being upended. Weslo then refers to the file history (CX 4, at 125) to a statement which indicates that a part of the frame pivots upwardly and part does not. It is alleged that, therefore, there is a difference between the explanation of the word "frame" in the file history and the definition of "framework" appearing in the specification. It is concluded that it is unclear what is meant by the word "frame" in claims 1 and 16 of the '071 patent. (RF B231).

284. Respondent is simply comparing "apples and oranges." The language from the file history of the '071 patent refers to an amendment which provides for an alternate embodiment of the '071 device. In this alternate embodiment, only a portion of the "frame" pivots upward. It is obvious that this is not the preferred embodiment set forth in the specification. (CX 4, at 124-27; see FF 91-93). It is equally clear that in the preferred embodiment set forth in the specification, the entire frame is turned up on end to put it in the upright position. (CX 1, col. 2, ll. 52-56; Fig. 3). It is also quite clear that the "framework" referred to in the specification is the "frame" described in the specification. Any fair common sense reading of the claims, in light of the specification and figures of the patent, could only lead to this conclusion. (Kostanecki, Tr. 723-24).^{12/}

12/ The position of Dr. Kaufman concerning lack of definition of "frame" in the '071 patent is a good example of the advocative and overly-technical nature of some of his testimony. (RX 327, Kaufman WS, at 14-15, 32).

285. It is further alleged that claim 1 is vague and indefinite because it first refers to the "generally horizontal frame" and then to "said frame in an upright position," without specifying how the frame got into the upright position. (RF B232). Both Dr. Kaufman and Mr. Mattern, Weslo's experts testified that they had difficulty understanding' that the frame referred to in the latter phrase is the same frame which is recited earlier as "a generally horizontal frame," and, if so, how it got into the upright position. (RX 321, Mattern WS, at 6; RX 327, Kaufman WS, at. 16-17). A common sense reading of the claim reveals no deep mystery as to what is being described. Claim 1 claims

[A] physical exercising apparatus capable of use in a plurality of orientations, and adapted to be selectively used as a rowing machine or for performing other types of exercises. . . . (CX 1).

It includes a "generally horizontal frame," which as Mr. Kostanecki explains is the appropriate position for the frame for rowing type exercises.

(Kostanecki, Tr. 720-28). The claim goes on to provide for

ground-engaging auxiliary support means for stably supporting the frame in an upright position (CX 1) (Emphasis added).

It is quite evident that the "generally horizontal" frame has now been up-ended so that it is no longer "generally horizontal." Moreover, this portion of claim 1 is couched in "means plus function" terms. Thus, the specification must be consulted to determine "the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. S 112. The specification and Fig. 3 of the '071 patent reveal that the frame, which is generally horizontal in the original or rowing position, is

simply "up-ended" onto auxiliary support means, which in the preferred embodiment consist of the feet on the underside of the bench and the foldable feet mounted on the frame. (CX 1; col. 2, ll. 55-54; Fig. 3). Furthermore, it is also evident that the change from a "generally horizontal frame" to "frame in an upright position" is a change in "orientation" as contemplated by the preamble to claim 1. (CX 1, claim 1). Accordingly, I cannot credit the advocative and overly-technical testimony of respondent's experts in this regard.

286. Similarly the contention of respondent and its experts as to the term "auxiliary support means" has no merit. (RF B232-B233; RX 321, Mattern WS, at 6; RX 327, Kaufman WS, at 15). Again, a fair, common-sense reading of the claim reveals that the claim is not "vague and indefinite" in this regard. Everything up to this point in the claim deals with the frame in a generally horizontal position. (CX 1). The device is also ground-supported, ergo, in the horizontal position it is supported by the frame to which the levers, resistance means, longitudinal tracks, slidable seat and foot bracing means of the rower configuration are connected. (CX 1). Thus, when put in the upright position it must have another, or "auxiliary" support means to keep it upright. (CX 1). As Mr. Kostanecki testified:

[T]he primary support means is really viewed in the context that the apparatus starts as a rowing exerciser. Thus, the elements identified above are auxiliary to the fundamental assembly of the apparatus as a rower and the ground-engaging auxiliary support means is auxiliary to the general assembly of the rower in a way that facilitates converting the rower into another type of exercise apparatus in a stable upright position.

(CX 275, Kostanecki WS, at 9).

287. Respondent further maintains that the term "stable" as used in claim 1 is not readily understandable. (RB, at 18). The definition of this word in Webster's New Collegiate Dictionary is

firmly established, not changing or
fluctuating.

This accords with Mr. Kostanecki's definition of the term. He testified that "stability" meant the same thing to exercise designers as to anyone else. He stated that this meant the device should be "adequately stable for the purpose intended" and that it could have some wobble providing it doesn't fall over, "or so that it can be used appropriately and adequately with a sufficient feeling of security." (Kostanecki, Tr. 713). Certainly, this is in accord with the common meaning of the term.

288. Furthermore, in the context in which the word "stably," is used in claim 1 of the '071 patent, it is evident that it requires the device to be free-standing. Claim 1 requires:

ground-engaging auxiliary support means for
stably supporting the apparatus with said
frame in an upright position. (CX 1, claim
1). (Emphasis added).

The "means" must "stably" support the apparatus according to this language. There is no qualifying language, such as "assist in supporting" or the like. It is the means, which in the preferred embodiment consists of the feet on the underside of the bench and the foldable feet on the bar 2 of the frame, which must stably support the apparatus in the upright position. (CX 1, col. 2, 11. 54-59). This is the plain and unambiguous language of claim 1. (CX 275, Kostanecki WS, at. 6-7).

289. Therefore, I find that the word "stably" in claim 1 is clear and unambiguous. It requires first that the device be stable during use, that is, that it be firmly established on the ground during use so as to allow the device to be used "appropriately and adequately with a sufficient feeling of security." Also, in the context used in claim 1, it requires that the device be stably free-standing when not in use. (FF 288).

290. The term "generally perpendicular" is also the subject of attack by respondent and its experts. (RF B236-B244). I have already found that it is the obvious intent and meaning of this term to require an angle of 90°, or as close thereto as possible under ordinary manufacturing and design circumstances. (FF 151-53). Certainly, an exercise equipment designer would have no trouble determining that this is the orientation "which makes the most sense," after reading the claims of the '071 patent and reviewing the specification and figures thereof. (CX 275, Kostanecki WS, at 7, 8, 10).

291. Next, respondent and its experts take issue with the phrase "firmly attaching" in the last section of claim 1 of the '071 patent. (RF B245-B249; RX 321, Mattern WS, at 6; RX 327, Kaufman WS, at 16). This is another example of Weslo's hypertechnical approach to the analysis of the terminology of this patent. Respondent admits that the commonly accepted English language usage of this phrase would indicate, in the abstract, that such an attachment is one where relative motion is not permitted due to the nature of the attachment. (RF B246). It, however, ignores this basic precept and tries to inject uncertainty and ambiguity into this basic concept, by urging that there is no specific definition of these terms in the patent and that the only "means" revealed in the specification for "firmly attaching" the bench to the frame is a pin or bolt. (RF B245, B247).

292. The pin or bolt described in the preferred embodiment of the specification is not required by claim 1 of the '071 patent. (CX 1, col. 2, 11. 45-53; claim 1 at col. 3, 11. 49-55). This does not mean that claim 1 is ambiguous, or that a pin or bolt is required by the '071 patent. The evidence herein demonstrates that a pin or bolt is not necessary for the "firm attachment" of the bench to the frame in the '071 device. The inventors so found and this fact was convincingly demonstrated on the record. (CX 271, Fitzpatrick WS, at 11; Fitzpatrick, Tr. 61-62, Kaufman, Tr. 1745-49). The pin or bolt was added by complainant DP out of an abundance of caution, for product safety reasons. (CX 273, Silberman WS, at 7). Although it has been included in the preferred embodiment in the U.S. patent, it has not been included in the claim. (CX 1, claim 1). Nor is it required by file wrapper estoppel. (FF 84-85). It is significant that in adding the language "firmly attaching," as well as other language, to distinguish the suit patent device over Selnes in the PTO, the inventors were not required to include the through holes and pin of the specification in the claim. (CX 4; FF 84-85, supra).

293. In like manner respondent attacks the term "removably coupled" in the phrase "bench removably coupled to said frame" in claim 16 of the suit patent. (RF B251; RX 321, Mattern WS, at 7). The plain meaning of the phrase "removably coupled" is that the bench is "joined" to the frame in such manner, that it is readily removable. (See Webster's New Collegiate Dictionary definitions of "removable" and "coupled"). Again respondent attempts to inject ambiguity into the basic meaning of this phrase by questioning whether a pin or a bolt is essential to such coupling. (RF B251). As in claim 1, no pin or bolt is recited by claim 16. (CX 1, claim 16).

language. In Claim 1, the "auxiliary support means* are to function in such manner as to stably support the frame in an upright position. (CX 1, claim 1). In claim 16 the *ground-engaging means on the underside of the bench* are to function in such manner as to serve to support the frame in an upright position. (CX 1, claim 16). Therefore, if it were not quite obvious to do so, one could look to the specification for guidance as to the corresponding structure, material or acts described, or the equivalents thereof. 35 U.S.C. S 112. When this is done it is certainly revealed that the device is simply upended onto the "auxiliary support means" or "the bench" in order to get the frame in an upright position. (CX 1, col. 2, 11. 53-59). There is certainly nothing indefinite about this fact.

D. Defenses of Failure To Claim Invention and Defective Oath

295. Respondent urges that the inventors did not set forth in the '071 claims what they regarded as their invention, in violation of 35 U.S.C.S 112, as they did not regard their invention as one in which there was "attaching means for firmly attaching," or "coupling means for detachably coupling," but one in which the post slid easily in and out of the socket. This argument is based on the fact that the inventors did not use a pin in their prototype H-4 device; (RB at 18-19; RF B261). In a closely related argument, it is charged that the oath required by 35 U.S.C. S 115 was defective, in that Mr. Silbermann should have been named as a co-inventor, since he contributed the idea of pinning or bolting the post to the socket, which feature is set forth in the preferred embodiment in the Specification of the '071 patent. (RB, at 19; RF B257-B271).

296. I have already found that the pin is not required by the claims of the '071 patent. (FF 85, 224-27, supra). The bench or second user support is firmly attached to the frame without use of the pin. (FF 227). In this regard there is no distinction between the prototype model H-4 and DP's BODYTONE 300 device. (CPX 1, 2).

297. Accordingly, there is no basis in fact for these arguments of respondent. (FF 295-96).

VII. ENFORCEABILITY OF THE '071 PATENT

A. Alleged Inequitable Conduct in the Prosecution of the '071 Patent

298. Respondent Weslo urges that the '071 patent is unenforceable in part because, during prosecution of the application for the '071 patent, the applicant's attorney did not bring Charters, U.S. Letters patent 1,966,848 (RX 6) and certain "commercial structures" (DP GYMPAC, RPX 5, at 27-29; DP 650 USA Fitness Gym, RPX 4, at 34-35, disclosed in RX 22, Silberman U.S. Letter Patent 4,369,966; RX 18, Silberman U.S. Letters Patent 4,316,609; RX 24, Silberman U.S. Letters Patent 4,382,596) to the attention of the examiner. Unenforceability also is urged because"of the alleged mischaracterization of the disclosure of Grosser, U.S. Letters patent, 4,276,882 (RX 17) and of page 560 of the Sears 1980 Fall.Winter catalog (CX 38). (Weslo Prehearing Statement at 41; Weslo's Contentions Regarding Anticipation and, . Obviousness; RF B303-B392; RB at 22-27). With respect to the disclosure of the commercial Structures noted above, I have found that these references have not been shown to be more pertinent than the prior art actually considered by the examiner. (FF 257 supra).

299. Alan I. Cantor, Esq. is a member of the firm of Banner, Birch, mcicia and Beckett. Mr. Cantor prepared and prosecuted the application for the '071 patent. (Cantor, Tr. 1343-44).

300. In 1982, Mr. Cantor authorized a patent search to be conducted to assess the patentability of the subject matter of the '071 patent. The search was performed by Wayne B. Stone, Esq., an experienced patent searcher who is also a patent attorney. (Cantor, Tr. 1345-46).

301. Following receipt of a search report dated December 10, 1982, Mr. Cantor analyzed the prior art wiliCh had been collected by Mr. Stone in his patent search, (Cantor', Tr, 1345-47• SX

302. The search report of December 10, 1982 identified the following references:

1. Rubin	U.S. 3,173,415	(RX 9)
2. Rogers	U.S. 4,319,747	(RX 19)
3. Sweden (Meyer)	126,662 1949	(RX 39)
4. France (Vigor)	1,081,419 1954	(RX 36)
5. Sporting Goods Dealer	December, 1976 - Page 106	
6. Sporting Goods Dealer	September, 1981 - Page 13	
7. Grosser et al	U.S. 4,275,882	(RX 17)
8. Coker	U.S. Des. 226,439	
9. Reach	U.S. 1,051,071	
10. Thomson et at	U.S. 1,866,868	(CX 8)
11. Charters	U.S. 1,966,848	(RX 6)
12. Hart	U.S. 3,473,843	(RX 10)
13. Stuckenschneider et al	U.S. 3,528,653	
14. Poole	U.S. 4,346,887	
15. Telle	U.S. 4,357,010	(RX 21)
16. France	2,309,253 1976	

(SX 72).

1. Rubin	U.S. 3,173,415		(RX 9)
2. Rogers	U.S. 4,319,747		(RX 19)
3. Sweden (Meyer)	126,662	1949	(RX 39)
4. France (Vigor)	1,081,419	1954	(RX 36)
5. Sporting Goods Dealer	December, 1576 - Page 106		
6. Sporting Goods Dealer	September, 1981 - Page 13		
7. Grosser et al	U.S. 4,275,882		(RX 17)
8. Coker	U.S. Des. 226,439		
9. Reach	U.S. 1,051,071		
10. Thomson et al	U.S. 1,866,868		(CX 8)
11. Charters.	U.S. 1,966,848		(RX 6)
12. Hart	U.S. 3,473,843		(RX 10)
13. Stuckenschneider et al	U.S. 3,528,653		
14. Poole	U.S. 4,346,887		
15. Telle	U.S. 4,357,010		(RX 21)
16. France	2,309,253	1976	

(SX 72).

303. During the prosecution of the '071 patent application, the examiner considered the patents listed in FF,302, supra to Rubin, Rogers, Meyer, Vigor, Grosser, and Hart. The patents to Thomson and Telle were cited to the examiner after the close of prosecution of the application. The remaining items were not submitted to the PTO in connection with the '071 patent application. (Cantor, Tr. 1528-39; FF 76, 78, 86, 88, 96, 97 supra).

304. At no time during the prosecution of the '071 patent application did Mr. Cantor cite the Charters patent. (Cantor, Tr. 1559; RX 6).

305. With respect to the prior art references listed in the Stone search report (SX 72), Mr. Cantor reviewed and understood the teachings of those references. He reviewed them before, and several times during, prosecution of the application for the '071 patent. He did not cite any of them at first to the PTO because, in his judgment, they were not material to examination of the application. The examiner cited none of these in the first

that Charters was relevant to the examination of the '071 patent application in only a very general sense, in-that WdiscloSes a variant of a rowing machine and is largely cumulative of other teachings of record in the prosecution history. Thus, proof that Mr. Cantor knew of the Charters reference is insufficient, . without-tore, to lead to the conclusion that his failure to disclose it constituted misconduct. (FF 302, 304, supra). I conclude that Mr. Cantor's decision not to disclose Charters to the PTO was a judgment made in good faith without the intent to mislead the examiner or to misrepresent the scope or content of the relevant prior art. Therefore, I find that nondisclosure of Charters was not a breach of Mr. Cantor's duty of candor to the PTO.

307. After Mr. Cantor received the search results in late 1982, he prepared a written opinion with respect to patentability and DP's right to make the BODYTONE convertible rower. In that report, he made reference to the prior art identified in SX 72. He evaluated the art and compared it to the subject matter of the invention. He does not recall identifying any one reference as being more principal or more important than another. Prior to rendering that report, he had studied the teachings and become familiar with the various items of art listed on SX 72. He retained copies of them in his office and forwarded copies to DP. (Cantor, Tr. 1347-49).

308. Two other applications which related to the subject matter of the '071 patent were filed at the time the application for the '071 patent was filed: (a) the application for U.S. Letters Patent No. 4,488,719 (which has been deleted from this investigation) and pertained to collapsibility of rowing machine, and (b) application No. 475,187 (now abandoned) pertaining to

mounting a rower on a wall. The same examiner was also assigned to review these latter two applications. (Cantor, Tr. 1344-45, 1589; CX 500, 501).

309. On December 13, 1983, Mr. Cantor submitted an information disclosure statement in connection with one of these co-pending applications -- Application Ser. No. 475,187 -- in which he disclosed U.K. Patent No. 1,169,148 (Ostensjo), the U.K. counterpart to U.S. Patent No. 3,586,322 (Kverneland). (CX 500, Information Disclosure Statement dated December 13, 1983; RX 11).

310. The prosecution history of the '071 patent indicates that the examiner considered Kverneland in allowing the '071 claims. (See FF 88, supra). Mr. Cantor described Kverne/and during prosecution of the '071 patent application as a "fairly ordinary cable and spring type rower which is intended to be mounted on a wall. . . ." In addition, Mr. Cantor characterized Kverneland as "merely cumulative of the other prior art of record, particularly Selnes British Patent No. 1,326,263, which discloses a multi-purpose exerciser (usable for rowing) which also can be mounted on the wall in a similar fashion." (CX 4, at 117-18).

311. The Ostensjo patent, cited to the examiner by Mr. Cantor in Application Ser. No. 475,187, which was comparable to Kverneland, was considered by the examiner in connection with the '187 application during the same time period that the examiner prepared the first Office Action in the application for the '071 patent. (CX 4, at 64; CX 500, List of Prior Art Cited by Applicant, dated March 27, 1984).

312. Based on the clear evidence in the prosecution history that the examiner considered and cited Kverneland during examination of the '071 patent application, I cannot impute any bad faith to Mr. Cantor in failing to cite Ostensjo in the '071 application. , (FF 88, 96). This is particularly so both in view of the citation of Ostensjo by Mr. Cantor in a co-pending application that was clearly examined by the same examiner during the same time period, and in view of the citation of Selnes in the '071 patent application. (FF 70-72, 83, 311, supra). As noted by Mr. Cantor, Selnes taught a lot more than Ostensjo (Kverneland). (Cantor, Tr. 1507).

313. After the examiner's first Office Action in the '071 patent application in which the examiner rejected certain claims over Yurdin, and following Mr. Cantor's personal interview with the examiner, Mr. Cantor filed an amendment in which he cited additional items of prior art, namely Rubin (RX 9), Rogers (RX 19), Grosser (Rx 17), Vigor (RX 36) and Meyer (RX 39). (See FF 72, 82, 86, supra; Cantor, Tr. 1517-19). Mr. Cantor gave the following reason for citing these references to the examiner at this point in the prosecution:

It was a reevaluation process. The examiner had rejected the claims based on a cardiac stress table, which to my view was not an exercise device, but 'somehow in is mind he felt that the claims embraced the cardiac stress table of the Yurdid patent[. TThat brought to my mind the probability that perhaps I ought to reassess the situation in view of the position that the examiner had taken.

So I went back through the prior art search report and I pulled out these references that had some remote connection, however remote, that I thought the examiner might want to consider in view of the position that he had taken with regard to Yurdin.

(Cantor, Tr. 1519).

314. One of the references identified in the search report of December 10, 1982, which Mr. Cantor decided to cite to the PTO in July 1984, was Grosser (RX 17). According to Mr. Cantor, he cited Grosser because it had the basic type shock absorber that was shown on the '071 patent." (Cantor, Tr. 1524).

315. In the Amendment of July 20, 1984, Mr. Cantor described the invention of Grosser as a wall mounted device. He failed to inform the examiner that the Grosser patent states at col. 1, line 7, that the Grosser device can be adapted to be free standing. Mr. Cantor testified that this omission may have been an oversight. (RX 17; Cantor, Tr. 1524-25; CX 4, at 82; see FF 86, 245, supra).

316. The primary examiner of the Grosser patent was Richard Johnson, evidently the same examiner assigned to the '071 application and the two additional applications filed by Mr. Cantor on March 14, 1983. (RX 17; CX 1, 500, 501).

317. Although the specification of the Grosser patent states that this device can be made free standing, there is nothing in the claims, specification or drawings which discloses how this might be done. (RX 17). As indicated by Mr. Kostanecki, this device was never commercially marketed as free standing because the standard that would be needed to support it would have been far too bulky to be practical. (Kostanecki, Tr. 2044). I have further found that even if the Grosser device could be adapted to be free standing, the manner of which is not clearly disclosed in the patent, this disclosure, alone or in combination with other references does not render

obvious the teaching of the '071 patent. (FF 262, 264, supra). Thus, although the statement by Mr. Cantor is technically inaccurate, I do not find it to be an act of willful deception, or in fact a material misrepresentation of what Grosser actually teaches.

318. Beacon Enterprises, Inc. authorized its attorney to file a protest with the PTO objecting to the allowance of the patent application which ultimately matured into the '071 patent. The objective of the protest was to indicate that Beacon Enterprises had made a similar product before Bodytone Ltd. had applied for the patent. No attorney representing DP contacted Leonard Weiss with regard to the protest. No attorney representing DP contacted Beacon Enterprises with respect to the protest. (L. Wess Tr., 1459, 1467-68).

319. The protest was filed during the prosecution of the '071 patent by Beacon's attorney, Mr. Amer, and disclosed the Beacon 3001 rowing exerciser as it appeared in the Sears 1980 Fall/Winter catalog. (See FF 74, 75, supra). Although this protest was dated May 23, 1984, and Mr. Cantor had received a copy of the protest in the mail, the examiner first saw this document when Mr. Cantor handed it to him at the interview of July 25, 1984. (Cantor, Tr. 1517; FF 74-76, supra).

320. In the amendment filed by Mr. Cantor following his interview with the examiner, Mr. Cantor made certain comments describing the structure of the Beacon 3001 and distinguishing it from the invention claimed in the '071 patent application. (See FF 87, supra). The comments made by Mr. Cantor were based on conclusions that he drew from what he could see in the protest. Mr.

Cantor did not contact Mr. Amer or attempt to purchase the unit. (Cantor, Tr. 1525-26).

321. Mr. Cantor's statement that the Beacon 3001, as shown in the Sears catalog, is not intended to be used or capable of use with the frame in the vertical position because the frame cannot be stably supported, was premised on the understanding that the claims of the '071 patent application were directed to a structure that would stand by itself with the frame in an upright position, and not to a structure that would stand only when supported by the weight of a user. (Cantor, Tr. 1526-29; FF 80, Bl, 92, supra).

322. The examiner in the Office Action of August 7, 1984 noted:

The Sears publication does not appear to disclose the existence of supports to enable the device to be used in a vertical position as required by the claims in the application. It is not apparent exactly how the device is to be operated when it is to be used "for additional exercises" and the protester has failed to show the relevance of the device to the exercising apparatus claimed in this application.

(CX 4, at 98).

323. The photograph of the Beacon 3001 shown in the Sears catalog does not show this device with the frame in the upright position. The testimony and demonstrations of the Beacon 3001 during the hearing in this investigation show that the Beacon 3001 was not designed to be used with the frame in an upright position, the device cannot stand on its own in the upright position, and it is not stable when being used in the upright position. (CX 4, at 68; Kaufman, Tr. 1819-21; FF 87, 89, 171-84, 265, 266, supra).

323a. Based on the comments made in the prosecution history of the '071 patent concerning the Sears 1980 catalog, and the testimony that has been given concerning the Beacon 3001 during the hearing in this matter, I find that it was not unreasonable or a breach of duty for Mr. Cantor to base his comments about the Beacon 3001 solely on what appeared in the protest. Subsequent demonstration of this device has established the basic accuracy of Mr. Cantor's observation about the Beacon 3001. Furthermore, the record does not establish either that Mr. Cantor intentionally or negligently attempted to mislead the examiner about the disclosure of the Sears catalog, or that the examiner misperceived the essence of the Beacon 3001 based on his own evaluation of the protest. (FF 322, supra). Accordingly, I find that Mr. Cantor did not breach his duty of candor to the PTO in this respect.

B. Weslo's Eleventh Affirmative Defense -- The Advisory Letters

324. In February 1984, Alan Cantor sent letters to manufacturers of convertible rowing exercisers, advising them that they were offering for sale a convertible rowing exerciser that fell within the scope of the claims of the then pending application for the '071 patent. He was instructed to do so by Ira Silberman. (Silberman, Tr. 427-429; Cantor, Tr. 1560-61; RX 59).

325. On February 23, 1984, Mr. Cantor sent one such letter to respondent Weslo in which he stated:

It has come to our attention that your company is offering for sale a convertible rowing exerciser -- the Body Shop 360 -- which by no coincidence is virtually identical in construction and operation to our client's Bodytone 300 Multi-Gym Your convertible rowing exerciser appears to fall

squarely within the scope of the claims of a pending patent application covering the Bodytone 300 Multi-Gym. We expect this application to issue as a patent in the near future.

Please be advised that if, upon issuance of a patent covering the Bodytone 300 Multi-Gym, your company continues to offer its infringing convertible rowing exercisers, Diversified Products vigorously will seek to enforce its proprietary rights by taking appropriate legal action against you to enjoin infringement of the patent and recover maximum damages for willful infringement.

(RX 59-7).

326. Before sending the February 23, 1984 letter to Weslo, Mr. Cantor examined a physical sample of the Weslo Body Shop 360, and also examined a brochure showing the device. (Cantor, Tr. 1563).

327. In September of 1984, Mr. Cantor again sent letters to manufacturers of convertible rowing exercisers informing them that the PTO had allowed the claims of the patent application covering the DP Bodytone 300 and that a patent would shortly issue. In the letters, Mr. Cantor summarized the allowed claims of the '071 patent and requested that the manufacturer cease manufacture, promotion, and sale of infringing rowers to avoid actionable infringement upon issuance of the patent. One such letter was sent to Weslo's attorneys on September 6, 1984. (RX 59-8).

328. In the September 6 letter to Weslo's attorneys Mr. Cantor did not request Weslo to cease manufacturing and importing the Body Shop 360 before the '071 patent issued. (RX 59-8; Cantor, Tr. 1565).

329. In September and October of 1984, Mr. Cantor sent letters to retailers believed to be selling convertible rowing exercisers that DP felt were covered by the allowed claims of the application for the '071 patent. In these letters, Mr. Cantor advised the retailers that patents covering the DP BODYTONE would shortly issue. Mr. Cantor advised, further, that sales of the competing convertible rowing exercisers (which were identified by model name and manufacturer) after the patent issued would be considered infringing sales. Mr. Cantor concluded the letters by asking for the retailers' cooperation in preventing infringement by removing competing convertible rowers from inventory so that no infringing sales of these units would be made after the patents issued. DP notified approximately 150 retailers, thirty of whom were identified as retailers of Weslo's BODY SHOP 360. (RX 61).

330. The retailers who received letters from DP in September and October of 1984 had been identified to Mr. Cantor by DP. In the summer of 1984, DP sales personnel were instructed to look for retailers who were selling units that looked like the BODYTONE 300. (Cantor, Tr. 1568; Thompson, Tr. 559-60; SX 78).

331. Mr. Cantor was instructed to send the September and October letters by Mr. Silberman. Before sending these letters, Mr. Cantor reviewed pertinent legal authorities and satisfied himself that such letters were legal. .(Cantor, Tr. 1573-74).

332. Mr. Cantor sent letters of apology to retailers who responded to the September-October letters by denying that they had sold the device in question. (RX 61-153; Cantor, Tr. 1568).

333. It is important to note that, in each of the groups of letters mentioned above, Mr. Cantor was careful to couch any warning of legal action with the information that any such action would not occur until after issuance of the patent. (FF 325' 327, 329).

C. Alleged Inequitable Conduct Before the ITC

334. In December of 1984, DP submitted a BODY SHOP 360 to the International Trade Commission as an exhibit to its complaint under Section 337. In the unit submitted to the Commission, the back bench was improperly fastened to the post perpendicular to the rowing frame by a bolt. When properly assembled, the bench of the BODY SHOP 360 is not bolted to the post, but is attached by sliding a C-shaped member on the back of the bench over the perpendicular post. The BODY SHOP 360 unit that was, submitted to the Commission was assembled by an employee of DP whose identity is unknown. Mr. Cantor was unaware that the BODY SHOP 360 was not properly assembled when it was submitted to the Commission. Mr. Cantor promptly corrected the misassembled feature after he learned that the BODY SHOP 360 submitted to the Commission had not been properly assembled. (Cantor, Tr. 1575-79, 1598).

335. Mr. Cantor prepared confidential Exhibit 18 to the Complaint which illustrates sales trends of DP and importing and domestic competitors in the convertible rowing exerciser market. The only hard data available to Mr. Cantor were the actual DP sales. Sales data projections portrayed in confidential Exhibit 18 thus were based upon a "best guess:" (Pilgrim, Tr. 155-57; Cantor, Tr. 1585, 1587; RX 201, at 13).

336. In preparing the three curves illustrated on confidential Exhibit 18 of the Complaint, Mr. Cantor used a process he called fairing a curve. Fairing a curve was stated to be a process for indicating a trend by extrapolating it from existing hard data. (Cantor, Tr. 1585-86; RX 201 at 13).

337. Confidential Exhibit 19 of the Complaint illustrates market share trends of DP and importing and domestic competitors. The only hard data available to Mr. Cantor when he prepared this exhibit was actual DP sales data. Sales of the competitors were based upon DP's best guesses from information DP personnel were able to learn from the marketplace. (RX 201, at 15; Pilgrim, Tr. 156-57; CX 272, Pilgrim W.S., at 18).

