In the Matter of

CERTAIN ELECTRICALLY RESISTIVE NONCOMPONENT TONER AND "BLACK POWDER" PREPARATIONS THEREFOR

Investigation No. 337-TA-253

USITC PUBLICATION 2069

MARCH 1988

United States International Trade Commission / Washington, DC 20436
UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

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United States International Trade Commission
Washington, DC 20436
In the Matter of,

CERTAIN ELECTRICALLY RESISTIVE MONOCOMPONENT TONER AND "BLACK POWDER" PREPARATIONS THEREFOR

Investigation No. 337-TA-253

COMMISSION ACTION AND ORDER

Action

Having considered the ID, the submissions of the parties, and the record in this investigation, we determine to review and reverse as erroneous the ID's finding that a violation of section 337 has occurred, and to terminate this investigation, based on a finding of no violation of section 337. We further determine to take the following action with respect to the ID:

(1) To review and affirm the ID's conclusion that Canon's warranty provisions did not violate section 337. We do not review the ID's finding that the warranty provisions were not an unreasonable restraint of trade, nor the implicit finding that the warranties did not constitute exclusionary conduct.

(2) Not to review the ID's findings of no coercion of dealers, although we note that the sale to OE Canada allegedly lost by Aunyx was beyond the scope of the Commission's subject matter jurisdiction, because that alleged lost sale did not concern the importation or sale of an article in the United States.
(3) To review and affirm the ID's finding that there was insufficient evidence to establish any exclusive dealing by Canon that has the effect or tendency to restrain or monopolize trade and commerce in the United States.

(4) To review and modify the ID's legal conclusions with respect to Aunyx's business tort allegations, although we affirm the ID's conclusion that no violation of section 337 resulted.

(5) Not to review the balance of the ID, which becomes the determination of the Commission

Order

Accordingly, it is hereby ORDERED THAT—

1. The ID is reviewed and reversed as to the finding that a violation of section 337 exists

2. The ID is reviewed and affirmed or reviewed and modified with respect to the issues specified above.

3. The remainder of the ID is not reviewed, and the petitions for review, to the extent they requested review of issues not reviewed, are denied to that extent

4. The IA's motion for leave for late filing of his brief on remedy, the public interest, and bonding is granted.

5. Aunyx's letter of January 19, 1988 is rejected as untimely

6. Canon's motion (Motion No 253-65) to exclude from Aunyx's response to Canon's petition for review matters not contained in the record is granted, but its request to supplement the record is denied

7. The Secretary shall serve copies of the Commission's opinion and 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.

Issued February 22, 1988
CERTAIN ELECTRICALLY RESISTIVE MONOCOMPONENT TONER AND "BLACK POWDER" PREPARATIONS THEREFOR

Inv. No. 337-TA-253

Certificate Of Service

I, Kenneth R. Mason, hereby certify that the attached NOTICE OF DETERMINATION TO REVIEW AND REVERSE, AFFIRM, OR MODIFY CERTAIN ISSUES CONTAINED IN THE INITIAL DETERMINATION: REVERSAL OF FINDING OF VIOLATION OF SECTION 337 OF THE TARIFF ACT OF 1930; TERMINATION OF INVESTIGATION AND COMMISSION ACTION AND ORDER, was served upon Stephen L. Sulzer, Esq., and Steven Schwartz, Esq., and upon the following parties via first class mail, and air mail where necessary, on February 22, 1988.

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CERTIFICATE OF SERVICE - page 2

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In the Matter of

CERTAIN ELECTRICALLY RESISTIVE MONOCOMPONENT TONER AND "BLACK POWDER" PREPARATIONS THEREFOR

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VIEWS OF THE COMMISSION

I. PROCEDURAL HISTORY

On July 15, 1986, Aunyx Corp. (Aunyx) filed a section 337 complaint with the Commission alleging unfair methods of competition and unfair acts in the importation and sale of certain electrically resistive monocomponent toner (ERMT), the particular type of dry "ink" used in models NP 210 through NP 500 photocopy machines manufactured and sold by respondents Canon, Inc. and Canon U.S.A., Inc. (Canon). Based on that complaint, and an amended complaint filed on July 30, 1986, and supplements filed on July 30 and August 1, 5, and 12, 1986, the Commission instituted this investigation to determine whether there are unfair acts or methods of competition in the importation and sale of such toner with the effect or tendency to restrain and monopolize trade and commerce in the United States, to destroy or substantially injure an industry,
efficiently and economically operated, in the United States, or to prevent the establishment of such an industry in the United States. The Commission's notice of investigation referred to the following unfair acts or methods of competition: (1) monopolization, (2) attempt to monopolize and (3) conspiracy to monopolize the relevant market for such toner, (4) exclusive dealing, and (5) business torts actionable under the common and statutory law of unfair competition, such as alleged interference with Aunyx's business relations and alleged disparagement of Aunyx's products and reputation.  

The notice of investigation listed Canon, Inc. of Tokyo, Japan and Canon U.S.A., Inc. of Lake Success, New York as respondents. Aunyx Corp. of Hingham, Massachusetts, alleged in the complaint to be the domestic industry, was listed as the complainant. 

On November 19, 1986, the presiding administrative law judge (ALJ) (Judge Mathias) granted respondents' motion to add a patent-based affirmative defense to their answer. On the same date, the ALJ issued an ID (Order No. 7) declaring the investigation "more complicated" and extending all procedural dates by three months. The Commission determined not to review that ID. 

Subsequently, the Federal Trade Commission (FTC) was permitted to intervene in the proceeding, although the Commission determined to limit that intervention by denying the FTC access to confidential business information, and by otherwise limiting the FTC's participation in the

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2/ See Amended Complaint at p.11.

3/ Chairman Liebeler and Vice Chairman Brunsdale dissenting.
investigation to that of an amicus curiae. The notice of investigation was also subsequently amended to cover "black powder" preparations as well as the toner itself.

On April 7, 1987, the ALJ certified to the Commission a joint request of complainant and the Commission investigative attorney (IA) for the issuance of questionnaires to 525 Canon dealers and 66 manufacturers of photocopy machines and toner. On April 9, 1987, the ALJ issued an ID further "declaring" the investigation "more complicated" and extending the deadline for completion of the investigation to the full 18 months permitted by statute. The Commission determined not to issue questionnaires, because of the lateness of the request and the need to resolve a number of novel legal and policy questions posed by the proposed issuance of questionnaires. The Commission also determined not to review the ID extending the deadline for completion of the investigation to the full 18 months permitted by statute.

In Order No. 20 (April 15, 1987), the ALJ denied on the ground of untimeliness a joint motion of Aunyx and the IA to amend the complaint and notice of investigation to include allegations that the Canon respondents and certain Canon dealers had entered into a conspiracy to divide the United States market among Canon dealers.

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4/ The Commission determined that the FTC could not engage in any discovery, and the intervention was "limited to the issue of the consistent application of the antitrust laws." 52 Fed Reg. 5838, 5839 (February 26, 1987). The FTC did file a prehearing statement with the ALJ, and although it attended the public portions of the hearing, made no further submissions in this investigation.

5/ Chairman Liebeler and Vice Chairman Brunsdale dissenting.

6/ See the Commission opinion and action and order (issued May 22, 1987) with respect to this determination.
In Order No. 41 (August 7, 1987), the ALJ granted the Canon respondents' motion to compel Aunyx to comply with document discovery requests. The order noted that Aunyx claimed that all requested documentation had already been produced insofar as it existed. The ALJ warned that this answer would seem to be a complete response but that---

it is difficult to believe that Aunyx does not have some of this information in its files, its computer data, or otherwise available to it. It will certainly be a direct violation of my prior discovery orders, and the Commission's procedural rules, if any such data are withheld. Proof of such withholding at a later date could result in severe sanctions, including possible dismissal of this action. 7/

The order gave Aunyx until August 14, 1987, to produce all documentation requested by Canon which was in the possession of Aunyx, its personnel, or affiliated or related companies.

In Order No. 42 (August 12, 1987), the ALJ denied as untimely the motion of complainant Aunyx to amend the complaint and notice of investigation to include four other U.S. firms within the definition of domestic industry. In addition to the untimely nature of the motion, the ALJ noted that "there does not appear to be any indication that Aunyx is prepared to prove injury to the four specified companies which it wishes to add to the definition of the domestic industry in this investigation." 8/

The evidentiary hearing in this investigation commenced on August 27, 1987, and was completed on September 11, 1987. On the first day of the

7/ Order No. 41 at 1-2.

8/ Order No. 42 at 1. That Order also noted that with respect to the monopolization allegations of the investigation, it was not necessary to amend the complaint because discovery had already been had of the "competition." Order No. 42 at 2.
hearing, Aunyx produced 52 boxes of computerized records in a tardy response to the ALJ's discovery order (Order No. 41). 9/ Respondents subsequently moved to terminate the investigation as a sanction for this lack of compliance with the ALJ's discovery order. The IAI supported Canon's motion in part, noting the prejudice caused by the delay in compliance with the order to the IA and Canon "in the preparation and presentation of important aspects of their cases." 10/ On August 31, 1987, the ALJ denied respondents' motion to terminate the proceedings as a sanction against Aunyx for its disregard of the ALJ's discovery orders, but found that Aunyx's responses to discovery had been "very reckless and inadequate," and ruled that---

Aunyx may not use or rely upon any production and sales data in the proof of their case. . . . If at this time I will not disqualify counsel, because it is too late in the proceeding to obtain new counsel. 11/

During the course of the evidentiary hearing, the ALJ issued Order No. 47 on September 4, 1987, granting Aunyx's motion in limine to exclude all evidence to be offered by respondents in furtherance of their patent-based affirmative defense to the allegations of antitrust law violations. The ALJ found that the patents at issue would not constitute a defense to the antitrust allegations and were irrelevant to the investigation, and that respondents' delay in asserting their patent rights constituted sufficient bad faith to bar the defense. The ALJ granted the Canon respondents leave to

10/ IA Response (Aug. 28, 1987) at 2
11/ Tr. at 845 (Aug. 31, 1987).
file an application for interlocutory review with the Commission. On October 2, 1987, the Commission determined to grant the Canon respondents' application for interlocutory review and reversed the order excluding the evidence pertaining to the patent-based affirmative defense. The Commission noted that, as a matter of law, the patents were theoretically relevant both to allegations of unlawful acquisition of monopoly power and to an assessment of the other alleged offenses, but that it could not assess whether the patents had any factual relevance to the antitrust allegations in the investigation, because the record was not yet before it. 12/ However, on October 9, 1987, Aunyx, the IA, and the Canon respondents entered into a stipulation providing for withdrawal of allegations pertaining to illegal acquisition of monopoly power and the withdrawal of the patent-based affirmative defense. The stipulation was accepted by the ALJ on October 15, 1987 (Order No 58).

On September 23, 1987, the ALJ issued Order No 52, granting, in part, respondents' motion to strike certain contentions based on Aunyx's production and sales records, in light of the sanctions imposed on Aunyx for failing to comply with discovery orders. In granting the motion in part, the ALJ explained that his ruling did not "preclude all evidence of complainant's efforts to develop, produce, and market OEM [original equipment manufacturer] compatible toners. It only excluded specific production and sales data

12/ Commission Opinion on Reversal of Order No. 47 Excluding Evidence Pertaining to Affirmative Defense at 2-3. The Commission also found that the ALJ did not fully analyze the factors appropriate to deciding if the doctrine of laches or estoppel would prevent the Canon respondents from asserting their patent rights, and thus also reversed the ALJ's finding that bad faith precluded respondents from asserting their patents.
related to Canon compatible toner." 13/

After submissions of briefs and proposed findings of fact, oral argument was held before the ALJ on October 14, 1987. The ALJ's final ID was issued on November 10, 1987. The ID found that there is a violation of section 337 in this investigation, in that respondents committed an unfair act or method of competition in the importation or sale of ERMT by maintaining their monopoly power in the market for ERMT in the United States by disparaging competitors and competing toners as "pirate." This unfair act or method of competition was found to have had the effect or tendency to restrain or monopolize trade and commerce in the United States. The ID found no violation of section 337 with respect to the other alleged unfair acts or methods of competition.

All the parties, with the exception of the FTC, petitioned for review of portions of the ID. On November 23, 1987, Aunyx and the IA filed petitions for review of the ID, and the Canon respondents filed their petition for review on November 25, 1987. Responses to the petitions for review were filed by the Canon respondents on December 4, 1987, and by Aunyx and the IA on December 7, 1987. No government agency comments or public comments were received.

The Commission on December 18, 1987, issued a Federal Register notice determining to extend the deadline for review of the ID to the statutory deadline (February 22, 1988), and directing the parties to brief the issues of remedy, the public interest, and bonding, and certain specified issues pertaining to violation. Government agency comments were also solicited on

13/ Order No. 52 at 2 (emphasis added)
these issues, and the public was invited to submit comments on the issues of remedy, the public interest, and bonding.

The parties submitted the briefs requested by the Commission. A number of brief public comments were filed by firms involved in the purchase or sale of various types of toner, including ERMT, in response to the Commission's invitation to members of the public to submit comments on the questions of remedy, the public interest, and bonding. Because we find no violation of section 337, and thus have no need to consider the question of remedy, such public comments were not considered in our analysis of the ID and of the question of whether a violation of the statute occurred. No government agency comments were received.