338. Confidential Exhibit 24 of the complaint is an affidavit of Calvin James, President of DP. In paragraph 11 of this affidavit, Mr. James indicates that DP had lost Herman's as a customer in favor of Weslo, due to a decrease in Weslo's selling price for the BODY SHOP 360. This affidavit was dated December 20, 1984. (RX 201).

339. This information apparently was based on a meeting held in November 1984 between DP salesmen and the buyer for Herman's. At that time, the Herman's buyer indicated that he had been visited by a salesman from Weslo and had been offered a lower price on the BODY SHOP 360 than the DP price for the BODYTONE. The buyer indicated that Herman's had inventory of the DP BODYTONE to last through the end of January 1985, but that Herman's next order would probably be placed with Weslo, due to lower price. This information was

communicated to Mr. James, and it was generally felt by the DP sales staff that the Herman's account was lost. (CX 276, Thompson WS, at 13-14; Thompson, Tr. 583-87, 615-19; James, Tr. 1187-89; See FF 573-81, infra).

340., In January .1985, DP offered an advertising allowance to Herman's of \$10,000, and Herman's ordered 1,000 units of the BODYTONE 300. At the NSGA Show at the end of January 1985, Herman's ordered 7,000 more BODYTONE 300's and received an advertising allowance package of \$70,000. This advertising allowance was offered to Herman's by DP in an effort to keep Herman's as a customer for the BODYTONE. (CX 276, Thompson WS, at 13-14; James, Tr. 1182-84; CX 313, 314).

341. The facts of record relating to DP's filing of the complaint in the ITC do not lead me to conclude that DP deliberately distorted or misrepresented supporting information in order to induce the Commission to institute the present investigation. (FF 334-40).

VIII. INFRINGEMENT

A. Infringement of Claims 1 and 16 Of The '071 Patent.

1. The BODY SHOP 360

342. Each of the elements of claims 1 and 16 of the '071 patent is present in the Body Shop 360. (CX 220).

343. The BODY SHOP 360 sold by Weslo is a ground-supported physical exercising apparatus capable of use in a plurality of orientations. (Kostanecki, Tr. 649, CX 220).

344. The BODY SHOP 360 can be selectively used as a rowing machine when used in a horizontal orientation or for performing other exercises when placed in a vertical orientation. (Kostanecki, Tr. 650).

345. The BODY SHOP 360 has a generally horizontal frame consisting of two rectangular metal tubes that go crossways to the general axis of the apparatus and the two welded round tubes that connect them. (Kostanecki, Tr. 651; CX 220).

346. The BODY SHOP 360 has two pivoted movable levers that are pivotally mounted to the rectangular tubes of the frame and which have handles at their distal end for grasping by a user's hands. (Kostanecki, Tr. 651; CX 220, Element B).

347. The BODY SHOP 360 has resistance means consisting of a pair of hydraulic dampers which are interconnected between the rectangular tubes and pivoted movable levers. (Kostanecki, Tr. 651-52; CX 220, Element C).

348. The BODY SHOP 360 has a longitudinal track consisting of a chrome plated rectangular tube attached above the frame. (Kostanecki, Tr. 652; CX 220, Element D).

349. The BODY SHOP 360 has a sliding seat mounted to the longitudinal tube. (Kostanecki, Tr. 652; CX 220, Element E).

350. The BODY SHOP 360 has foot bracing means located above the forward rectangular tube of the frame. (Kostanecki, Tr. 653; CX 220, Element F).

351. The BODY SHOP 360 has ground-engaging auxiliary support means for stably supporting the frame in the upright position. These ground engaging auxilliary support means consist of at least the extensions of the round tubes of the frame, and the little feet which are on the bottom of the second user support. (Kostanecki, Tr. 653-55; CX 220, Element G).

352. When the BODY SHOP 360 is placed in the vertical position the rectangular tube that extends 90° from the frame, and to which the bench or second user support is connected, does not touch the ground. There is a gap of about 1/4 - 3/16 of an inch; only the feet on the bottom of the bench and the extensions of the round tubes that comprise the frame touch the ground. However, the bottom of the bench post is part of an assembly which makes the whole unit ground engaging and functional in the upright position. (Kostanecki, Tr. 654, 659-60).

353. The BODY SHOP 360 has a second user support consisting of a padded bench which is approximately 24 inches long and 12 inches wide. (Kostanecki, Tr. 655; CX 220, Item H).

354. The BODY SHOP 360 has attaching means for firmly attaching the second user support to the apparatus adjacent to the lower end of and generally perpendicular to the upright frame so that the user can grasp and move the handles while Supported on the second user support, thereby, increasing the range of exercises which can be performed on the apparatus. The attaching means is the rectangular tube extending perpendicularly from the lower end of the apparatus and the C-shaped section attached to the underside of the bench. The C-shaped section slides over the rectangular frame adjacent to the lower end of the apparatus. (Kostanecki, Tr. 655-56) Thus the second user support is "firmly attached" within the intent and meaning of the '071 patent. (See, FF 291-92, ^{13/}supra).-

355. Thus the BODY SHOP 360 includes each of the elements of claim 1 of the '071 patent. (FF 343-54).

356. The elements of claim 16 are similar to those of claim 1. Thus, the above findings also reveal the inclusion of all but the last three

13/ Respondent's counsel and its expert performed a demonstration intended to show that the bench was not "firmly attached," by Mr. Rossa's forcibly pulling the bench off while the Weslo device was in use in the upright position by Dr. Kaufman. (Kaufman, Tr. 1829-32). However, counsel had to admit that the bench was not going to come off, by itself without such outside force, during use. (Kaufman, Tr. 1831). I find this demonstration meaningless, and totally irrelevant to any issue in this proceeding.

elements of claim 16 within the structure of the BODY SHOP 360. (CX 1, claim
14/
16).--

357. These last three elements of claim 16 are also found in the BODY SHOP 360. '(FF 358-60, infra).

358. There are frame support means beneath the frame for supporting the frame in a generally horizontal position, when the frame of the BODY SHOP 360 is placed in the rowing, or horizontal, mode. The cross-bars underneath the frame, serve this purpose. (CPX 5).

359. There is also a bench removably coupled to the frame adjacent one end of the longitudinal member and generally perpendicular thereto. (CPX 5; CX 220, Elements H and I).

360. Finally, there are ground-engaging means on the underside of the bench, whereby the bench serves to support the frame in an upright position. (CPX 5; CX 220, 2nd page, Elements J and G). Respondent's expert avers that the bench does not serve to support the frame in an upright position, because the post on the BODY SHOP 360 extends to the point where the device is

14/ The first element of claim 16 provides for a frame including a longitudinal member, just as claim 1 requires a "generally horizontal frame," but claim 16, as published by the PTO goes on to require that this horizontal member be "adjustable in length." (CX 1, claim 16). However, such adjustability was deleted during the prosecution of the patent and its inclusion therein was error on the part of the PTO. A Certificate of Correction has been filed but not yet acted on. (FF 93, 37).

"relatively stable in the upright condition even without the bench attached."
(RX 327, Kaufman WS, at 43-44, 1 118, 121). As noted previously, in connection with the Beacon 3002 device, the plain wording of claim 16 does not require that the "engaging means on the underside of the bench" be the sole support of the device in the upright position. There can be no doubt, upon visual inspection and use of the BODY SHOP 360, that the feet "serve," along with other structures such as the post, to support this device in the upright position. The feet clearly give some support to the device in the upright position, especially during use. (CPX 5).

361. Therefore, the BODY SHOP 360 includes each and every element of claim 16 of the '071 patent. (FF 357-60).

2. The BODY SHOP 100 and 1000

362. The BODY SHOP 100 and 1000 rowers have the same basic construction as the BODY SHOP 360. The basic difference between the BODY SHOP 100 and BODYSHOP 360 is that the BODYSHOP 100 does not feature 360° rowing, nor have a butterfly attachment. The BODYSHOP 1000 contains additional features not found in the BODYSHOP 360, but is essentially a BODYSHOP 360. (CX 264, at 274-75; CX 221; CX 222; CX 375, Kostanecki WS, at 17).

363. Omitted.

364. In formulating his opinion on whether the BODY SHOP 100 and 1000 infringe the '071 patent, Mr. Kostanecki only examined photographs which did not clearly show the means by which the second user supports of the BODY SHOP

100 and BODY SHOP 1000 are attached to the upright frame. (Kostanecki, Tr. 772-75; 778; CX 221, 222).

365. Weslo's president testified that the structure of the attaching means for attaching the second user support to the back bench post in the BODY SHOP 100 is identical to the attaching means in the BODY SHOP 360. (CX 264, Watterson Dep., at 274-75).

366. Weslo's president testified that the attaching means for attaching the second user support to the frame in the BODY SHOP 1000 is different from the attaching means found in the BODY SHOP 360, but Mr. Watterson did not describe that attaching means. (CX 264, Watterson Dep., at 275). Thus, there is no evidence of record to show whether there is "attaching means for firmly attaching said second user support to the apparatus adjacent the lower end of and generally perpendicular to said upright frame," as required by claim 1 of the '071 patent, or that it has a "bench removably coupled to said frame," as required by claim 16 of the '071 patent.

3. Differences Between the BODYTONE 300 and the BODY SHOP 360

367. Even though the BODY SHOP 360 contains each of the structural elements found in the BODYTONE 300, there are a number of structural differences between the BODYTONE 300 and the BODY SHOP 360. (RX 327, Kaufman WS, at 6).

368. Omitted.

369. Omitted.

370.' The way in Which the pivoted movable handles are mounted to the frame in the BODY SHOP 360 is different than the manner in which the handles are mounted in the BODYTONE device. (RX 327, Kaufman WS, at 3)

371. In the DP BODYTONE 300, the handles are pivoted in a fixed clevis, as is the head end of the cylinder. The rod end of the cylinder is pinned to a clevis, which can be locked, to one of several discrete positions along the handlebars. The handles are thus constrained to move in a circular arc. (RX 327, Kaufman WS, at 7-8).

372. In the BODY SHOP 360, on the other hand, the cylinders are not constrained to swing in an arc. The handles are mounted on ball joints rather than trunnions as in DP's device and thus the handles on the Weslo device can swing 360°, thereby increasing the range of motion that can be achieved with the rowing arms of the Weslo device. (RX 327, Kaufman WS, at 7; Kaufman, Tr. 1624).

373. The Weslo 360 device in one configuration has the capacity to perform "butterfly exercises" while the DP BODYTONE device does not. In the Weslo device, the user can simply pull a quick release ball decent pin and disconnect the head end of the cylinder from the frame clevis. "Butterfly extension arms" slip into the transverse tubular section on which the ball joints are mounted and can be attached rigidly in place. These extension arms

each carry a pivoted clevis like the one attached to the frame. The same quick release pin can be used to attach the cylinders to these butterfly extensions, thereby permitting a completely different range of upper chest exercises with the spherical centers of motion located at the ends of the two butterfly arms rather than near the foot braces. This is a feature the DP BODYTONE device does not yet offer. (RX 327, Kaufman WS, at 9; Kaufman, Tr. 1626).^{15/}

374. In the DP device the sliding seat rolls on a pair of round tubular members which straddle the center line. In the Weslo device, there is a central rectangular member upon which the seat rolls. (RX 327, Kaufman WS, at 9, 1 29; Kaufman, Tr. 1623).

375. The above differences in features between the Weslo BODY SHOP 360 and the BODYTONE 300 of DP (FF 367-74), do not alter the fact that the Weslo device includes each and every element of claims 1 and 16 of the '071 patent. (FF 342-66).

15/ DP is engaged in ongoing product development and is considering adding a BODYTONE rower to its product line that features a butterfly capability. (Silberman, TR. 44-45). The Shapemaster 1000 manufactured by DP for Sears can be configured to perform butterfly exercises. Although the concept for this product was developed by Sears, the butterfly feature was contributed by Mr. Silberman at DP who realized the product already had the feature ability in it and didn't require any additional mechanics. It simply involved the changing of a mounting configuration in the existing joint. (Silberman, Tr. 443-44).

4. The Devices of Other Respondents

376. Convertible rowing exercisers of respondents M.T.I (manufactured by respondent Pan's World) and Shinn Fu (manufactured by Ever Young) are also in evidence in this matter (CPX 6, 7), as are promotional materials related thereto. (CX 67, 232)^{16/}--

377. An examination of CPX 6 and 7 reveals that these are slavish copies of the BODYTONE 300. (CPX 2, 6, 7). 'Mr. Kostanecki's testimony that he has examined and used these devices and found claims 1, 5-9 and 13-17 of the '071 patent to read squarely on them, is unrebutted. (CX 275, Kostanecki WS, at 21, 22; CX 225, 226). His testimony concerning the Pan's World 207 device, based upon Pan's World's catalog and a comparison with CPX 6, to the same effect, is also unrebutted. (CX 275, Kostanecki WS, at 22; CX 233). My examination of all of these exhibits confirms Mr. Kostanecki's opinion.

378. Therefore, I find that the M.T.I. exerciser manufactured by respondent Pan's World and imported and offered for sale by respondent M.T.I., as well as Pan's World's 207 exerciser and the Schinn Fu exerciser, manufactured by respondent Ever Young and imported and offered for sale by respondent Shinn Fu, all include each and every element of claims 1, 5-9 and 13-17 of the '071 patent. (FF 377).

16/ CX 232 is a catalog published by Pan's World which describes its 207 exercisers. It is identical to the M.T.I exerciser, manufactured by Pan's World, in all respects except for some of its mounting brackets, which are incidental to the design. (CX 275, Kostanecki WS, at 22).

B. Complainant's Products

379. Complainant's convertible rowing exercisers are sold under the trade name "BODYTONE". The first model of the BODYTONE, the BODYTONE 300, was initially offered for sale in late January or early February 1983 at the National Sporting Goods Association ("NSGA") trade show in Chicago, Illinois. Since 1983, the BODYTONE 300 has been complainant's basic convertible rowing exerciser. (CX 272, Pilgrim WS, at 12; CPX 2; FF 22, supra).

380. Complainant DP has added a number of different versions of the BODYTONE to its product line:

(1) the BODYTONE 310 and 320 are slight variations of the BODYTONE 300 and are manufactured for sale to specific retailers;

(2) the BODYTONE 250 is a lower-priced version of the BODYTONE 300;

(3) the BODYTONE 500 is a modified version of the BODYTONE 300 which features an oversize backboard with a red wet-look vinyl fabric as opposed to the standard black fabric;

(4) the BODYTONE 600 is an upscale version of the BODYTONE 300, featuring rowing arms that can be pivoted 360°; and

(5) the BODYTONE 700 is an upscale version of the BODYTONE 300, featuring inclinability of the rower frame. (CX 270, at 9-11; RX 324, at 6; RX 290, Interrog. No. 12; FF 23, supra).

381. DP manufactures, exclusively for Sears, the Shapemaster 1000, a convertible rowing exerciser designed by Sears. (RX 290, Interrog. No. 12; RX 324, at 5; FF 24, supra).

1. The BODYTONE Models

382. Each model of the BODYTONE, i.e., the 250, 300, 310, 320, 500, 600 and 700, is covered by the claims of the '071 patent. (CX 275, Kostanecki WS, at 10-11).

383. Each of the BODYTONE exercisers are ground supported physical exercising apparatus capable of reorientation to perform other types of exercises such as bench presses and arm curls. (CX 275, Kostanecki WS, at 11).

384. Each of the BODYTONE exercisers includes all of the elements of the main independent claims of the '071 patent -- claims 1 and 16. More particularly, each BODYTONE rower includes:

a generally horizontal frame;

two levers operatively connected to the frame;

resistance means;

a seat slidable on a longitudinal track;

foot bracing means in the form of a pair of footrests;

ground engaging auxiliary support means for stably supporting the exercising apparatus with the frame in the upright or vertical position;

a second user support in the form of a padded bench;

attaching means for firmly attaching the second user support to the upright frame adjacent to and generally perpendicular to the upright frame.

(CX 275, Kostanecki WS, at 12; CX 212, 213). They also each include the frame support means, the removably coupled bench and the ground-engaging means on the underside of the bench recited in claim 16. (CX 212, 213).

385. The attaching means in the BODYTONE 300, 310, 320, 500, 600 and 700 consists of a projecting beam affixed to the back of the second user support, which is inserted into a socket. (CPX 2, 3, 11; CX 43, 205, 206, 210, 211).

386. The attaching means in the BODYTONE 250 consists of a removable pin which is inserted through brackets on the back of the bench into an elliptical-shaped piece of round tubing extending from the lower end, and generally perpendicular to, the upright frame. (CX 275, Kostanecki WS, at 13; CX 209).

2. The Shapemaster 1000

387. The DP Shapemaster 1000, made exclusively by DP for Sears, is not a BODYTONE rower, but does possess a rowing frame that is capable of being pivoted from a horizontal rowing position to an upright orientation for performing additional exercises. (CX 275, Kostanecki WS, at 14-15).

388. The generally horizontal frame in the Shapemaster 1000 supports the working elements of the exerciser. The portion of the frame supporting the working elements is capable of reorientation to an upright Or vertical position to permit "performing other types of exercises." (CX 275, Kostanecki

WS at 14). With this device the entire structure is not tipped up on end to permit exercises in the upright orientation. Instead, the frame portions supporting the movable levers and the resistance means are reoriented from a horizontal orientation (for rowing exercises) to an upright orientation (for bench presses, etc.). (CX 275, Kostanecki WS, at 14-16; CX 202, 216; CPX 4).

389. Claim 1 of the '071 patent reads upon the DP Shapemaster 1000. (CX 275, Kostanecki WS, at 14).

390. The Shapemaster 1000 is a "ground-supported physical exercising apparatus capable of use in any of a plurality of orientations" and is "adapted to be selectively used as a rowing machine or for performing other types of exercises." (CX 275, Kostanecki WS, at 14).

391. The Shapemaster 1000 has a generally horizontal frame which supports pivoted movable levers equipped with resistance means. (CX 216; CPX 4).

392. Unlike the BODYTONE, the Shapemaster is not tipped on end: the frame must be disassembled in order to be reoriented into an upright mode. (CX 216; CPX 4).

393. The components of the generally horizontal frame, which support the working element of the device, can be reoriented into an upright configuration for performing other exercises. (CX 275, Kostanecki WS, at 14-15; CPX 4).

394. The Shapemaster 1000 has a longitudinal track equipped with a sliding seat. (CX 275, Kostanecki WS, at 15; CPX 4).

395. Mr. Kostanecki identified the ground engaging auxiliary support means in the Shapemaster 1000 as consisting of the rowing track and the same piece of square tubing that supports the device in the horizontal position. (Kostanecki, Tr. 811-12).

396. According to Mr. Kostanecki, these elements, identified by the letter "G" in CX 216, take on additional or auxiliary roles when the frame is reoriented into the upright position. (CX 275, Kostanecki WS, at 15).

397. In the Shapemaster 1000, a second user support consisting of a bench can be placed adjacent to and perpendicular to the lower end of the upright frame. According to Mr. Kostanecki, the firm attachment of the second user support in the Shapemaster 1000 occurs as a consequence of frictional engagement between the underside of the second user support, identified as element H in CX 216, and the rails of the rowing track. The U-shaped members on the underside of the second user support frictionally engage the rails and

prevent any movement of the second user support. Mr. Kostanecki testified that the fit between the second user support and the rails was "barely snug." (CX 275, Kostanecki WS, at 15-19; Kostanecki, Tr. 739).

IX. IMPORTATION AND SALE

398. Weslo does not contest that it has imported and sold BODY SHOP 360 exercise machines in the United States subsequent to October 16, 1984. (CX 268, Answer to Request No. 5; Weslo RB, at 34).

399. As to Body Shop 360 and 100 exercise machines that are made in Taiwan, Weslo generally orders from Pro-X Ltd. (Pro-X). Pro-X purchases from Weslo International, Inc. (Weslo Taiwan), which has manufactured convertible exercising machines for Weslo from about August 1984 to the present; (CX 858, Answer to Interrogatory 25; CX 266, Answer to Interrogatory 42).

400. Pro-X Ltd. is located in Bermuda, was formed in August 1984, and functions as a trading company for exercise equipment manufactured by Weslo Taiwan and imported by Weslo. No products are shipped to or otherwise handled by Pro-X in Bermuda. (CX 267, Answer to Interrogatory Nos. 8, 26; CX 246, Stevenson Dep., at 37-38, 63, 77).

401. Prior to the formation of Pro-X in August 1984, Weslo dealt directly with Weslo Taiwan or H.C. Enterprises for products ordered from Taiwan, including rowing machines. H.C. Enterprises was not a manufacturer. Body Shops purchased from H.C. Enterprises were manufactured by Kai Hsien in

Taiwan, which ceased production sometime in 1984. (CX 246, Stevenson Dep., at 68-69, 278).

C 402.

C

C

C

(Stevenson, Tr. 1094-95, 1101-02).

C 403. From January 1984 to September 1984, Weslo U.S. sold Body
C Shops, valued at in the United States (excluding returns and
debits). (CX 182; CX 317).

C 404. From October 1984 to May 1985, Weslo U.S. sold Body Shops,
C valued at in the United States (excluding returns and debits).
(CX 186).

C 405.

C

C

C

C

C

C

(CX 246, Stevenson Dep., at 167-69; CX 245,
Stroh, Dep., at 130-32, 134-37).

C 406. Based on the delivery date in the united States, through October
16, 1984, Sears purchased Body Shops valued at directly

C from Weslo In November 1984 and April-May 1985, Sears purchased
C Body Shops valued at from Weslo (CX 183).

407. According to Mr. Stroh of Sears, agreements for additional direct
C sales from Weslo to Sears through December 1985 total approximately
C Body Shops. (Stroh, Tr. 1268-69).

408. M.T.I., Inc. (M.T.I.), located in Idaho, imports multifunction
rowing machines from Pan's World International (Pan's), which is located in
Taiwan. (CX 241, McDonald Dep., at 11-13).

409. M.T.I. first purchased a multi-gym from Pan's in March of 1984.
This transaction involved 500 units which arrived in the United States in late
June or early July 1984. (CX 241, McDonald Dep., at 35-36).

410. M.T.I. received 914 multi-gym's from Pan's on October 23, 1984.
(CX 241, McDonald Dep., at 37-39).

411. The multi-gym imported by M.T.I. from Pan can be used as a rower,
and with the attachment of a board can be stood on end so that other exercises
can be performed. (CX 270, Dep. of McDonald, at 55-56).

412. In October of November of 1984 a buyer from Oshmans was shown a
picture of **the** Ever-Young convertible rower. At that time, the buyer was
under the impression that the Ever-Young convertible rower was in the
prototype stage, and was quoted a unit price of about \$75 or \$77. (CX 244,
Markey Dep., at **89-91**).

413. Shinn Fu Company of Amercia has imported and sold in the United States convertible rowing exercisers and collapsible convertible rowing exercisers identified as the "Powerpack Compact Rower and Multi-Gym". (Shinn Fu and consent order settlement agreements, at 1, PP B).

414. Ever Young and Shinn Fu represent and warrant that as of March 1, 1985, neither company nor any associated companies had any inventory in the United States of convertible rowing exercisers. (Shinn Fu and Ever Young Consent Order Settlement Agreements, Article II-C).

415. Sunstar or its associated companies imported and offered for sale in the United States a convertible rowing exerciser displayed and offered for sale at the Sporting Goods Manufacturer's Association (SGMA) Show in New York, New York in September of 1984. (Sunstar Consent Order Settlement Agreement, at 1, pp B).

416. Sunstar represents that as of March 1, 1985, neither it nor its associated companies had any inventory in the United States or convertible rowing exercisers, specifically including "Sunstaris SGMA rowing exerciser." (Sunstar Consent Order Settlement Agreement, at 3, PP C).

417. A buyer from Oshman's recalls that Sunstar had a convertible rowing machine in Sunstar's booth in late 1983 or late 1984, but does not know if Sunstar currently manufactures convertible rowing machines for sale in the United States. (CX 244, Markey Dep., at 87-88).

418. National Sporting Goods Corp. (National) or its associated companies have imported or offered for sale in the United States convertible

rowing exercisers and collapsible convertible rowing exercisers, specifically including the convertible rowing exerciser displayed and offered for sale at the SGMA Show in New York, New York in September 1984. (National Consent Order Settlement Agreement, at 1, PP B).

419. National has not manufactured, used, sold or otherwise marketed and promoted for sale in the United States any convertible rowing exercisers and convertible rowing exercisers except for National's exercisers shown in the September 1984 SGMA Show. (National Consent Order Settlement Agreement, at 3, PP 8).

420. National represents that as of March 1, 1985, neither it nor its associated companies had any inventory in the United States of convertible rowing exercisers, specifically including "National's SGMA rowing exerciser." (Sunstar Consent Order Settlement Agreement, at 3, PP C).

421. Seasonal Merchandise or its associated companies have offered for sale or intended to import and sell in the United States convertible rowing exercisers and collapsible convertible rowing exercisers as identified by Product No. 70-0705 in Volume IX, No. 10 (August 1984) of the Taiwan International Trade Magazine published by the Importers and Exporters Association of Taipei. (Seasonal Consent Order Settlement Agreement, at 1, PP

422. Seasonal Merchandise has not manufactured, used, sold, or otherwise marketed and promoted for sale in the United States any convertible rowing exercisers and collapsible rowing machines except the multifunctional

rowing machine, Product No. 70-0705. (Seasonal Consent Order Settlement Agreement, at 3, PP B).

X. THE DOMESTIC INDUSTRY

423. Complainant DP is located in Opelika, Alabama, and is a subsidiary of Grand Metropolitan PLC, Grand Met USA. (CX 272, Pilgrim WS, at 10).

424. DP's operations at Opelika include the production of the **BODYTONE** convertible rowing exercisers. (RX 343, Pilgrim Dep., at 85).

425. DP's activities at Opelika include the procurement of raw materials, and manufacturing activities such as fabrication of round and square steel tubing in its own tube mill, process stamping and forming, drilling, welding, finishing and assembly. DP packages and stores the finished product in its distribution center and ships rowing machines to customers on its trucking line subsidiary. (CX 277, Greenidge WS, at 4; Pilgrim, Tr. 160-61).

426. Prior to early June 1985, DP also manufactured convertible rowing exercisers in Compton, CA. The last convertible rowing exercisers were assembled at Compton in June, and DP has no present plans for future assembly at Compton. Equipment used at Compton for assembly of convertible rowing exercisers has been transferred to Opelika. (Pilgrim, Tr: 285-88).

C 427. For the Bodytone 300, foreign components make up
C percent of the unit cost, depending on whether foreign or
domestic cylinders are used. Foreign cylinders are used in about of the
Bodytone 300's produced. (CX 57; CX 115).

428. DP also has a facility for assembling Bodytone machines in
England. The machines produced in this facility are not exported to the
United States, but are intended for the European market and, eventually,
countries outside of Europe. (RX 343, Pilgrim Dep., at 28-29).

429. In 1983 and 1984 DP relied to a certain degree on subcontractors
for fabrication, painting, plating, and assembling operations, due to higher
than anticipated growth in these years. (CX 177; Pilgrim, Tr. 218; See also,
Pilgrim, Tr. 309-12).

430. Because of perceived disadvantages of relying on outside
subcontractors and rental of outside warehouses, DP requested in March 1984
that GrandMet USA, Inc. approve an expansion plan for the construction of a
525,000 square foot building at a total cost of (CX 177).

431. The expansion plan cited in FF 430 was approved by GrandMet, and
construction of the facility began in April 1984 and it is now essentially
complete. The DP expanded facility now has in excess of 1 million square feet
under one roof, with a very sizable portion of the expansion dedicated to the
production of the DP Bodytone. (CX 272, Pilgrim WS, at 15).

432. As of July 26, 1985, DP employed an hourly work force of employees. DP's sales organization includes approximately people. (CX 272, Pilgrim Dep., at 22; CX 276, Thompson WS, at 2; CX 118).

XI. EFFICIENT AND ECONOMIC OPERATION

433. Weslo does not challenge that there exists an efficiently and economically operated domestic industry. (Prehearing Conf. Tr. 288).

434. In order to meet increased market demand in 1984 for the DP Bodytone Multi-Gym, DP purchased approximately of equipment, which included approximately spent for programmable automated robots for welding and related equipment. was spent to modify existing tools and purchase new tooling; was spent for purchasing additional metal presses, tooling and dies; was spent for weld fixtures, tooling, dies, vinyl processing machines, and equipment for manufacturing units for special customer orders. (CX 272, Pilgrim WS, at 13-14).

435. The equipment (i.e. robotic programmable weldera) was chosen in order to facilitate flexibility in the production process to cope with changes in product design or market demand. (CX 272, Pilgrim WS, at 14; Pilgrim, Tr. 210-11).

436. DP won the Grand Metropolitan 1984 award for innovation for its BODYTONE line of exercise equipment (includes the BODYTONE 100, 200 and 300)

out of 32 entries. Grand Metropolitan cited innovation with respect to the product itself, the use of robotic welding equipment, and the DP advertising program. (CX 90 at 500898; CX 91 at 500909),

437. DP recently expanded and improved its Opelika plant at a cost of by adding 525,000 square feet of additional space adjacent to its pre-existing facility and by adding features such as air conditioning to its pre-existing facility. (CX 272, Pilgrim WS, at 13-15; CX 177).

C 438. The recent expansion at DP included the installation of
C
(CX 177, at 20-24;
CX 272, Pilgrim WS, at 15; Pilgrim, Tr. 212-13).

439. The recent-expansion at DP will allow for an expanded research and development facility to be devoted to the design and refinement of new exercise products. (CX 177, at 36-37).

C 440. The research and development department is comprised of 18
degreed engineers and designers and is organized into product design,
engineering, specification and packaging, and reliability groups. Total
employees in R&D increased (CX
273, Silberman WS, at 2; CX 114 at 11).

441. The reliability engineering group at DP is responsible for the quality assurance program of DP products. (CX 273, Silberman WS, at 3).

442. The most frequent complaint about the BODYTONE from Bradlees' personnel and customers is its difficulty of assembly. At least half of Bradlees 132 stores have complained of assembly problems with the BODYTONE 300 or of having customers return the product because of assembly problems. (SPX 3, Wooster Dep., at 32).

443. In December 1984 or January 1985, DP began using an all-welded frame on its Bodytones in order to make the assembly easier. (RPX 28, Thompson Dep. Vol. 1, at 76-77; RPX 29, Zeigler Dep., at 94).

444. For the eight month period ending May 31, 1985, DP's return figures for defective units totaled units. Convertible rowers sold by DP during the same period totaled units. (RX 276; CX 187).

445. DP promotes its BODYTONE rowers through a multi-media consumer advertising campaign which includes advertising on, national television and in leading magazines. The cost of this advertising program is approximately annually. (CX 143-52).

446. DP markets its BODYTONE rowers nationwide ,to ,the retail mass merchandising market and catalog sales market

(CX 272, Pilgrim WS, at 17; CX 276, Thompson WS, at 2; Thompson, Tr. 546-47).

447. In fiscal year 1984 (October 1983 through September 1984), DP's pre-tax profit for its Bodytone products (includes the 100 series:only) was

C of net sales. For DP's overall operations,
C pre-tax 'profit in 1984 was (CX
196).

447. For the period October 1984 to May 1985, DP's pre-tax profit for
its Bodytone products (includes the 250, 300, 310, 450, 500, and 600 series)
C was of net sales. For DP's overall operations, pre-tax
C profit over the same period was of net sales. (CX 196).

448. DP provides a profit sharing plan to its employees under a
qualified IRS plan. Under this plan, profits are allocated to employees based
on regular time worked in any given year and the profits are invested in an
C employee retirement program. In 1984, DP distributed of salary and
C regular pay for approximately of its employees. (RX 343, Pilgrim Dep.,
Vol. IV, at 184-89).

XII. EFFECT OR TENDENCY TO CAUSE SUBSTANTIAL INJURY

A. The Exercise Equipment and Convertible Rowing Machine Markets.

450. In the mid-1970's, exercise equipment began evolving from single
function types of equipment to multifunction devices. This evolution started
before exercise equipment was being purchased for home use. When consumers
became interested in products for home use, exercise machines designed for
institutional use were either too expensive or too large for the typical home
use consumer. The exercise bicycle became a popular machine for home use, and
gradually, the multifunction concept evolved into weight benches, rowing

machines and treadmills. (RX 325, Stevenson WS, at 3-4).

451. Dating back to 1978 with the introduction of action exercise cycles, the trend in the exercise equipment market over the last several years has been towards more multi-use products. (RX 324, Stroh WS, at 11; SPX 2, Markey Dep., at 146-47).

452. Prior to the introduction of the BODYTONE 300, other multi-purpose home exercise machines were available in the U.S. market. These products were available to the home exercise equipment market during the period 1980-82. (Greenidge, Tr, 897-98).

453. The first shipment of DP Bodytone convertible rowing exercisers was in April, 1983. In April-December 1983, DP sold BODYTONE exercisers. In April-December 1984, DP sold BODYTONE exercisers. (CX 272, Pilgrim WS, at 12; CX 179; CX 187).

454. The Bodytone machine's initial acceptance in the marketplace was at a faster rate than normal. (Pilgrim, Tr. 245-46; See also, RX 219).

455. In the first half of 1984, all exercise equipment was selling at a substantially accelerated rate over the previous periods. (Pilgrim, Tr. 219).

456. The condition of the market for rowing exercisers during 1984 was one of dramatically accelerating sales. (RX 324, Stroh WS, at 8).

457. In mid-December 1984, DP's business for exercise equipment was beginning to slow down, and in January 1985, business was slowing down dramatically. (Pilgrim, Tr. 243; See also CX 165).

C 458. DP completed a market forecast in July 1985 that projected sales
C of rowers in Fiscal 1985 at units. For Fiscal 1986 DP projected sales
C of units based on its long-range strategy and sales of units
based on its 1986 profit plan. (CX 114, at 13).

C 459. Currently, the product life cycle for the Bodytone rowing
C machines

C
C
C
C
C

(Pilgrim, Tr. 246-47).

C 460. Mr. Bohn of Ajay Corp. believes that the market for convertible
C rowing machines in 1985 than in 1984, but expects the
market to show in 1986. The market for conventional
C rowers is The convertible rowing machine would typically have
a lifespan of (Bohn, Tr. 1951-52).

C 461. Mr. Stroh of Sears 'expects sales of convertible exercisers

(Rx 324, Stroh WS, at 8).

462. Mr. Bohn of Ajay estimates that the total market for convertible rowing machines

(Bohn, Tr. 1958)..

463. Based on sales in June, July, and August, Mr. Stevenson of Weslo had than he had when he gave his deposition on April 9, 1985. (Stevenson, Tr. 1082).

464. Mr. Stevenson of Weslo believes that since May 1985 the market for convertible rowing machines has been

(Stevenson, Tr. 1086).

465. Convertible rowing machines compete with other types of exercise equipment for the consumer dollar. (RX 324, Stroh WS, at 11; Pilgrim, Tr. 206; Stevenson, Tr. 1090).

466. In general, all types of exercise equipment compete for the consumer dollar, but competition intensifies within subsets of the exercise equipment market. Hand-held exercise equipment, weight benches, and barbells don't compete as strongly against a Body Shop as an exercise bike. Competition narrows with respect to rowing machines in general, and narrows further with respect to convertible rowing machines. (Stevenson, Tr. 1089-90).

467. Mr. Stevenson of Weslo believes that the ITC investigation has decreased the number of competitors in the convertible rowing machine market, and a market situation almost like an oligopolistic market currently exists. Because of the oligopolistic market structure, he would have expected prices

C

but he alleges they

(Stevenson, Tr. 1090-91).

468. The physical fitness equipment market is seasonal in nature. Outbound goods from DP to retailers begin in June and peak in October. Sales decrease in November and December. January and February are strong months, and March, April and May are the low months of the year. Retail sales lag the shipping cycle by roughly one month. DP builds inventory in off shipping cycle time periods to keep employees occupied and to have the quantity needed during peak periods. (CX 187; PX 343, Pilgrim Dep., at 55; Pilgrim, Tr. 188.

B. The Health of the Domestic Industry

C

469. For total sales, DP sold _____ units of Bodytone rowing machines in fiscal 1983 (sales starting in April), _____ units in fiscal 1984, and _____ units from October 1, 1984 through June 30, 1985. From January-June 1984 to January-June 1985, total sales

C

C

Projected sales for fiscal 1985 are _____ units. (RX 309; RX 310; Pilgrim, Tr. 258'

470. For April-December 1983 and 1984, the following quantities of domestic sales of DP BODYTONE rowers were made (rounded to the nearest

C

C

C

C

C

	<u>1983</u>	<u>1984</u>
April		
May		
June		
July		

C August
 C September
 C October
 C November
 C December
 f. Total

RX 309; RX 310; CX 187.

471. For January-June 1984 and 1985, the following quantity and value of domestic sales of DP BODYTONE rowers were made (value in

C

	1984		1985	
	<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>
January	—	—	—	—
February	—	—	—	—
March	-	—	—	—
April	-	—	—	—
May	-	—	—	—
June	-	—	—	—
Total				

C
 C
 C
 C
 C
 C
 C
 C

1/ Total sales rather than domestic sales, since a breakout of domestic vs. export sales is not possible for this month.

(CX 187; Pilgrim, Tr. 258-59, 268)

472. From April-December 1983 to April-December 1984, DP's export sales of convertible rowers (RX 232).

C

473. From January-May 1984 to January-May 1985, DP's export sales of convertible rowers (RX 232).

C

474. In January-May 1984 DP's convertible rower export sales totaled units and in January-May 1985 its export sales totaled units. (RX 232).

475. In fiscal year 1984 (October 1983 through September 1984), DP's pre-tax profit for its Bodytone products (includes the 300 series only) was of net sales. For DP's overall operations, pre-tax profit in 1984 was of net sales. (CX 196).

476. For the period October 1984 to May 1985, DP's pre-tax profit for its Bodytone products (includes the 250, 300, 310, 450, 500, and 600 series) was of net sales. For DP's overall operations, pre-tax profit over the same period was of net sales. (CX 196).

477. The DP Bodytone is one of DP's most profitable products. (Pilgrim, Tr. 149; James, Tr. 1125).

478. DP was unable to meet 100 percent of the demand for Bodytone products in 1983 because of the rapid growth in demand. (CX 272; Pilgrim WS, at 20; RX 188; RX 197).

479. DP of necessity worked employees excessive overtime, including up to seven days per week for extended periods of time, due to its higher than anticipated growth in fiscal years 1983 and 1984. This growth required extensive dependence upon outside subContractors to fabricate, paint, plate, and assemble products. (RX 191, last page of summary).

480. In the fall of 1984, prior to DP's expansion, DP was producing
C rowers at a rate of _____ However, this production
level was based on a longer work week, and the production of many component
parts outside of DP. (CX 272; Pilgrim WS, at 14; Pilgrim, Tr. 279-281).

481. The constraining factor in DP's current production capacity are
C the 13 automated welding robots, which have a capacity of _____
C Based on a 3 shift per day,
C 5-day work week, production capacity is therefore _____
C Capacity could be expanded further by going to a
seven day work week, by the use of additional welding on a manual basis in
existing facilities, or by the purchase of additional automated welding
machines. (Pilgrim, Tr. at 310-11).

482. Due to the seasonal nature of the convertible rowing machine
C market, DP has practiced a a policy of _____
C (CX 272,
Pilgrim WS, at 22).

483. When business began slowing down in December 1984, DP laid off
C _____ employees to avoid a build up in inventory of its
C products. DP laid off an additional _____ employees in March 1985.
(CX 272; Pilgrim WS, at 22; See also, CX 165).

484. DP's monthly inventory levels of rowing machines in 1984 and 1985, are as follows:

	<u>1984</u>	<u>1985</u>
C	January	
C	February	
C	March	
C	April	
C	May	
C	June	
C	July	
C	AugUst	
C	September	
C	October	
C	November	
C	December	

(RX 306; RX 307).

C. Imports as a Cause of Substantial Injury

1. Market Share

485. From April 1983 to the fall of 1983, DP held all of the market for convertible rowing machines. Convertible rowing exercisers competitive with DP's Bodytone began to appear in the U.S. market in the fall of 1983.

(CX 272, Pilgrim WS, 18; CX 276, Thompson WS, at 7; CX 273, Silberman WS, 10)

486. Several of these competitive products were on display at the National Sporting Goods Association (NSGA) show in Chicago in January 1984, among them the Weslo Body Shop 360. (CX 276, Thompson WS, at 7; Cx 244, Markey Dep., at 78).

487. Sunstar and National imported and offered for sale convertible rowing machines at the NSGA show in New York in September 1984. (Sunstar Consent Order Settlement Agreement, at 1, PP B.; National Consent Order Settlement Agreement, at 1, PP B.

488. An analysis of the convertible rowing exerciser market in the period October 1984 through May 1985 reveals that, in addition to Weslo, there were other foreign and domestic marketers present in the market. (CX 277, Greemidge WS, at 8).

489. The four major sellers of convertible rowing exercisers in the United States are DP, Allegheny, Ajay, and Weslo. (Greenidge, Tr. 973; Turner, Tr. 1952-53; Stevenson, Tr. 1067-69; James, Tr. 1175; Stroh, Tr. 1294-95).

C 490. DP, Allegheny, Ajay, and Weslo account for percent of the total domestic market for convertible rowing exercisers. (Greenidge, Tr. 973; Bohn, Tr. 1956).

C 491. The following table shows the unit and dollar sales in 1984 of the four major sellers of convertible rowing exercisers in the United States, as well as their respective market shares, assuming their combined sales represent of total sales of convertible rowing exercisers in the United States, and allocating of the market to other manufacturers:

	<u>Unit Sales</u>	<u>Dollar Sales</u>	<u>Market Share</u>
C	DP		
C	Ajay		
C	<u>Weslo</u>		
C	<u>Allegheny</u>		
C	<u>Other</u>		
C	Total		

(CX 182; CX 183; CX 187; CX 317; 'SX 79-81; Turner, Tr'. 19401 Bohn, Tr. 1963).

492. Allegheny International Exercise Company (Allegheny) is located in North Carolina, and is involved in the manufacture and sales of various types of exercise equipment, including convertible rowing exercisers. Allegheny first produced convertible rowing exercisers in 1984. (Turner, Tr. 1934-36).

493. Ajay is located in Wisconsin, and manufactures a full line of exercise products, including convertible rowing exercisers. (Bohn, Tr. 1946-47).

494. From January to September, 1984, sales of Weslo Body Shops in the United States totaled approximately units, (CX 182; CX 183; CX 317).

495. From January to September 1984, sales of DP Bodytones in the United States totaled units.' (CX 187).

496'. From DICTober 1984 to May 1985, sales of Weslo Body Shops in the United States totaled approximately (CX 182; CX 183; CX 317).

497. According to Mr. Stroh of Sears, further agreements for (Stroh, Tr. 1268-69).

498. From October 1984 to June 1985, total sales of DP BODYTONES totaled _____ units. (Pilgrim, Tr. at 268).

499. DP forecasts total sales of _____ Bodytone units for fiscal 1985. (Pilgrim, Tr. 268; CX 114, 13).

500. Based on actual total sales and forecasted sales _____ forecasted total sales of DP Bodytones for calendar year 1985 are _____ units. (Pilgrim, Tr. 268; RX 309; RX 310; CX 176).

501. In January-May 1985 DP exported a total of _____ convertible rowers. If the conservative assumption is made that DP will export no additional rowers in 1985, an estimate of DP's domestic sales of convertible rowers in calendar 1985 is _____ units. (RX 232).

502. Ajay sold _____ convertible rowing exercisers, valued at _____ from January 1985 to July 1985. (SX 79).

503. According to Mr. William Bohn, President of Ajay, sales of convertible rowers _____ (Bohn, Tr. 1962).

504. In calendar year 1984, DP's sales from August through the end of the year accounted for _____ of its total convertible rower sales. (CX 187).

505. In calendar year 1985, DP's forecasted sales from August through the end of the year accounts for of its forecasted convertible rower sales. (CX 176; Pilgrim, Tr. 168).

C 506. Allegheny sold convertible rowing exercisers, valued at
C from January 1985 to July 1985. (SX 81; Turner, Tr. 1939-40).

507. Weslo has as a general business goal an increase in market share for the Body Shop rowers in 1985. (Stevenson, Tr. 1066-67; CX 257, answer to interrogatory 24).

C 508. Weslo anticipates sales of Body Shop units in calendar year 1985
C will be approximately the 1984 sales level.
(Stevenson, Tr. 1081-82; CX 267, answer to interrogatory 19).

C 509. Sears' 1984 purchases of Body Shops from Weslo
C units. Sears' 1985 purchases delivered through May 1985 equaled
C units, and Sears has contracted for delivery of additional Weslo Body
C Shops for the remainder of 1985. (CX 183; CX 317; Stroh, Tr. 1268-69).

510. **Based** on forecasted or contracted for sales levels in calendar year **1985, and assuming** Allegheny's January-July sales will account for of its total 1985 **sales, market share estimates for 1985 are** as follows:

	<u>Unit Sales</u>	<u>Market Share</u>
C DP		
C Ajay		
C Weslo 1/		
C <u>Allegheny</u>		
C <u>Other</u>		
C Total		

(CX 176; CX 187; Stroh, Tr. 1268-69; SX 79; SX 81; Bohn, Tr. 1962; Turner, Tr. 1939-40; CX 277, Greenidge WS, at 13; CX 182, 183; Stevenson, Tr. 1081-82).

C 1/ Based on Stevenson testimony that the consumer demand for Weslo Body
C Shops will be

C 511. Mr. Stroh of Sears estimated the total rower market in 1985 at
C units, with convertible rowing exercisers making up percent of
C this market, or units. (Stroh, Tr. 1292, 1294).

C 512. Mr. Stroh of Sears expected
C
C (Stroh, Tr. 1294-95).

C 513. Mr. Stevenson of Weslo expected
C
C
C (Stevenson, Tr. 1069).

C 514. From January 1984 through October 16, 1984 sales of Weslo Body
C Shops totaled units. From January 1984 to October 1984, sales of DP
C Bodytones and Shape **Masters** totaled units. (CX 182; CX 317; CX 187).

C 515. From October 16, 1984 to May 1985, sales of WesloBody Shops
C totaled units. From November 1984 to May 1985, sales of DP Bodytones
C and Shape Masters totaled units. (CX 182; CX 317; CX 187).

516. For DP's convertible rowing exercisers, the incremental cost of production is less than the base cost of production, so the impact of higher unit sales on profitability is greater because of the impact of incremental profit margin contribution. (Pilgrim, Tr. 148-49).

2. Lost Sales and Price Competition

517. Weslo sells its line of Body Shop convertible rowing exercisers at wholesale to retail mass merchandisers, sporting goods stores, department stores and others who in turn sell to the ultimate consumer. Accordingly, weslo competes at the wholesale level for customers for its Body Shop exercisers. (RX 325, Stevenson WS, at 7; CX 247, Stevenson Dep., at 301-03).

518. Weslo U.S.' and Weslo International's top customers in the United States represent percent of Weslo's unit sales and percent of dollar sales over the January 1984 to May 1985 period. (CX 277, Greenidge WS, at 14; CX 248; SX 9).

519. (CX 248; CX 249; CX 277, Greenidge WS, at 14).

520. Following are Weslo U.S.'s unit values for total sales of Body Shops from January 1984 to May 1985, by Body Shop model:

<u>Body Shop</u>	<u>Body Shop</u>
360	360
with	<u>without</u>
<u>butterfly 1/</u>	<u>butterfly</u>

1984:

C January--
C February---
C March - -
C April - -

C 1/ This model accounted for percent of Weslo's sales of Body Shop convertible rowers.

C May - - -
C June - - -
C July 2/ -
C August - -
C September-3/
C October 4/-
C November 5/
C December -

1985:

C January----
C February---
C March - -
C April - -
C May - - -

 521. Weslo offers advertising discounts to some of its customers,
C including (CX 246, Stevenson Dep., at 110-13, 120-23;
CX 247, Hancey Dep., at 93).

C 2/ Does not include sales of
C because CX 317 does not include the model number for this transaction.

C 3/ Does not include sales of
 because CX 317 does not include the model number for this transaction.

C 4/ Does not include sales of
because CX 317 does not include the model number for this transaction.

C 5/ Does not include sales of
because CX 317 does not include the model number for this transaction.
(CX 182; CX 317. (see 253]).

522. Weslo designed into its product the butterfly attachment and the 360 degree rowing arms, along with a completely welded frame, a single chrome rowing bar, and three different rollers on the seat. The DP 300 has neither a butterfly attachment nor orbital arms. (RX 325, Gary Stevenson WS, at 5-7; Pilgrim, Tr. 221).

523. Because of the BODY SHOP 360's butterfly attachment and 360 degree rowing arms, the BODY SHOP 360 has a higher perceived value than the BODYTONE 300. (CX 276, Thompson WS, at 9).

524. Perceived value relates to how much the consumer is willing to pay for a product; i.e., does the consumer perceive the product as a value for the money spent. In assessing perceived value, functional features of the product are relevant. (RPX 28, Thompson Dep. Vol. 1, at 113-14).

525. If a brand of product, such as the DP Bodytone, has a dominant position in the market, there is value in carrying that brand.

(SPX 1, Stroh Dep., at 238-39).

526. Being a full-line supplier of physical fitness equipment is a competitive advantage in the market. A retail buyer of physical equipment would try to consolidate its purchases to as few sources as possible. This results in less paperwork for the buyer and less time consumed in reviewing the lines of production. (Greenidge, Tr. 958).

527. Both the Weslo BODY SHOP 360 and BODYTONE 300 were rated in Shape Magazine in April 1985. Shape Magazine rated both units essentially the same,

with advantages to the BODYTONE 300 with respect to a lifetime warrantee, and advantages to the BODY SHOP 360 with respect to additional rollers on the bottom of the seat rail and the butterfly attachment. (RX 266).

528. M.T.I. ordered 914 multi-gyms from Pan's World in Taiwan on October 23, 1984 at an f.o.b. Idaho price of \$50.49 per unit. M.T.I. sold these units at an average wholesale price of between \$85.00 and \$90.00, and the most recent price offered by M.T.I. for quantities exceeding 25 units was \$78.00. (CX 241, McDonald Dep., at 13-14, 47-48; CX 242, McDonald Dep., at 3-15.

529. Shinn Fu imported and offered for sale in the United States the Powerpack rower. This convertible rower was offered to Oshman's in October or November 1984 for (CX 244, Markey Dep., at 89-91; Joint Motions to Terminate Shinn Fu and Ever Young, Settlements Agreement, Articles IIIA and IV; CX 49; CX 50; CX 57).

530. DP's pricing program for 1984-85 for the Bodytone 300 was (CX 120, CX 119.

531. To large accounts, DP's sales prices for the Bodytone 300/500 has ranged from

C
C
C

(CX 252; CX 277, Greenidge WS, at 19; Stroh, Tr. 1307-08; SPX 3, Wooster Dep., at 21, 28; CX 276, Thompson WS, at 13-15; SX 32-48).

532. DP offers promotional advertising allowances to its customers, but these are generally not allocable strictly to convertible exercise machines. (James, Tr. 1183-84).

533. From April 1, 1983 through March 31, 1984, Oshman's purchased at least BODYTONE 300 rowers from DP at a unit cost to Oshman's of (CX 164; SX 32-48; SPX 2, Markey Dep., at 54.1 CX 276, Thompson WS, at 16 says units from DP over this period, but CX 164 contradicts this number)).

534. During the 12 months following March 31, 1984, Oshman's purchased Bodytone units from DP. (CX 276, Thompson WS, at 16; CX 164).

535. Weslo first presented the Body Shop to Oshman's in the fall of 1983, and Oshman's first began purchasing Body Shops in the Spring of 1984. (RX 325, Stevenson WS, at 8).

536. Weslo's national sales manager, Carl Horn, paid a sales visit to Oshman's in November or December 1983, bringing with him a sample Body Shop 360 without the butterfly attachment and offering it to Oshman's at a price of This visit occurred prior to Oshman's decision to discontinue purchasing Bodytone 300's. (SPX 2, Markey Dep., at 81-83).

537. Oshman's inability to purchase product from DP at a unit cost less than was a leading factor in influencing Oshman's decision to discontinue purchasing from DP, based on the fact that Oshman's was unable to

meet prices that other retailers were offering for the BODYTONE 300. (SPX 2, Markey Dep., at 75-76, 80-81).

538. Oshman's made the decision to purchase the Body Shop 360 in December 1983 or January 1984. (SPX 2, Markey Dep., at 84).

539. Oshman's profit margin was the primary factor for eventually buying the Weslo Body Shop instead of the DP Bodytone. Other factors influencing Oshman's decision to purchase from Weslo included the availability of the butterfly attachment, and the poor sales performance of DP. (SPX 2, Markey Dep., at 126, 73-75, 77-79).

540. The cost to Oshman's of acquiring the Body Shop 360 with butterfly attachment from Weslo is (f.o.b., Logan, Utah). Oshman's promotional sales price for the BODY SHOP 360 is and its regular price is (SPX 2, Markey Dep., at 29-31).

541. From January 1984 to May 1985, Oshman's purchased approximately Body Shops from Weslo at unit values of for the BODY SHOP 360 with arms, for the BODY SHOP 360 without arms, and for the BODY SHOP 100. The volume of purchases of BODY SHOP 360's with arms was significantly higher than for BODY SHOP 360's without arms (CX 181).

542. Currently, the cost to Oshman's of the BODY SHOP 360 with and without the butterfly attachment Oshman's has dropped the

BODY SHOP 360 without the butterfly attachment from its product line. (SPX 2, Markey Dep., at 35).

543. The cost to Oshman's of acquiring the BODY SHOP 100 from Weslo is (f.o.b., Logan, Utah). Oshman's promotional price for the BODY SHOP 100 is and its regular price is Oshman's has purchased BODY SHOP 100's from January 1984 to May 1985. (SPX 2, Markey Dep., at 30; CX 181).

544. Oshman's California division reported purchases of convertible rowers from DP from March 1983 to January 1984, and reported no subsequent purchases. The average unit value for its January 1984 purchases from DP was (CX 256).

545. Oshman's California division reported purchases of convertible rowers from Weslo from March 1984 to March 1985, with units purchased on or after October 16, 1984. The average unit value for its purchases from Weslo was in March 1984 and in March 1985. (CX 256).

546. On July 1, 1985, a memorandum was sent to Jim England by Hugh Lappe, DP's midwest regional sales manager. Mr. Lappe was informed by the senior and assistant buyers at Gold Circle that Gold Circle, Ohio would be dropping the BODYTONE 300 in favor of the Weslo BODY SHOP 360. The only reason given for making the switch was price and competitive retail price points. In 1984, Gold Circle purchased BODYTONE 300's from DP, and

through June 1, 1985, purchased BODYTONE 300's. Mr. Stevenson of Weslo confirmed that Weslo currently sells the body shop to Gold Circle. (CX 308; Thompson, Tr. at 533, 539; Stevenson, Tr. at 1080).

C 547. Mr. Stroh of Sears estimates that Sears holds percent of the retail rowing machine market. (Stroh, Tr. 1292).

C 548. Sears accounted for approximately of Weslo body shop purchases in the United States from January 1984 to May 1985. (CX 181; CX 183; CX 317).

549. Sears began to purchase the BODYTONE 300 from DP for both retail and catalog sales in the fall of 1983. In the fall of 1984, DP introduced the BODYTONE 500 for sale only to Sears. (RX 324, Stroh WS, at 6).

550. The BODYTONE 500 is the same basic product as the BODYTONE 300, except it features an oversized backboard with a red wet-look vinyl fabric. (RX 324, Stroh WS, at 6).

551. Sears' sales of convertible rowers for 1983-84 are shown in the tabulation below:

	<u>1983</u>	<u>1984</u>
C DP 300/500		
C DP Shapemaster		
C Weslo 360/1000		
C Weslo 100		
C Allegheny		
C Other		
C Total		

SX 9; Stroh, Tr. at 1296-98, 1300-01, 1310.

552. In 1985₄ Sears' replaced the Allegheny convertible rowers with the Weslo BODY SHOP 100: convertible rower at the opening price point, and will market the (Stroh, Tr. at 1301-02).

553. Omitted.

554. Sears had initially replaced the Allegheny convertible rower with a product from Merchant's Corp. in Taiwan, so indirectly the BODY SHOP 100 replaced convertible rowers produced by Merchant's Corp. (Stroh, Tr. at 1295).

555. In 1985, Sears projects that it will sell over convertible rowing machines. (SX 9; Stroh, Tr. at 1310).

C 556. In 1985, Sear& projects that it will sell Weslo BODY SHOP
C 100's and at least BODY SHOP 360's and 1,000's for a total of units. (SX 9; Stroh, Tr. at 1300).

557. In 1985, Sears projects that it will sell at least, DP BODYTONE 300's and 500's and Shapemasters. (SX 9; Stroh, Tr. at 1310).

558. In 1985, Sears projects that it will sell convertible rowers produced by Allegheny. (SX 9; Strgh,Tr. at 1300-01).

559. The following tabulation shows Weslo U.S.'S price structure for its various body shop models, prepared in March 1985;

C BODY SHOP 100
C BODY SHOP 360
C BODY SHOP 1000

(CX 136; Stevenson, CX 246 at 102-06, 108-09, 112-13, 117-23, 259-68).

C 560. Sears anticipates that

C
C (Stroh, Tr. at 1300, 1320).

C 561. The business generated by the Weslo product is

C (Stroh, Tr. 1237, 1244).

562. From October 1984 through May 1985, Sears took delivery of
C approximately body shop units from Weslo
C . (CX 253; CX 183; CX 317).

563. To date, Weslo U.S.'s average selling price to Sears (both 1984
C and 1985) was and its average selling price in 1985 was (CX
253),

564. Omitted.

565. Weslo U.S.'s selling price to Sears for the BODY SHOP 100 and the BODY SHOP 1000 are _____ per unit, respectively. Prices are f.o.b. Logan, Utah. (Stroh, CX 245, at 213).

566. DP had agreed to sell the BODYTONE 500 to Sears for _____ for the period January 1, 1985 to May 31, 1985. (CX 252; CX 277, at 19).

567. In the month of June 1985, Sears purchased BODYTONE 500's from DP at a special promotional price of _____ for an estimated quantity of _____ units. Sears requested this lower price in order to combat the pricing in the retail market that Sears was not able to meet at the existing price. Sears gave a precommitment to DP in May 1985 to purchase these quantities. (Stroh, Tr. at 1307-09).

568. Currently (August 1985), Sears purchases the BODYTONE 300/500 from DP for _____ the Shapemaster from DP for _____ and the BODY SHOP 360/1000 (Stroh, Tr. 1318-19).

569.

C
C
C
C

(Stroh, Tr. at 1199).