II. MAINTENANCE OF MONOPOLY POWER

The ID found that Canon had lawfully acquired monopoly power in the relevant market, the market for ERMT in the United States. The ID therefore considered whether Canon willfully maintained its monopoly power in the ERMT market.

The offense of monopoly under § 2 of the Sherman Act has two elements: (1) the possession of monopoly power, and (2) the willful acquisition or maintenance of that power.

14/ See Additional Views of Vice Chairman Brunsdale and Commissioner Cass for a further discussion of market definition, market power and antitrust injury issues.

15/ See Additional Views of Chairman Liebeler.

The ID found that only one practice complained of by Aunyx constituted a violation of section 337: maintenance of monopoly power in the ERMT market by disparagement of competing toner. The ID found that Canon engaged in disparagement of competing products, in particular by referring to one competitor, Esgraph, as a "pirate" in a letter sent in 1982 to two Canon dealers and through general references to competition as "toner pirates" or to competing toner as "pirate toner." 17/ The disparagement was found to "most likely" have a restraining effect on competition, although the full and precise effects of such disparagement "may not be demonstrable." 18/

We review and reverse the ID's finding of a violation of section 337 because of disparagement 19/ that maintained Canon's monopoly power.

Maintenance of monopoly power can be established if a monopolist engages in "exclusionary conduct," conduct that impairs competition in an

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17/ ID at 170-71.

18/ ID at 170-74.

19/ By "disparagement" we refer to the offense found by the ID, viz., disparagement as willful maintenance of monopoly power, as opposed to the business tort of disparagement. Several questions are presented by the ID's analysis of the disparagement issue in this context. First, a number of the cited instances in which competitors or competing ERMT were referred to as "pirate" were statements circulated within Canon and were not published. To the extent they were not published it is questionable that they could have been disparaging or "exclusionary" in an antitrust sense. Second, we note that there is some question whether the use of the term "pirate" in referring to a competitor necessarily is disparaging. Third, there is a question whether Canon's published statements had a legitimate business justification as an attempt to prevent confusion in the marketplace or passing off of non-Canon toner as Canon-brand ERMT. We do not reach these questions because we find reversible error in the shifting of the burden of proof to respondents as to the effect of any disparagement, and, if the burden of proof is placed on Aunyx, Aunyx failed to satisfy its burden.
unnecessarily restrictive way. 20/ The best support for a conclusion that any disparagement impaired competition is the finding that Esgraph "became an early victim of Canon's disparagement." 21/ However, the ID also found that Esgraph's ERMT was not being accepted in the marketplace because it would function well in only one model of Canon Copier, the NP 400. Esgraph thus concluded---

that it would be necessary to go back and do more research to produce a toner that was compatible across a broader spectrum of Canon NP series machines. In view of resistance it had met from Canon and the Canon dealers . . . and the need to expend further funds for research on a broader spectrum toner, Esgraph decided to get out of the production of Canon-compatible toner in late 1982. 22/

Esgraph's lack of success in selling its ERMT was not found to be due to Canon's disparagement. Moreover, Esgraph's decision not to reformulate its ERMT was based on the cost of such reformulation, Canon's pricing policies, and "resistance" from Canon and its dealers. 23/ Disparagement of Esgraph as a "pirate" was thus at most only one element in the "resistance" of Canon and its dealers.


21/ ID at 171; FF 395

22/ FF 395. See also ID at 171-2, FF 180, and FF 393-395.

23/ See FF 395
The ID determined that the effect on Aunyx and other competitors was even less apparent. 24/ While the ID found that use of the term "pirate" did not end with the 1982 letters, and that the record shows that "Canon, its personnel, and its dealers" continued to brand its toner competition as toner pirates, the effects of that disparagement were found to be "more nebulous." Indeed, many Canon dealers were found to have tested non-Canon toners with the object of purchasing such toner. Competition was found to be spotty, "at least through 1985," and many of the non-Canon toners (including Aunyx) had quality problems. The ID concluded, "it is difficult to tell what effect the continued disparagement of the competition as 'pirates' might have had on competition." 25/

Thus, the findings of fact in the ID indicate that "disparagement" by Canon had no clear effect on competition. 26/ Instead, the ID found a violation of section 337 by resolving the doubts about the effects of such disparagement against the Canon respondents, 27/ effectively shifting the burden of proof from Aunyx to Canon. We review and reverse the ID’s finding of a violation of section 337 because this shifting of the burden of proof was erroneous.

24/ ID at 172.

25/ ID at 172-73. We question the degree to which the disparagement continued. The last specific Canon-published reference to a "pirate" appears to be in late 1983.

26/ "[T]he full and precise effects of Canon's disparagement of 'pirate toners,' 'toner pirates,' and 'no-name toners,' may not be demonstrable . . . ." ID at 174.

27/ ID at 174.
Shifting of the burden of proof to respondents was contrary to the Commission's rules, 28/ and established case law. 29/ The authority cited in the ID for shifting the burden of proof does not support it. 30/ If the burden of proof had properly been on complainant Aunyx, the ID would have had to conclude that that burden was not sustained. As noted above, the ID found that the disparagement had at best an unclear effect on competition. Even with respect to the single competitor it found was a "victim" of disparagement, Esgraph, the ID does not find that the disparagement caused Esgraph to leave the market, nor does it cite to evidence of record indicating that disparagement of Esgraph (as distinguished from general "resistance" of Canon and its dealers) played a significant role in discouraging Esgraph from committing the resources needed to reformulate its ERMT.

As noted above, exclusionary conduct impairs "competition in an unnecessarily restrictive way." 31/ Aunyx failed to satisfy its burden of showing that any disparagement by Canon was "exclusionary." In view of the foregoing, we have determined to reverse the ID's finding of maintenance of monopoly power through disparagement.

The IA and Aunyx have argued, particularly in their petitions for review of other issues, that the language of section 337 requires that a violation of

28/ See 19 C.F.R. § 210.42(a) ("The proponent of any factual proposition shall be required to sustain the burden of proof with respect thereto.")

29/ See Fischer & Porter Co. v. U.S. International Trade Commission, 831 F.2d 1574, 1580 (the proponent of an order has the burden of proving injury) (Fed. Cir. 1987).

30/ See P. Areeda & D. Turner, Antitrust Law, ¶ 626c (1978). Areeda & Turner clearly indicate elsewhere in their treatise that they believe that disparagement would ordinarily have such a tenuous effect on competition that it should presumptively be ignored. Areeda & Turner ¶ 738c.

31/ Aspen Skiing, supra.
the statute be found where an unfair act or method of competition has the "tendency" to restrain or monopolize trade, even if the unfair act or method of competition does not have the effect of doing so. The acts of "disparagement" here cannot be said to have a tendency to restrain or monopolize trade. When tendency to monopolize is analyzed under section 337, the focus is on future effects of the unfair acts or methods of competition. 32/ We find no such tendency to restrain or monopolize trade here. Canon's market share has declined with the reentry of Nashua and the entry of Xerox into the ERMT market in mid-1986 and early 1987. We therefore find no tendency for any disparagement to have an exclusionary effect in the future. 33/

III. THE CANON WARRANTIES

We determine to review and affirm the ID's conclusions that Canon's warranty provisions did not violate section 337. While the ID did not

32/ Compare Akzo, N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1487 (Fed. Cir. 1986), cert. denied, --U.S.--, 107 S.Ct. 2490 (1987) (upheld the Commission tendency to injure determination, which was based on "a prediction of the future effect of Akzo's unfair imports on the domestic industry") with Certain Electronic Audio and Related Equipment, Inv. No. 337-TA-7, USITC Pub. 768 (April 1976) at 45 (comparing the "tendency to monopolize" language of section 337 to the "incipiency" standard of section 5 of the FTC Act) and FTC v. Cement Institute, 333 U.S. 683, 693, (1948), (an act that "might lead to such restraint if not stopped in its incipient stages" is unlawful under section 5 of the FTC Act).

33/ We also note that the attempt to monopolize test should not have been applied to the conduct of Canon, a firm found to possess monopoly power. Evidently, the ID did so because of its reliance on Multiflex, Inc. v. Samuel Moore & Co., 709 F.2d 980 (5th Cir. 1983), cert. denied, 465 U.S. 1100 (1984), a case disavowed in part on other grounds by the Fifth Circuit in Deaville Corp. v. Federated Department Stores, Inc., 756 F.2d 1183 (5th Cir. 1985). However, Multiflex is distinguishable, and the disparagement found in that case was markedly different from that found by the ID here.
specifically address the argument that the warranties constituted tying arrangements, after reviewing the ID and the record on this issue, we are satisfied that the elements of a tying arrangement were not established. 34/

We do not review the ID's finding that the warranties were not unreasonable restraints of trade, 35/ nor the implicit finding that the warranties did not constitute exclusionary conduct. While the ID did not specifically address the question of whether these warranty provisions had a tendency to restrain or monopolize trade, we find that the warranties have no such tendency.

As noted above, "tendency" to restrain or monopolize trade refers to the future effect of the unfair acts or methods of competition, assuming no such

34/ Commissioners Rohr and Cess note that the complaint did not allege that the Canon warranties constituted illegal tying arrangements. More importantly, the Commission's notice of investigation did not set forth tying as one of the unfair acts to be investigated. Commission proceedings are not like those of a district court in which broad general pleadings can be refined over the course of discovery. The Commission requires all allegations to be pled specifically, and with information to support them. We believe that while Commission rule 210.22(c) allows the pleadings and notice of investigation to be conformed to the actual evidence and arguments of the parties, this rule is limited to those issues "reasonably within the scope of the pleadings and notice." It does not permit the addition of issues not within the scope of the pleadings and notice. Only if the allegations made in a section 337 investigation are clear from the outset can the expedited procedures and shortened discovery times of our investigations be administered fairly to all parties. The Commission did not institute this investigation with respect to tying and there can be no error in the ALJ's failure to make findings with respect to such allegations.

35/ We note, however, that the fact that the Canon NP copiers to which the machine warranties applied are no longer being produced does not appear to be relevant to the "reasonableness" of Canon's warranties, although the fact is relevant to the question of whether the machine warranties have a "tendency" to monopolize. However, to the extent the ID may have relied in part on this fact in assessing the "reasonableness" of the machine warranties, we view it as at most harmless error.
present effect, not to whether those acts should be defined as "unfair", i.e., of the type that would violate the antitrust laws. 36/ Essentially, the question is whether the ID erred in failing to find that the warranty practice (assuming it was an unfair act or method of competition) might tend in the future to restrain or monopolize trade.

We find no such tendency to restrain or monopolize trade here. In assessing the future effect of Canon's warranties, we note Canon's market share has declined significantly recently with the entry of Xerox and the reentry of Nashua into the ERMT market, suggesting yet a further erosion of Canon's market share in the future. Further, the NP copy machines to which the machine warranty refers are no longer being produced. Accordingly, it is reasonable to infer that at least the 90-day machine warranties either have or shortly will have no application to NP 210-500 copiers.

IV. EXCLUSIVE DEALING

We determine to review and affirm the ID's conclusion that there was insufficient evidence to establish Aunyx's exclusive dealing claim, that Canon imposed requirements on its dealers to buy ERMT only from Canon which had the effect or tendency to restrain or monopolize trade in the United States. The

36/ The ID is somewhat ambiguous as to whether the warranties constituted an unfair act or method of competition. Other than finding that it was not established that the warranties are tying arrangements, we do not reach this issue as we find that there was no effect or tendency to restrain or monopolize trade even if the warranties could be said to be unfair acts or methods of competition. We also note, but do not decide, the question of the extent to which the warranties, which apply to the copy machines, parts, and drums, can be said to be outside the scope of the instant investigation, which involves unfair acts or methods of competition in the importation or sale of ERMT.
ID did not discuss the basis for its conclusion regarding the claim. We find that this conclusion is supported by the failure of complainant Aunyx to carry its burden of establishing the elements of that offense as well as by the ID's factual findings that (1) Canon dealers in fact purchased non-Canon ERHT and (2) there was no evidence that "minimum purchase" requirements deterred Canon dealers from using non-Canon-brand toners. 37/

V. BUSINESS TORT AND INJURY ISSUES

We determine to review the ID's legal conclusions with respect to Aunyx's business tort allegations, because a serious question is raised as to the proper definition of the domestic industry in this case. The ID defined the relevant domestic industry for purposes of the tort claims as comprising only complainant Aunyx, although it is evident from the ID and the record that producers of ERHT other than Aunyx existed.

Based in part on the absence of Aunyx production and sales data as a result of the discovery sanctions imposed on Aunyx, the ID found that there was "insufficient evidence of record from which to infer that Canon's acts and practices caused substantial injury to Aunyx, or that Aunyx was efficiently and economically operated." 38/ Aunyx challenged that determination in its petition for review, arguing that the ID should have found that an "infant" industry existed, evidently composed of Aunyx.

The ID contains no specific finding that there existed any unfair acts or methods of competition that would constitute a business tort. To the

37/ FF 351-355

38/ ID at 177; ID at 179 (Conclusion of Law No. 10).
contrary, it found that the allegation of interference with Aunyx's source of supply was not sufficiently supported by the evidence of record, and concluded that there was insufficient evidence to show that Canon interfered with Aunyx's business relations. 39/ We do not review those findings.