570. The non-brand product which Sears is currently promoting is the Shapemaster line of convertible rowers. DP currently produces the Shapemaster
C 1000 for Sears, . (Stroh, Tr.
1234-36).

571. If Weslo were not available as a supplier, Sears would probably

C
C
C
C
C
C (Stroh, Tr. 1240-42).

572. Sears would not advance its own brand (the Shapemaster) to the exclusion of brand-name convertible rowers because the Shapemaster in itself does not deal with all aspects of the market. (Stroh, Tr. 1235).

573. Herman's World of Sporting Goods (Herman's) is one of the largest sporting goods retail chains in the United States. (James, Tr., at 1176, 1179; RPX 28, Thompson Dep., at 136).

574. In November 1984, three of DP's sales people, Jim England, Joe Lombardi, and Tom Campbell visited Herman's buyer, Mr. Jack Purs. They were told that Mr. Purs had just been visited by sales representatives from Weslo who had offered the BODY SHOP 360 to Herman's at a price lower than DP's price
C of for a BODYTONE 300. (CX 276, Thompson WS, at 13).

575. At the November 1984 meeting, Mr. Purs informed the DP personnel that he had enough BODYTONE 300's in inventory to last through January 1985. (CX 276, Thompson WS, at 13).

576. At this meeting, Mr. Purs informed the DP representative that he would be inclined to purchase the BODY SHOP 360 in lieu of the BODYTONE 300 unless DP adjusted the price of the BODYTONE 300. The Herman's buyer at no time stated that Herman's had decided to discontinue purchasing the BODYTONE 300. (RPX 27, England Dep., at 16-18).

577. DP's sales personnel left the meeting with the Herman's buyer under the impression that the Herman's account was in jeopardy and conveyed this information to their superiors at DP. (RPX 27, England Dep., at 18-19).

578. Around December 1, 1984, DP's vice president, James Thompson, was informed by Mr. Purs that his decision on whether to discontinue purchases of the BODYTONE 300 in favor of the BODY SHOP 360 would not be made until he met with DP representatives at the NSGA show in January 1985. Mr. Thompson communicated this information to Mr. Calvin James in early December 1984. (Thompson, Tr., at 615-16, 583-86).

579. In late 1984, Weslo solicited the Herman's account, and offered a price of _____ for the BODY SHOP 360. (RX 325, Stevenson Dep., at 9-10; Stevenson, Tr., at 1082-83).

580. To retain Herman's business, on January 24, 1985, DP offered Herman's an advertising allowance package of _____ applied to DP's entire

C product line. On January 24, Herman's placed a new order for BODYTONE
C 300 rowers-- were shipped almost immediately and the remaining were
shipped the following month. (CX 313; CX 276, Thompson WS, at 14; CX 272,
Pilgrim WS, at 25).

581. At the NSGA show in Dallas, which began on January 31, 1985,
C Herman's ordered more units, and was granted an advertising allowance
C package of on February 5, 1985, applied to the entire line of DP
products. (CX 276, Thompson WS, at 14; CX 314).

582. Bradlees began to carry the BODYTONE 300 in the fall of 1983.
C The cost to Bradlees of the bodytone unit was The retail price at
C that time was and the promotional price was Currently, the
C cost to Bradlees of the BODYTONE 300 is (Wooster, SPX 3 at 21, 28).

583. Bradlees first purchased the Weslo BODY SHOP 360 in August of
C 1984. The cost to Bradlees of the BODY SHOP 360 was The retail and
promotional prices of the Weslo BODY SHOP 360 were \$139.99 and \$114.99,
C respectively. The cost to Bradlees of the Weslo BODY SHOP 360 has declined
since that time. The BODY SHOP 360 has been offered at a promotional price of
C \$109.88 during 1985. (SPX 3, Wooster Dep., at 25, 26-27, 91).

584. Bradlees began purchasing the Ajay Octagym in August 1984 at a
C cost of \$103.00, which it offered at a retail price of and a
C promotional price The present cost of
C the Octagym is (SPX 3, Wooster Dep., at 25, 26-27).

585. In fiscal years (February 1 to January 31) 1983-84 and February 1, 1985 to June 29, 1985, Bradlees sold the following quantities of convertible rowers from DP, Weslo, and Ajay:

	DP	Weslo	Ajay
C 1983 - -			
C 1984 - -			
C 1985 - -			

(SX 59; SPX 3, Wooster Dep., at 40-41).

586'. The BODYTONE 300 and BODY SHOP 360 are competitive at the retail level and are offered at the same price point by Bradlees.

(Spx 3, Wooster Dep., at 38, 47).

587. Bradlees has continued with the BODYTONE 300 unit because of the the DP TV advertising, as well as an advertising allowance of **to be** given to Bradlees for the 1985 Christmas season. (SPX 3, Wooster Dep., at 47-48).

588. In approximately April-May 1985, Bradlees dropped the Weslo BODY SHOP product from its 1985 product line, because of the three convertible rowers that Bradlees carried, the Ajay Octagym and the DP BODYTONE 300 were the most compatible cosmetically. (SPX 3, Wooster Dep., at 28, 46-47, 49).

589. Lechmere, of Boston, MA, had been purchasing the BODYTONE 300 from DP for a unit cost of Lechmere presently also purchases BODY SHOPS from Weslo. An internal DP memorandum shows that in January 1985 a

buyer from Lechmeres informed a DP employee that Lechmere had been offered a \$7.00 per unit discount off previously quoted prices on the Weslo BODY SHOP 360. (Stevenson, Tr. at 1049; CX 309; Thompson, CX 276, Thompson WS, at 14-15).

D. Tendency To Substantially Injure

590. Mr. Stevenson is certain that there are manufacturing **sources** other than Weslo Taiwan available to Weslo U.S. for production of convertible rowers. (Stevenson, Tr. at 1076-77).

C 591. Based on production and logistical constraints, Mr. Stevenson of
C Weslo projected in March 1985 an annual production capacity of units
C at Weslo Taiwan.

C (CX 136; CX 246,
Stevenson, at 249-255; Stevenson, Tr. at 1075).'

592. Weslo is now the major supplier to Sears, the dominant retailer of exercise equipment in the United States. (Stroh, Tr. at 1292, 1300, 1320).

C 593. William Bohn, president of Ajay, has visited Taiwan and believes

(Bohn, Tr. at 1953-54).

594. In 1985, at least two Taiwanese companies have advertised for sale convertible rowing machines, at prices of from \$39.50 to \$46.44 per unit, f.o.b. Taiwan. (CX 86; CS 87; CX 89).

595. M.T.I., which purchased convertible rowing machines from Pan's International in Taiwan, had approximately 400 units in inventory as of April 25, 1985, which it was offering for \$78.00 for quantities over 25. (CX 241, McDonald Dep., at 13-15).

C 596. Weslo Taiwan currently sells the BODYSHOP 360 to Pro-X Ltd. for
C per unit. Weslo U.S. purchases the BODYSHOP 360 from Pro-X Ltd. for
C f.o.b. Taiwan. (CX 258, answer to interrogatory 25).

C 597. In April 1985, the ocean freight, customs, and document and entry
C fees for the BODY SHOP 360 were _____ respectively. With
C an f.o.b. Taiwan price of _____ this results in an f.o.b. U.S. cost to Weslo
C of _____ (CX 258, answer to interrogatory 25; CX 260).

C 598. Sears' cost for a purchase of the BODY SHOP 360 or 1000
C
C for an order delivered in May 1985
C _____
C (SX 9; SX 10).

C 599. Weslo U.S. purchases the BODYSHOP 100 for a cost of,
C f.o.b. Taiwan. In April 1985, the ocean freight, customs, and miscellaneous
C fees for the BODY SHOP 100 were _____ respectively,
C resulting in an f.o.b. U.S. cost to Weslo of _____ (CX 258, answer to
C interrogatory 25; CX 260).

C 600. For the fiscal quarter ending January 31, 1985, Weslo U.S.'s
C gross profit margin for sales of convertible rowers was _____ percent. Its net
187

C profit margins before and after taxes were percent and percent,
 respectively. (CX 247, Hancey Dep., at 170; CX 134).

601. For the two month period November 1 to December 31, 1984, Pro-X
 Ltd. earned a gross and net profit margin of percent for sales of all
 products. (CX 251).

602. The most recent cost figures reflect that DP's per unit
 manufacturing costs for the rowers at issue are as follows:

<u>Model</u>	<u>Prime</u> <u>Cost 1/</u>	<u>Over-</u> <u>head</u>	<u>Average</u> <u>SG&A 2/</u>	<u>Total</u> <u>Cost</u>	<u>Date</u>
BODYTONE 250					7/10/85
BODYTONE 300					10/1/85-12/31/85 (standard cost projected)
BODYTONE 310					10/1/85-12/31/85 (standard cost projected)
BODYTONE 320					3/31/85
BODYTONE 500					10/1/85-12/31/85 (standard cost projected)
BODYTONE 600					7/10/85
BODYTONE 700					7/10/85
Shapemaster 1000					3/31/85

(CX 119; CX 196; RX 275).

603. Weslo has no plans to discontinue any of the BODY SHOP units, and
 expects the BODY SHOP 360 to be available in 1986. (CX 246, Stevenson Dep.,
 at 256-58).

604. Weslo's sales organization in the United States consists of
 approximately within which Weslo has
 manufacturers' representatives who are responsible for sales activities within
 their given territory. There are also three regional sales managers who have

supervisory responsibility over the manufacturers' representatives and who report back to Mr. Stevenson. (Stevenson, Tr. at 1001).

605. Weslo continues to try to sell to potential customers in the United States, including

All

of these companies have in the past been customers of DP's BODYTONE.

(Stevenson, Tr. at 1078-80).

606. Mr. Stevenson of Weslo states that Weslo's general business goals with regard to its BODY SHOP are to increase sales and market penetration.

(Stevenson, Tr. at 1066).

(From page 188)

- 1/ Prime cost includes material, freight, scrap, direct labor, and royalties.
- 2/ Average SG&A for the period October 1984-May 1985.

OPINION

I. INTRODUCTION

This investigation is concerned with the importation into and sale in the United States of certain convertible rowing exercisers, which are alleged to infringe United States Letters Patent 4,477,071 ('071 patent). These unfair methods of competition and unfair acts are alleged to have the effect or tendency to destroy or substantially injure an industry, efficiently and economically operated, in the United States.

The products in issue are multi-purpose physical exercising apparatuses which have been called convertible rowing exercisers. The devices are designed to be compact and adaptable for home use. In a basic horizontal orientation such devices operate as a ground-supported rowing exerciser, but when up-ended to a vertical position on the attached bench, such devices permit a user to perform a range of other exercises, such as curling, pressing, and squatting-to-standing exercises. Thus, such devices allow a user to perform aerobic exercises when in a horizontal mode and anaerobic, weight training type exercises, when the frame is in an upright position. (FF 21).

There were originally ten respondents named in this investigation -- four Taiwanese companies and six domestic importers. Three additional foreign respondents were added by amendment of the complaint, by Order No. 17, issued May 13, 1985. (Procedural History). Service of the complaint and Notice of Investigation was perfected on all respondents. All but two, Weslo Taiwan and

John Lee have either entered appearances, or responded to the Complainant and Notice of Investigation. (FF 1-6).^{17/}--

II. JURISDICTION

Thus, the Commission has in personam jurisdiction over most, if not all, of the respondents named in the Complaint. Moreover, the power of the Commission to enter an exclusion order against goods is based on in rem, rather than personal jurisdiction. The Commission has in rem jurisdiction over any of the accused convertible rowing exercisers that have been imported into or sold in the United States, whether or not the foreign manufacturer or the importer has been named as a respondent or received actual notice of the investigation. Sealed Air Corp. v. International Trade Commission, 209 U.S.P.Q. 469 (C.C.P.A. 1981).

Therefore, I find that the Commission has subject matter jurisdiction and jurisdiction over the product involved herein, as well as personal jurisdiction over most, if not all, the individual respondents. Certain Steel Rod Treating Apparatus and Components Thereof, Inv. No. 337-TA-97, 215 U.S.P.Q. 229, 231 (1981).

^{17/} Respondent Pro-X has entered a limited appearance for the purpose of petitioning for review the Initial Determination (Order No. 17, May 13, 1985) amending the complaint and joining it as a respondent.

III. VALIDITY

A. Presumption of Validity

Pursuant to 35 U.S.C. S 282, "[a] patent shall be presumed valid. . . . The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." The presumption of validity is a procedural device which places the burden of proof on the party asserting invalidity and likewise continuously places the burden of persuasion on the merits on that party. Stratoflex, Inc. v. Aeoroquip Corp., 218 U.S.P.Q. 871, 875 (Fed. Cir. 1983). The challenger of a patent's presumed validity must meet its burden of proof by clear and convincing evidence. Lindemann Maschinenfabrik GMBH v. American Hoist, & Derrick Co., 221 U.S.P.Q. 481, 486 (Fed. Cir. 1984). This burden of persuasion rests with the party asserting invalidity whether or not the most pertinent prior art was considered by the examiner. Solder Removal Co. v. United States International Trade Commission, 199 U.S.P.Q. 129, 133 (C.C.P.A. 1978). However, the burden of proof may be more easily met by evidence of prior art more pertinent than that considered by the examiner. *Id.*; American Hoist & Derrick Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. 763, 769-71 (Fed. Cir. 1984); W.L. Gore & Assoc., Inc. v. Garlock, Inc., 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983).

B. Anticipation

Staff maintains that the Beacon 3002 device (RPX 9) anticipates claims 1, 5-10, 13-14 and 16 of the '071 patent. Respondent asserts that this device and several other prior art items anticipate the suit patent.

Under 35 U.S.C. S 102(a) and (b), a patent claim is anticipated if each element of the claim, or its functional equivalent, is described in a single prior art reference or embodied in a single prior art device. Radio Steel and Manufacturing Co. v. MTD Products, Inc., 221 U.S.P.Q. 657, 661 (Fed. Cir. 1984); RCA Corp. v. Applied Digital Data System, Inc., 221 U.S.P.Q. 385, 388, n.4, 392 (dissent) (Fed. Cir. 1984); In re Schaumann, 197 U.S.P.Q. 5, 9, 10 (C.C.P.A. 1978); Tate Engineering, Inc. v. United States, 175 U.S.P.Q. 115, 119 (Ct. Cl. 1972); Revlon, Inc. v. Carson Products Co., 226 U.S.P.Q. 51, 58 (S.D.N.Y. 1985); Alco Standard Corporation v. Tennessee Valley Authority, et al., 224 U.S.P.Q. 577, 586 (W.D. Tenn. 1984); See also In re Sovish, Moisson, and Selleslags, 226 U.S.P.Q. 771, 774 (Fed. Cir. 1985). "That which infringes, if later, would anticipate, if earlier." Peters v. Active Manufacturing Co., 129 U.S. 530, 537 (1889).

I agree with staff that the Beacon 3002 exerciser anticipates the claims of the '071 patent. I disagree with respondent that any of the other prior art references or devices anticipates the claims of the suit patent.

1. The Beacon 3002 Rower

The Beacon 3002 rower-exerciser was demonstrated in a plurality of orientations, horizontally as a rower, and upright for additional exercises, as early as the Fall of 1980. Both Leonard Weiss and Steve Glusky of Beacon Enterprises, Inc., the manufacturer of the Beacon 3002, have so testified and their testimony has been substantiated by the testimony of an independent witness, Mr. John Kucera, who was a buyer for Montgomery Ward at that time.

(FF 135-36). It is also established that Montgomery Ward purchased a small quantity of such exercisers more than one year prior to the priority date claimed by the '071 inventors, although such device was promoted in its catalog solely as a rowing exerciser for use in the horizontal position and not for its multiple orientation capabilities. (FF 133-37, 277).

The Beacon 3002 rower (RPX 9) is a multi-purpose, ground supported, rower-exerciser which is capable of being used in a plurality of orientations, i.e., both in the horizontal and upright positions. (FF 139). Thus, it may be used as a rowing machine in the horizontal position or for performing other types of exercises when in the upright position. (FF 139-58). It has a frame made of tubular sections which is generally horizontal when the device is used as a rower. (FF 140). It has two pivoted movable levers -- one hinged to the frame on each side. They are operatively connected to the frame by means of a hinge joint. Each lever has a handle adapted to be grasped and moved by the user's hand. (FF 141). Resistance means, in the form of hydraulic cylinders, are operatively coupled to each lever for the purpose of providing resistance to the movement of the levers. (FF 142). The Beacon 3002 also has a longitudinal track attached to the frame in the form of circular metal tubing welded to the frame. (FF 143). It also has a seat, or first user support which slides back and forth on wheels, along the longitudinal track, when the device is used as a rower. (FF 144). There is a padded board at one end of the horizontal bench, which serves as a foot bracing means for bracing the user's feet, when the exerciser is used as a rowing machine. This padded board extends from the horizontal frame at an angle of 64° and is also used as a backrest for certain other exercises when the device is in the horizontal position. (FF 145). This footrest/backrest also serves as part of the

"ground-engaging auxiliary support means," along with the small feet at the front of the rower, for the purpose of "stably supporting the apparatus with said frame in an upright position." (FF 146). Such footrest/backrest further serves as a "second user support," upon which the user stands, sits, kneels or lies, in order to perform certain exercises when the device is in the upright position. (FF 147). Finally, this "second user support" is firmly attached, by way of a pin, to the apparatus adjacent the front or lower end of the frame, and in such a position *with* relationship to the small feet at that end of the frame that the device will remain stably upright, and the user can grasp and move the handles while supported thereon, thereby increasing the range of exercises which can be performed with the apparatus. (FF 148).

All of these elements read literally on claim 1 of the '071 patent, with the exception of the angle of attachment of the "second user support" to the frame. The last element of claim 1 specifies that the second user support be attached so that it is "generally perpendicular" to the upright frame. (ex 1, Col. 3, 1. 49-51). I have found that the term "generally perpendicular" means an angle of 90 degrees, or as close thereto as practicable. (FF 153). As noted above, the "second user support" on the Beacon 3002 rower-exerciser is at an angle of 64 degrees. It would not stably support this device in an upright position, absent the small feet attached to the frame at this end of the device. (FF 181). However, when combined with those feet it does stably support the device in such upright position. (FF 154).

This is the full functional equivalent of the generally perpendicular attachment of the second user support in the '071 device. (FF 154). Therefore, the Beacon 3002 rower-exerciser contains each element, or its functional equivalent, of claim 1 of the '071 patent.

The only other independent claim of the '071 patent is claim 16. The Beacon 3002 apparatus also anticipates this claim. It is a "physical exercising apparatus" having a frame including a horizontal member.^{18/} (FF 159). It also has two levers pivoted to the frame on opposite sides of the longitudinal member, each of such levers having a handle at the distal end adapted to be grasped and moved by a user. (FF 159). There are two hydraulic cylinders, which interconnect the frame and an intermediate portion of the levers, which provide resistance to the movement of the levers. (FF 159). There is a track secured to the frame parallel to the longitudinal member. (FF 159). The Beacon 3002 has a removable seat with rollers mounted on the bottom, so that it slides back and forth along the track when in use. Thus, it has a seat slidable along the track. (FF 159). In place of the pair of footrests specified in claim 16, it has the footrest/backrest/second user support described above, for bracing the user's feet. Complainant admits this is the functional equivalent of the pair of footrests required by claim 16. (FF 159, n.4). The small feet at the footrest end of the frame and the foldable feet at the opposite end provide frame support means for supporting the frame in a generally horizontal position. (FF 159). The footrest/backrest/second user support comprises a bench, which is removably coupled to the frame at one end of the horizontal member. (FF 159). It is not "generally perpendicular" to the frame and seat, as it extends at an angle of approximately 64 degrees. (FF 159, n.5). However, I have found that this

18/ Claim 16 as issued by the PTO states that this frame and horizontal member are "adjustable in length." The adjustable feature was deleted during prosecution of the '071 patent. Therefore, such phrase is erroneous. A Certificate of Correction has been filed but has not yet been acted on. (FF 37, 93).

bench, when coupled with the short legs on the underside of the frame at this end is the functional equivalent of a "generally perpendicular" bench, since they serve the same purpose of supporting the frame in an upright position in the same general manner. (FF 159, n.5). Finally, there are ground engaging means on the underside of the bench (the two metal posts on the underside thereof) which in conjunction with the small feet on the underside of the frame serve to support the frame in an upright position. (FF 159).

The 3002 device also anticipates dependent claims 5-9, 13-15 and 17 of the '071 patent. (FF 160-70).

Complainant's arguments concerning the "questionable utility" of the exercises which can be performed on the 3002 device when it is in the upright position do not alter the fact of anticipation. There is nothing in the '071 patent which specifies that the exercises to be performed should be of any particular quality or benefit. Complainant's expert had to admit that the '071 device was not without some shortcomings in this regard and a Consumer Reports survey indicates that this type of device is only recommended by that publication as a rowing machine. (FF 155-56).

The case law cited by complainant in its argument that the 3002 device does not anticipate the '071 patent is simply inapposite. The basic proposition thereof is that "accidental results, not intended and not appreciated, do not constitute anticipation." (CB at 3, citing Eibel Process Co. v Minnesota & Ontario Paper Co., 261 U.S. 45, 66 (1923)).

It is true that the development of the 3002 device in a configuration usable in an upright position was accidental. The small front feet which allowed it to be stably set up on end were not added for this purpose. (FF 175). However, the fact that it could be upended for additional exercises did not go unappreciated. The unrebutted evidence of record shows that this trait of the device was recognized and that attempts were made to market the device as a multi-purpose, multi-oriented rower-exerciser which could be used horizontally as a rower and vertically for an additional range of exercises. (FF 135).^{19/} In fact the device was commercially sold, but was never marketed for its multiple-orientation properties. (FF 277). These facts clearly distinguish the facts of the instant matter, insofar as the Beacon 3002 device is concerned, from the facts of the various cases cited by complainant at pages 3 through 7 of its Post Hearing Brief.

In view of the above facts, the '071 patent is anticipated by the Beacon 3002 rower-exerciser and is, therefore, invalid under 35 U.S.C. 102(a) and (b).

19/ It is equally as obvious that the market potential for such a device was not fully appreciated by Beacon, or it would have made the obvious changes which would have made the 3002 a more attractive and more useful device in this regard. (FF 179).

2. Other Prior Art Which Respondent Claims Anticipates the '071 Patent

(a) Beacon Model 3001 (RPX 8)

This device does not anticipate the '071 device. It does not include "ground-engaging auxiliary support means for stably supporting the apparatus with the frame in an upright position," or the equivalent thereof; nor does it have the "second user support" attached at a "generally perpendicular" angle to the upright frame, or the equivalent of such feature. (FF 181-84). These elements are required by claim 1 of the '071 patent. (CX 1). In the case of claim 16, the other independent claim, it does not include a "bench" coupled to the frame which is "generally perpendicular" to the longitudinal member, nor ground engaging means on the underside of the bench which "serve to support [the] frame in an upright position." Moreover, it does not include the functional equivalent of any of these elements. (FF 181-84).

Therefore, the 3001 device cannot anticipate the '071 patent, since it does not embody each element of the claims thereof, or their functional equivalent.

Although not essential to such conclusion, I have found that the '071 patent requires the device to be freestanding in the upright position. Such finding reflects the plain meaning of the words of the '071 patent. (FF 182). Moreover, the great instability of the 3001 device when used in the upright position confirms this requirement. My observation of courtroom demonstrations and my own testing of RPX 8 revealed that the 3001 device

generally required the assistance of another to hold the device, or placing it against a wall or other support, for mounting it in an upright position. This is particularly so when the user is in the sitting (curling) or lying (bench press) positions. (FF 181). My observations further revealed that the 3001 device was very shaky and unstable during use. (FF 181). Such instability and difficulty of use is directly attributable to the lack of supporting means for "stably supporting" the frame in an upright position and concomitantly, the fact that the footrest/backrest on this device is attached at an angle of 64°, so that it cannot act, of itself, or in combination with any other element of this device ^{20/} to stably support the apparatus in an upright position. (FF 181-82).

b. The Charters Device-1/

This device does not anticipate the '071 patent, because it does not include a "slidable seat" within the meaning and intent of the '071 patent, nor a second user support or bench, as those terms are used in the '071 patent. (FF 187). It is clear from the claims, specification and figures of the '071 patent that the seat must be freely slidable back and forth during use in the horizontal mode. (FF 188). The testimony and other evidence of record further shows that the seat must be readily slidable in this manner for true rowing exercises. (FF 188). In fact, complainant's

20/ There are no feet attached to the bottom of the frame in the 3001 device, as in the 3002 exerciser. (RPX 8, 9).

21/ U.S. Letters Patent 1,966,848; RX 6.

convertible rowing exercisers and all those of other manufacturers which are in evidence herein, as well as all prior art patents dealing with conventional rowing devices which are in evidence, all have some type of wheel and track mechanism which facilitates the sliding of the seat back and forth along the horizontal track, when such devices are used in that mode. (FF 188, 191).

While respondent's expert has testified that the seat on the Charters device is slidable during use, and has constructed a miniature model of this device which he claims reveals such slidability, the specification of the Charters patent and the obvious principles of the laws of friction militate against his position. (FF 190-91). As for the Charters patent, it is true that the specification states at one point that the seat is mounted on a transverse brace member 6 which in turn is secured at its opposite ends to hollow sleeve members 7 "which are slidably mounted on the longitudinally disposed rails 1 [the frame]." (FF 190). However, it is clear from a reading of the specification and claims that such slidability is solely for the purpose of adjusting the distance between the seat and the footrest, to accommodate the legs of the child users.^{22/}-- The claims and specification require the seat in the Charters device to be stationary during use. (FF 190).

22/ This device is a combination rowing machine-amusement device designed for use by children. (RX 6).

Moreover, it is obvious that the seat in the Charters device would not slide smoothly back and forth during use. The manner and materials of its construction militate against this. (FF 191). It is clear that the metal-on-metal friction between the pipe sections 1 comprising the frame and the hollow sleeve members 7 would greatly impede the slidability of the seat, when in use with a person sitting on it. (FF 191). In fact even the very smooth brass tubing used by Dr. Kaufman in his miniature model shows some frictional resistance to sliding, when thumb pressure is exerted on the seat. In this regard I have found that this model (RPX 16) cannot reliably be used to depict the slidable nature of the seat in the Charters device. Its size and the selection of the materials from which it is constructed make it inappropriate for this purpose. (FF 191).

Of equal importance to the question of anticipation is the lack in the Charters patent of any teaching of a second user support or bench attached perpendicularly to the frame for reorientation of the frame for use in an upright position, as required in claims 1 and 16 of the '071 patent. (FF 192). It is respondent's contention, and that of its expert, Dr. Kaufman, that the standard 19 terminating at its upper end in an annular support or ring member 20, constitutes such a second user support or bench. (RFB80, B85-B88). However, it is admitted that there is nothing in the Charters patent which suggests that it be used in this manner. (FF 192). Respondents rely solely on the fact that the scale model constructed by Dr. Kaufman (RPX 16) stably stands upright when turned on end. (FF 192).

The '071 patent provides far more than a rowing exerciser which can be stood on end. It has a second user support and a configuration which allows the device to be used for an increased "range of exercises" when it is so upended. (CX 1, Figs. 6a-d). Taking an expanded view of Dr. Kaufman's model (RPX 16) it is difficult to see how anyone could stand, kneel, lie, or even sit comfortably on the annular ring (especially if made of pipe which would support the exerciser) in order to perform exercises while the device was in the upright position. (FF 194-195). Dr. Kaufman's only reference to this problem was a brief suggestion that one could put a cushion across the annular ring and standard. (Kaufman, Tr. 1692). However, there is nothing in the Charters patent which teaches the desirability or utility of such an addition as is admitted by Dr. Kaufman. (Kaufman, Tr. 1642, 1706). In fact, Dr. Kaufman admitted that "... the second user support is a bit of a question"(Kaufman, Tr. 1642).

Moreover, Dr. Kaufman's testimony on cross-examination makes it evident that the dimensions and configuration of the Charters device, as illustrated by his model, would make it difficult, if not impossible to do exercises from a lying, sitting or kneeling position, or to do squat-type exercises, when the device would be in an upright position. (FF 197).

In view of all of these facts I have found that the Charters patent does not include a second user support or bench within the intent and meaning of claims 1 and 16 of the '071 patent. (FF 192-96).

The slidable seat and second user support or bench are critical elements of both claim 1 and claim 16 of the '071 patent. Accordingly, these claims are not anticipated by the Charters patent. (FF 185-98).

c. The Wilson Patent

The Wilson patent, U.S. Letters Patent 881,521, (RX 2) is for a mechanical chair which is convertible into an exerciser which includes rowing and treadmill attachments. Respondent Weslo contends that this prior art patent anticipates claims 1, 5-9 and 13-14 of the '071 patent. It does not urge anticipation of independent claim 16. (Comment to CF 121). However, I find that this patent does not include certain critical elements of claim 1 of the '071 patent. (FF 191-211). Claims 5-9 and 13-14 are all dependent upon claim 1. (Cx 1).

The "frame" in the Wilson device is not capable of reorientation from a horizontal to a vertical position. (FF 200-03). It does not have an "auxiliary support means" for stably supporting the apparatus with the frame in an upright position. (FF 209). It does not have a "second user support" within the obvious intent and meaning of the '071 patent. Among other things, the orientation of the rowing attachments on the Wilson device is such that if one were standing or sitting on the treadmill he could not grasp and move the handles thereof in such a way as to increase the "range" of exercises which can be performed with the apparatus. (FF 204-08). Further, even if the treadmill could be considered a second user support, as is urged by respondent, it is not attached to the apparatus adjacent the lower end of and generally perpendicular to the upright frame. (FF 210).