Disparagement is thus the only possible unfair act or method of competition that could constitute a business tort. We do not decide whether the published statements referring to "pirate" competition constituted disparagement as a business tort, although we note that there are no findings in the ID that the elements of common law disparagement were established. Instead, we find that even if Canon committed a business tort, there is no basis for finding an effect or tendency to destroy or substantially injure, or to prevent the establishment of, the relevant efficiently and economically operated domestic industry. This is true whether the industry is defined as comprising only Aunyx, as in the ID, or the industry is instead defined as all domestic producers of ERHT. We therefore affirm the ID's conclusion that Aunyx has not shown that it is efficiently or economically operated, or substantially injured. The record is devoid of production and sales data for Aunyx as a result of sanctions imposed on Aunyx for discovery order violations. 40/

39/ FF 334, 337 (no interference with sources of supply); Conclusion of Law No. 9 (no interference with business relations).

40/ As for prevention of establishment of an industry, we agree with the ID that the discovery sanctions imposed on Aunyx should be read broadly. Those sanctions apply not only to the question of injury but prevention of establishment as well. We endorse the ALJ's view that the Commission will not countenance a party's disregard of discovery orders. Without being able to assess any effect on Aunyx's production or sales due to the absence of this (Footnote continued on next page)
"The 'industry' protected by section 337 is the domestic industry that is lawfully manufacturing the articles that are the subject of this investigation." 41/ This suggests that the industry in this investigation could be defined as domestic producers of ERMT.

However, in Order No. 42 (Aug 12, 1987) the ALJ denied Aunyx leave to amend the complaint and notice of investigation to add firms (other than Aunyx, the only firm named as the "industry" in the complaint) to the scope of the industry, due to the tardiness of that request, the lack of adequate justification for the delay in seeking amendment, the fact that the proposed amendment might still fail to encompass the entire industry affected by the alleged unfair practices, the lack of any indication that Aunyx was prepared to offer proof of injury with respect to that larger industry, and the fact that the proposed amendment might change the basic issues, broaden the scope of the investigation and thereby prejudice the other parties. 42/ Aunyx did not seek leave to file an application for interlocutory review of that ruling.

(Footnote continued from previous page) Data from the record, we could not find that Aunyx's operations were prevented from being "stabilized" as an "infant industry" even if that analysis were otherwise appropriate. Moreover, the quality problems with Aunyx's toner indicate that there would not be a sufficient causal link between any business torts committed by Canon and the failure of Aunyx to "stabilize." Aunyx concedes that it had quality problems with its ERMT, although it argues that such problems were not "serious" and were not unusual for a new entrant attempting to overcome the technical barriers to entry of the ERMT market. See Aunyx Petition for Review at 28

41/ In the matter of Chain Door Locks, Inv No 337-TA-5, USITC Pub. 770 (April 1976) at 35.

42/ Order No. 42 at 2. See also FF 452 ("A motion to enlarge the definition of the domestic industry, made within the last month before the hearing herein, was denied as untimely.").
nor did Aunyx seek to appeal the limitation of the definition of the industry subsequent to issuance of the ALJ's final ID. 43/

The ID found that Aunyx failed in its burden of proving that the relevant domestic industry is efficiently and economically operated and substantially injured or prevented from being established even if the industry is defined as comprising only Aunyx. 44/ Even if the Commission considered a broader definition of the domestic industry at this stage of the proceeding, 45/ it is clear that Aunyx has failed in its burden of proof in this regard as well. We note that the record is devoid of production and sales data for Aunyx, due to sanctions imposed on it for discovery order violations. 46/ Several other companies produced ERMT during the period of investigation, but there is little evidence in the record concerning those firms. 47/ Tomoeegawa also

43/ In any event, we see no basis for overturning denial of Aunyx's motion on the ground that the motion was untimely.

44/ ID at 177.

45/ We are reluctant to do so because that would require reliance on a record generated on the assumption that the industry was limited to Aunyx. We note that Aunyx concedes that deficiencies with respect to producers other than Aunyx exist in the record due to Order No. 42's denial of Aunyx's motion to expand the definition of the industry: "evidence was not specifically developed, and findings were not specifically made, directed to the question whether the U.S.-based activities of and value added by [other] companies . . . were sufficient to include them in the U.S. industry . . . The omission could be of significance . . . ." Aunyx December 31, 1987 Submission at 35.

46/ ID at 177

47/ The ID opines that "there is no reason to believe that [such companies] were significant factors in the production and sale" of ERMT during the relevant period. FF 440. It also finds, however, that a number of would-be entrants "for whom the record shows little else" had quality problems with their ERMT. See FF 172-73.
produced some ERMT in the United States, but "little is known of its sales practices or sales volumes" and the ID otherwise refers to the evidence of record with respect to TomoeGawa as "skimpy." Thus, for at least two of the domestic "players" identified by Aunyx, plus other small producers, and other competitors who might also be considered producers, there are serious deficiencies in the record. Accordingly, it is evident that Aunyx has failed to sustain its burden of proving an efficiently and economically operated domestic industry that is destroyed, substantially injured, or prevented from being established by reason of the unfair acts or methods of competition committed by respondents.

Even if we found that a broader industry was efficiently and economically operated, we would not find that there was injury or prevention of establishment that was causally linked to any unfair acts or unfair methods of competition by Canon. The ID found that Canon's competition's was "very weak" until the entrance of Nashua's reformulated product in mid-1986 and Xerox's product in early 1987. Each of the other competitors, with two possible exceptions, "suffered quality problems, especially up through 1984 . . . ."

48/ FF 432.
49/ FF 433-34.
50/ Dec. 31, 1987 Submission at 35.
51/ Id.
52/ See Fischer & Porter, supra.
53/ FF 447.
Accordingly, whether the industry is defined as only Aunyx or all domestic producers of ERMT, Aunyx failed to establish that an industry is efficiently and economically operated, nor any effect or tendency for that industry to be destroyed, substantially injured, or prevented from being established, due to any unfair act or method of competition by Canon.
We join in the Commission's decision to review and reverse the ALJ's finding that there was a violation of Section 337 in Canon's "disparagement" of competing toner manufacturers. We add these additional views to express our reservations about the approach taken in the ID regarding several matters not reviewed by the Commission. Because the Commission has unanimously found that Canon's conduct was not sufficient to be actionable as a wrongful effort to maintain its monopoly power, the Commission need not decide whether an ERMT market (the relevant market found in the ID) was properly defined or Canon's power in that market was properly assessed. For the same reason, the Commission need not determine whether the injury suffered by petitioner Aunyx was of a type cognizable under the antitrust laws which provide the basis for petitioner's unfair trade practice claim. While we do not dissent from the Commission's decision not to review these matters, our concerns about the ID's treatment of these issues require some comment.¹

¹The ID was quite critical of the testimony of Canon's economic expert, and it appears that Canon's arguments regarding market definition and the existence of market power failed on the facts, not because the ALJ rejected Canon's view of the law. As
Market Definition and Market Power

Identification of the relevant economic market and assessment of the power of a given firm to affect prices in that market are critical to disposition of claims under the antitrust laws. These issues usually are addressed separately. Increasingly, however, courts and commentators recognize the confluence of these inquiries. For instance, the definition of product markets turns largely on an evaluation of the availability and closeness of substitutes for the product at issue: if substitutes are available, the market to be analyzed should be defined so as to include those substitutes. At the same time, the degree of power exercised by a firm will decline with the availability of close substitute products from other existing firms or from new firms that are able to easily enter the business.

Our concerns about the ID's treatment of the market definition and market power issues in this investigation center on the role of substitute products and potential substitute products. We are concerned that the ID too readily rejected a consequence, the ID's treatment of these issues would not be reviewed by the Commission unless they were clearly erroneous (19 C.F.R. Sec. 210.54) -- a standard which was not met here.

2E.g., F. Fisher, Diagnosing Monopoly, 19-2 Quarterly Rev. of Econ. & Bus. 8 (1979); Ball Memorial Hosp., Inc., v. Mutual Hosp., Ins., 784 F.2d 1325, 1335-1337 (7th Cir. 1986).

3E.g., F. Scherer, Industrial Market Structure and Economic Performance 60 (2nd ed. 1980).
Canon's proposed definition of the relevant market without a sufficiently critical evaluation of evidence regarding competition among substitute products. We also are concerned that the ID's rejection of Canon's argument on market power places too much weight on the failures of other participants in the ERMT market.

Canon's Proposed Mid-Range Copier Systems Market

Relying heavily on the Ninth Circuit's decision in *General Business Systems v. North American Phillips*,\(^4\) Canon contends that the relevant market for assessing its monopoly power is a market of all mid-range copier systems.\(^5\) Canon argues that toner is just one part of an overall copier system and that toner pricing is constrained by competition between different copier systems. Canon reasons that if it priced toner at supracompetitive levels, it would sell far fewer copiers, to its overall economic disadvantage.\(^6\) Thus, Canon concludes, "effective competition" for toner occurs at the overall copier system level, and the relevant market for antitrust purposes is the market for copier systems. Had this market definition been accepted it is highly questionable whether it could not have been shown that Canon had monopoly power, given the large number and strength of other copier system vendors.

\(^4\)699 F.2d 965 (9th Cir. 1983).

\(^5\)Canon's Petition for Review at 49-58.

\(^6\)Ibid.
As we read the ID, Canon's argument was rejected on the facts, not as a matter of law. In rejecting Canon's argument, the ID placed particular significance on two conclusions of fact: that toner is a small part of the overall cost of copying over the life of a customer's ownership of a particular copying system, and that only a minority of copier customers (20-25 percent) ever analyze cost-per-copy in selecting a copier system. These facts, together with the purported difficulty of computing total system cost, apparently led the ALJ to conclude that the cost of toner is not a material factor in the evaluation of overall system cost when a customer purchases a new copier system. As we understand the ID, it was principally for these reasons that Canon's proposed mid-range copier system market definition was rejected.

We agree with Canon that the ID somewhat misses the mark when it discounts the importance of toner prices in the overall copying cost. It may be true that total copying system cost includes the cost of materials, such as paper, that diminish the absolute value of the cost of toner compared to all other copying expenses. But a copier purchaser will have to pay for paper regardless of what machine he buys. It seems far more

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7See ff 66-70.
8See ff 76.
9See ff 81.
10See ff 67; also Canon's Petition for Review at 56-57.
11Id.
likely that a customer will focus on the items, such as toner, that vary from system to system. And in doing a comparison of the system costs, the copier purchaser will be confronted with the fact that toner is apparently one of the two most expensive items (representing as much as 30 percent of system costs), second only to the cost of the copier machine itself. We are concerned that the ID addresses this issue only in passing and does not directly confront the implications of Canon's argument.

We are also concerned with the ID's reasoning that the existence of competition among copier systems (which include toner) is negated by the fact that only a minority of copier customers attempt to analyze cost-per-copy when they select a new copier. The ID accepts with approval the testimony of Mr. McNaughton of Nashua Corporation that 20 to 25 percent of copier customers attempt to analyze cost-per-copy when selecting a copier. Apparently focusing on the 75 to 80 percent of customers who do not attempt to analyze the cost-per-copy, the ID treats the lack of customer knowledge as a factor that rebuts Canon's argument that the price of toner is factored by copier customers into an overall system price.

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12 See Canon's Petition for Review at 57 (and record citations therein); cf. Respondent's Response to Canon's Petition for Review at 32 to 34, and The Response of the Commission's Investigative Staff to Canon's Petition for Review at 43 (and record citations therein) [criticizing Canon's estimate of toner cost as overstated].

13 See ff 76-77.

14 See ff 76.
However, the ID fails to consider that the substantial minority (20 to 25 percent) of copier customers who have the knowledge and wherewithal to conduct a cost-per-copy analysis may be policing Canon's toner pricing for the rest of the copier customers. Unless there is evidence that Canon can engage in systematic price discrimination (charging lower prices to those who have knowledge about toner prices and charging higher, supracompetitive prices to those who are ignorant), the area of effective system competition may be so large that it effectively restrains Canon's ability to charge supracompetitive prices for its toner. The ID does not consider this possibility and says nothing that suggests that systematic price discrimination in fact exists.

**Canon's Proposed All Dry-Toner Market**

By now, it is well accepted that to define a product market


17In its only consideration of the issue, the ID finds that price discrimination in another context did not exist (ff 356). Citing testimony in the record, the Commission Investigative Attorney has suggested that price discrimination did exist: "Even if Canon's few large customers did consider total system cost to be an important factor in selecting copiers, Canon insulated them from supracompetitive ERMT prices by charging them a discriminatory lower price for ERMT" (Response of Commission's Investigative Staff to Canon's Petition for Review, at 42). While there may be some merit in the IA's argument, the ID is silent on this issue.
properly for purposes of the antitrust laws, the inquiry must focus not only on the needs and perceptions of customers, but also on the ability of firms to supply products they are not then producing. In defining the relevant market, one must assess competition not only from the "consumption end" but also from the "production end." "Cross elasticity of supply, or production flexibility among sellers, is [a] relevant factor to be considered in defining a product market for antitrust purposes." Indeed in Calnetics Corp. v. Volkswagen of America, Inc., the Ninth Circuit reversed a decision by the district court in part because the latter failed to consider production cross-elasticity in defining the relevant product market.

The proper analysis of competition from the production end is of key importance in this investigation. Canon argues here, as it did before the ALJ, that the relevant market consists of all dry toner because producers of other types of dry toner could

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18 Kaiser Aluminum & Chemical Corp. v. F.T.C., 652 F.2d 1324, 1330 (7th Cir. 1981).

19 532 F.2d 674 (9th Cir. 1976). The Court in ILC Peripherals v. International Business Machines, 458 F. Supp. 423, 427 (N.D. Cal. 1978), explained why it is important to fully consider supply substitutability when defining a relevant market: "Substitutability in production refers to the ability of firms in a given line of commerce to turn their productive facilities toward the production of commodities in another line because of similarities in technology between them. Where the degree of substitutability in production is high, cross-elasticities of supply will also be high, and again the two commodities should be treated as part of the same market. While the majority of the decided cases in which the rule of reasonable interchangeability is employed dealt with the 'use' side of the market, the courts have not been unaware of the importance of substitutability on the 'production' side as well."
switch to producing Canon-compatible ERMT with relative ease.\textsuperscript{20} The ALJ at least implicitly recognized the importance of cross-elasticity of supply when he considered and rejected Canon's arguments below.\textsuperscript{21} As we read the ID, Canon's arguments were not rejected on the law. Rather, they were rejected because of a failure proof — the ALJ found as a factual matter that production of ERMT by existing producers was difficult and barriers to entry by new producers were high.\textsuperscript{22} We have certain concerns about the ALJ's conclusions in this regard.

At Canon's invitation, the ALJ devoted significant attention to the Department of Justice Merger Guidelines in his evaluation of the relevant market.\textsuperscript{23} In looking at putative product markets from a supply perspective, the Department of Justice has concluded that firms with "existing productive and distributive facilities that could easily and economically be used to produce and sell the relevant product within one year in response to a 'small but significant and non-transitory increase in price' should be included in the relevant market" [emphasis

\textsuperscript{20}Canon's Petition for Review at 66-69. Canon makes this argument expressly in the alternative to its preferred market definition -- mid-range copier systems.

\textsuperscript{21}See, e.g., \textit{ff} 82-87.

\textsuperscript{22}See, e.g., ID at pp. 143-144.

\textsuperscript{23}See Department of Justice, Antitrust Division, 1984 Merger Guidelines, 49 Fed. Reg. 26,823 (June 29, 1984) [hereinafter cited as Guidelines]. \textit{See}, e.g., \textit{ff} 34-36, 51 for a discussion of the merger guidelines by the ALJ.
Even though these guidelines have no authoritative legal status in regard to the market scope and market power issues in this case, we do not believe the ALJ's consideration of the standards contained in the Guidelines was misplaced. When using the Guidelines in an antitrust case, however, it should be remembered that they are not rigid rules. As they themselves explain: "Because the specific standards set forth in the Guidelines must be applied to a broad range of possible factual circumstances, strict application of these standards may provide misleading answers to the economic questions raised under the antitrust laws." The ID does not clearly reveal whether the ALJ considered possible reasons to depart from the Guidelines or instead viewed the methodology of Guidelines section 2.21 to be determinative in rejecting Canon's argument on market participation of firms not presently producing NP ERMT. The ID appears to give great weight to the fact that "[t]he evidence reveals no toner manufacturer who spent one year or less gaining

24 See Guidelines, Sec. 2.21, 49 Fed. Reg. 26,829 (June 29, 1984). By its terms this provision addresses firms with existing production capability and focuses on what they could do through the exercise of economically reasonable effort.

25 As noted by one commentator: "The 1984 Guidelines define markets exclusively for the purpose of analyzing mergers, in which the chief concern is not exercises of market power by a single firm, but rather increased likelihood of collusion. However, many of the economic principles of market delineation developed in the guidelines serve equally well in other antitrust contexts." H. Hovenkamp, Economics and Federal Antitrust Law, 74-75 (1985).

successful entry into the NP ERMT market."\textsuperscript{27}

The one-year period specified in section 2.21 of the guidelines was not intended to be strictly applied.\textsuperscript{28} In the words of Dr. Feinberg, the economic expert called at trial by the Commission's investigative attorney, the one-year period should be used as a "benchmark" and not an "absolute cutoff."\textsuperscript{29} A one-year benchmark for the technology involved in this industry may indeed be appropriate on the record of this case; but the findings of fact do not adequately elucidate why that is so.

Indeed, as we discuss below, there is very little discussion in the ID regarding the nature and extent of actual barriers to entry posed by the technology at issue in this case. The ID's rejection of an All Dry-Toner Market was predicated on a finding that development of NP ERMT was very difficult. As we discuss below, this conclusion appears to be based on little analysis of the nature and extent of actual technological barriers and a great deal more on the fact that no one succeeded in producing the product within a one-year period. The existence of actual barriers to NP-ERMT development is critical to defining an NP-ERMT-only market, and it is critical to finding that Canon had

\textsuperscript{27}See ff 51.

\textsuperscript{28}In fact the Guidelines later specify a two-year period as the guiding standard when assessing the strength of barriers to entry by firms that would have to construct new facilities or significantly modify existing facilities to produce the relevant product. \textit{See} Guidelines, Sec. 3.3, 49 Fed. Reg. 26,832 (June 29, 1984).

\textsuperscript{29}Tr. at 3750-3751.
monopoly power within such a market.

**Barriers to Entry and Monopoly Power**

While there is considerable support for the notion that the relative ease of entry by potential competitors is a key factor to be considered in defining a market, it also must be considered in assessing the existence and extent of market power. The market shares of producers presently in a market tell you little about their market power unless the relative ease of entry by new firms is also assessed. "Market share is just a way of estimating market power, which is the ultimate consideration." In *Ball Memorial*, the Seventh Circuit explained the role of supply elasticity and barriers to entry in assessing market power: "the lower the barriers to entry and the shorter the lags to new entry, the less the power existing firms have. When the supply is highly elastic, existing market share does not signify power."

Canon argues that it had no monopoly power despite its large share of the ERMT market (the market found by the ALJ) because barriers to entry by new producers were low and existing

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30 See, e.g., *United States v. Waste Management, Inc.*, 743 F.2d 976, 979-983 (2d Cir. 1984). In *U.S. v. Waste Management, Inc.*, the court concluded that entry by potential competitors may be considered in determining the effect of a merger on competition in that market. Id. at 982.

31 *Ball Memorial Hosp., Inc. v. Mutual Hosp. Ins.*, 784 F.2d 1325, 1336 (7th Cir. 1986).

32 784 F.2d at 1335.
competitors could easily expand their ERMT production in response to supracompetitive prices. 33

The ID concluded that Canon had monopoly power principally from the fact that Canon had a historically high market share within the NP ERMT market. The analysis of market shares clearly was a correct starting place for the ALJ's analysis of monopoly power. As an initial matter, market power can be inferred from a high market share. But such an inference is misplaced if it becomes clear on further analysis that monopoly power is constrained by the possible market entry of new producers. 34

We are concerned that the evidence regarding the nature and magnitude of barriers to entry may not be sufficient to support the conclusion that the barriers were so great that they conferred market power on the members of an ERMT-only market. While there is some discussion of the actual nature of barriers to entry, 35 for the most part significant barriers are deduced from the failure of several companies to produce a successful ERMT product within one year. 36 The ID contains a number of

33 Canon's Petition for Review at 66-69.

34 S. Salop, Measuring Ease of Entry, 31 Antitrust Bulletin 556 (Summer 1986).

35 See, e.g., ff 22, 38-44.

36 This process of deduction is illustrated by the ALJ's opinion when he writes "The evidence adduced in this investigation reveals that no competitor had the ability to enter or did in fact enter, the NP ERMT market with success in one year or less" [emphasis added]. ID at p. 144. The finding of fact cited for this statement (ff 51) says nothing about the ability
findings about the time and money expended by companies such as Winston Technologies (Esgraph), Pelikan, and [*****I in their efforts to develop their own NP ERMT.37 Even if all these efforts resulted in failure, they do not necessarily warrant the inference that barriers were high. They could support the alternative conclusion that there was significant activity in the market which may have had the effect of restraining Canon's market power.

Standing alone, the experience of other firms does not provide strong evidence on the existence or significance of barriers to entry. There are no findings on the magnitude of the effort that reasonably should be expected for relatively expeditious entry into this industry, and there are no findings on whether the efforts by the firms which apparently tried to enter the ERMT marketplace were reasonable given the potential gain that could be realized. The absolute cost of entering a market is not as relevant as the ratio of entry costs to likely return if entry is successful. As Dr. Feinberg observed at trial, in assessing the severity of barriers to entry, "the requirements for entering a market should be compared to the size of the potential profits to be earned."38

According to Petitioner's expert, from 1981 through 1986 of toner manufacturers to enter the market had they been motivated to do so. It simply observes that none of them in fact successfully entered the market within a one-year period.

37See, e.g., ff 45, 48, 50.
38Tr. at 3752.
Canon earned gross profits of [*************] on ERMT sales amounting to [*************].\(^{39}\) As for the developers of Canon-compatible ERMT, the relative significance of the barriers actually experienced appears to be small compared to their potential gains from entering the ERMT market. Esgraph expended only roughly one man-year effort at a cost of something over $100,000.\(^ {40}\) Pelikan's effort cost about $150,000 for materials, research, manufacturing, and field testing.\(^ {41}\) And even mighty [*****] spent only about [*************] to develop its Canon-compatible toner.\(^ {42}\) The time spent in product development by Esgraph, Pelikan, and [*****]\(^ {43}\) appears to be within the general bounds of the benchmarks discussed in Sections 2.21 and 3.3 of the Justice Department Guidelines. While the effort expended by these companies was not manifestly trivial, it equally was not so great that it necessarily can be said with confidence that there are significant barriers to ERMT development and production.

\(^{39}\) See ff 125. Canon's development cost for its monocomponent technology was [*************]. See ff 27.

\(^{40}\) See ff 45.

\(^{41}\) See ff 48.

\(^{42}\) See ff 50. [************] See ff 415. There are no findings regarding the development costs experienced by [***********] suppliers. There is also little evidence about the barriers encountered by Tomoegawa, a Japanese and U.S. toner producer that apparently developed and sold a Canon-compatible toner. See ff 432-439.

\(^{43}\) See ff 45, 399, 443-445.
Injury to Aunyx

Finally, we note that the ID failed to inquire adequately into the nature of the injury to Aunyx from Canon's disparagement of competing toner products. 44 We have two concerns in this regard. First, it is not clear that Aunyx suffered any injury from the "disparagement." The Commission Opinion correctly points to the absence of significant evidence of injury to any competitor from Canon's disparagement and particularly to the absence of evidence of injury to Aunyx. The Commission Opinion does not explicitly state that injury to Aunyx must be demonstrated. We think it is an important question whether injury to Aunyx is at least implicitly required to support affirmative relief under Section 337.

If the ID had focused more carefully on the injury to Aunyx, rather than on injury to competitors generally, we believe that it would have been required to address an evidentiary problem not noted in the ID. Some of the assertedly disparaging comments referred solely to another competitor in this market, not to Aunyx. 45 Disparagement of other competitors' products might not harm Aunyx but might instead actually benefit Aunyx. If this were the case, we do not believe that injury sufficient to support this investigation would be established. A similar concern affects analysis of injury from the disparaging statement that apparently referred to Aunyx as well as other producers of

44See ID at 172-74.
45FF 395, 173.
competing toner products. In evaluating the injury to Aunyx from this statement, the ID should have ascertained the possible benefit to Aunyx from harm to its competitors as well as the possible harm to Aunyx from any disparagement of its product.

A second concern is the possible absence of the sort of antitrust injury necessary to support an action under the antitrust laws. In private antitrust litigation, it is not sufficient for the plaintiff to make out a violation of the antitrust laws and a derivative harm to the plaintiff. The plaintiff also must show that the harm to him results directly from the injury to competition and not from some other consequence of the challenged action. If disparagement of competitors is cognizable as a violation of the antitrust laws, injury to the business of the disparaged competitor arguably could constitute the sort of antitrust injury required for recovery in antitrust litigation. While we do not express a view on that issue, we believe that the ID erred in concluding that the disparagement had injured Canon's competitors sufficiently to sustain its claim under Section 337 without specifically addressing this matter.


47 For analysis of antitrust injury in various factual contexts and relation of this concept to other antitrust considerations, see Page, The Scope of Liability for Antitrust Violations, 37 Stan. L. Rev. 1445 (1985).
ADDITIONAL VIEWS OF CHAIRMAN LIEBELER

Certain Electrically Resistive Monocomponent Toner and "Black Powder" Preparations Therefor
Inv. No. 337-TA-253

I concur in the decision of the Commission. The Commission has reversed the Initial Determination's conclusions that the evidence adduced in this investigation revealed injury to competition sufficient to sustain Canon's disparagement of competing products claim under the antitrust laws. The precise ground for that decision is the ALJ's error in shifting to Canon the burden of disproving injury. As this decision is dispositive of the disparagement claim, and as no other antitrust claim has been found viable, the Commission need not reach the questions regarding market definition and market power addressed in the Additional Views of Vice-Chairman Brunsdale and Commissioner Cass. Were those matters before us, I would concur with the concerns expressed in those Additional Views. I also believe that the analysis of injury from Canon's disparagement, which is on review before us, should distinguish the exact nature of the injury to competition from the injury suffered by any of Canon's competitors. Because the Commission has determined that no significant evidence of any injury has been presented, this distinction, too, is not immediately at issue.
Pursuant to the Notice of Investigation in this matter (51 Fed Reg 29709, August 20, 1986), 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(a)).