Accordingly, the Wilson device cannot anticipate claims 1, 5-9 and 13-14 of the '071 patent.

d. The Welgemoed South African Patent

Respondent further claims that the '071 patent is anticipated by the Welgemoed South African Patent No. 78/5724. (RX 27; CX 36). This patent also does not include certain critical elements of the '071 claims. (FF 212-16). The brief, conclusionary testimony of Dr. Kaufman and Mr. Mattern (RX 329, 11 99-100; RX 321, 1 75 et seq.) do not substantiate respondent's claims in this regard. (FF 212-16).

RX 27 reveals that this patent covers a rower which has a column 13 extending vertically from the forward or footrest portion thereof, which column carries a pair of pedals. A padded cushion was attached to the frame underneath the rowing seat and between the tracks. The device could be used as a conventional rower, or one could lie on the padded cushion and do pedaling exercises. (FF 212). There is no showing or suggestion that the device be re-oriented in an upright position in order that the column-pedal structure be used as a user support while the levers (oars) are used for exercises other than rowing. (FF 214). Indeed, it would appear that the device could not stand upright in this manner due to the pedal attachment. (FF 214). Thus, this device does not have: ground-engaging auxiliary support means for stably supporting the apparatus with the frame in an upright position; nor a second user support within the intent and meaning of the '071 patent. (FF 214-15). It cannot, therefore anticipate claims 1 and 5-9 as urged by respondent.

e. The H-4 Unit and Related Arguments of Respondent

During the hearing in this investigation Weslo demonstrated that the specification and drawing of applicants' original British application, the priority document in the '071 file wrapper, failed to disclose the auxiliary support means required to operate applicants' device in the upright position. (FF 222-23). Based on this omission, Weslo urges that the '071 patent is not entitled to the priority date of its counterpart British application (i.e., May 25, 1982) because that application does not satisfy the requirements of 35 U.S.C. S 112, and, therefore, cannot be given effect in determining a priority date under 35 U.S.C. § 119. Kawai v. Metlesics, 178 U.S.P.Q. 158, 167 (C.C.P.A. 1973). It is thus Weslo's position that the date of invention of the '071 patent must be construed to be March 14, 1983, the date of filing with the PTO. (RB, at 8-9).

Based on this contention respondent urges that applicants' own promotional literature and prototype model H-4, and the activities of DP in this country as per agreement with the inventors, both before and after the inventors and DP entered into a formal, exclusive distributorship agreement, constitute a bar to the '071 patent under 35 U.S.C. S 102(a) or 35 U.S.C. § 103. (RB, at 8-12; Weslo's Motion To Amend Pleadings, Motion Docket No. 212-85).

The law is clear that an applicant's own publication cannot be asserted against it as anticipating prior art unless the publication is dated more than one year before the applicant's date of invention, in which case it would constitute a statutory bar under 35 U.S.C. § 102(b). In re Katz, 215

U.S.P.Q. 14, 17-18 (C.C.P.A. 1982); In re Jaeger, 112 U.S.P.Q. 477 (C.C.P.A. 1957); Illinois Tool Works v. Solo Cup Co., 172 U.S.P.Q. 385 (7th Cir. 1972); 2 Chisum, Patents S 15.03[3]. The date of the publication in question was September 1982 and the filing date for the '071 patent is March 1983. (FF 221; CX 1).

The activities of the inventors and DP in testing and showing the H-4 device in the Fall of 1982 certainly cannot constitute a statutory bar. All of the activities of complainant DP, related to the H-4 model and the BODYTONE 300, were by agreement with, and in the interest of the inventors and were done as agents of the inventors, whether before or after final entrance into the formal, exclusive licensing agreement. (FF 60-63). See, e.g., Ex parte Titone, 177 U.S.P.Q. 731, 733 (PTO Bd. App. 1971). The activities of DP in October 1982 were covered by a preliminary agreement entered into between the inventors and Mr. Pilgrim at the ISLE show. (FF 61-62). Thus, all such activities were those of the inventors^{23/}. The language of 35 U.S.C. 102(a) applies only to the activities of others, not the inventors. Such is the explicit provision concerning the "known" and "used" language of this section of the statute and, as noted above, the Courts have expressly found that the "patented" and "publication" language of this section also only pertains to the activities of others.

23/ I have also found that the pin utilized in the BODYTONE device to fasten the second user support to the frame is not essential to the "firmly attached" and "coupled" recitations of claims 1 and 16 of the '071 patent. (FF 224-27). Therefore, the H-4 unit and the '071 patent do not have different inventors, as claimed by respondent and the H-4 unit is not a prior art reference under 35 U.S.C. 103.

Accordingly, The H-4 prototype device, the September 1982 publication of the inventors in England, the testing of the H-4 device by DP in the Fall of 1982 and the showing of the BODYTONE 300 by DP at the Chicago NSGA show in January and February 1983, do not constitute a bar to the '071 patent. 35 U.S.C. 102(a). ²⁴/

C. Obviousness

Under the provisions of 35 U.S.C. 5 103:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, 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. Patentability shall not be negatived by the manner in which the invention was made.

The Supreme Court has set forth the factual inquiries which will lead to a determination of obviousness or nonobviousness:

[T]he scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success,

24/ Motion Docket No. 212-85, Motion to Amend Pleadings, filed by respondent Weslo on August 19, 1985, and opposed by complainant, is hereby granted. Weslo's motion to amend the pleadings to conform to the evidence raises a new affirmative defense based upon the disclosures at the hearing concerning the erroneous omission of the "auxiliary support means" in the priority document. The addition of respondent's Twentieth Affirmative Defense, as attached to its motion, does simply conform the pleadings to the evidence. Further, it does not impose an undue burden on complainant to require it to meet this defense. In fact, I have determined that Weslo's Twentieth Affirmative Defense is without merit, for the **reasons** given **above**.

208

long-felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 U.S.P.Q. 459, 467 (1966). A determination as to obviousness is "a legal conclusion based on factual evidence." Stratoflex, Inc. v. Aeroquip Corp., 218 U.S.P.Q. at 876, quoting Stevenson v. International Trade Commission, 204 U.S.P.Q. 276 (C.C.P.A. 1979).

On this issue, respondent Weslo, who bears the burden of proof, asserts that the subject invention is obvious in light of a significant quantity of prior art references, many of which were considered during prosecution of the '071 patent application, but the majority of which apparently were not considered by the examiner. It is noted that with respect to prior art not before the examiner, Weslo must establish that these references, any or all of them, are more pertinent than the art actually evaluated by the examiner. Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 221 U.S.P.Q. at 486-87. Complainant disputes Weslo's contentions that the invention embodied in the '071 patent is obvious. The Commission investigative attorney did not take a position on this issue.

1. Level of Ordinary Skill in the Art

The hypothetical person of ordinary skill in the art against whom obviousness is measured is charged with knowledge of the contents of all of the pertinent prior art. In re Sernacker, 217 U.S.P.Q. 1, 5 (Fed. Cir. 1983). The pertinent prior art consists of the art in the field of the inventor's endeavor. The person of ordinary skill is further presumed to have the ability to select and utilize knowledge from reasonably analogous arts

which are pertinent to the particular problem addressed by the invention. In re Winslow, 151 U.S.P.Q. 48, 51 (C.C.P.A. 1966); In re Antle, 170 U.S.P.Q. 285, 287-88 (C.C.P.A. 1971). Accord, Cable Electric Products, Inc. v. Genmark, Inc., 226 U.S.P.Q. 881, 886 (Fed. Cir. 1985).

In the process of selecting the specific items of prior art with which the inventor is presumed to be familiar, it is essential to focus on the time of the invention, and to make the selection without knowledge of the invention. In re Antle, 170 U.S.P.Q. at 287.

To imbue one of ordinary skill in the art with knowledge of the invention in suit ... is to fall victim to the insidious effect of a hindsight syndrome wherein that which the inventor taught is used against its teacher.

It is difficult but necessary that the decisionmaker forget what he or she has been taught at trial about the claimed invention and cast the mind back to the time the invention was made ..., to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art.

W.L. Gore & Assoc., Inc. v. Garlock, Inc., 220 U.S.P.Q. at 312-13.

Furthermore, it is important to define a level of skill that is "ordinary" so as to guard against evaluating the obviousness of an invention "to the rare genius in the art, or to a judge or other layman after learning all about the invention." Stratoflex, Inc. v. Aeroquip Corp., 218 U.S.P.Q. at 879.

Several factors may be indicative of the level of ordinary skill in the art:

(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the

technology; and (6) educational level of active workers in the field.

Environmental Designs, Ltd. v. Union Oil Co., 218 U.S.P.Q. 865, 868 (Fed. Cir. 1983). See also Orthopedic Equipment Co., Inc. v. United States, 217 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

In the present investigation, it is generally agreed that the level of skill in the art of designing physical exercise apparatus is relatively low. It requires at a minimum, though, a well skilled machinist with practical experience and some familiarity with physical exercise equipment. (FF 231-33). The technology involved is not particularly sophisticated: in fact the inventors were interested in manufacturing a product of relative simplicity which would be within the means of their modest facilities. (FF 40, 43). Although Messrs. Fitzpatrick and Lloyd had some knowledge of physical exercise apparatus, due to their interest in sports, and their investigation of equipment then on the market, there is nothing in the record to suggest that the design of physical exercise apparatus requires any special skills beyond those ordinarily accruing to a person having experience in mechanics. (FF 41, 42, 44-46).

Although it may be pertinent to consider so-called problems encountered in the art,

there is no requirement that persons of ordinary skill have been aware of the problem, or have been seeking solutions. The inventor is not required to have been the winner of a race to a common goal. Certainly, an invention may create a new want and still be nonobvious and therefore patentable.

Leinoff v. Louis Milona & Sons, Inc., 220 U.S.P.Q. 845, 849 (Fed. Cir. 1984).

In this case, it cannot be said that the inventors were consciously seeking a

solution to a longstanding problem in the art. The record suggests that Fitzpatrick and Lloyd started in the business of manufacturing exercise equipment for economic reasons, and had no particular background or prior expertise in the field. (FF 40-43). As is amply shown in the voluminous prior art cited by Weslo, there have been many solutions to the various problems posed in the field of physical exercise apparatus. What the inventors did with their convertible rowing exerciser was, in essence, to provide another solution, and to "create a new want."

Much has been made in this case of the simplicity of the invention at issue. However, simplicity is not a proper criterion for resolving the issue of obviousness. Stevenson v. International Trade Commission, 204 U.S.P.Q. at 283. Similarly it is the result, rather than the manner of invention, that is of concern for purposes of determining obviousness.

Invention is not always the offspring of genius; more frequently it is the product of plain hard work; not infrequently it arises from accident or carelessness; occasionally it is a happy thought of an ordinary mind; and there have been instances where it is the result of sheer stupidity. It is with the inventive concept, the thing achieved, not with the manner of its achievement or the quality of the mind which gave it birth, that the patent law concerns itself.

Radiator Specialty Co. v. Buhot, 4 U.S.P.Q. 205 (3d Cir. 1930); 2 Chisum Patents S 5.04[2]. The record here shows that the inventors followed the teachings of the prior art related to multiple exercise machines by starting with a conventional, horizontal rowing machine and a wall mounted exerciser. (FF 44-50). That they subsequently considered the concept of combining the two pieces of apparatus into one, a simple one, (FF 51-55) is not probative of obviousness. The issue to be decided is whether the product of their conception would have been obvious to a person of ordinary skill in the art at 212

the time of the invention in light of the teachings of the prior art, considered as a whole.

2. Scope and Content of the Prior Art

The scope of the prior art is that "reasonably pertinent to the particular problem with which the inventor was involved." Stratoflex, Inc. v. Aeroquip Corp., 218 U.S.P.Q. at 876 (citations omitted). In this case, it cannot strictly be said that the inventors were consciously attempting to solve a particular problem. As the testimony of Mr. Fitzpatrick indicates, the inventors were interested in developing a physical exercise type of apparatus that would be acceptable in the marketplace and well adapted to their skills and manufacturing facilities. (FF 43, 44, 49). Within this context, and as stated as an object of the invention, the inventors wanted to develop "a simple and compact exercising apparatus which is adaptable so that a range of different exercises including rowing exercises are possible with one machine." (CX 1, col. 1, ll. 23-26). The problems which this invention addressed were stated as follows:

Exercising apparatus of the nature of gymnasium equipment is well known and increasingly is being used privately in domestic homes. Up until now, however, to accommodate the wide variety of different exercises consistent with a balanced program of exercise it is necessary to use different items of exercising apparatus. Especially in the domestic situation the expense and bulk of the various different pieces of apparatus required to give a reasonably comprehensive program of exercises has militated against such home use. The same drawbacks also apply to most of the more versatile (multi-exercise) units designed for the home.

(CX 1, col. 1, ll. 9-20).

In view of the inventor's stated objective, the most pertinent area of prior art is that relating to physical exercising apparatus, and particular .hy

multi-purpose devices and rowing machines. As disclosed in the file wrapper of the '071 patent, the examiner also considered to be analogous certain items of prior art primarily used as medical equipment, but which possess similar uses and structure to exercise equipment. (FF 72, 73, 249, 251).

During the prosecution of the '071 patent application, the examiner considered approximately 19 prior art references before allowing the claims. An additional 19 references were cited by applicants to the examiner after notice of allowance that the claims had issued. It appears from the file wrapper that the examiner did not consider these references. (FF 235). Weslo has cited more than 70 references which it alleges are prior art to the '071 patent rendering it obvious. (FF 234). Many of these are references considered by the examiner, and several are different disclosures of the same structure. (See RF B136-B138). However, the majority of these references were not considered by the examiner in allowing the claims of the suit patent. Weslo has asserted that these references are relevant to the claims of the '071 patent. However, Weslo must show more than that these references are pertinent. "It is difficult to imagine a patent law suit in which an accused infringer is unable to add some new 'pertinent' art." W.L. Gore & Assoc., Inc. v. Garlock, Inc., 220 U.S.P.Q. at 313. As to those references not considered by the examiner, Weslo must demonstrate that they are more pertinent than the prior art recorded in the prosecution history of the '071 patent. Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 221 U.S.P.Q. at 486-87.

In evaluating the scope and content of the prior art, it is a difficult but essential mental exercise to evaluate the prior art without benefit of the teachings of the invention.

It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law.

Orthopedic Equipment Co., Inc. v. United States, 217 U.S.P.Q. at 199. It is evident that Weslo has made no effort to view the cumulative teachings of the prior art as they stood immediately prior to the time of the invention. The approach adopted by Weslo in asserting obviousness has been to cite every conceivable rowing-type exerciser or multi-purpose exercise device it could find and to select discrete elements from each that may also be found in the claims of the '071 patent. Proposed combinations of prior art elements have been suggested, often without regard to what each reference fairly discloses or without illumination as to how the combination might reasonably be made. The analysis undertaken by Weslo can be aptly described as follows:

the claims [of the '071 patent] were used as a frame, and individual, naked parts of separate prior art references were employed as a mosaic to recreate a facsimile of the claimed invention. At no point ... does [Weslo] ... explain why the mosaic would have been obvious to one skilled in the art ... or what there was in the prior art that would have caused those skilled in the art to disregard the teachings there found against making just such a mosaic.

W.L. Gore & Assoc., Inc., v. Garlock, Inc., 220 U.S.P.Q. at 312.

In addition, many references have been offered, individually and in combination, without benefit of testimony from any person of ordinary skill in the art, or any expert, regarding what the reference discloses. This shotgun approach, far from providing illumination about the true state of the art at the time of the invention, has served only to obfuscate an already complex issue.

215

Accordingly, only those references which were considered by the examiner and those further references for which Weslo has provided testimony to explain their relevance will be considered herein in reaching a determination as to the obviousness of the subject invention.^{25/} As to the remaining references, I must find that Weslo has not even attempted to meet its burden of establishing that these items of alleged prior art are more pertinent than the art considered by the examiner.^{26/}

As is apparent from the prior art which appears in the file history, as well as the volume of additional prior art cited by Weslo, it has been a longstanding objective in the physical exercise device art to develop apparatus that is simple and compact enough to be usable in the home and affordable to a wide range of users, and to be sufficiently versatile to afford a wide range of exercises. (FF 236-47, 253-55). Many of these devices

25/ Thus, the prior art which will be considered herein includes the art asserted by Weslo which was before the examiner: (1) the Beacon 3001 in its various disclosures in the record (RPX 8, RX 233, RX 342); (2) U.S. Letters Patent 3,892,404 (Martucci) (CX 14); (3) U.K. Patent No. 1,326,263 (Selnes) (CX 28); (4) U.S. Letters Patent 4,275,882 (Grosser) (CX 18); (5) Amerec 610 and 660 Rowing Machine Brochure (CX 39); (6) U.S. Letters Patent 3,586,322 (Kverneland) (CX 12); and the following references asserted by Weslo which were not considered by the examiner: (1) the Beacon 3002 in its various disclosures in the record (RPX 9, RX 25, RX 269); (2) U.S. Letters Patent 881,521 (Wilson) (RX 2); (3) U.S. Letters Patent, 1,966,848 (Charters) (RX 6); (4) U.S. Letters Patent 2,855,200 (Blickman I) (RX 8); (5) U.S. Letters Patent 3,614,097 (Blickman II) (RX 12); (6) U.S. Letters Patent 4,369,966 (Silberman) (RX 22); (7) U.S. Letters Patent 192,271 (McLaughlin) (RX 40); and (8) U.S. Letters Patent Des. 268,278 (Smith) (RX 26).

26/ In this connection, it is noted that Weslo has submitted two documents, entitled "Weslo's Response to DP's Objections to Certain Weslo Direct Exhibits," and "Weslo's Contentions Regarding Anticipation and Obviousness." Both of these documents identify prior art references and briefly indicate what is disclosed in the references and state Weslo's position as to the document's relevance. These submissions, unsupported as they are by any testimony, constitute argument of counsel and are not probative evidence in this investigation.

are capable of performing or simulating rowing exercise, in addition to allowing other types of exercise. (FF 236-43, 253, 254). In addition, several devices can be used with the frame carrying the resistance means situated in either the horizontal or vertical position. (FF 236-37, 240-41). The prior art also shows a multitude of conventional rowing machines, several of which afford a variety of exercises that may be performed on the rower in the horizontal position. (FF 126, 127, 171, 242, 248). In the prior art of record here, there are also several multi-purpose chairs which can be reconfigured from a chair into various types of exercise apparatus. (FF 199-201, 250-52).

Thus, a person of ordinary skill in the art having all of the pertinent prior art before him would be aware of many different configurations of rowing machines; would know that rowing machines can be used to perform multiple exercises while the rowing frame is in a substantially horizontal position; would know of different means of reorienting a device, such as by attaching it to a wall or by reconfiguring a ground supported frame, which would afford a broader range of exercises; and would know of various means of utilizing the device's resistance means in relation to a user support to promote compactness of the apparatus. (FF 236-56).

In short, and as asserted by Weslo, the prior art discloses every element that is present in the invention claimed in the '071 patent. However, this fact is not conclusive of obviousness.

That all elements of an invention may have been old (the normal situation), or some old and some new, or all new, is however, simply irrelevant. Virtually all inventions are combinations and virtually all are combinations of old elements. A court must consider what the prior art as a whole would have suggested to one skilled in the art.

Environmental Designs, Ltd. v. Union Oil Co. of California, 218 U.S.P.Q. at 870. The broad sweep of prior art cited by Weslo, considered in its entirety, suggests that in the design of physical exercise apparatus, a person of ordinary skill in the art is limited only by his imagination in the manner of combining certain common elements.

The file history of the '071 patent shows that the examiner considered a total of 19 prior art references during the prosecution of the '071 application. It was the examiner's conclusion that these references, taken alone or in combination, did not render the claims of the '071 patent obvious. (FF 70-73, 75-76, 86, 88). There appears to be no necessity to reexamine the prior art considered by the examiner. However, Weslo also relies on certain items of prior art not considered by the examiner, and has suggested certain combinations of prior art which are claimed to render obvious the subject invention. These references include the patents to Charters (RX 6), and Wilson (RX 2), the Beacon 3001^{27/} and Beacon 3002 rowing devices, and patents to Blickman (U.S. 2,855,200, RX 8); McLaughlin (RX 40); and Smith (Rx 26) in combination with Grosser (RX 17).

The first four items noted above have been described extensively in connection with Weslo's arguments on anticipation. Blickman discloses a home exercising apparatus which provides different exercising facilities and which may be folded onto a closet door and stored within a closet. (FF 243).

27/ Although the Beacon 3001 was considered by the examiner during prosecution in its disclosure in the 1980 Sears Fall/Winter catalog, this device was physically present at the hearing and was the subject of considerably testimony. Therefore, it will be specifically reconsidered herein.

McLaughlin discloses an improvement in exercising machines which the inventor describes as "the parlor rowing apparatus." This is a compact device which allows for variation in the size of the user and the degree of resistance, and allows the apparatus to be changed from a rowing exerciser to a "health lift." (FF 247). The patent to Smith discloses the ornamental design for a rowing machine. (FF 263). The patent to Grosser discloses a multi-purpose home exerciser in which the exercise lever is situated in a vertical position, and in one configuration a bench may be attached in a perpendicular relationship to the frame which carries the resistance means. (FF 245).

3. Differences Between the Prior Art and the Claims at Issue

As noted above, the prior art discloses a vast array of multi-purpose physical exercise devices and rowing machines. (FF 236-56). As to those rowing machines which can only be used for rowing or which afford multiple exercises only by means of the user reorienting himself in relation to the horizontal rowing frame, these devices, considered collectively do not disclose or suggest "ground-engaging auxiliary support means for stably supporting the apparatus with [the] frame in an upright position; a second user support; [or] attaching means for firmly attaching said second user support to the apparatus adjacent the lower end of and generally perpendicular to said upright frame" (FF 242-48). Thus, the primary pertinence of these devices to the claimed invention is to show the basic elements of rowing apparatus, and the variations in the basic configuration and individual components that may be used to produce rowing exercise.

Another pertinent category of prior art physical exercise devices consists of those devices which may be used to perform multiple exercises, often

including a rowing-type exercise. Some of these, devices, notably vigor (RX 36) and Meyer (Rx 39) show rowing type and other exercises, bUt do not show or suggest the use of a frame or reorientation of a frame from a, horizontal to vertical position in the sense of the invention claimed, in the, '071,J)atent., (FF 253, 254). The mOstpertinent devices of this type are those which do utilize a frame and permit a rowing type exercise_in the horizontal position, and are capable of reorientation into ..a vertical position (q.g., Selnes, CX 28; Clausen, CX 7; and Kverneland, RX 11).^{28/} (FF 236-37, 240-41). The prior art also discloses certain devices in which the frame which carries the exercising means is oriented in a vertical position, with or without a bench attached, in generally perpendicular relationship to the vertical frame (e.g., Grosser, RX 17; Blickman I, RX 8; and Silberman, RX 22). Although all of these devices show a vertical orientation of the frame, and a perpendicular relationship to the ground or to a bench, a critical feature which distinguishes the claimed invention from each of these devices is that each of these devices is supported in the vertical position by a wall or door. (FF 243, 245, 255). Thus, Selnes, Clausen and Kverneland do not suggest the attachment of a second user support to support the frame in a vertical position. (FF.236-37, 240-41). Irrespective of the perpendicular

28/ Respondent Weslo has offered expert opinion about the interpretation of the Selnes and Kverneland references through its technical expert, Dr. Kaufman. (Kaufman W.S., RX 327, 11 82, 83, 97). In Dr. Kaufman's expert opinion, a cable attachment connecting the cross bar of Selnes to a "second user support" which operates as a swing when the frame of Seines is oriented in a vertical position, can be interpreted as a "firm" attachment of the second user support to an upright frame. Similarly, Dr. Kaufman suggests, with respect to the Kverneland reference, that when the frame of Kverneland is oriented in an upright position, the floor can operate as a second user support. These examples are rather typical of Dr. Kaufman's frequently strained interpretation of the teachings of the prior art. Although Dr. Kaufman is a well qualified engineer, his imaginative analysis of the prior art heavily, relies on an impermissible use of hindsight and is frequently based on a misperception of the teachings of the '071 patent. Accordingly, I have found it difficult to place reliance on much of Dr. Kaufman's testimony.

relationship between the bench and the vertical frame in Grosser and Blickman I, the support of the vertical frame is derived from the wall or door, rather than from its relationship with a firmly attached, ground-supported second user support. (FF 243, 245, 262).^{29/} Thus, these prior art devices do not disclose or suggest that a vertically oriented exercise frame can be made free standing by means of a firm attachment of a "second user support ... adjacent the lower end of and generally perpendicular to" the upright frame so as to enable the user to conduct an additional range of exercises while supported thereon.^{22/}

Although there are disclosures in the prior art of a socket structure affixed in perpendicular relationship to a bench or horizontal rowing frame (e.g., Rogers, RX 19; and Charters, RX 6) there is no suggestion of the desirability of using such an arrangement to affix a second user support to a

29/ Respondents and staff note the statement in Grosser that the device can be made free standing. This statement clearly appears in the Grosser specification. However, nothing in the specification, figures, or claims of the patent reveal how this can be accomplished. Certainly, the bench device disclosed therein does not provide such capability. (CX 18). Moreover, Mr. Kostanecki, who worked with the inventor on this device, testified that they never developed a practical way to make it freestanding. (FF 245).

30/ Weslo has also suggested that the patents to Blickman (RX 8, 12) render obvious the '071 claims. With respect to Blickman I (RX 8), this assertion is based on the proposition that a frame in the Blickman structure, which carries a slidable seat in a horizontal position and may be used for rowing exercise, can be placed in a vertical position and used for chin-ups. In this vertical position, Weslo claims that the frame becomes a "second user support." This rather fanciful interpretation of Blickman I ignores the fact that this device must be wall or door mounted for support and disregards the very different means by which Blickman I effects multiple exercises as compared to the '071 claims. (FF 243). To the extent that the chinning bar in Blickman I may be called a "second user support" by virtue of its ability to support a user performing chin ups, it is not a second user support nor remotely suggestive of such a support within the meaning of the claims of the '071 patent, which requires that the user, while supported thereon, must be able to "grasp and move said handle ... thereby increasing the range of exercises which can be performed with the apparatus." (CX 1, claim 1).

rowing frame to allow the frame to be reoriented and free standing in the upright position. (FF 192-96, 246).

From the foregoing, it is clear that all of the elements which appear in the claimed invention of the '071 patent may be located in many different references in the prior art. However, "prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings." In re Sernacker, 217 U.S.P.Q. 1, 6 (Fed. Cir. 1983). Accord Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 221 U.S.P.Q. at 988. See also ACS Hospital Systems, Inc. v. Montefiore Hospital, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Except as discussed infra, Weslo has not attempted to establish, nor is it otherwise apparent, specifically how these different types of prior art can be combined to achieve the claimed invention, nor is the desirability of such a combination suggested by the prior art.

a. Charters

The structure disclosed in the Charters patent has been discussed earlier in connection with Weslo's claims of anticipation. Charters claims a combined exercising and amusement device, and discloses a form of rowing machine which is designed to provide amusement to a child in the course of exercising. (FF 185). Although Charters clearly requires a stationary seat which is movable only to accommodate the size of the child using the device, whereas the claims of the '071 patent require a seat slidable during use, it would be obvious to combine the Charters rowing frame with another rowing machine having a slidable seat. (FF 189, 191, 237, 241, 242, 248).

The critical element missing in Charters, however, is the concept of reorienting the horizontal rowing frame, and consequently, the structure necessary to allow reorientation and use, to a frame in an upright position. (FF 192-97, 258). The fact that Charters discloses a structure which has a standard affixed at the end of and in a perpendicular relationship to the rowing frame, without more, is insufficient to render obvious the claimed invention of the '071 patent.

Weslo acknowledges that Charters does not teach reorientation of the frame into a vertical position. (See RF B142). Moreover, even if the Charters structure were stable when supported on the standard in the upright position, the notion that this standard may function as a "second user support" injects an interpretation of Charters well beyond what is contemplated in the patent. (FF 194, 195). Consequently, the attachment of a second user support to the Charters structure within the meaning of the '071 claims, and the ability to perform an additional range of exercises while supported thereon when this device is situated in the upright position is entirely speculative and in no way suggested by the Charters disclosure itself. Dr. Kaufman's ability to convert Charters into a convertible rowing exerciser of the type disclosed in the '071 patent was clearly based on an extrapolation of the teachings of the '071 patent which were then imposed on the Charters structure, rather than a fair interpretation of what Charters actually discloses or reasonably suggests. (FF 189-97). Such undiluted application of hindsight is not useful to reaching a determination of obviousness. See, e.g., In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

Based on the many structural differences between Charters and the claims of the '071 patent, which are based on fundamentally different inventive

concepts, I find that the Charters patent is not more pertinent than the prior art considered by the examiner (some of which disclosed other conventional type rowers), nor does it, alone or in combination, render obvious the claims of the '071 patent. (FF 259).

b. Wilson

The structure of the Wilson mechanical chair has also been discussed at length in connection with Weslo's claims of anticipation and the substantial differences between this apparatus and the claims of the '071 patent have been considered. (FF 199-211). This device is not capable of reorientation of the rowing frame in the sense of the '071 invention, with the consequence that Wilson does not remotely suggest an apparatus having a second user support attached "adjacent the lower end of and generally perpendicular to" an upright frame, "so that the user can grasp and move [the rowing arms] while supported on said second user support." (FF 203-10). Due to a fundamental difference in structure, the Wilson rowing arms are not capable of use in multiple orientations, thus the relationship between the rowing arms, the horizontal frame, and the second user support do not allow for an increased range of exercises. (FF 200, 203, 204, 207).

Weslo's imaginative attempt to make Wilson fit the claims of the '071 patent is an impermissible exercise in hindsight which postulates an unfounded interpretation of what Wilson actually teaches and disregards the fundamental invention claimed in the '071 patent. I must conclude that' Weslo's contentions with respect to Wilson go far beyond what Wilson fairly suggests, and that the structure disclosed in the Wilson patent in no way renders obvious, either alone or in combination with other references, the claims of the '071 patent. (FF 206).

224

c. Smith in Combination with Grosser

In his analysis of the prior art, Dr. Kaufman has suggested that it would be obvious to combine the rowing machine disclosed in U.S. Letters Patent Des. 268,278 to Smith (Rx 26) with the bench of U.S. Letters Patent 4,275,882 to Grosser (Rx 17). (See Rx 327, Kaufman WS, at 1 110). Presumably this combination would render a device capable of use in both horizontal and vertical orientations. Although this combination may be feasible, it does not render obvious the teaching of the '071 patent.

The bench of Grosser is an L-Shaped bench, which is supported at one end by legs which extend to the ground, and at the other end on a hook attached to the vertical frame. (FF 262). The vertical frame extends to the ground, but is shown in the Grosser patent to be wall mounted for support. (FF 245). The Grosser bench does not make the Grosser device freestanding in the upright position, but rather is itself supported by the frame, which is in turn attached to the wall. Thus, this proposed combination would still not provide a second user support attached to the frame in such a manner to support the device in an upright position. If the two devices were to be combined, the Smith device would have to be hung on the wall and the bench could then be supported on the wall mounted device, just as in Grosser. Accordingly, this combination would not render obvious the '071 device. (FF 262-64).

d. Beacon 3001

The Beacon 3001 device was considered by the examiner during prosecution of the '071 patent application in the protest filed by Beacon's attorney, Mr.

Amer. (FF 74-76, 87-89). It has also: been considered in connection with Weslo's claims of anticipation. (FF 171-84). On this record, the Beacon 3001 rowing exerciser appears in its physical embodiment (RPX 8), as well as in the Sears Fall/Winter 1980 catalog (CX 38). In addition, U.K. Design Registration No. 982,354 to Welgemoed (RX 233) is similar to the Beacon 3001. (FF 234).

As noted above, the Beacon 3001 is not configured so that it is capable of being stably supported when the rowing frame is in the upright position.

(FF 131, 173-84). I have already found that the Beacon 3001 does not anticipate the claims of the '071 patent. During prosecution of the '071 patent application, the examiner considered the Beacon 3001 device as it was disclosed in the Sears Fall/Winter 1980 catalogue. (FF 87-89). In this disclosure, the Beacon 3001 is shown being used in a horizontal position, in one picture as a rowing exerciser, and in another, as a push-pull exerciser, with the user's back supported by the foot rest. (FF 75, 87). The examiner concluded that the Beacon 3001 did not "disclose the existence of supports to enable the device to be used in a vertical position as required by the claims in the application." (FF 89). This conclusion by the examiner was confirmed during the hearing in this investigation. (FF 173-84).

The Beacon 3001 is clearly a device that was designed to be used in the horizontal position. Although it allows multiple exercises, these are all performed when the rowing frame is in a horizontal position. (FF 173-74, 178, 266). The foot rest of the Beacon 3001 is affixed at the end of the rowing frame, and I have found that it is not "generally perpendicular" to the frame, within the meaning of the claims of the '071 patent. (FF 183). Due to the fact that the foot rest, to operate as a foot rest, must be set at an obtuse angle with respect to the rowing frame, when the Beacon 3001 is upended into a

vertical position, the obtuse angle of the foot rest prevents the device from being stably supported in the upright position. The changes to the structure that would have to be made to enable the Beacon 3001 to be stably supported in the upright position are, in part, those changes that were actually incorporated in the Beacon 3002, which will be considered separately. (FF 179).

I find that the Beacon 3001 was designed to be a device usable only in a horizontal position, and in fact is usable only in a horizontal position. (FF 181, 182, 265, 266). There do not appear to be any other prior art references combinable with the Beacon 3001 that would either suggest the desirability of reorienting the Beacon 3001 rowing frame in a vertical position, or suggest the structural changes that would make the device operable in a vertical position. ACS Hospital Systems, Inc. v. Montefiore Hospital, 221 U.S.P.Q. at 933; In re Gordon, 221 U.S.P.Q. at 1127. Accordingly, I find that the Beacon 3001 does not render obvious the claims of the '071 patent.

e. Beacon 3002

The Beacon 3002 appears on this record in its physical embodiment (RPX 9) as well as in the Montgomery Ward Fall/Winter 1981 catalog. (RX 269). In addition, U.S. Letters Patent Des. 256,707 to MacLaren-Taylor (RX 25) is similar to the Beacon 3002. (FF 234). In allowing the claims of the '071 patent, the examiner did not consider the Beacon 3002. This device was not included in the protest filed in the '071 prosecution, and applicants were not aware of the existence of this device. Nevertheless, the structure of the Beacon 3002 is decidedly more pertinent than the Beacon 3001 that was

considered by the examiner. This device is also more pertinent than any other prior art reference relied on by Weslo.

The Beacon 3002 was presented in the Montgomery Ward Fall/Winter 1981 catalog as a versatile hydraulic rower, in which the foot rest could also be used as a back rest to change from rowing to resistance exercise. The catalog shows the Beacon 3002 only in a horizontal orientation. (FF 134, 277). Nevertheless, there has been testimony from the Montgomery Ward buyer that Mr. Leonard Weiss from Beacon Enterprises demonstrated the 3002 in an upright position as early as 1980. (FF 135-37).

Unlike the focus of analysis of anticipation, it is necessary to a determination on the issue of obviousness to consider the differences between the prior art and the claimed invention. Although the Beacon 3002 has been shown to be capable of use in an upright position, its structure is not identical to the structure disclosed in the claims of the '071 patent. Most significantly, the foot rest of the Beacon 3002 is set at an angle relative to the rowing frame, and I have found that this foot rest, which becomes an auxiliary support means together with the legs affixed at the end of the frame when the frame is in an upright position, is not "generally perpendicular" to the upright frame within the meaning of the claims of the '071 patent. (FF 145, 150). Thus, I have found, for purposes of anticipation, that the foot rest/back rest in combination with the legs becomes the functional equivalent of the auxiliary support means of the '071 device. (FF 151, 153, 154).

The test of obviousness in this regard is less stringent than that of anticipation, in that the focus of analysis is not on whether the structure claimed is identically disclosed in the prior art, but rather whether the

structure claimed is suggested by the prior art. 35 U.S.C. S 103. In this instance, and in view of my finding of anticipation, I must conclude that the Beacon 3002 device does render obvious the claims of the '071 patent.

There is no doubt that the Beacon 3002 was designed as a rowing machine and a resistance exerciser to be used in a horizontal position. (FF 154, 175, 179). The primary difference between the Beacon 3001 and 3002 is the addition of legs to the rowing frame of the 3002 which enable this device to be inclined for performing rowing exercises. (FF 133). The legs on the front end of the 3002 incidentally enable the device to be upended with the rowing frame in a substantially vertical position. (FF 133, 175, 179). It has also been shown that an additional range of exercises can be performed, with the user positioned on the foot rest/back rest and grasping the rowing arms when the frame is upright. (FF 135, 136, 154-58). In this configuration, the end of the foot rest and the end of the legs become the ground-engaging auxiliary support means for supporting the apparatus with the frame in an upright position, and the foot rest becomes the second user support. (FF 154, 267, 268).

The record indicates that although the Beacon 3002 was designed as a horizontal rower, at least Mr. Leonard Weiss appreciated its ability to be upended to perform additional exercises, and he demonstrated the 3002 in this orientation in 1980. (FF 135, 136). Although the structure of the Beacon 3002 is not identical to the structure disclosed in the '071 claims, chiefly in the lack of a perpendicular relationship between the rowing frame and the foot rest/back rest/second user support, the Beacon 3002, unlike any other item of prior art on this record, has the necessary structural elements to allow it to be reoriented from a horizontal to upright position, and to

operate on the same principle as that disclosed in the '071 patent. (FF 268). Thus, where the prior art teaches reorientation of a horizontal frame to the vertical by mounting on a wall or door, the Beacon 3002 accomplishes reorientation and free standing support by means of the foot rest and legs, in a functionally identical manner to that shown in the '071 patent. (FF 154, 236-37, 240-41). Also unlike other items of prior art, the Beacon 3002 allows the user to be positioned on the second user support and to grasp and move the pivoted levers to perform an additional range of exercises in a similar manner to that taught in the '071 patent. (FF 154-58).

There are unquestionably certain modifications to the 3002 device which could be made to make it more suitable for use in an upright position, such as by providing a longer bench and making the foot rest/second user support perpendicular to the rowing frame when the device is in an upright position. These are admittedly simple design changes to make. (FF 179). The prior art certainly discloses the desirability of a perpendicular relationship between an exercise frame and bench. (FF 243-46). Therefore, I find that the Beacon 3002 is the closest prior art to the teachings of the '071 patent, and that the differences between the 3002 device and the '071 device are so slight that it would have been well within the abilities of a person of ordinary skill in the art to recognize and make the desirable changes to the 3002 device. (FF 269).

4. Secondary Considerations

The ultimate conclusion as to whether the structure of the Beacon 3002 or of any other prior art reference renders obvious the claims of the '071 patent can only be made after an evaluation of secondary considerations, or the

"objective evidence" of nonobviousness. When there is evidence of so-called "secondary considerations," it must always be considered "en route" to a determination of obviousness. Stratoflex, Inc. v. Aeroquip Corp., 218 U.S.P.Q. at 879. See also Fromson v. Advance Offset Plate, Inc., 225 U.S.P.Q. 26, 32 (Fed. Cir. 1985). Consideration of such evidence "can often serve as insurance against the insidious attraction of the siren hindsight when confronted with a difficult task of evaluating the prior art." W.L. Gore & Associates, Inc., v. Garlock, Inc., 220 U.S.P.Q. at 313. Accord Union Carbide Corp. v. American Can Corp., 220 U.S.P.Q. 584, 591 (Fed. Cir. 1984).

However, there also must be shown a nexus between the merits of the claimed invention and the evidence of secondary considerations in order for this kind of evidence to be given significant weight in an obviousness determination. Stratoflex, Inc. v. Aeroquip Corp., 218 U.S.P.Q. at 879. Thus, these considerations are "secondary not because they are secondary in importance [but] ... because they are relevant through a process of inference to the ultimate technical issue of nonobviousness" Cable Electric Products, Inc. v. Genmark, Inc., 226 U.S.P.Q. at 887, quoting Address by D. Chisum, AIPLA Annual Meeting (October 26, 1984), reprinted in 1984 AIPLA Bull. 618, 620.

In the present investigation, the commercial success and immediate market acceptance of DP's BODYTONE line of convertible rowing exercisers, as well as the success of its imitators, has been unquestionable and phenomenal. (FF 270-75). The success of the original H-4 device, as well as the rapid acceptance of the DP BODYTONE has been attributed to the perception in the market place that it embodied a unique concept. (FF 60, 66, 270). This perceived uniqueness and consequent immediate acceptance and success is in

contrast to the disappointing performance of a device like the Spectrum 2000, which is the embodiment of the Grosser patent. (FF 278).

The invention claimed in the '071 patent marked a significant departure from the teachings of the prior art by providing a multi-purpose exercise and rowing apparatus which is not only simple and compact, but more importantly is stably ground supported when the frame is in either the horizontal or vertical position. For exercise devices having a vertical frame, or a frame convertible from horizontal to vertical, the prior art taught that the frame was wall or door mounted in the vertical position. (FF 236-37, 240-41, 243-45). Mr. Kostanecki testified that the Spectrum 2000 which was fairly typical of this prior art teaching was not well received because potential buyers did not want to mount the device on a wall. (FF 278). Thus, it appears to be a reasonable inference that the convertible and free standing characteristics of the BODYTONE device, which represent the essence of the '071 invention, have been a significant factor in the commercial success of the BODYTONE devices and of its competitors.

In view of the immediate commercial success of the DP BODYTONE, the contrasting very unimpressive performance of the Beacon 3002 must be considered something of an anomaly. (FF 276-77). Certainly Leonard Weiss claimed to be quite enthusiastic about the use of the 3002 device in an upright position and so demonstrated it to his customers in 1980. (FF 135-36). Mr. Kucera, the buyer for Montgomery Ward apparently was not impressed with this feature of the 3002, and it was never publicly displayed in an upright position. (FF 134, 135, 277). It is apparent that although Mr. Weiss recognized the versatility and utility of his Beacon 3002 device, he misjudged its commercial possibilities and, therefore, did not make the

modifications that would have made it a more attractive commercial offering. (FF 179, 277). For this reason, the very modest sales and short commercial life of the Beacon 3002 does not overcome the other indications of obviousness on this record. It appears from the record that the Beacon 3002 was only marketed as a horizontal rowing machine, thus its ability to be used in other orientations was neither promoted nor widely appreciated. Therefore, the contrast in its performance to that of the BODYTONE device cannot be dispositive of the obviousness issue.

The considerable commercial success of the BODYTONE device, as well as the extensive presence of imitators in the market is impressive evidence confirming my conclusion that the device claimed in the '071 patent is not rendered obvious by the vast quantity of prior art on this record. **However,** my different conclusion as to the Beacon 3002 is not shaken by the evidence of BODYTONE's commercial success. Clearly, commercial success by itself cannot establish nonobviousness. Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick, 221 U.S.P.Q. at 487-88. See also Leinoff v. Louis Milona & Sons, Inc., 220 U.S.P.Q. at 849. Rather, this evidence must be evaluated as indicia of nonobviousness. Where primary evidence suggests obviousness, commercial success alone, or combined with other secondary evidence is insufficient to establish patentability." Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 222 U.S.P.Q. 688, 696 (E.D. Mich. 1984), citing Sakraida v. Ag Pro Inc., 425 U.S. 273, 283 (1976). With respect to the Beacon 3002, the secondary considerations relating to the BODYTONE device cannot overcome the significant primary evidence of obviousness.

5. Conclusion as to Obviousness

Upon consideration of the evidence of record, and for the reasons stated herein, I find that the Beacon 3002, and it only, renders obvious the claims of the '071 patent. (FF 279).

D. 35 U.S.C. S 112

Both complainant and respondent agree that claims are to be read and understood by one of ordinary skill in light of the specification and that the terms used in the claims are directed to one of ordinary skill in the art.

(CB, at 22 -- complainant cites to Eibel Processing CO. v. Minnesota & Ontario Paper Co., 261 U.S. 45 (1922); RB, at 12, in accord). They differ, however, on the issue as to whether the claims in the '071 patent can be so read, and as to the efficacy of Mr. Kostanecki's testimony in this regard. (CB, at 21-26; RB, at 16-18).

Although Mr. Kostanecki himself is somewhat overqualified to be considered one of "ordinary" skill in the art here involved (FF 100-12), his long association with the field of exercise equipment design and manufacture put him in a position to be quite knowledgeable as to the skills, understanding, and language usage of one who is of ordinary skill in the relevant art.

(FF 100-12, 121). His qualifications contrast greatly with the lack of familiarity with the exercise equipment field exhibited by respondents experts, Dr. Kaufman and Mr. Mattern. (FF 121, Kaufman, Tr. 1675-77; Mattern, Tr. 1842-46). I do find Mr. Kostanecki's testimony regarding the clarity and meaning of the language of the claims to merit some weight, therefore,

especially in view of the other evidence of record, including the specification and figures of the '071 patent and the file wrapper history thereof.

For the most part I find respondent's allegations of vagueness and indefiniteness to be overly-technical and frivolous; an attempt to go beyond the plain, every-day meaning of certain words and phrases. (FF 121, 280-94). It is a basic tenet of patent law that terms in claims are deemed to be used in their common meaning, unless the contrary clearly appears from the definition of terms set out in the specification. In re Tamarin, 88 U.S.P.Q. 490, 492 (C.C.P.A. 1951); Eastern Electric v. Seeburg Corp., 164 U.S.P.Q. 293, 298 (S.D.N.Y. 1969).

To the extent respondent's arguments require going beyond the plain meaning of the words of the claims, I have found that the terminology in question is either clear from a study of the specification and drawings and/or that such terms would be readily understood by one of ordinary skill in the relevant art. (FF 280-94).

For example, the terms "generally horizontal" and generally perpendicular," which are the principal targets of respondent's criticisms (RB, at 16-18; RF B227-B231, B236-B244), are not vague and indefinite when viewed in the light of the specification and drawings of the patent and the knowledge and skill of a person of ordinary skill in the art. (FF 151-53, 282, 285, 290).

Mr. Kostanecki has pointed out that one who works in the exercise equipment field would recognize that this device starts out as a rower. Therefore, the "generally horizontal" frame would be recognized as requiring

that the device be essentially horizontal, with no more of an angle than would be consistent with its use in that mode. (FF 282, 285). Indeed Fig. 6i of the patent reveals the '071 device with a slight inclination of a "couple of degrees." (Kostanecki, Tr. 725; CX 1).

Similarly, Mr. Kostanecki testified that "generally perpendicular" can be defined on the basis that a "general perpendicularity" is the orientation that will "make the most sense" with relation to the exercises for which the device is to be used. (Kostanecki, Tr. 822-23: CX 275, Kostanecki WS, at 7, 8; see also, FF 151-53). He notes further that the term "generally perpendicular" was used in his opinion, to avoid absolute perpendicularity, "which would be an impossible requirement." (CX 275, Kostanecki WS, at 10). Dr. Kaufman admits, in connection with his description of Weslo's BODY SHOP 360, that it is difficult, if not impossible, to obtain absolute perpendicularity in such a device. He testified:

There is some manufacturing tolerances and clearances, but the orientation is determined generally by the fact that there is a post sticking up at right angles out of the frame...

The relationship isn't, I suppose, intended to be a 90° relationship. The front surface of the bench, of course, is a padded cushion. But you could say that the major dimensions would define some sort of a balance which is at 90°, yes.

(Tr. 1719-20; FF 151). (Emphasis added).

Moreover, Mr. Thomas Rossa, lead counsel for Weslo in, this investigation, described the relationship between the post and frame on the BODY, SHOP 360, as "generally perpendicular," in an affidavit he filed in the U.S. District Court for the District of Utah, Northern Division, in related litigation. (FF 151).

A comparison of the BODY SHOP 36g with Figs. 3, 6a-6d of the '071 patent and DP's BODYTONE 300 unit reveals that all of these devices are identical

236

with respect to the alignment between the bench and the frame. (FF 152; CPX 5; CPX 2; CX 1). Thus, it is quite myopic of Weslo and its expert to recognize and understand a "generally perpendicular" relationship in the Weslo device, but not in the patent device.

Furthermore, the use of such modifiers as "generally" and "substantially" is quite common in patent law and such modifiers are commonly found not to render the claim indefinite and vague. See, e.g., Eibel Process Co. v. Minnesota & Ontario Paper Co., 261 U.S. 45 (1922); (See also Mattern, Tr. 1852-53).

Finally, it is quite clear from the physical evidence of record, as well as the testimony of Mr. Kostanecki, that persons engaged in this art have had no trouble duplicating the '071 device, with regard to the "generally horizontal" and "generally perpendicular" elements thereof. (CPX 2-7, 9, 11, 12; RPX 1, 24-25).

E. Allegations of Failure To Claim Invention and Defective Oath

Both of these alleged defects of the '071 patent are dependent upon Weslo's contention that the pin or bolt, which may be used to lock the post to the socket in the bench attachment of the DP BODYTONE 300, is in fact the "firm attachment" and "coupling" means referred to in claims 1 and 16 of the '071 patent. (FF 295-96). I have found that there is simply no factual basis for such arguments. (FF 85, 224-27).

IV. ENFORCEABILITY OF THE '071 PATENT

A. Alleged Inequitable Conduct Before The PTO

Weslo and the Commission investigative attorney assert that the '071 patent is unenforceable by virtue of the patent applicant's inequitable conduct in the prosecution of the '071 patent application. (RB at 22-27, RF B303-B392; SB at 25-36, SF B119-B160). It is the position of the Commission investigative staff that inequitable conduct occurred in the failure to cite the Charters patent to the examiner, and in claimed misrepresentations of the disclosures of the Sears 1980 catalog (the Beacon 3001) and the Grosser patent. Weslo principally focuses on the failure to cite Charters and alleged misrepresentation of the Beacon 3001 in support of its contention of inequitable conduct, but also relies on the alleged failure of Mr. Cantor to cite numerous other prior art references to the examiner. Thus, Weslo claims that the patent applicants engaged in an entire inequitable course of conduct in their dealings with the PTO. (FF 298).

The standard of conduct in the prosecution of a patent before the PTO is set forth in Rule 56 of the PTO's Rules of Practice:

(a) A duty of candor and good faith toward the Patent and Trademark Office rests on the inventor, on each attorney or agent who prepares or prosecutes the application and on every other individual who is substantively involved in the preparation or prosecution of the application All such individuals have a duty to disclose to the office information they are aware of which is material to the examination of the application. Such information is material where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent. . . .

35 C.F.R. S 1.56(a) (1985).

The party asserting a breach of this duty bears a heavy burden of establishing by "clear, unequivocal and convincing evidence" the existence of "an intentional misrepresentation or withholding of a material fact from the PTO." Orthopedic Equipment Co. v. All Orthopedic Appliances, Inc., 217 U.S.P.Q. 1281, 1286 (Fed. Cir. 1983); Environmental Designs, Ltd. v. Union Oil Co. of California, 218 U.S.P.Q. 865, 870 (Fed. Cir. 1983).

As a starting point for considering inequitable conduct, there must be "evidence of a threshold degree of materiality of the nondisclosed or false information." This threshold can be met by any of the following four tests:

(1) objective "but for"; (2) subjective "but for"; (3) "but it may have been", and (4) PTO Rule 1.56(a), i.e., whether there is a substantial likelihood that a reasonable examiner would have considered the omitted reference or false information important in deciding whether to allow the application to issue as a patent.

J.P. Stevens & Co., Inc. v. Lex Tex Ltd., Inc., 223 U.S.P.Q. 1089, 1092 (Fed. Cir. 1984). The most stringent, "but for" test of materiality has been defined as follows:

If it can be determined that the claims would not have been allowed but for the misrepresentation, then the facts were material regardless of their effect on the objective question of patentability. (Citations omitted; emphasis in original].

Norton v. Curtiss, 167 U.S.P.Q. 532, 545 (C.C.P.A. 1970). However, the appropriate starting point for consideration of materiality is the PTO standard, "for it appears to be the broadest, thus encompassing the others, and because that materiality boundary most closely aligns with how one ought to conduct business with the PTO." American Hoist & Derrick Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. 763, 773 (Fed. Cir. 1984).

Although the PTO standard of materiality is the broadest, it cannot be said that every piece of marginally relevant nondisclosed prior art will meet the threshold. Thus, an item of prior art that would be merely cumulative does not meet the threshold of materiality. Litton Industrial Products, Inc. v. Solid State Systems, Corp., 225 U.S.P.Q. 34, 40 (Fed. Cir. 1985). See also J.P. Stevens & Co. v. Lex Tex Ltd., 223 U.S.P.Q. at 1092. Therefore, "it is not enough that the information be simply 'relevant' in some general sense to the subject matter of the claimed invention" Digital Equipment Corp. v. Diamond, 210 U.S.P.Q. 521, 538 (1st Cir. 1981). Rather, the focus of materiality is on "information that might prevent claims from being allowed."

[T]he pertinent inquiry is not whether a reasonable examiner would want to be aware of a particular thing, but whether, after he was aware of it, he would "consider it important" in deciding whether to reject one or more claims.

American Hoist & Derrick Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. at 773 n.2. In the context of measuring the materiality of nondisclosed references, it is clear that "an applicant for patent is under no obligation to disclose 'all pertinent prior art or other pertinent information' of which he is aware." Id. at 772, quoting Digital Equipment Corp. v. Diamond, 210 U.S.P.Q. at 538; Kimberly-Clark Corp. v. Johnson & Johnson, 223 U.S.P.Q. 603, 614 (Fed. Cir. 1984).

In the present case, Weslo contends that applicants breached their duty of disclosure by failing to cite a significant volume of prior art to the examiner. Many of these items of prior art are those which were cited to the examiner after allowance of the claims. Based on the applicants' representation that these references were no more pertinent than those already

considered, the PTO denied the applicants' petition to consider these references. (FF 95-98). As to the many prior art references cited by Weslo as being pertinent to the claims of the '071 patent, including those listed in the applicants' late citation, I have already found that these references have not been shown to be more pertinent than those actually considered by the examiner. (See FF 234, 235, 256).³¹ --/ Furthermore, I find that the references relied on by Weslo are generally relevant to the subject matter of the '071 invention only in the sense that they relate to physical exercise equipment, or multi-purpose exercising apparatus. It has not been shown that any of these references contains a disclosure that would have been important to the examiner "in deciding whether to reject one or more claims." American Hoist & Derrick Co. v. Sowa & Sons, 220 U.S.P.Q. at 773 n.2. Thus, these references are merely cumulative and do not reach the minimum threshold of materiality. (FF 302-304). J.P. Stevens & Co. v. Lex Tex Ltd., 223 U.S.P.Q. at 1092.

Primary emphasis by both Weslo and Staff has been placed on the nondisclosure of the Charters patent to the examiner. Weslo's and the Commission investigative attorney's contentions that this was a material reference that should have been disclosed are necessarily related to the allegation that Charters both anticipates and renders obvious the claims of the '071 patent. It is further alleged that Mr. Cantor knew of the existence

31/ Weslo and staff also appear to suggest that Mr. Cantor erred in not disclosing to the examiner the patent to Ostensjo. (RF B321-B326; SF B141-B146). The established facts show that this patent was cited by Mr. Cantor in a co-pending application before the same examiner, that the counterpart Kverneland patent was actually considered by the examiner in the prosecution of the '071 application, and that this reference is certainly not more pertinent to the '071 claims than Selnes, which was disclosed by Mr. Cantor and considered by the examiner. (FF 308-12). The position of Weslo and staff is simply untenable.

of the Charters patent and should have known of its materiality. That Mr. Cantor was fully aware of Charters and did not cite it to the examiner during prosecution of the '071 patent application is not in dispute. (FF 302-04). The question, therefore, is one of the materiality of the Charters reference and the claimed culpability of Mr. Cantor in failing to disclose it.

[Q]uestions of "materiality" and "culpability" are often interrelated and intertwined, so that a lesser showing of the materiality of withheld information may suffice when an intentional scheme to defraud is established, whereas a greater showing of the materiality of withheld information would necessarily create an inference that its nondisclosure was "wrongful"

Digital Equipment Corp. v. Diamond, 210 U.S.P.Q. at 538. Accord American Hoist & Derrick Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. at 773.

The Commission investigative attorney takes the position that Charters is material because it discloses a standard in perpendicular relationship to the rowing frame, and is of a structure that would allow it to be upended onto the standard to perform additional exercises. Furthermore, the staff asserts that Charters contains more elements, and thus is more pertinent to the subject claims than Yurdin, over which the examiner initially rejected the original claims. (FF 72, 82, 313). In view of the examiner's rejection over Yurdin, the staff claims, Mr. Cantor should have been aware of the materiality of Charters.

The argument advanced by the staff disregards a crucial aspect of the Yurdin disclosure, which is its teaching of reorientation from a horizontal to a vertical position. (FF 249). This is a central aspect of the claimed invention, and one that is not remotely suggested by Charters. By contrast,

each of the elements contained in the Charters device is present in the prior art considered by the examiner, including the teaching of a socket attachment in perpendicular relationship to a horizontal frame, in Rogers. (FF 70, 71, 73, 236, 237, 242, 246). Charters discloses a rowing machine designed for children in which a seat which may be repositioned on the frame is not slidable in use, and in which there is no suggestion that the device can be reoriented with the frame in an upright position, or serve any useful purpose if so reoriented. (FF 258, 259).

Weslo's contentions concerning the Charters disclosure have been heavily and impermissibly reliant on hindsight application of the teachings of the '071 patent. This advocacy has obscured and distorted the true nature of Charters as a prior art reference, and has infused Charters with an artificial degree of materiality for purposes of considering the issue of inequitable conduct. Without the benefit of hindsight, one would not be instructed by the Charters patent to put a cushion or bench on the standard and annular ring, or to re-design the configuration of the frame and oars to allow an additional range of exercises to be performed while supported on such a cushion or bench and grasping the handles of the oars. (FF 306). Even the suggestion that Charters would have been "important" to the examiner in the sense that it was a key disclosure, inflates Charters to a stature that the four corners of the patent do not fairly suggest. Thus, I conclude that Charters was not a more pertinent reference than those actually considered by the examiner.

In establishing the standard of conduct required of Mr. Cantor in prosecuting the subject application, I must "determine not only that the undisclosed art or information was material, but that the one charged with nondisclosure knew or should have known of its materiality at the time."

Kansas Jack, Inc. v. Kuhn, 219 U.S.P.Q. 857, 862 (Fed. Cir. 1983) (Emphasis added). In addition, a patent applicant is entitled "to exercise good faith judgment in deciding what matters are and are not of sufficient relevance and materiality to require disclosure." Xerox Corp. v. Dennison Mfg. Co., 168 U.S.P.Q. 700, 705 (S.D.N.Y. 1971). Accord Digital Equipment Corp. v. Diamond, 210 U.S.P.Q. 521.