The Administrative Law Judge hereby determines that there is a violation of Section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337, hereafter Section 337), in the importation of certain electrically-resistive monocomponent toner and "black power" preparations therefor into the United States, or in their sale.

The complaint herein alleged that such importation and sale constitute unfair acts and unfair methods of competition by reason of alleged conduct (1) of a type actionable under the U.S. antitrust laws, such as (a) use of leverage over dealers to coerce such dealers not to purchase toner from Aunyx, (b) use of leverage over dealers to coerce such dealers to buy toner only from
respondent Canon USA, Inc., (c) interference with Aunyx's supply of materials necessary to the manufacture and packaging of toner; and (d) interference with Aunyx's ability to market its toner products, and (2) of a type actionable not only under the U.S. antitrust laws, but also under the common law and statutory law of unfair competition, such as (a) interference with Aunyx's business relations with its customers, and (b) disparagement of Aunyx's products and reputation. The complaint further alleges that the effect or tendency of the unfair methods of competition and unfair acts is to monopolize and restrain trade and commerce in the United States, to destroy or substantially injure an industry, efficiently and economically operated, in the United States, and to prevent the establishment of a United States industry.

The violation found herein is that Canon disparaged competing producers of the toner in issue, and their products in such a manner as to restrain or monopolize trade and commerce in the United States, in violation of Section 337.
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APPENDIX
PROCEDURAL HISTORY

On July 15, 1986, a complaint was filed with the U.S. International Trade Commission under Section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337, hereafter Section 337), on behalf of Aunyx Corporation ("Aunyx"), 65 Industrial Park Road, Hingham, Massachusetts 02043. An amended complaint was filed on July 30, 1986, and supplements to the amended complaint were filed on July 30 and August 1, 5 and 12, 1986. The complaint as amended alleged unfair methods of competition and unfair acts in the importation of certain electrically resistive monocomponent toner into the United States, and in its sale, the effect or tendency of which were allegedly to monopolize and restrain trade and commerce in the United States; to destroy or substantially injure an industry, efficiently and economically operated, in the United States, and to prevent the establishment of a United States industry.

Upon consideration of the complaint, the Commission, on August 13, 1986, ordered that an investigation be instituted pursuant to subsection (b) of section 337 to determine whether there is a violation of subsection (a) of Section 337, in the importation of certain electrically resistive monocomponent toner into the United States, or in its sale, by reason of alleged (1) monopolization; (2) attempt to monopolize; and (3) conspiracy to monopolize the relevant market for said toner, (4) exclusive dealing, and (5) conduct actionable under the common and statutory law of unfair competition, such as (a) alleged interference with Aunyx's business relations.
with its customers and (b) alleged disparagement of Aunyx's products and reputation, the effect or tendency of which is to monopolize and restrain trade and commerce in the United States, to destroy or substantially injure an industry, efficiently and economically operated in the United States, and to prevent the establishment of a United States industry. The notice of investigation was published in the Federal Register on August 20, 1986. (51 Fed. Reg. 29709).

The following parties were named as respondents in the notice of investigation:

Canon Inc.
7-1 Nishi-Shinjuku 2 Chome
Shinjuku Dai-Ichi Seimei Building
Shinjuku-Ku, Tokyo, Japan

Canon U S A., Inc
One Canon Plaza
Lake Success, New York 11042

Stephen L. Sulzer, Esq. and Stephen Schwartz, Esq., Office of Unfair Import Investigations, were the named Commission investigative attorneys, party to the investigation. Judge John J. Mathias was designated as the Administrative Law Judge to preside over the investigation.

A response to the complaint and notice of investigation was filed by respondents. A preliminary conference was held before the administrative law judge on October 8, 1986, at which all parties were represented.

On November 19, 1986, respondents' motion to amend their answer to the complaint and notice of investigation to add a patent-based defense as their
Eighth Affirmative Defense was granted. (Order No. 6). An Initial Determination issued on that same date designating the investigation more complicated and extending all procedural dates by three months. (Order No. 7). By Notice dated December 12, 1986, the Commission decided not to review the Initial Determination.

On January 12, 1987, an Initial Determination issued granting the request of the Federal Trade Commission ("FTC") to intervene in this investigation. (Order No. 9). The Commission, by Notice issued February 18, 1987, decided to review the Initial Determination and reverse in part and affirm in part the granting of intervenor status to the Federal Trade Commission. The Commission reversed that portion of the ID that granted the FTC access to confidential information and affirmed that portion which allowed intervention on the condition the FTC not engage in any discovery. The Commission further stated that the FTC's intervention was limited to the issue of the consistent application of the antitrust laws and noted that such participation by the FTC is analogous to that of an amicus curiae. (Notice, February 18, 1987)

On January 26, 1987, an Initial Determination was issued granting complainant's motion to amend the notice of investigation to read "Certain Electrically-Resistive Monocomponent Toner and Components Thereof" (Order No. 11). By Notice dated March 2, 1987, the Commission decided to review and modify that initial determination. The notice of investigation was thus amended to cover "Certain Electrically Resistive Monocomponent Toner and 'Black Powder' Preparations Therefor." (Notice, March 2, 1987).
On April 7, 1987, the administrative law judge certified to the Commission a joint request of complainant and staff for the issuance of certain questionnaires by the Commission under 19 U.S.C § 1333(a)(4) (Order No 14). On May 22, 1987, the Commission issued a "Notice of Decision Not To Issue Questionnaires."

On April 9, 1987, an Initial Determination issued granting a joint motion of complainant and staff to further designate this investigation "More Complicated" and extend it to the full eighteen (18) months in duration (Order No 17). By Notice issued May 13, 1987, the Commission decided not to review such initial determination.

By Order No 20, dated April 15, 1987, the administrative law judge denied the joint motion of complainant and staff to amend the complaint and notice of investigation to include allegations that Canon Inc and Canon USA Inc and certain Canon dealers had entered into a horizontal conspiracy to divide the United States market among Canon dealers in violation of Section 1 of the Sherman Act.

By Order No 22, dated April 20, 1987, the request of Impro Corporation to intervene as a party was denied.

By Order No 42, dated August 12, 1987, a motion of complainant to amend the complaint and notice of investigation to enlarge the definition of the domestic industry therein, was denied.
The Prehearing Conference in this matter convened on August 27, 1987. The hearing commenced immediately thereafter before Judge Mathias to determine whether there is a violation of Section 337 as alleged in the complaint and set forth in the notice of investigation. All parties were represented at the hearing. The hearing concluded and the record was closed on Friday, September 11, 1987.

During the course of the hearing, on September 4, 1987, Order No. 47 was issued, granting complainant’s motion in limine to exclude evidence relating to respondents’ Eighth Affirmative Defense, the patent-based defense. By Order No. 48, dated September 9, 1987, leave was granted to respondents to file an interlocutory appeal from Order No. 47. By Notice of October 5, 1987, the Commission granted the application for interlocutory appeal, and reversed the order excluding evidence as to the patent-based defense. However, complainant and respondents entered into a stipulation providing for complainant’s withdrawal of certain allegations of the amended complaint and the withdrawal by respondents of the patent-based defense. Thus, in Order No. 58, dated October 15, 1987, the hearing on the patent-based defense, as previously set, was cancelled.

On September 23, 1987, an order issued granting, in part, respondents’ motion to strike certain contentions based on production and sales records of complainant. (Order No. 52). As a sanction for complainant’s failure to obey certain discovery orders in this investigation, certain production and sales data of complainant Aunyxt was excluded from the record.
The issues have been briefed and proposed findings of fact and conclusions of law as well as replies thereto, have been submitted by the parties. Oral argument was heard on the briefs and proposed findings of fact of the participating parties on October 14, 1987. 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:

<table>
<thead>
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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>Tr</td>
<td>Official Transcript, usually preceded by the witness' name and followed by the referenced page(s).</td>
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<tr>
<td>CX</td>
<td>Complainant's Exhibit, followed by its number and the referenced page(s).</td>
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<tr>
<td>CPX</td>
<td>Complainant's Physical Exhibit.</td>
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<tr>
<td>RX</td>
<td>Respondent's Exhibit, followed by its number and referenced page(s).</td>
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<tr>
<td>RPX</td>
<td>Respondent's Physical Exhibit.</td>
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<tr>
<td>SX</td>
<td>Staff Counsel's Exhibit, followed by its number and the referenced page(s).</td>
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<tr>
<td>CRX</td>
<td>Complainant's Rebuttal Exhibit, followed by its number and the referenced page(s).</td>
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<td>CF</td>
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<td>RF</td>
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<td>CB</td>
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<td>Dep.</td>
<td>Deposition, usually preceded by the name of the deponent, and followed by the exhibit number and the referenced page(s).</td>
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FINDINGS OF FACT

I. JURISDICTION

1. Service of the complaint and notice of investigation was perfected on all respondents by the Commission Secretary. Respondents Canon Inc. and Canon U.S.A., Inc. ("Canon") appeared through counsel and responded to the complaint and notice of investigation. Respondents do not contest the Commission's jurisdiction over the subject matter of this investigation (Respondents' Post-Hearing Brief).

II. PARTIES

2. Complainant Aunyx Corporation is a corporation organized and existing under the laws of the State of Massachusetts, and has its principal place of business located at 65 Industrial Park Road, Hingham, Massachusetts 02043. It is engaged in the business of manufacturing and selling toners for use in copier machines (RPX 44, the Complaint, ¶ 3).

3. Aunyx Manufacturing Co. is a Massachusetts corporation with its principal place of business located in Hingham, Massachusetts. It is a wholly owned subsidiary of Aunyx Corporation and is engaged in the manufacture of toners for use in Xerox, Canon, Royal, and other copier machines, including the toner at issue herein. (CX 7, Langone W. S., at ¶ 1, 8, CX 1, Hanley W. S., at ¶ 4(b), CX 22).
4. Aunyx Business Machines is a Massachusetts corporation with its principal place of business located in Hingham, Massachusetts. (CX 7, Langone W S., at ¶ 1) It has been an authorized, non-exclusive dealer for Canon NP copiers with primary sales and service responsibilities in Plymouth County, Massachusetts since 1976, and since 1983 has been an authorized dealer of Canon PC copiers. (Answer to Amended Verified Complaint and Verified Supplement, dated September 12, 1986, at ¶ 58). It has also been an authorized dealer of Panasonic copiers and supplies since 1986. (CX 5, Donnelly W S., at ¶ 1).

5. Aunyx Corporation ("Aunyx") is the complainant in this investigation. (Notice of Investigation). The other two corporations, Aunyx Manufacturing and Aunyx Business Machines, were described by Mr Langone, the president and sole owner of Aunyx, as being the other two parts of the "Aunyx family." They are all three located at the same address. (CX 7, Langone W S., at ¶ 1).

6. Respondent Canon Inc is a Japanese company, organized and existing under the laws of Japan, having its principal place of business located at 7-1, Nishi Shinjuku 2 Chome, Shinjuku Dai-Ichi Seimei Building, Shinjuku-Ku, Tokyo, Japan. Until the end of 1984, Canon Inc was engaged in the development, manufacture, and sale, for export to the United States, of electrically resistive monocomponent toner ("ERMT") for use in Canon Inc.'s copier machines. Since about November, 1984, Canon Inc. has been engaged in the development, manufacture, and sale, for export to the United States, of "black powder" preparations for such ERMT, which "black powder" is combined with
other chemicals and supplies by Canon Business Machines, Inc., in the United States to produce ERMT. (CF 3 and Canon's comment thereon; CX 104, at 2, 8, Answers to Interrogatory Nos. 1, 8)

7 Respondent Canon U.S.A., Inc. is a domestic company and a wholly-owned subsidiary of Canon Inc., with its principal office located at One Canon Plaza, Lake Success, New York 11042. Until the end of 1984, it imported, sold and distributed, or caused the importation, sale and distribution, within the United States, of ERMT for use in Canon Inc.'s copier machines. It also markets and distributes such copiers. Since about January 1985, Canon U.S.A., Inc. has been obtaining its ERMT from Canon Business Machines, Inc. in Costa Mesa, California, for resale in the United States market. (CF 4 and Canon's comment thereon; CX 104, at 2, Answer to Interrogatory No. 1).