As I have found that the Charters device falls far short of anticipating or rendering obvious the claims of the '071 patent, this reference cannot be said to bear a high degree of materiality to the '071 claims. (FF 185-97, 258, 259). In balancing the thresholds of materiality and intent, I find Charters to be a reference of a low degree of materiality, and thus find that Mr. Cantor's exercise of good faith judgment in deciding not to disclose it was neither willfully deceptive nor grossly negligent. J.P. Stevens & Co. v. Tex. Tex Ltd., 223 U.S.P.Q. at 1092; American Hoist & Derrick Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. at 773. Thus, the nondisclosure of Charters in the prosecution of the '071 patent application was not a breach of Mr. Cantor's duty of disclosure. (FF 306).

It is further alleged that inequitable conduct occurred in the statements made by Mr. Cantor concerning the Beacon 3001 and Grosser. I have already found that the Beacon 3001 is not stable, either on its own or in use, with the frame in an upright position. (FF 181-84). Thus, the statements made by Mr. Cantor concerning the protest filed by Mr. Amer during prosecution do not constitute a material misrepresentation. (FF 87, 319-21). The file history further reflects that the examiner reached his own independent judgment concerning the device shown in the Sears catalog. (FF 322). It has not been shown on this record that the conclusion reached by the examiner was

incorrect. Weslo has not cited any supporting authority for the proposition that Mr. Cantor was obligated to find out more about the Beacon 3001 than was disclosed in the protest document. Clearly, the burden of establishing the full capabilities of the Beacon 3001 lay with the protester. (FF 74, 75, 89). That this burden was not effectively discharged by Mr. Amer cannot become a source of blame attributable to Mr. Cantor.

Finally, the Commission investigation attorney faults Mr. Cantor's description of the Grosser patent by virtue of his failure to indicate that this patent stated that the claimed device could be made free standing. (FF 245, 315). Mr. Cantor's statement that Grosser disclosed a wall mounted device is not totally inaccurate, and his failure to call attention to the statement in the specification that it can be adapted to be free standing was evidently inadvertent on his part. (FF 315). Whether or not Grosser could be made free standing,, it would not render obvious the '071 claims. (FF 245, 262). How Grosser could be made free standing is not revealed in the patent, and Mr. Kostanecki has indicated that this was never done commercially because the support would have been too bulky. (FF 245, 317). Thus, even if the examiner had wanted to know that Grosser stated that it could be made free standing, which he could easily have read for himself, such knowledge would not form a basis for rejecting the claims. Further, not only was the Grosser patent made available to the examiner for his independent review, but Examiner Johnson, who examined the '071 application was also the primary examiner on the Grosser patent. (FF 316). Thus, there appears to be little reason to believe that the examiner was misled by Mr. Cantor's statement. In view of the low threshold of materiality of Mr. Cantor's alleged error, and the absence of willful intent, I must find that this omission does not rise to the level of inequitable conduct. See J.P. Stevens & Co. v. Lex Tex Ltd., 223

Upon careful consideration of the allegations raised in connection with the issue of inequitable conduct, and review of the evidence relevant to this issue, I find that Weslo's efforts to impute a **pattern of misconduct on complainant's counsel are premised on an unwarranted interpretation of the prior art and an unsupported attempt to cast the patent applicants' actions in an unfavorable light. After considering each of the claimed instances of inequitable conduct, individually and collectively, I conclude that' Weslo has fallen far short of demonstrating the requisite levels of materiality and intent to warrant a finding of inequitable conduct. (FF 298-323a).**

B. Alleged Patent Misuse

1. Weslo's Eleventh Affirmative Defense -- The Advisory Letters

In its eleventh affirmative defense, Weslo alleges that the '071 patent is unenforceable because prior to its issuance complainant DP conducted a letter writing program designed to force competitors and retailers to stop manufacturing, importing and selling competing devices. (RB, at 27-28). The evidence demonstrates, however, that such letters were sent in good faith and that any threat of legal action was couched by the information that such would occur only upon issuance of a patent by the PTO. (FF 324-33). DP's letter writing in this regard was a legitimate effort aimed at preserving its rights once the patent issued. (FF 324-30).

As noted in Grayhill, Inc. v. AMF, Inc., 203 U.S.P.Q. 745, 773 (D.N.J.

1977):

A patent owner has the right to notify persons suspected of infringement of the existence of his claim. A good faith belief that a patent is being infringed followed by filing a lawsuit in good faith is a defense to a charge of unfair competition.

Such notices are not to be condemned, where made truthfully and in good faith, for they might result in the avoidance of litigation. Such warnings are necessarily threats, but they are not per se improper. Callmann, Unfair Competition, Trademarks and Monopolies, S 11.11 (4th Ed. 1985). However, the letter writer must be prepared to file suit and the letter must be truthful in all respects. Where the patent is pending, as in the present case, "the notice must not convey the impression that the patent has already been granted." Id. S 11.11, at 36-37.

Complainant has complied with such strictures in all respects. It was careful to note that suit would follow the issuance of the pending application. (FF 325, 327, 329, 333). It was also obviously prepared at the time to file the threatened action. (See, CX 55, 58-66). Accordingly, DE has not committed patent abuse in this regard. See also Anchor Plastics Co. v. Dynex Industrial Plastics Corp., 178 U.S.P.Q. 264 (D.N.J. 1978); David & David v. Myerson, 156 U.S.P.Q. 369 (E.D.N.Y. 1966).

2. Weslo's Charges of Robinson-Patman Violations

Weslo's twelfth affirmative defense alleged patent misuse and unclean hands in that DP had allegedly violated the Robinson-Patman Act and the antitrust laws of the United States by engaging in price discrimination among its customers. However, respondent has adduced no evidence at the hearing regarding such charges, nor has it briefed its position in this regard. (RB, RRF). Accordingly, there is no basis for finding that DP has engaged in the practices so alleged.

C. Alleged Inequitable Conduct Before The ITC

As an affirmative defense to the enforceability of the '071 patent, Weslo contends that DP engaged in inequitable conduct before the ITC in the submission of allegedly inaccurate materials in support of the complaint which improperly induced the Commission to institute the present investigation. (RB at 29-34; RF B421-B452). This defense is premised on the submission of an incorrectly assembled Weslo BODY SHOP 360, as well as the contents of certain confidential exhibits to the complaint.

The facts of record indicate that DP did submit a BODY SHOP 360 that was incorrectly assembled in one respect, and that this error was corrected as soon as it was discovered, albeit after institution of the investigation. (FF 334). Irrespective of my findings that presence or absence of a pin is not dispositive of infringement, there is not the least indication that DP's inadvertent misassembly was motivated by bad faith or was in any way a deliberate attempt to induce institution of the investigation on false

pretenses. Weslo's other contentions concerning the confidential exhibits to the complaint attempt to insinuate intentional misrepresentations and evil motivations on the part of DP that are simply not supported by the record. (FF 335-41). Although a complainant before the Commission should use best efforts to present information as accurately as possible, it is permissible to base a complaint on information and belief. It is not possible, nor is it required, for a complainant to prove its entire case to the Commission before an investigation begins. That subsequent developments or further discovery may show certain supporting materials to the complaint to have been in error in this case is not sufficient to dispel complainant's good faith in making its initial submissions. (See, e.g., FF 338-40).

Weslo's manner of presenting this affirmative defense may create an inference that the underlying facts which make up Weslo's claim of inequitable conduct are to be measured by the same standard as inequitable conduct before the PTO. Such is not the case. The standard of conduct prescribed for prosecution of patents before the PTO relates to the ex parte relationship between applicant and examiner. In an adversary proceeding before a court or an administrative agency, the submissions of a party are closely scrutinized and subject to full examination by the adversary. Thus, the duty of candor is a very different thing. See Atlas Powder Co. v. Ireco Chemicals, App. Nos. 85-2034 and 85-2207, at 9-10 (Fed. Cir. 1985). Although certain of the information submitted by DP in support of the complaint has been cast in a somewhat different light by subsequent developments and cross-examination by Weslo, the suggestion that DP engaged in a deliberate, or even inadvertent, course of inequitable conduct before the ITC is without foundation on this record. (FF 341). Moreover, had DP had the benefit of full discovery of

We810 and others, prior to submission of its complaint, its corrected submissions concerning injury and lost business would have been no less impressive. (FF 485-589).

V. INFRINGEMENT

.Under 35 U.S.C. S 271(a), "whoever without authority makes, uses or sells any patented invention, within the United States during the term therefor, infringes the patent." "If the accused structure falls within the language of the claims, the patent is infringed." Graver Tank & Mfg. Co. v. Linde Air Products Co., 85 U.S.P.Q. 328, 330 (S. Ct. 1950). The burden of establishing infringement rests with the patentee. Phillips Petroleum Co. v. Richardson Carbon & Gasoline Co., 163 U.S.P.Q. 141, 142 (5th Cir. 1969). The unauthorized importation into the United States of a product which infringes the claims, of a valid patent is an unfair act within the meaning of Section 337. In re Von Clemm, 108 U.S.P.Q. 371 (C.C.P.A. 1955).

I. have found that the structure of respondent Weslo's BODY SHOP 360 and BODY SHOP 100, as well as the convertible rowing-exercisers of respondents M.T.I., Pan's World, Shinn Fu and Ever Young, read upon each and every element of independent claims 1 and 16 of the '071 patent. (FF 342-65, 376-78). Although the Weslo BODY SHOP 360 may contain some improvements over the preferred embodiment set forth in the '071 patent specification (FF 367-75) it still, falls literally within the language of claims 1 and 16 of that patent. (FF 342-65, 375).

Accordingly, if the '071 patent were found to be valid, the above listed devices of the named respondent's would be infringing products.^{32/}

VI. IMPORTATION AND SALE

A. Weslo

Weslo does not dispute that it has imported and sold in the United States BODY SHOP 360 convertible rowing exercisers. (FF 398; Weslo's Post-Trial Brief, at 34). Rowing exercisers manufactured by Weslo International in Taiwan (Weslo Taiwan) are generally imported into the United States through the trading company Pro-X Ltd., located in Bermuda, although the rowing exercisers never physically enter Bermuda. (FF 399-400).

C
C
C
C

(FF 405). Weslo U.S.'s sales of Body Shops in the United States totaled

C
C

units (valued at) from January 1984 to September 1984, and totaled units (valued at) from October 1984 to May 1985.

(FF 403-404). Based on delivery in the United States, Sears' purchases of

32/ I have not been able to make a finding of infringement with regard to the Weslo BODY SHOP 1000, since the record evidence fails to reveal the relationship between the bench and the frame in that device. (FF 366).

Body Shops totaled through October 16, 1984, and totaled from November 1984 to May 1985. (FF 405-06). Agreements for sales of Body Shops to Sears account for units to be delivered through December 1985. (FF 407).

B. Other importers

The evidence of record indicates that convertible rowing exercisers have been imported by firms other than Weslo. M.T.I. Inc. imported 500 convertible rowing machines from Pan's World International in March 1984, and imported an additional 914 units from Pan's World on October 23, 1984. (FF 408-10). Shinn Fu Company of America imported and sold in the United States the "Powerpack Compact Rower and Multigym", although the record contains no information as to the quantities or dates of importations and sales by Shinn Fu. (FF 413).

Sunstar or its associated companies imported and offered for sale in the United States a convertible rowing exerciser displayed and offered for sale at the Sporting Goods Manufacturer's Association (SGMA) Show in New York, New York in September 1984. (FF 414). National Sporting Goods Corp. or its associated companies have imported or offered for sale in the United States convertible rowing exercisers, specifically including the convertible rowing exerciser displayed and offered for sale at the September 1984 SGMA Show. (FF 418). The record contains no information concerning quantities and dates for actual importations and sales by Sunstar or National. However, since

convertible rowers from these companies were offered for sale in the United States in September 1984, it is possible that some sales of these rowers occurred after October 16, 1984.

Seasonal Merchandise or its associated companies offered convertible rowing machines for sale in the United States in the August 1984 issue of the Taiwan International Trade Magazine. (FF 421). However, the record contains no additional information concerning whether convertible rowing machines from Seasonal were in fact imported and sold in the United States.

VII. THE DOMESTIC INDUSTRY

The definition of the domestic industry, although not set forth in the statute, is well established by the legislative history of Section 337 and long-standing Commission practice. In patent based investigations, the domestic industry "generally consists of the domestic operations of the patent owner, his assignees and licensees devoted to . . . exploitation of the patent." H. Rep. No. 93-571, 93d Cong. 1st Sess. 78 (1973); Certain Ultra-Microtome Freezing Attachments, Inv. No. 337-TA-10, 195 U.S.P.Q. 653, 656 (1976) (Freezing Attachments); Schaper, 219 U.S.P.Q. 668 n.9.

Weslo does not contest that DP is in the business of making and selling convertible rowing exercisers, nor that DP is economically and efficiently operated. (Weslo's Post-Trial Brief, at 34). 33/

DP is located in Opelika, Alabama and is a subsidiary of Grand Metropolitan PLC. (FF 423). DP's production activities at Opelika for Bodytone convertible rowing exercisers include the procurement of raw materials, fabrication of round and square steel tubing, process stamping and forming, drilling, welding, finishing, and assembly. DP packages and stores the finished product in its distribution center and ships rowing machines to customers with its own trucking line subsidiary. (FF 424-425). DP formerly manufactured Bodytones in Compton, California, but this production was terminated in June 1985 and the equipment transferred to Opelika. (FF 426). DP procures some raw materials from offshore sources, but this offshore procurement accounts for at most percent of the unit cost of DP's convertible rowing exercisers. (FF 427).

33/ Although Weslo does not contest DP's position as a domestic producer of convertible rowing exercisers, Weslo questions a definition of the U.S. industry that includes only DP. (Weslo's Post-Trial Brief, at 34-35). Weslo contends that there are many non-DP domestically manufactured convertible rowers which may properly be included in the domestic industry if they exploit the claims of the patent at issue (citing Certain Miniature Plug-in Blade Fuses, Inv. No. 337-TA-114, at 33). Respondents are clearly in error, since the Commission has consistently required that the domestic industry in patent cases include the "domestic operations of the patent owner, his assignees and licensees devoted to . . . exploitation of the patent" (emphasis added). The additional non-DP domestically manufactured convertible rowers to which Weslo refers are neither patentees, assignees, nor licensees of the patent at issue. Therefore, they cannot properly be included within the scope of the domestic industry.

Because of higher than anticipated growth in 1983-84, DP relied to a certain degree on subcontractors for some fabrication, painting, plating, and assembly operations in these years (FF 429). Due to the perceived disadvantages of relying on outside subcontractors, DP expanded its facilities by 525,000 square feet in 1984-85. This expansion is now essentially complete. (FF 430-431).

DP also has a facility for assembling Bodytone machines in England. The machines produced in this facility are not exported to the United States, but are intended for the European market and, eventually, countries outside of Europe. (FF 428).

VIII. EFFICIENT AND ECONOMIC OPERATION

Complainant must establish that the domestic industry, as defined, is efficiently and economically operated. Customarily, the Commission has considered the following factors to be indicative of efficient and economic operation: (1) the use of modern equipment and procedures; (2) substantial investment in research and development; (3) effective quality control programs; (4) successful sales campaigns; (5) sustained profitable operations, and (6) incentive benefit programs for employees. In-the-Ear Hearing Aids, T.C. Pub. No. 182, at 20-21 (1966); Certain Pump Top Insulated Containers, Inv. No. 337-TA-59, 209 U.S.P.Q. 251, 254-55 (1981); Certain Automatic Crankpin Grinders, Inv. No. 337-TA-60, 205 U.S.P.Q. 71, 78. (1979); Certain Spring Assemblies and Components Thereof and Methods for Their Manufacture (Spring Assemblies), Inv. No. 337-TA-88, 216 U.S.P.Q. 225, 242 (1981).

Weslo does not contest that DP is efficiently and economically operated (Weslo's Post-Trial Brief, at 34). The application of the above criteria to the DP operations indicates that DP is efficiently and economically operated, as discussed below.

In order to meet increased market demand in 1984 for the DP Bodytone, DP purchased approximately of equipment, which included approximately spent for programmable automated robots for welding, and related equipment. Over was spent to modify existing tools and purchase new tooling; almost was spent for purchasing additional metal presses, tooling and dies; over was spent for weld fixtures, tooling, dies, vinyl processing machines, and equipment for manufacturing units for special customer Orders. (FF 434). The robotic programmable welders were chosen in order to facilitate flexibility in the production process to cope with changes in product design or market demand. (FF 435). DP won the Grand Metropolitan 1984 award for innovation for its Bodytone line of exercise equipment (includes the Bodytone 100, 200 and 300) out of 32 entries. Grand "Metropolitan cited innovation with respect to the product itself, the use of robotic welding equipment, and an innovative advertising program. (FF 436).

DP recently expanded and improved its Opelika plant at a cost of approximately - by adding 525,000 square-feet of additional space adjacent to its pre-existing facility and by adding features such as air conditioning to its pre-existing facility. (FF 437). The recent expansion at DP included the installation of an

C
C
C
(FF 438).

The recent expansion at DP will allow for an expanded research and development facility to be devoted to the design and refinement of new exercise products. (FF 439). The research and development department is comprised of _____ and is organized into product design, engineering, specification and packaging, and reliability groups. Total R&D employees increased _____

C
C
(FF 440).

The reliability engineering group at DP is responsible for the quality assurance program of DP products. (FF 441). For the eight month period ending May 31, 1985, DP's return figures for defective units totaled _____ units. Convertible rowers sold by DP during the same period totaled _____ units, for a reject rate of _____ (FF 444).

DP markets its Bodytone rowers nationwide to the retail mass merchandising market and catalog sales market

C
C
C
(FF 446). DP promotes its Bodytone rowers through a multi-media consumer advertising campaign which includes advertising on national television and in leading magazines. The cost of this advertising program is approximately _____ annually. (FF 445).

In fiscal year 1984 (October 1, 1983 through September 30, 1984), DP's pre-tax profit for its Bodytone products (includes the 300 series only) was _____

of net sales. For DP's overall operations, pre-tax profit in 1984 was of net sales. (FF 447). For the period October 1984 to May 1985, DP's pre-tax profit for its Bodytone products (includes the 250, 300, 310, 450, 500, and 600 series) was

of net sales. For DP's overall operations, pre-tax profit over the same period was of net sales. (FF 448).

DP provides a profit sharing plan to its employees under a qualified IRS plan. Under this plan, profits are allocated to employees based on regular time worked in any given year and the profits are invested in an employee retirement program. In 1984, DP distributed nearly of salary and regular pay for approximately of its employees. (FF 449).

In view of all these facts, there can be no question but that complainant DP is efficiently and economically operated.

IX INJURY

In order to prevail under Section 337, complainant must establish that the effect or tendency of respondents' unfair acts and unfair methods of competition is to destroy or substantially injure the domestic industry. This element requires proof separate and independent from proof of the unfair act. Furthermore, complainant must establish a causal connection between the injury suffered and the unfair acts of respondents. Spring Assemblies, 216 U.S.P.Q. at 243; Certain Limited-Charge Cell Culture Microcarriers (Microcarriers), Inv. No. 337-TA-129, 221 U.S.P.Q. at 1165, 1182 (1983).

A. Market overview

In order to better understand the context in which competition, in this market occurs, this section will provide an overview of the evolution of the exercise equipment and convertible rowing machine markets. In the mid-1970's, exercise equipment began evolving from single function types of equipment to multifunction devices. This evolution started before exercise equipment was being purchased for home use. When consumers became interested in products for home use, exercise machines designed for institutional use were either too expensive or too large for the typical home use consumer. The exercise bicycle became a popular machine for home use, and gradually, the multifunction concept evolved into weight benches, rowing machines and treadmills. (FF 450). Dating back to 1978 with the introduction of action exercise cycles, the trend in the exercise equipment market over the last several years has been towards more multi-use products, and prior to the introduction of the Bodytone 300 in 1983, other multi-purpose home exercise machines were available in the U.S. market. (FF 451-452)

The Bodytone machine's initial acceptance in the marketplace in 1983 was at a faster rate than normal for a new exercise product, and in 1984 convertible rowing exercisers as well as all exercise equipment were selling at an accelerating rate. (FF. 453-456, 470). Forecasts were not totally consistent concerning convertible rowing machine market growth in 1985. DP's domestic unit sales declined in the first half of calendar-year 1985 compared to the first-half 1984, although DP's annual domestic sales in 1985

(FF 471, 491, 510; See 457, 459, 462). DP's export market but total DP sales still declined in the first six months of 1985. (FF 469, 474). Sears expressed of the market for fiscal 1985, and Weslo view. (FF 461, 463-464). Based on a product life cycle for this type of product, convertible rowing machine market forecasts for 1986 are (FF 458-460, 463-464). While future demand for convertible rowing machines can be strengthened by the introduction of additional features, the entry of another type of exercise product in the same price range can weaken this demand. (FF 459).

Although all types of exercise equipment compete for the consumer dollar, competition intensifies within subsets of the exercise equipment market. Hand-held exercise equipment, weight benches, and barbells don't compete as strongly against a convertible rowing machine as an exercise bike. Competition narrows with respect to rowing machines in general, and narrows further with respect to convertible rowing machines. (FF 465-466).

34/ An assessment of DP's growth in sales is heavily influenced by whether one focuses on fiscal or calendar years. For example, a comparison of actual DP total sales in fiscal year 1984 (October 1, 1983 to September 30, 1984) to forecasted total sales in fiscal year 1985 results in (FF 469). Because January-June 1985 sales data are the most recent available, a comparison with January-June 1984 sales is the best measure of DP's current

B. Substantial Injury

The Commission has customarily considered relevant indicators of the extent of injury to include evidence of (1) lost sales, (2) volume of imports, (3) loss of profit, (4) loss of market share, (5) underselling, (6) declining sales, (7) declining employment, (8) excess domestic capacity, (9) inability to raise prices to meet increased production costs, (10) trends in market demand, and (11) the presence of fairly traded imports and domestic substitutes. Certain Vertical Milling Machines and Parts, Attachments, and Accessories Thereto (Milling Machines), Inv. No. 337-TA-133, 223 U.S.P.Q. at 332, 348 (1984); Spring Assemblies, 216 U.S.P.Q. at 242-43; Certain Roller Units, Inv. No. 337-TA-44, 208 U.S.P.Q. at 141, 144 (1979); Reclosable Plastic Bags, Inv. No. 337-TA-22, 192 U.S.P.Q. at 674, 680 (1977); Certain Drill Point Screws for Drywall Construction (Drill Point Screws), Inv. No. 337-TA-116, USITC Publication 1365, March 1983.

DP does not dispute that its Bodytone convertible rower is its most profitable product line. Total domestic sales increased from units in April-December 1983 to units in April-December 1984. (FF 470).^{22/}

35/ DP's first sales of the Bodytone convertible rower were in April 1983. Because of the highly seasonal nature of demand for convertible rowing machines, sales comparisons should be made between corresponding months of different years, rather than between different months of the same year. (FF 468).

In 1983, DP was not able to meet 100% of demand for Bodytone products, and in fiscal years 1983 and 1984 DP worked employees excessive overtime and depended upon outside contractors. (FF 478-80). The ratio of pre-tax profits to net sales for the Bodytone convertible rower

compared to profit margins for overall operations of ' (FF 475-76).

With the exception of

other indicators point to the existence of injury in 1985. Overall domestic sales decreased from units in January-June 1984 to units in January-June 1985, and sales were lower in every individual month in 1985 compared to 1984, with the exception of June 1985. (FF 471). December 1984 was the first month in which domestic sales volume was lower than in the corresponding month of the previous year. (FF 470). DP laid off employees in December 1984 to avoid a buildup in inventory, and laid off employees in March 1985. (FF 483). Based on a capacity of units per month, DP's capacity utilization was in January-June 1985. (FF 469, 481). DP's monthly inventory levels were significantly higher in January-May 1985 than in January-May 1984, although inventory levels in June of 1985 were lower than in the previous year. (FF 484). Therefore, based on the existence of injury in 1985, as indicated by declining sales, declining employment, increasing inventory levels, and excess capacity, I now turn to the issue of causation.

1. Market share analysis

After DP's introduction of its Bodytone line of convertible rowing machines in April 1983, convertible rowing machines from other suppliers began to appear in the market in the fall of 1983, and several of these competitive products were displayed at a national sporting goods show in January 1984.

(FF 485-86). In 1983, therefore, DP held the major portion of the convertible rowing machine market. (FF 485). Although convertible rowing exercisers were available from a variety of sources in 1984, four suppliers are estimated to have accounted for _____ of the market. (FF 487-90).^{2Y} These four suppliers were DP, Allegheny International Exercise Company (Allegheny), Ajay, and Weslo. Of these suppliers, DP, Allegheny, and Ajay sold U.S.-produced convertible rowers, and Weslo sold convertible rowers produced offshore. (FF

36/ Although an exact determination of the market share held by the four largest suppliers cannot be made without data from the remaining suppliers, testimony from both complainant's and respondent's witnesses was consistent concerning the predominance of these four suppliers in the marketplace. Therefore, the estimates of _____ appear reasonable as a basis for market share analysis.

37
398, 423-25, 492-93). --/ In calendar year 1984, DP's market share had declined to . , with Weslo capturing of the market, and Ajay and Allegheny accounting for of the market, respectively. (FF 491).

Because the '071 patent became effective on October 16, 1984, only sales by Weslo after that date can be considered injurious, although sales by Weslo prior to that date are relevant for market share trends and for the issue of tendency to injure. Ideally, the analysis would focus on the market participants' market shares before and after October 16, 1984. However, the data provided by Ajay and Allegheny are for calendar year 1984 and January-July 1985, so that such an analysis for the total market is not possible. (FF 491, ,502, 506). Based on forecasted or contracted for sales levels in calendar year 1985, DP's market share with Weslo's market share and Ajay and Allegheny accounting for of the market, respectively. (FF 510). Mr. Stevenson of Weslo, however, believes that Weslo will (FF 513).

37/ Although there is evidence that convertible rowing machines were imported from companies other than Weslo, there is little evidence concerning the actual quantities and sales of these imports, with the exception of the 914 convertible rowers imported by M.T.I. after October 16, 1984. M.T.I. had 400 convertible rowers in inventory as of April 25, 1985, and the other importers had no convertible rowers in inventory as of April 1, 1985. (FF 410, 414, 416, 420, 595). Because of the lack of evidence concerning imports from sources other than Weslo Taiwan, and because the evidence indicates that importers other than Weslo account for only a small portion of the convertible rowing machine market, the causation analysis will focus on imports from Weslo Taiwan.

The fact that Weslo currently holds a _____ share of the market is not itself sufficient to establish the causal link between imports from Weslo and injury to DP. Microcarriers, 221 U.S.P.Q. at 1165, 1182. Causation must be established, including evidence that import sales were directly at the expense of DP, causing substantial injury. Spring Assemblies, 216 U.S.P.Q. at 243; Milling Machines, 223 U.S.P.Q. at 332; Drill Point Screws, U.S.I.T.O Publication 1365, at 20-22. For example, causation may be absent when complainant operated at full capacity and was unable to satisfy the demand of customers buying imports. Certain Combination Locks, 337-TA-45, 205 U.S.P.Q. at 1124, 1127 (1980). Although the record shows that DP was operating at or near full capacity in fiscal years 1983 and 1984, capacity utilization during January-June 1985 was generally under _____ (FF 469, 478-79, 481). Presumably, therefore, DP had the capacity in 1985 to supply customers purchasing imported convertible rowing machines.

2. Lost Sales/Price Competition

Weslo sells its line of Body Shop convertible rowers at wholesale to retail mass merchandisers, sporting goods stores, department stores and others who in turn sell to the ultimate consumer. Accordingly, Weslo competes directly at the wholesale level with DP for customers of its Body Shop exercisers--this analysis will therefore focus on competition at the wholesale level. (FF 517). Weslo and Weslo International's top _____ customers account for over _____ percent of their sales, and _____ (FF 519-20). Pricing was not the only consideration in the customers' decisions to buy Weslo convertible rowers. However, for the customers--for which DP's lost sales information was provided; Weslo's lower

price and the resulting higher profit margin at retail was an important if not prime consideration. (FF 537-38, 546, 561, 586). Following is a discussion of competition at individual accounts.

C Sears.--Sears is retailer of convertible rowing
C exercisers in the United States, accounting for of the retail
market, according to the Sears' exercise equipment purchasing agent. (FF
C 547). Sears is also the Weslo Body Shops,
C accounting for almost of Body Shop purchases in the United States from
January 1984 to May 1985. (FF 548). Accordingly, the Sears account is
critical with respect to an analysis of lost sales and pricing.

Sears began to purchase the DP Bodytone 300/500 in the fall of 1983, and
C in 1983 DP Bodytones accounted for of Sears' convertible rowing machine
sales. 211/ Sears sold no Weslo Body Shops in 1983. (FF 549-51). Sears'
sales of convertible rowers and DP roughly
of Sears' sales at while the Weslo Body Shop
C accounted for (FF 551). Sears anticipates that the Body Shop 360/1000
C Weslo
C (FF 560). Sears projects that in 1985,
C Weslo will account for about of its sales, and DP will account for
C approximately (FF 555-57).

38/ The Bodytone 500 was introduced to Sears in the fall of 1984, and is the same basic product as the Bodytone 300, except it features an oversized backboard with a red wet-look vinyl fabric. (FF 549-50). The Bodytone 300 or 500 rowers will therefore be referred to collectively as the Bodytone 300/500 in this discussion.