8 Canon Business Machines, Inc. ("CBM") is a wholly-owned subsidiary of Canon Inc. and is located in Costa Mesa, California. Since 1985, it has imported toner "black powders" in bulk form from Canon Inc., to which it adds certain additives to produce ERMT, which it then packages in cartridges and cartons and sells to Canon U.S.A., Inc. (CF 5, which Canon does not contest)

III THE PRODUCT AT ISSUE

9. The product at issue in this investigation is the electrically resistive negative charging monocomponent toner ("ERMT") compatible with Canon's NP 210 through NP 500 series copiers, and an imported chemical preparation ("black powder preparations") which can be combined with certain additives to produce ERMT. (SF 8; RRF 42, FF 5, above)
10. Toner is the ink used to form the image in a xerographic copier machine. (SF 9, which Canon does not contest).

11. Canon's NP 210-500 series copiers utilize the toner projection development system ("TPDS") This system uses dry, electrically resistive monocomponent toner that was developed by Canon for use in its NP copiers. The development of such toner involved the delicate balancing of materials and processes within the machine. The TPDS produces copy by projecting toner particles back and forth across an air gap between the toner supply and the developing drum at an alternating frequency up to 1000 cycles per second (1000 Hz). The system is sometimes known as "jumping toner." (RX 715, Michie & blowing at 8; See also, RPX 102).

12. In general terms, the process of the NP 210-500 copiers works as follows.

(1) the document to be copied is optically projected onto the electrostatically charged surface of a rotating photoconductive drum;

(2) electrostatically charged toner particles are brought into close proximity to the electrostatic latent image on the photoconductive drum by the action of the developer unit, causing the charged particles to be attracted into the latent image areas ("development" of the image),

(3) copy paper moving in registration with the rotating drum passes over a transfer corotron where an electrostatic charge applied to the back of the paper causes the toner particles in the developed image to transfer from the drum to the paper surface; and

(4) the paper carrying the loose toner particles in the image of the original document is passed through a fuser unit where heat and/or pressure melt the toner particles causing them to adhere permanently to the paper.
To perform properly in the environment of a particular copier machine, toner must possess several carefully controlled physical properties. Toners thus differ greatly from one another depending upon the copying machines in which they are to be used. The differences are dictated by engineering considerations that go into the design of each copier machine. As a general rule, machine design considerations such as copy throughput rate, machine size, choice of photoconductor, and method of image development dictate the specific properties of the toner required for a particular machine. Such performance parameters preclude the interchange of different toner types such as dual-component with monocomponent, or positive charging with negative charging, or conductive with resistive toners. (RPX 44, at ¶ 8, Answer ¶ 8).

There are several different types of toner for use in copying machines -- liquid or dry, dual component or monocomponent, positive charging or negative charging, and electrically resistive (i.e., charged triboelectrically -- by friction) or electrically conductive (i.e., charged only by induction) (CX 113, RPX 44 at ¶ 9, Answer ¶ 9, RX 700, Murase W S, at 4-6).

In dual component toners, the toner particles are mixed with carrier particles to charge the toner and transport it to the photoconductive drum. Upon contact with the drum, toner separates from the carrier and adheres to the drum, while the carrier particles fall away from the drum and...
are recycled for use with additional toner. Monocomponent toner, in contrast, does not require a separate carrier because the toner particles contain a magnetic material and transport themselves. (RPX 44, at ¶ 9, Answer ¶ 9, RX 715, Michie W.S. at 6-7)

16. The process for manufacturing ERMT includes the following steps

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Answer to Interrogatory No. 1)

IV. MARKET DEFINITION

A. Industry or Public Recognition As a Separate Economic Market

17 [ C ] perceived a separate market for Canon-compatible ERMT

In [ C ] estimation, there was a distinct toner market in place, an aftermarket, that required a pricing strategy for successful entry. [ C ]
18 [C 1,] identified a market for Canon-compatible ERMT which included a specific marketplace, i.e., purchasers, and specific vendors and market prices [C ] recognized the need for product quality and careful pricing in order to gain a foothold in this market [C 19 ] [C ] directed its efforts from a perception of a separate market for toner compatible with the Canon NP 210-500 copiers [C ]

20 Mr James K Keller was President and Chief Executive Officer of Winston Technologies, which manufactured a variety of toner products, including the Esgraph toner compatible with the Canon NP 400 and 210 copiers (CX 197a, Keller W S., at ¶ 1) The decision to manufacture Canon-compatible toner was based on the perception of a market for Canon-compatible toner, due in large part to requests for such a toner from various sources, including independent dealers, Canon dealers and paper companies (CX 197a, Keller W S., at ¶¶ 8 and 9)

21 Mr Robert Langone, President of Aunyx Corporation, perceived an identifiable market for toner compatible with the Canon NP 210-500 copiers, because of the unique NP process which required specific supplies (Langone, Tr 3524-25)
Product's Peculiar Characteristics and Use

22. The peculiar characteristics of NP toner are illustrated by the complex and costly process required to develop any competitive product. The development of competitive toner requires that the prospective competitor obtain samples of the Canon brand toner, analyze the composition of the Canon brand toner, formulate a chemically similar and functionally equivalent product, and then test the physical properties and performance of the competitive toner. (CX 9, MacNaughton W.S., at 9-11, ¶¶ 14 & 15, Kairys, Tr 759)

23. Canon's history is one of a long but innovative development leading to, among other things, the NP system at issue. Canon entered the copier business in 1968 with the NP copying system, the first plain paper alternative to xerography. An integral part of the NP process is a unique 3-layered cadmium sulfide photosensitive drum. (RX 700, Murase W.S., at 4)

24. By 1972, Canon introduced liquid, dry copying which produced dry copies with liquid toner. (Id.)

25. In 1974 and 1975, Canon USA introduced its own NP copiers in the United States, the NP-L7 and NP70, both of which used dual component liquid toner. This required a complex, expensive process and regular servicing by a technician to change the developer. (Id. at 8).
26 The monocomponent toner copying system provided an attractive alternative to dual component toner systems because the monocomponent system provided more consistent copies at less cost and maintenance, and regular servicing to change the developer is not required (Id at 5).

27 The development of monocomponent technology for moderately-priced plain paper copiers required Canon in 1976 to commit a large technical staff and over [C] to a campaign lasting more than [C] years (Id at 6).

28 Canon's research and development campaign resulted in the Toner Projection Development System, in which a sharp image is developed by projecting monocomponent toner particles back and forth across an air gap between the toner supply and the developing drum at high frequency (Id).

29 The first copier in the NP series at issue, the NP-400, was introduced in the US in June, 1981. By April, 1987, the last NP model at issue that was still in production, the NP 270, was discontinued in the United States (Id at 10; See RPX 19 and attachment).

30 When Canon introduced the NP copying system in 1981, it was the only source of toner usable in the NP machines (Canon Prehearing Brief at 85).

31 All copiers in the NP 210-500 series use the same ERMT, sometimes called "universal toner." (RX 715, Michie W.S, at 19, Canon Prehearing Brief at 166).
32. The NP 210-500 copiers can use only NP 210-500-compatible ERMT. No other products are interchangeable. (Meola, Tr. 2372-76; CX 10, Pearson W S., at 2, 18-19, ¶¶ 5, 37-39; Pearson, Tr 1998-99, Finnegan Dep., JPX 70 at 49; RX 727, Rapp W S., at 28)

NP toner had a unique design, (Id at 46)

C. Unique Production Facilities

34. If a firm has existing productive and distributive facilities that could easily and economically be used to produce and sell the relevant product within one year, that firm should be included in the relevant product market (1984 Department of Justice Merger Guidelines § 2 21, 49 Fed. Reg. 26823, 26829 (June 29, 1984)).

35. If a firm that could readily convert its facilities from the production of one product to another would have significant difficulty distributing or marketing the new product or for some other reason would find the substitution unprofitable, that firm should not be included in the relevant product market (Id)

36. Respondents' economic expert witness considers the DOJ merger guidelines the key source for the definition of relevant market, and the interpretation of indicia of market power (Rapp, Tr 3256)
37 Respondents' economic expert witness stated that "[a]lthough NP-210 [through 500] toner is difficult to imitate because of the technological advances of the NP-210 [through 500] copier system, several manufacturers have developed an NP-210 [through 500]-compatible toner." [emphasis added]. (RX 727, Rapp W S, at 46).

38 Patent protection is among the barriers to entry of the marketplace for a toner at issue. (CX 9, MacNaughton W S, at 10, Pearson, Tr. 2291).

39 The manufacture of monocomponent toner carries with it the problem of cross-contamination with other products, as well as the additional problem of the abrasiveness of the toner which could harm the manufacturing equipment. (CX 9, MacNaughton W S., at 11).

40 It is necessary that NP toner be equally blended. The high-intensity blending equipment Pelikan purchased in order to properly mix the toner cost approximately $65,000. (Kairys, Tr. 813)

41 At Pelikan, before changing from the manufacture of one toner to another, all the equipment used on the line is extensively cleaned out and purged. The mixing, milling, classification and blending all have to be completely purged before the manufacture of another toner. (Kairys, Tr. 810)
42 Toner compatible with the Canon NP210 - NP500 series is an ERMT and therefore can be fairly easily contaminated. Aunyx engages in an intensive five to six hour cleaning procedure before it manufactures any monocomponent toner on its production line (Pickett, Tr 1579).

43 Aunyx's method of manufacturing Canon-type monocomponent toner differs substantially from its method of manufacturing dual component toners because it requires significantly more processing. In order to accommodate these differences, Aunyx acquired \( C \) which Aunyx uses only to manufacture Canon-type toner (CX 3, Pickett W.S., at 5-7).

44 Diamond Research Corp. reported in Toner and Developer Industry Update, 1984 as follows:

Contamination, for example, can be a severe problem unless certain equipment is dedicated to the manufacture of a specific product or family of products. And, as more potent charging agents are incorporated into toner formulas there will be a greater need to duplicate and segregate manufacturing facilities and process equipment. Unless a "compact toner plant" concept is adopted, the ability to automate and to use high output equipment will be sharply restricted by the time required for cleaning and changeover" (CX 25 at 74).

45 Esgraph spent at least $100,000 to develop an NP toner. At least one man-year (not a year within the meaning of the DOJ guidelines) of labor went into developing the toner, i.e., an employee in the copy shop who did testing evaluation, a chemist who ran the program, and a pilot plant operator who made samples (CX 197, Keller W.S., at 9; Keller, Tr 475-76).
46. The Esgraph toner was only tested by Esgraph on the NP-400. Esgraph toner was not suitable for other Canon machines. (CX 197, Keller W S., at 9-11 & 21, ¶¶ 10, 13 and 31; Keller, Tr 510-13; Keller Dep. JPX 22 at 104-07, 138-40).

47. In late 1982, Esgraph decided to leave the NP ERMT market altogether. This decision was due to the realization that further research and development would be required because a successful ERMT must be capable of use not only in the NP 400, but also in other copiers of the NP 210-500 series, and that Canon would continue to mount a strong resistance, which had already included a price reduction of $4.00 per carton. (CX 197a, Keller W S., at 21, ¶ 31; Keller, Tr. 509-13; Keller Dep. JPX 22, at 104-07, 138-40).

48. Pelikan worked on a competitive toner for approximately two years, spending a minimum of $150,000 for materials, time and research and extensive manufacturer and field testing before introducing the toner to the marketplace. Pelikan introduced its toner in mid-1983. (Kairys, Tr. 750-51, 811, CX 197, Kairys W.S., at 5, ¶ 10, see Exs 6-8).

49. Aunyx began its efforts to produce and market a toner compatible with the NP210 - 500 series Canon copiers in 1981. (Thompson Dep., JPX 55 at 137) It introduced its Canon compatible toner at the July 1982 National Office Machine Dealers Association (NOMDA) show and began producing such toner in commercial quantities in September 1982. (CX 78, Langone W.S., at ¶19, Complaint ¶ 18) However, Aunyx had serious quality problems with its product and finally ceased production in May 1983 for 17 months and did not resume.
production until late 1984, after additional development efforts (CX 5, Donnelly W S at ¶ 4, Shaw Dep., JPX 54 at 121-23, 125, RX 347, 348, 512, 513, RX 459 at 82, 104, 131, 141, RX 461 at Bates Nos. 202168, 202170, 202183, 202205-206, 202224, 202226, 202352, 202407, 202410, 202419; RX 418 at Bates Nos 202443, RFX 145-147, Pickett Dep., JPX 48 at 12-32; Picket, Tr. 1594; Thompson Dep., JPX 58 at 143) Thus, Aunyx was not able to produce a product it found satisfactory until late 1984, at least three years after the date it began developing a Canon-compatible toner.

50. [C] needed over two years [C]

51 The evidence reveals no toner manufacturer who spent one year or less gaining successful entry into the NP ERMT market. (FF,47-50)

D Distinct Customers.

52 Due to the needs of dealers and customers, it was only commercially advantageous to produce a toner for the entire NP 210-500 series (Kairys, Tr. 830-31, CX 197a, Keller W S at ¶ 31; Keller, Tr. 510-13, Keller Dep., JPX 22, at 104-07, 138-40)

53 Since only NP 210-500 ERMT will function in the NP 210-500 copiers, there is minimal, if any, cross-elasticity of demand between ERMT and other types of toner (Feinberg, Tr. 3757, Pearson, Tr. 1998-2000)
54. Consumers of NP toner are specific because they demand and can only use NP toner (CX 10, Pearson W.S., at 2; Pearson, Tr. 2000; FF 32)

55. A change from an NP 210-500 toner to any other type of toner is only possible with a change in copiers to one outside the Canon NP 210-500 series (RX 727, Rapp W.S., at 28, Feinberg, Tr 3697, 3757-59)

E Distinct Prices

56. Toners and copiers are priced separately (CX10, Pearson W.S., at 22). Canon U.S.A. maintained suggested retail prices for its NP 210-500 toner (RX 727, Rapp W.S., at Ex 1; see, e.g., CX 48). Canon U.S.A. maintained wholesale prices specifically for NP toner (See, e.g., CX 48).