C The Weslo Body Shop is much (FF 561, 569).
C Weslo's price to Sears per
unit for the Weslo BODY SHOP 360. (FF 559). Although the BODY SHOP 360 and
BODYTONE 300/500 are not exactly the „same product, they are competitive and
sell at comparable prices at the retail level. (FF 526, 586). Weslo's price
to Sears' for the BODY SHOP 360 was per unit as of March 1985, and DP
C had agreed to sell the BODYTONE 300/500 to Sears. for for the period
January 1, 1985 to May 31, 1985. (FF 559, 566), Therefore, for comparable
C rowing machine models, Weslo was priced lower than DP by per unit, or
by in early 1985. For the month of June 1985, Sears purchased the
C BODYTONE 300/500 from DP at a lower promotional price of for an
C estimated quantity of units. Sears requested this lower price from DP
in order to combat lower prices in the retail market that Sears could not meet
based on the previously higher DP price. (FF 567). Presently (August 1985),
C Sears purchased the DP Bodytone 300/500 for and the Shapemaster (from
DP) for price to Sears for the Body Shop 360/1000 is
currently (FF 568).

Sears' purchasing philosophy is

C
C
C
C
C
C

(FF 569). Therefore,

(FF 570).

If Weslo were not available as a supplier, Mr. Stroh of Sears testified that he would

(FF 571). Respondents argue that the need to have multiple sources of supply has been recognized by the Commission as a factor weighing against causation, citing Microcarriers and Drill Point Screws. Weslo's Post Trial Brief, at 43). However, in my view a more appropriate standard was outlined in Spring Assemblies. The Commission asserted in Spring Assemblies that alternative suppliers other than respondent had been alleged to have infringed the patent, and if the allegation was true, those suppliers could not be considered legitimate alternative sources of harm. Furthermore, even if the alternative suppliers were not infringers, the injury inflicted by respondent would not be negated. Spring Assemblies, 216 U.S.P.Q. at 243-45.

Although an actual measure of DP's loss at Sears due to Weslo's is difficult to make, a conservative estimate can be made for 1985 by calculating the additional sales DP would make in 1985 if ^{39/} The result is units. At an average selling price of per unit, this results in a loss of revenue of

39/

C 40/ Based on a prime manufacturing cost of the loss
C of profit is therefore 41/ (FF 516, 602).

C Given Sears' position in the convertible rowing machine retail market, its importance as a purchaser of convertible rowing machines from both DP and Weslo, and Weslo's share of Sears' purchases in 1985, the competitive circumstances surrounding this account alone would be sufficient to establish the causal connection between imports from Weslo and injury to DP.

Oshman's.--From April 1, 1983 through March 31, 1984, Oshman's purchased at least BODYTONE 300 rowers from DP at a unit cost to Oshman'S of

(FF 533) During the 12 months following March 31, 1984, Oshman's purchases from DP dropped to units, and Oshman's decided to discontinue its convertible rowing machine purchases from DP. (FF 534, 536). The Weslo Body Shop was first presented to Oshman's in the fall of 1983 at a price of

C Oshman's decided to purchase the Weslo Body Shop in December 1983 or January 1984, and it first purchased the Body Shop in the Spring of 1984. (FF 535-36, 538). Since the spring of 1984, Oshman's has purchased approximately

C Body Shops from Weslo at unit values of for the BODY SHOP 360
C with arms (the butterfly attachment), and for the BODY SHOP 360 without arms. (FF 541). Currently, the cost to Oshman's of the BODY SHOP 360

C
C (FF 542).

C 40/ DP's average selling price to Sears from January to May 1985 for the BODYTONE 500 was (FF 566).

41/ Overhead and most GSA expenses are incurred whether or not the sales are made. Therefore, they should not properly be included in the base cost in calculating the incremental profit of additional sales. Prime costs include material, freight, scrap, direct labor, and royalties. (FF 602).

A leading factor for discontinuing its purchases of convertible rowing machines from DP was Oshman's inability to purchase at a unit cost of less than [redacted] from DP. At this cost, Oshman's was unable to meet prices that other retailers were offering for the BODYTONE 300. (FF 537). An improvement in Oshman's profit margin was the primary reason for purchasing the BODY SHOP 360 instead of the BODYTONE 300, although the availability of the butterfly attachment and the poor sales performance of DP were other factors affecting Oshman's decision. (FF 539).

Oshman's California division reported purchasing [redacted] convertible rowers from DP from March 1983 to January 1984, and reported no subsequent purchases. The average unit value for its January 1984 purchases from DP was [redacted] (FF 544). The California division reported purchasing [redacted] convertible rowers from Weslo from March 1984 to March 1985, with [redacted] units purchased on or after October 16, 1984. The average unit value for its purchases from Weslo was [redacted] in March 1984 and [redacted] in March 1985. (FF 545). Oshman's also purchases the Weslo Body Shop 100 at a cost of [redacted] (FF 543).

Although price was not the only factor in Oshman's decision to replace DP with Weslo as its convertible rower supplier, lower price and higher profit margin was the primary factor. Oshman's purchases of [redacted] Weslo Body Shops occurred since the spring of 1984, so a portion of these sales presumably occurred prior to October 16 and cannot be considered injurious. However, with the strongest purchasing months in the industry occurring in October and

November, it is likely that a not insignificant portion of Oshman's purchases occurred after October 16, 1984. With respect to Oshman's California division, units were purchased from Weslo after October 16, 1984, representing a revenue loss to DP of approximately and a profit loss of approximately 42/

Herman's.--Herman's World of Sporting Goods (Herman's) is one of the largest sporting goods retail chains in the United States. (FF 573). In November 1984, three of DP's sales people, Jim England, Joe Lombardi, and Tom Campbell visited Herman's buyer, Mr. Jack Purs. They were told that Mr. Purs had just been visited by sales representatives from Weslo who had offered the BODY SHOP 360 to Herman's at a price lower than DP's BODYTONE 300 price of (FF 574) Mr. Stevenson of Weslo confirmed that in late 1984, Weslo had offered. Herman's the BODY SHOP 360 for a price of (FF 579). At the November 1984 meeting, Mr. Purs informed the DP personnel that he had enough BODYTONE 300's in inventory to last through January 1985, and would be inclined to purchase the BODY SHOP 360 in lieu of the BODYTONE 300 unless DP

42/ Based on an average sales price of per unit, which is about lower per unit than Oshman California's last purchases from DP in January 1984, but was the unit price for later sales to Oshman's. The profit loss is based on a prime cost of (FF 602).

adjusted the price of the BODYTONE 300. (FF 575-76). However, at no time did the Herman's buyer state that he had made a final decision to discontinue purchasing the BODYTONE 300. (FF 576). DP's sales personnel left the meeting with the Herman's buyer under the impression that the Herman's account was in jeopardy and conveyed this information to their superiors at DP. (FF 577).

Around December 1, 1984, DP's vice president, James Thompson, was informed by Mr. Purs that his decision on whether to discontinue purchases of the BODYTONE 300 in favor of the BODY SHOP 360 would not be made until he met with DP representatives at the NSGA show in January 1985. Mr. Thompson communicated this information to Mr. Calvin James in early December 1984. (FF 578). To retain Herman's business, on January 24, 1985, DP offered Herman's an advertising allowance package of _____ applied to DP's entire product line. On January 24, Herman's placed a new order for _____ BODYTONE 300 rowers-- _____ were shipped almost immediately and the remaining _____ were shipped the following month. (FF 580). At the NSGA show in Dallas, which began on January 31, 1985, Herman's ordered _____ more units, and on February 5, 1985 was granted an advertising allowance package of _____ applied to the entire line of DP products. (FF 581).

Although the advertising allowance was applied to the entire product line, the record supports the view that it was directly tied to retaining DP's sales of convertible rowers at Herman's. It appears more than coincidental that an advertising allowance of _____ was given to Herman's on the same day an order for _____ bodytones was placed at DP, and an advertising allowance of _____ was given to Herman's 5 days after the purchase of _____ Bodytones.

C This represent6 an effective reduction in price of the BODYTONE 300 by
per unit in order to retain the Herman's account, or a reduction in DP revenue
C and profit of 43/

Respondents argue that complainant misrepresented the Herman's account as
a lost sales because Herman's never stopped buying the DP BODYTONE 300 and
Herman's has never purchased the Weslo Body Shop. (Weslo's Post Trial Brief,
at 46). Although the Herman's account is not technically a lost sale, DP did
lose revenue by lowering its price to retain the Herman's account, and
therefore this account legitimately should be considered in the injury
analysis.

Bradlees.--Bradlees began to carry the BODYTONE 300 in the fall of 1983,
and first purchased both the Weslo Body Shop and the Ajay Octagym in August of
1984. (FF 582-584). In fiscal year 1984 (February 1, 1984 to January 31,
C 1985), Bradlees sold DP convertible rowers, Weslo convertible
C rowers, and Ajay convertible rowers. (FF 585). In the period February
C 1, 1985 to JiinA 29, 1985, Bradlees sold DP convertible rowers,
C Weslo convertible rowers, and Ajay convertible rowers. (FF 585). In
approximately April-May 1985, Bradlees dropped the Weslo Body Shop from its
1985 product line, because Bradlees only wanted to carry convertible rowers

43/ In this case, the redUCtiOn in revenue equals the reduction in profit
because the quan,tity of Aales by DP to this account (and therefore unit cost)
did not directly change diie to competition from Weslo.

from two sources, and the DP BODYTONE 300 and the Ajay Octagym were the most compatible cosmetically. (FF 588).

In the fall of 1983, the cost to Bradlees of the DP BODYTONE 300 was (FF 582). The costs to Bradlees of the Weslo Body Shop and the Ajay Octagym in August 1984 were respectively. (FF 583-84). The cost of the DP rower has since risen to and the cost of the Weslo Body Shop had declined since 1984. (FF 161-62). The present cost to Bradlees of the Ajay Octagym is (FF 584). Because the BODYTONE 300 and the BODY SHOP 360 are competitive at the retail level, and because the BODY SHOP 360 is lower priced at the wholesale level, the BODY SHOP 360 was more profitable for Bradlees. (FF 165). However, Bradlees continued to carry the BODYTONE 300 unit because of DP's TV advertising, as well as an advertising allowance of to be given to Bradlees for the 1985 Christmas season. (FF 586).

Lechmere.--Lechmere, of Boston, MA, had been purchasing the BODYTONE 300 from DP for a unit cost of Lechmere presently also purchases Body Shops from Weslo. An internal DP memorandum shows that in January 1985 a buyer from Lechmeres informed a DP employee that Lechmere had been offered a previously quoted prices on the Weslo Body Shop 360. (FF 589).

Based on Weslo's significant market share, its direct competition with and underselling of DP, and evidence that DP lost sales and revenue directly to Weslo, I determine that the required causal nexus has been established between Weslo Body Shop imports and injury to the domestic industry.

C. Tendency to Substantially Injure

When an assessment of the market in the **presence of the accused** imported product demonstrates relevant conditions or **circumstances from which probable** future injury can be inferred, a tendency **to substantially injure the domestic** industry has been shown. Certain Combination Locks, Inv. No. 337-TA-45, RD at 24 (1979). Relevant conditions or circumstances **may include foreign** cost advantage and production capacity, ability of **the imported product** to undersell complainant's product and the ability of **distributors to make** higher profit margins on sales of imports, or substantial **manufacturing** capacity combined with the intention to penetrate the U.S. **market**. Certain Methods for Extruding Plastic Tubing, Inv. No. 337-TA-10, 218 U.S.P.Q. at 328 (1982); Reclosable Plastic Bags, 192 U.S.P.Q. at 674 (1977); Exercising Devices, Inv. No. 337-TA-24; Panty Hose, Tariff Commission Pub. No. 471 (1972). The legislative history of Section 337 indicates that "Where unfair methods and acts have resulted in conceivable loss of sales, a tendency to substantially injure such industry has been established." Trade Reform Act of 1973, Report of the House Comm. on Ways and Means, H. Rep. No. 93-571, 93d Cong., 1st Sess. at 78 (1973), citing In re Von Clemm, 108 U.S.P.Q. at 371 (C.C.P.A. 1955). Other factors affecting a tendency to injure finding include the number of solicitations to potential U.S. buyers of infringing goods, the continuation of solicitations during the hearing, and a strongly suggested intent of the foreign manufacturers to continue sales of the infringing product in the United States. Bally/Midway Mfg. Co. vs. U.S. International Trade Commission, 219 U.S.P.Q., at 97, 102-03 (Fed. Cir. 1983).

In the present case, many of the above elements are present, supporting a finding that there exists a tendency of injury to the domestic industry from

the importation of convertible rowing machines. Import penetration by the largest importer, Weslo, was at approximately in 1984 and is at least an estimated for 1985. (FF 491, 510). Sears, the single largest retailer of exercise equipment in the United States and a major customer of DP, expects Weslo (FF 592).

Weslo convertible rowing machines undersold DP by substantial margins at the wholesale level. (FF 520, 531, 533, 536, 537, 540, 559, 563, 566, 579, 582-83). In 1985, at least two Taiwanese companies advertised convertible rowing machines for sale in the United States at 539.50 and \$46.44 per unit, f.o.b., Taiwan,

(FF 559, 594).

Based on production and logistical constraints, Mr. Stevenson of Weslo projected in March 1985 an annual production capacity of units per year at Weslo Taiwan. Although Mr. Stevenson does not expect that this production level existing production capacity is still a factor supporting a finding of tendency to injure, when combined with Weslo's intent and competitiveness in the U.S. market. (FF 591). Weslo has an established sales organization in the United States, is continuing to solicit customers who presently purchase from DP, and has no plans to discontinue sales of Body Shop convertible rowers in the United States. (FF 603-05). Weslo has a general business goal for the Body Shop convertible rowers to increase sales and market penetration. (FF 606).

With respect to competition from convertible rowing machine suppliers other than Weslo, the record indicates that convertible rowing machines were offered for sale by at least two additional suppliers in 1985, and several Taiwanese firms had sold or offered convertible rowing machines for sale in the United States in 1984. (FF 408, 412, 413, 415, 417, 594-95). Mr. Stevenson of Weslo is certain that there are manufacturing sources other than Weslo Taiwan available to Weslo U.S. for the production of convertible rowers. (FF 590).

Weslo has a decided cost advantage over DP, with U.S. f.o.b. costs of _____ for the BODY SHOP 360 and _____ for the BODY SHOP 100. (FF 596-97, 599). Although Weslo would have to incur additional marketing expenses, DP's total f.o.b. unit costs of _____ for the BODYTONE 300 and _____ for the BODYTONE 250 indicate that Weslo has a substantial cost advantage. (FF 602). For the fiscal quarter ending January 31, 1985, Weslo U.S.'s net profit margins before and after taxes were _____ respectively, an indication that at least at that time Weslo U.S. _____ (FF 600). From January to May 1985, Weslo U.S.'s average unit values _____ per unit for the Weslo BODY SHOP 360 with butterfly attachment. (FF 520).

Weslo's present _____ share of the convertible rowing machine market, and its intent and ability to gain additional market share as evidenced by production capacity, underselling, cost advantages, and an established sales structure in the United States, requires a finding of tendency to injure. In addition, the existence of other foreign suppliers that have marketed convertible rowing machines in the United States at costs and prices competitive with Weslo's supports such a finding.

D. Additional Affirmative Defenses Raised by Weslo

Weslo has raised numerous affirmative defenses, some of which were addressed earlier. Affirmative defenses which were not discussed earlier are discussed below.

1. Qualitative Advantages of the BODY SHOP

Respondents state that "on many occasions, the Commission has recognized that customer preference for features of the accused products which are not covered by the patent in issue is an intervening factor which weighs against a finding of the requisite causal nexus", citing Scanners; Certain Centrifugal Trash Pumps, Inv. No. 337-TA-43, 205 U.S.P.Q. 114, 120-21 (1979) (concurring opinion of Vice Chairman Alberger); Certain Exercising Devices, Inv. No. 337-TA-24, USITC Pub. 813 (1977), at 4-5; Certain Combination Locks, Inv. No. 337-TA-45, 205 U.S.P.Q. 1124, 1127 (1979); Certain Large Video Matrix Display Systems, Inv. No. 337-TA-75, 213 U.S.P.Q. 475, 485-87 (1981); (Weslo's Post-Trial Brief, p. 40).

In two of the cited cases (Centrifugal Trash Pumps, Matrix Display Systems), a broad-based shift in consumer demand away from complainants' product was cited as a possible legitimate superceding (alternative) cause of injury. In other words, imports which increased due to the inability of the domestic product to satisfy changing consumer tastes or preferences might not be considered a substantial cause of injury. Although the Weslo BODY SHOP 360 has certain features (butterfly attachment, orbital arms) which add to its perceived value relative to the DP BODYTONE 300, purchasing the Bodytone from

DP also has certain qualitative benefits (DP's extensive national advertising and brand-name recognition, a full product line). (FF 522-27, 445). Little evidence was presented showing a broad-based shift in consumer demand from convertible rowers without butterfly attachments and orbital arms to convertible rowers with these features. On balance, the record indicates that the BODY SHOP 360 and the BODYTONE 300 are highly competitive in the marketplace at both the wholesale and retail levels, notwithstanding some qualitative differences in physical appearance, performance, or marketing. (See FF 527, 586). Although these qualitative differences played a role in the retailers' purchasing decisions, relative price and profit margin were still important if not prime purchasing considerations. (FF 537-38, 546, 561, 586).

In combination Locks, the issue of quality related to the possible harm to complainant's goodwill and sales resulting from the confusion between complainant's locks and lower-quality imported locks. Therefore, this case does not support the affirmative defense proposed by respondent.

Quality problems with the BODYTONE 300, primarily difficult assembly operations, were also alleged by respondent as a reason for customers preferring the Body Shop. (FF 442). However, in response to the assembly problem, DP now uses an all-welded frame which was introduced in late 1984 or early 1985. (FF 443). While there is evidence that the DP Bodytone does have some quality problems, respondents have provided no direct evidence that this has resulted in a significant consumer shift away from Bodytone convertible exercisers. The overall reject or return rate, rather than reference to individual design or quality problems, is a better measure of whether poor quality is a factor materially affecting the demand for a product. For the

eight month period ending May 31, 1985, returns to DP were only of its sales. (FF 444).

Although qualitative differences exist between the DP Bodytone and the Weslo BodyShop, the record does not support the claim that these differences were an overriding factor leading to Weslo's increase in market share. Therefore, this affirmative defense is rejected.

2. The Need for Multiple Sources of Supply

Respondents argue that certain customers require multiple sourcing in order to maintain advertising flexibility, and that the need to have multiple sources of supply has been recognized by the Commission as a factor weighing against causation, citing Microcarriers. (Weslo's Post-Trial Brief, at 43). However, the Commission has also determined that a multiple sourcing policy can be intrinsically related to the infringing imports in that it is one of the causes of the importation of the infringing imports, and not an independent, alternative source of harm. Spring Assemblies, 216 U.S.P.Q. at 244. The Commission stated:

There will always be a cause of the infringing imports, i.e., reasons why the infringing articles are being imported. However that is not the relevant causal connection for section 337 analysis. Section 337 focuses on the connection between imports and the injury, not on the connection between the infringing imports and the causes of their importation.

Id.

Therefore, a decision to buy imported convertible rowing machines in order to have multiple sources of supply is not a legitimate, independent alternative source of harm to complainant. 44/

c. The Presence of Non-Infringing Substitutes

Respondents argue that the presence of non-infringing substitutes is an important factor weighing in the determination of causation, and in this case defeats DP's contention that there exists a causal link between Weslo's activities and DP's alleged injury, citing Optical Wavelength Fibers, at 105; Milling Machines, at 43-44; Drill Point Screws, at 20-21. (Weslo's Post-Trial Brief, at 42). Specifically, respondents argue that because DP's Bodytone products compete in the marketplace with a variety of exercise devices, claimed lost sales cannot be attributed solely to sales of competing convertible rowers.

I do not dispute that DP'S convertible rowing exercisers compete in the marketplace with other types of exercise equipment, and that at times consumers could have purchased other types of exercise equipment instead of **DP** convertible rowing exercisers. However, lost sales need not be attributed

44/ One might argue that a domestic producer's capacity constraint can also be a cause of importation, and therefore should not be considered an independent alternative source of harm. However, when a domestic producer is operating at full capacity, sales made by importers could not have been made by the domestic producer, and no sales would have been lost. An alternative sourcing decision lies with the purchaser, and that purchasing strategy can result in lost sales to the domestic producer.

solely to sales of the competing allegedly infringing imports. In the prior cases cited by respondents, it was the existence of non-infringing substitutes, together with a lack of direct evidence with respect to causation (i.e., evidence of market share shifts or lost sales) that resulted in negative determinations. Milling Machines, at 43-44; Drill Point Screws, at 20-22.

In the present case, two factors weigh against the legitimacy of respondent's "non-infringing substitute" affirmative defense. First, there exists direct evidence of market share shifts from complainant to respondent and of lost sales and lost revenues, as discussed earlier. Second, and perhaps more important, is the failure of respondents to show the degree to which non-infringing substitutes compete with DP's convertible rowing machines. Rather, respondent's evidence was largely restricted to the proposition that non-infringing substitutes exist in the marketplace. Respondent's own witness testified that although all exercise equipment competes for the consumer dollar, the degree of competition is most intense between different types of convertible rowers. (FF 465-466).

Respondents fail to show a market share shift away from convertible rowing machines toward non-infringing substitutes. In fact, it was established that the convertible rowing machine recently has been one of the more popular types of exercise equipment, suggesting that convertible rowing machines have probably increased, rather than lost, market share in the overall exercise equipment market.

Based on the market share shift from complainant to respondent, on evidence of direct lost sales and lost revenue to respondent, and on respondent's failure to document that convertible rowing machines have lost market share to non-infringing substitutes, this affirmative defense is rejected.

X. PENDING MOTIONS

A. Complainant's Motion for Default

On July 30, 1985, complainant DP filed a **motion for an order to Show cause** why respondents Pro-X, John Lee and Weslo **Taiwan should not be found in** default. (Motion Docket No. 212-75). The **Commission investigative staff** orally stated its support for this motion during the **hearing in this** investigation. (Tr. 111-12, August 19, 1985). None of these respondents has responded to this motion. Order No. 53, issued August 30, 1985 **was an order** to show cause not later than September 12, 1985 why these respondents should not be found in default. No response to this order has been filed.

As indicated in Order No. 53, each of these respondents **was properly** served with the amended complaint and notice of investigation, and by virtue of their relationship with respondent Weslo U.S. presumptively have received actual notice of this investigation. Furthermore, respondent Pro-x filed a petition for review of Order No. 17 which joined it as a respondent, indicating its awareness of its status as a respondent at an early date.

Thus, it appears that although each of these respondents has received actual notice of this investigation and has been given full opportunity to participate, each has declined to do so.

Accordingly, each of respondents Pro-X, John Lee and Weslo Taiwan is hereby found to be in default pursuant to Rule 210.25. It is further ORDERED that:

1. Respondents Pro-X, John Lee and Weslo Taiwan have waived the right to appear in this investigation;
2. Effective on this date, no party to this investigation will be required to serve documents on Pro-X, John Lee or Weslo Taiwan; and
3. Pro-X, John Lee and Weslo Taiwan have waived the right to contest the allegations at issue in this investigation. On the terms provided herein, Motion 212-75 is granted.

B. Other Motions

On August 28, 1985, Weslo filed a motion to reopen the record and receive exhibits RX 299-301. (Motion Docket No. 212-86). This motion is opposed by complainant. The purpose of this motion is to clarify the status of RX 299-301, which were received at one point during the hearing and rejected at another. These exhibits pertain to certain Japanese printed publications

which are alleged by Weslo to constitute prior art to the '071 patent.

Although I will receive these exhibits into evidence for purposes of a complete record, it should be noted that, as with many other prior art reference submitted by Weslo, there has been no testimony on this record to show what these references disclose, how they relate to the suit patent or why they may be more pertinent than the art actually considered by the examiner in allowing the '071 patent to issue. The only submission by Weslo which would indicate its position with respect to these documents is contained in Weslo's Response to DP's Objections to Certain Weslo Direct Exhibits. This document constitutes argument of counsel and is entitled to no evidentiary weight in this proceeding. Thus, it should be clear that Weslo has not met its burden of establishing the relevance of RX 199-301, and they have played no part in my determination of the patent issues in this investigation.

On September 5, 1985, Weslo filed a motion to redesignate certain documentary exhibits as physical exhibits. (Motion Docket No. 212-87). These documents are lengthy deposition transcripts, which will be redesignated as follows:

Documentary Ex. No.	Physical <u>Ex. No.</u>	<u>Title</u>
RX 343	RPX 31	Deposition of Raymond Pilgrim
RX 344	RPX 32	Deposition of Calvin James
RX 345	RPX 33	Deposition of Ir.a Silberman
RX 346	RPX 34	Deposition of Alan Cantor

The foregoing exhibits are hereby redesignated as physical exhibits, subject to the right of complainant to verify the completeness of these transcripts.

Accordingly, Motion 212-87 is granted.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the subject matter of this investigation, personal, jurisdiction over, most, if not all, of the parties named in the Notice of Investigation, as amended, and in rem jurisdiction over the accused imported convertible rowing exercisers. 19 U.S.C. S 1337(b).

2. U.S. Letters Patent 4,477,071 is invalid as anticipated under 35 U.S.C. S 102(a) and (b) by the Beacon 3002 rower. 35 U.S.C. S 102(a)&(b).

3. U.S. Letters Patent 4,477,071 is invalid as obvious under 35 U.S.C. S 103 over the Beacon 3002 rower. 35 U.S.C. S 103.

4. U.S. Letters Patent 4,477,071 is not invalid for failure to comply with the requirements of 35 U.S.C. S 112, or for failure to name the inventors or for a defective oath. 35 U.S.C. SS 112, 115, 116.

5. U.S. Letters Patent 4,477,071 is not void or unenforceable by reason of alleged inequitable conduct before the Patent and Trademark Office or the U.S. International Trade Commission, or by reason of patent misuse.

6. If U.S. Letters Patent 4,477,071 were found to be valid, it would be infringed by the convertible rowing exercisers manufactured abroad and imported into and sold in the United States by each of the respondents named in this investigation. 35 U.S.C. S 271.

7. Patent infringement is an unfair act or unfair method of competition under 19 U.S.C. S 1337(a). In re von Clemm, 108 U.S.P.Q. 371 (C.C.P.A. 1955).

8. If U.S. Letters Patent 4,477,071 were found to be valid, the relevant domestic industry would consist of the domestic operations of complainant Diversified Products Corp. devoted to the manufacture, production and sale of convertible rowing exercisers under the tradenames BODYTONE and Shapemaster 1000 in accordance with the claims of the '071 patent.

9. The relevant domestic industry is efficiently and economically operated.

10. If U.S. Letter Patent 4,477,071 were found to be valid, the effect and tendency of respondents' unfair acts and unfair methods of competition would be to substantially injure the relevant domestic industry.

11. There is no violation of Section 337. 19 U.S.C. S 337(a).

INITIAL DETERMINATION AND ORDER

Based on the foregoing findings of fact, conclusions of law, the opinion and the record as a whole, and having considered all, of the pleadings and arguments presented orally and in, briefs, as well as proposed findings of fact and conclusions of law, it is the Administrative Law Judge's DETERMINATION that there is no violation of Section 337 in the unauthorized importation into and sale in the United States of the accused convertible rowing exercisers.

The Administrative Law Judge hereby CERTIFIES to the Commission this Initial Determination, together with the record of the hearing in this investigation consisting of the following;

1. The transcript, of the hearing, with appropriate corrections as may hereafter be ordered by the Administrative Law Judge; and further
2. The exhibits accepted into evidence in the course of the hearing, as listed in the Appendix attached hereto.
3. Motion Docket No. 212-90, Weslo's Motion To Amend Notice of Investigation and Name of Respondent Weslo, October 16, 1985.

The pleadings of the parties are not certified, since they are already in the Commission's possession in accordance with the Commission's Rules of Practice and Procedure.

Further, it is ORDh,,ED that:

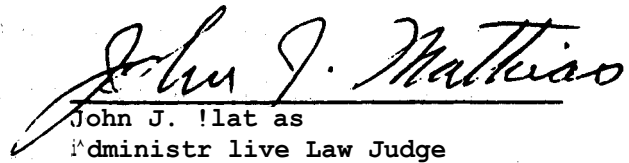
1. In accordance with Rule 210.44(b), all material heretofore marked in camera for reasons of business, financial and marketing data found by the Administrative Law Judge to be cognizable as confidential business information under Rule 201.6(a) is to be given in camera treatment;

2. As provided herein, Motion 212-75, complainant's motion for default as to respondents Pro-X, Ltd., John Lee and Weslo International Inc., is granted; Motion 212-81, Weslo's motion to correct its amended response, is granted; Motion 212-85, Weslo's motion to amend the pleadings is granted; Motion 212-86, Weslo's motion to reopen the record and receive certain exhibits is granted; and Moticin 212-87, Weslo's motion to redesignate certain documentary exhibits as physical exhibits, is granted.

3. The Secretary shall serve a public version of this Initial Determination upon all parties of record and the confidential version upon the Commission investigative attorney and all counsel of record who are signatories to the Protective Order issued by the Administrative Law Judge in this investigation.

4. Counsel for all parties shall indicate to the Administrative Law Judge those portions of this Initial Determination which contain confidential business information to be deleted from the Public Version of. this Determination not later than October 24, 1985.

5. Pursuant to Rule 210.53(h), this Initial Determination shall become the determination of the Commission forty-five (45) days after the service hereof on the parties, unless the Commission, within forty-five (45) days after the date of such service shall have ordered review of the Initial Determination or certain issues therein, pursuant to 19 C.F.R. 210.54(b) or 210.55 or by order shall have changed the effective date of this Initial Determination.


John J. Matias
Administrative Law Judge

Date: October 18, 1985