57. Toner is sold to national account customers by Canon U.S.A. through the dealers who supply and service the end-users. According to their agreements, some customers are billed separately for toner, and others are not (McLaughlin, Tr. 2455) Even for national accounts, separate toner prices were set (See, e.g., CX 2, Monihan W.S., at 4-6, Ex. A)

58. Certainly independent vendors of NP toner must charge a toner-specific price (See, e.g., CX 156 (Nashua's 1986 "NOMDA Special" prices for Canon NP 210-500 toner per carton by quantity). Independents had to price their toner with regard to market prices and their goal of market penetration (FF 17, 18)
59. Cross-price elasticity among toners and copiers would have been reflected in the decision to select one copier and not another. (Feinberg, Tr. 3697, 3759, RX 727, Rapp W.S., at 28)

60. Dr. Rapp admitted that in determining whether complements, such as copiers and toner, are in the same market that it is the matter of the strength of complementarity which is crucial. He admitted further that this is a function of cross-price elasticity. (Rapp, Tr. 3366).

61. Respondents' economic expert witness did not know the cross-price elasticity between copiers and toner. (Rapp, Tr. 3449, 3467).

62. Respondents' economic expert witness did not commission any study or consult any consumer purchasing survey to determine customer purchasing behavior. Moreover, he did not interview any Canon dealers, independent toner manufacturers, independent supply dealers, or customers, including national account customers, in the course of his work in this matter. (Rapp, Tr. 3363-66, 3403, 3440-41).

63. Dr. Rapp did not even have the benefit of most of the evidence of record in this investigation in rendering his opinion. (Rapp, Tr. 3357, 3429-31, 3439, 3452, 3464, 3416-18, 3424-25, 3428-33).

64. In connection with ease of entry into the ERMT market, Dr. Rapp did not review all deposition testimony, or testimony, of officials of any
other producers of Canon-compatible toner in reaching his conclusions. (Rapp, Tr 3416-18, 3424-25, 3428-33)

65 Dr Rapp's principal position was that the copy system is the relevant market and that toner is simply a substantial, known and important component of the copier system price (RX 727, Rapp WS, at 11-20)

66 In calculating the percentage of system cost represented by toner, in support of his position that toner was not a separate market from the copier system market, Dr Rapp did not include all other parts and supplies in his calculations, e.g., fuser rollers, paper, etc (Rapp, Tr 3443-44).

67 Dr Rapp overstates the significance of toner as a percentage of system cost. Among other things, he limited his definition of system cost to exclude the cost of paper and other supplies (Feinberg, Tr. 3649 et seq ). Even though some of these costs may be the same for each system it still was a part of the system cost. To leave out any significant portion of system cost inflates toner cost as a percentage of system cost and thus inflates the hypothetical effect of an increase in toner price and the effect such an increase would have on system cost (Feinberg, Tr 3649, 3658-50, 3694-96).

68 Furthermore, Dr Rapp has inflated the cost of toner as a part of the systems cost by calculating it at the full Canon list price, rather than at Canon discounted prices, or even possibly the lower price a consumer might pay an independent supplier (Feinberg, Tr 3649). Dr Rapp also assumed a [ C ] life of the copier, and does not account for the purchaser who would consider a shorter useful life (Feinberg, Tr 3649, Rapp, Tr 3369)
69. Therefore, Dr. Rapp has overstated the market effects of an increase in toner prices. (Feinberg, Tr. 3665 et seq.)

70. Dr. Rapp, in applying the Justice Department Merger Guidelines to the question of the relevant market, focused on the question of whether Canon could profitably impose a significant non-transitory price increase of 10% for one year. His focus in this analysis was misplaced. In this case, Canon began with a natural monopoly in ERMT for its NP 210-500 series copiers. The relevant issue in these circumstances is whether it could "maintain" a monopoly price profitably without shifting customers to other machines. (Feinberg, Tr. 3547-48). Moreover, even in his analysis, the effect of an increase in the price of toner is vastly overstated. In the first place, Dr. Rapp based his analysis on a 10% price increase, rather than the 5% price increase hypothesized in the Justice Department Guidelines (Feinberg, Tr. 3698; 49 Fed. Reg. 26823, 26824). According to staff's calculations, even with toner making up an unduly large percentage of system cost, a 5% increase in the price of ERMT would have resulted in a total system cost increase of only \[ C \]. With toner at its lowest percentage of system cost, according to Dr. Rapp, a 5% increase in toner price would have resulted in an increase of \[ C \] for the total system cost. (See RX 727, Rapp W.S., at Ex. 1). Dr. Rapp admits that response in system sales caused by a change in toner cost would likely decrease the smaller the part of system cost is represented by toner. (Rapp, Tr 3408)

71. Dr. Rapp has not seen any data on shifts in copier system sales caused by toner increases. (Rapp, Tr. 3407).
72 Dr Rapp has not made any historical study of systems costs and market shares to determine the effects of systems costs on the market for copiers (Rapp, Tr 3406).

73 Dr Rapp admitted that there was no publication to which a customer could turn in order to determine a "systems price" for a particular copier (Rapp, Tr 3402).

74 Dr Rapp also assumed a [C] year machine life in his calculations (RX 727, Rapp WS, at Ex 1). This does not account for early obsolescence. The portion of total system cost represented by toner to a customer will differ if the customer has the copying machine for twenty four (24) months instead of [C] years, for example. (Rapp, Tr 3369).

75 Dr. Rapp did not even consider the differences between large national account customers (only a small part of Canon's business) and ordinary "down-the-street" customers in his analysis (Rapp, Tr 3399).

76 In the experience of Mr. MacNaughton of Nashua Corporation, only approximately 20% to 25% of copier customers even attempted to analyze cost-per-copy in selecting a copier. (MacNaughton, Tr 120-21). Major national accounts usually engage in a cost-per-copy analysis before purchasing copiers. However, they do not differ dramatically from small customers in that they still stress the importance of service (RX 703, MacLaughlin WS, at 10-14, Donnelly, Tr 1171-72). Although larger customers look somewhat at cost-per-copy, all customers are interested in service, reliability and
features. (Langone, Tr 3454-55). MacNaughton considered cost-per-copy a very important secondary consideration to Fortune 1000 companies (MacNaughton, Tr. 125-26). Based on Mr. Langone’s experience, cost-per-copy is almost never brought up when selling a copier to a small customer (Langone, Tr 3507-08).

77 Nashua frequently became involved in cost-per-copy analysis when dealing with large sophisticated customers. However, by the time that these large customers discussed cost-per-copy considerations, they had already more or less decided which copying system or mix of copiers they were going to buy based on the needs of their department (MacNaughton, Tr. 122).

78 In 1982, [ C ] of Canon copier placements were through the national account program. National account placements of Canon increased to [C] in 1983, and have remained at [C] since 1984 (McLaughlin, Tr 2459, 2468, RX 703, McLaughlin W.S, at 8).

79 Approximately [ C ] of national account customers rent their copiers. Only [C] of Canon USA’s placements of copiers are currently with national account customers (McLaughlin, Tr 2458).

1/ The term “NP copier placements” on page 8 of RX 703, McLaughlin W.S, refers to both rental and purchased copier placements to national accounts (McLaughlin, Tr 2468)
80 The large customer would find it worthwhile to investigate more fully the cost of various supplies and parts. The small customer would not have the same incentive to invest in this information search cost. (Pearson, Tr 2278-79)

81 It would be difficult for a small customer to calculate a system cost that included every possible component, future supplies, and service (Feinberg, Tr 3787). Since copier purchasers do not know the future price of toner, absent a specific contract specifying the future price of toner, there is no way they can calculate a system price that would necessarily turn out to be correct. (Feinberg, Tr 3691)

82 Dr. Rapp's secondary position that all dry toners was the relevant market, was also flawed. His basis for this position was the contention that any manufacturer of a dry toner could easily switch to the manufacturer of ERMT for Canon NP 210-500 machines (RX 727, Rapp W S., at 28-41). This is contrary to the evidence of record. (FF 37-51)

83 If there were no substitutability of supply with regard to copier systems, the conclusion of the respondents' economic expert witness as to a dry toner relevant market would admittedly change. (Rapp, Tr. 3415)

84 Dr. Rapp has not also taken into account the risk of rapid obsolescence of specific copier machines in investigating ease of entry into the market by potential competitors (Feinberg, Tr 3674, see RX 727, Rapp W S.)
85. As found above, the evidence reveals no dry toner manufacturer who
spent one year or less gaining successful entry into the Canon-compatible ERMT
market (FF 37-51)

86 Although Dr Rapp pointed to Nashua as a successful entrant into
the market, he did not know how long it took Nashua to become a successful
entrant. (Rapp, Tr 3422)

87 Although Dr Rapp consulted a chemist or an engineer at Canon, he
did not discuss with him the question of how long it would take other
manufacturers to successfully enter into production of the toner in issue
(Rapp, Tr 3418-19).

(G) Dr. Pearson's Testimony

88 Complainant's economic expert witness did not have a numerical
estimate of the price inelasticity of demand for NP toner. In fact, he did not
think that it had ever been calculated To this witness, logic would indicate
a high price inelasticity because the user cannot substitute other types of
toner for NP toner, and toner is necessary for use of copiers. (Pearson,
Tr 2283)

89 Complainant's economic expert witness did not measure the degree
of complementarity between toners and copiers because he could not obtain
sufficient data (Pearson, Tr 2120-21)
90. Complainant's economic expert witness did not evidence any familiarity with toner manufacture. The witness had no discussions with an employee of Canon or any independent toner manufacturer other than Aunyx. The witness did not interview employees of any manufacturer of copiers. The witness had never prepared any other study, investigation or report relating to toner or copying machines (Pearson, Tr. 2107-08)

(H) Other Relevant Market Facts

91. As the innovator in the NP toner projection system and toner, Canon at least initially had market power with respect to the toner. (Canon Prehearing Brief at 85; Feinberg, Tr. 3698-99)

92. Canon had the ability to charge a supracompetitive price for ERMT when it first introduced the NP series of machines (Feinberg, Tr. 3666, 3698-99)

93. The record shows that competitors were able to substantially undercut the price for toner charged by Canon. (See, e.g., CX 160, which shows Tomoeawga toner available for $28.00 less than Canon toner) It also reveals that Canon's dealers were able to extract prices from end users which even Canon thought were excessive (CX 164, at 2)

94. Toner and mid-range copiers are complements (CX 10 at 17, ¶ 35 (Pearson)) The fact that toner and mid-range copiers are complements does not, by itself, indicate that they constitute a relevant product market (Feinberg, Tr. at 3670-71, 3780-82, Pearson, Tr. at 2272-74)
The wide disparity between total system costs among competing mid-range copiers suggests that customers were largely unaware of, or unaffected by, total system cost in selecting a copier (CX 727, Rapp W S, Ex 3; Feinberg, Tr 3662-63; SF 125).

Canon's own internal concerns about price gouging by some of its dealers show that end users were not sensitive to system costs (CX 164, at 2).

The features of a machine admittedly play an important part in customers' decisions in purchasing a copier, regardless of substantial differences in "system costs" (Rapp, Tr 3404).

Machine reliability and copy quality are an important part of the customer's decision in purchasing a copier. (Rapp, Tr 3380).

A successful toner is characterized by customers making repeat purchases. (Feinberg, Tr 3748-49).

V. MARKET POWER

As the innovator in the NP Toner Projection System and toner, Canon at least initially had market power with respect to ERMT (Canon Prehearing Brief at 85, Feinberg, Tr. 3698-99).
101. Canon admits that it was the only firm selling ERMT when the NP series was first introduced in the United States in 1981 (Canon Pre-hearing Brief at 15, 115-16).

102. Dr Pearson, Aunyx’s economic expert, calculated sales volumes of ERMT, measured in cartons as follows:

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(CX 10, Pearson W.S, at Table 1; see FF 4).


104 Dr Pearson included Xerox sales in calculating Canon’s 1986 market share. (CX 10, Pearson, W.S, at Table 1). However, Xerox did not begin domestically marketing the Xerox-manufactured toner for use in the NP 210-500 copiers until [ C ] (FF 445) Excluding Xerox’s

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2/ Dr. Pearson’s table includes sales volumes for Aunyx which have been stricken from the record. (See, Order No 52) The above table is provided solely to show the support for Dr Pearson’s testimony and cannot be considered an accurate indicia of Aunyx’s sales.
sales, Canon’s market share in the first half of 1986 would be approximately [ C ] by Dr Pearson’s calculations (See CX 10, Pearson, W.S., at Table 1).

105. Delta Business Systems began to purchase generic ERMT in November 1985, but withdrew it from the market because of copy quality and service problems. (B King, Tr. 2041-42, 2047.) [ C ] Delta Business Systems began to market it anew, and continues to do so to the present. (B King, Tr 2042, 2047, 2057)

106 Dr Pearson’s market share data did not include Delta Business Systems’ sales of ERMT. (CX 10, Pearson, W.S., at Table 1; Pearson, Tr 2219-20) Delta Business System’s sales would not significantly affect Canon’s market share (FF 105, 441)

107 Dr. Pearson’s market share data did not include Tomoegawa’s sales of ERMT. (CX 10, Pearson W.S., at Table 1).

108. Tomoegawa’s sales of ERMT would not significantly affect Canon’s market share (FF 439, below)

109 Dr. Pearson’s market share data did not include sales of Esgraph Toner. (CX 10, Pearson W.S., at Table 1).

110 According to Mr Keller, Esgraph’s total ERMT sales were approximately [ C ] (Keller Dep., JPX 22, at 135-36).
111. Including Esgraph's sales, Canon's market share in 1982 was approximately \([ C ]\) (See CX 10, Pearson W S , at Table 1, Keller Dep , JPX 22, at 135-36).

112. Canon faced weak competition in the ERMT market at least until mid-1986 when Nashua re-entered the market and early 1987 when Xerox/[ ] entered the market. (FF 360-447; RB at 56, Respondents’ Prehearing Statement at 47-64)

113. Canon’s competitors have estimated its market share as exceeding 90% through 1986 (FF 114-16)

114. Canon’s share of the domestic ERMT market remained well over 90% until July, 1986, according to industry witnesses \([ C ]\) [ C ] CX 9, MacNaughton W.S , at 1-2, 4, 6, 13, MacNaughton, Tr. 56-58, [ C ]

115. Nashua estimated that the domestic shares for ERMT in 1986 were as follows. Canon [ C ] Nashua [ C ] Aunyx, Xerox and BASF all [ C ] and others (including Delta, Leslie and Copymate) cumulatively [ C ] (Price Dep , JPX 53, at 35-37 and Ex 21)

116. Based on his industry experience and figures from Diamond and Dataquest, Mr Langone, President of Aunyx, estimates that Canon has between approximately 98% and 99% of the ERMT market (Langone, Tr 1413-13).
117. [ C ] another competitor put Canon's share of the market in 1985 at 95% [ C ]

118. According to Dr. Feinberg, the ERMT market is highly concentrated, to use the language of the Herfendahl Index. (Feinberg, Tr 3791) Dr Pearson calculated that whether Canon's market share was [ C ] [ C ], Canon has continually enjoyed market power and has been in a highly concentrated market, according to the Herfendahl Index. (Pearson, Tr 2001-02).

119. Canon had the ability to charge a supracompetitive price for ERMT when it first introduced the NP series of machines. (Feinberg, Tr 3666, 3698-99).

120. An internal Canon U.S.A. document, a summary of weekly report dated 4/7/83 circulated to Messrs. Murase and Kagami, officers of Canon U.S.A., states that some Canon-authorized dealers were charging [ C ] [ C ] the suggested list price for Canon Brand toner. (CX 164, at 2, Bates No 500212).

121. At least one Canon-authorized dealer recognized that the price set by Canon U.S.A for ERMT was supracompetitive (CX 168, at Bates No. 503010).

122. Competitors recognized that Canon "had a lot of room to move on price" [ C ], JPX 2, at 167-68).
124. Dr. Pearson, complainant's expert, calculated Canon U S.A's ratio of gross profits to sales on Canon ERMT as follows. 1981-[ C ]; 1982-[ C ], 1983-[ C ], 1984-[ C ]; 1985-[ C ], 1986-[ C ]; average [ C ]
(CX 10, Pearson, W S , at Table 5, see also CX 109)

125 According to Dr Pearson, from 1981 through 1986, Canon U S.A received gross profits of [ C ] for the sale of [ C ] of ERMT, with an average profit of approximately [ C ] (CX 10, Pearson W.S , at 5, 38, ¶¶ 12, 85, and Table 5.)

126 The gross profits to sales ratios calculated by Dr. Pearson, while not dispositive on the issue of monopoly power, do constitute evidence which is consistent with the existence of respondents' monopoly power (CX 10, Pearson W S , at Table 5; Feinberg, Tr 3680, 3770-75).

127 From 1981 through at least 1984, Dr Pearson calculated that Canon Inc has been able to sell its ERMT at a high markup, [ C ] [ C ] (CX 10, Pearson W S , at Table 4; Pearson, Tr. 2018, see also CX 104, Exs 2B and 9A)

128 Dr Pearson did not calculate markup figures for 1985 and 1986 because he could not get data comparable to those used in calculating markup from 1981-1984 (CX 10, Pearson W S , Table 4, Pearson, Tr. 2019)
129. The markup figures calculated by Dr. Pearson reflect transfer prices between respondents, not market prices, and are incomplete as to indirect costs. As such, they probably do not reflect actual market behavior, but they do illustrate a pattern of pricing which is uncharacteristic of competitive pricing. (Pearson, Tr. 2020-21, 2234-37; Feinberg, Tr 3681)

130. Dr. Feinberg's testimony indicates that the barriers to entry in the Canon-type ERMT market, taking two years or more for successful entry, are themselves indicia of market power according to the Justice Department's Merger Guidelines. (Feinberg, Tr. 3674-75).

VI. IMPORTATION AND SALE

131. Canon U.S.A. was importing toner for use in the NP 210-500 machines between 1981 and 1984. The toner imported from Japan between 1981 and 1984 was packaged in cartridges and loaded four cartridges to the carton upon arrival in the United States. Thus, from 1981 through the end of 1984, Canon Inc. was exporting finished packaged toner to Canon U.S.A. (Michie, Tr 2313-15, 2322-23; CF 890, not contested by Canon)

132. On February 25, 1985, Canon announced to its dealers that toner for the NP 210-500 machines was "now being manufactured at Canon Business Machines at Costa Mesa, California." (CX 61, CF 891, not contested by Canon)

133. Since 1985, Canon Business Machines ("CBM") has been [ C ] a [ C ] [ C ] reference in CX 106 is the -37-
The percentage by weight figures for these materials set forth in RX 106, are correct as of August 1987 (Michie, Tr 2317-18; CF 892, not contested by Canon)

Since 1985 at Cost Mesa, CBM has (Michie, Tr. 2323-24, CF 893, not contested by Canon)

At the Canon Inc Ueno factory in Japan, (Michie, Tr 2320; CF 894, not contested by Canon)

Canon, Inc., produced the following amounts of Canon NP 210-500 toner in 1981; in 1982, in 1983, in 1984; in 1985, and between January and June 1986 (CX 105, CF 895, not contested by Canon)

Canon, Inc. produced the following quantities of black powder for shipment to Canon Business Machines in 1984, in 1985; and between January and June 1986. This black powder was valued at yen in 1984, yen in 1985,
and [ C ] yen between January and June 1986 (CX 105, Ex 2c, CF 896, not contested by Canon)

138 On January 26, 1984, Canon Business Machines wrote to its customs agent, Harper Robinson & Company, that "we would like to move the facility for filling NP 400 toner cartridges to Costa Mesa, California. What this would mean, as far as our import situation is concerned, is that toner presently imported in prepackaged, ready-to-use cartridges would be imported in bulk (one half ton metric containers) and transferred in Costa Mesa to cartridges and packaging material which we would purchase locally" (CX 117, CF 897, not contested by Canon)

139 Approximately [ C ] of the Canon Business Machines facility at Costa Mesa, California was dedicated to the NP 210-500 toner at the time the floor plan was prepared (CX 114).

140 Only [ C ] of the NP 210 through 500 toner by weight is added to the product by Canon Business Machines at Costa Mesa. Canon, Inc manufactures and packages black powder which it then sells and ships to Canon Business Machines. (CX 106, at 6, 21-22, CF 899, not contested by Canon).

141 CBM has [ C ] direct workers working per shift on the packaging line. In addition there are support people who do such things as quality control, shipping and receiving, and supervision [ C ] [ C ] (Michie, Tr 2314-15, 2324, CF 901, not contested by Canon)
142 The cost of packaging material per case (for cartridges) of the NP 210 through 500 toner was as follows [C] as of January 1985, [C] as of November 1985; [C] as of January 1986. The labor to package the toner, i.e., putting the cartridges in boxes, packing the boxes in shipping carts, and palletizing the cartons constituted about [C] of the total direct labor. (CX 119, CF 902, not contested by Canon).


144 From 1981 through 1984 Canon U S A obtained ERMT for use in the Canon 210-500 series copiers by direct importation from Canon Inc in Japan, and for sale and distribution within the United States. Since 1984 it has obtained the ERMT from CBM for resale in the United States market. (CF 4 and Canon's comment thereon; CX 104, at 2, Answer to Interrogatory No 1).

145 Canon Inc., Canon U S.A., and CBM (collectively "Canon") have a complete unity of interest in the importation and sale of Canon-brand toner compatible with the NP 210-500 copiers. They share common objectives, and the wholly-owned U.S. subsidiaries act for the benefit of the Japanese parent (CX 99 at 2-5, 8-9, CX 100-03, Michie, Tr 2301-02). Moreover, Fujio Mitarai, President of Canon U S.A. is also a Managing Director of Canon Inc. (CX 99, at 19)
146. The importation of the "black powder" preparations for ERMT by Canon Inc to CBM, is tantamount to the importation of the finished toner product. The finishing and packaging steps performed by CBM are [ C ] (FF 131-45).

VII ALLEGED UNFAIR ACTS AND UNFAIR METHODS OF COMPETITION

A Introduction

147 Canon distributes its copy machines, replacement parts, and supplies in the United States through a network of more than five hundred (500) independent authorized dealers (RX 700, Murase W S. 10-11) The profit margin for these dealers is quite low for Canon machines, but the dealers make considerable profit on the sale of supplies and service. Approximately 40% of the dealers' profits come from the sale of toner and supplies and between 25-40% of their profits come from service and spare parts (MacNaughton Tr 16, 36, 65, 114-115, [ C ]; CX 9, MacNaughton W S at 4, 12)

148 Copy machines are service-intensive, and end-users, both large and small, rely upon repair service and preventative maintenance. After a copy machine end-user purchases or leases a Canon copier, the Canon dealer service technician is typically the customer's sole point of contact with the dealership. The role of the service technician is to see that the machines stay in proper working condition. It is an important role -- the key to the business. The opinions, expertise, and credibility of the service technician have a considerable impact on the supplies that go into a copier machine.
In late 1982 and early 1983 Canon began to have competition in the market of toner compatible with its NP copier machines. The toner market for these machines was described to Mr. Kagami and Mr. Murase in a Canon internal memo in the following manner:

1. [ ]
   [ ]
   [ C ]
   [ ]
   [ ]
   [ ]

2. [ ]
   [ ]
   [ C ]
   [ ]
   [ ]
   [ ]

3. [ ]
   [ ]
   [ C ]
   [ ]
   [ ]
   [ ]

---

3/ Mr. Kagami was General Manager of Canon USA. Mr. Murase was General Manager for the Copier Division of Canon USA.

4/ Discussion of Canon use of the terms "toner pirate" and "pirate toner" to refer to competitors and their products is discussed infra, at FF 160-67, 176.

5/ The term "skater" in the copier industry is defined to mean a dealer who sells Canon toner at wholesale and/or outside of its dealer territory (C, JPX 8, at 8, 267).
150. Canon dealers are signatories to an agreement with Canon that covers the terms for their distribution of copiers, service, and supplies. In May of 1983, Mr. Haruo Murase, General Manager of Canon's Copier Division, revealed a new arrangement between Canon and its dealers to be included in the new Canon Dealer Retail Agreement. Murase announced to the Canon dealers that Canon had earlier agreed, at the request of the Canon Dealer Advisory Council, to prepare the Dealer Agreement so as to "contain more specific provisions designed to eliminate" the extraterritorial sale, or "skating," of Canon machines and supplies. The Agreement was designed to, inter alia, "strengthen the marketing and service capabilities of the entire network of authorized NP-Copier Dealers," and the dealers were requested to return the signed agreements so as to "expedite your receipt of the upcoming new NP-Copier products... " (RX 8).
151 Under the Agreement, each Canon dealer is to sell at retail only, each dealer has a primary sales and service area, and the dealers can sell Canon copiers outside their area of service capability only if they make alternate arrangements for another authorized dealer to service the copiers (RX 8).

152. The Agreement also contains a market allocation scheme wherein the dealers are only to sell toner within their respective primary marketing areas. Canon reserves the right to restrict sales of Canon toner to any dealer thought to be selling Canon toner outside of its primary marketing area (RX 8).

153 The purpose of the market allocation provision for the sale of toner by Canon dealers is, inter alia, to reduce competition between Canon dealers for the sale of Canon toner and to support the price of that toner (Joseph Dep, JPX 21, at 358-59, Fox Dep, JPX 9, at 267-69).

154 In May of 1985, [C] of [C] Company, a Canon authorized dealer in [C], wrote to [C], an authorized Canon dealer in [C], to express problems that [C] wanted brought to the attention of the Canon Dealer Advisory Council and to Canon USA. With regard to "toner skating," [C] noted that dealers who were skating toner to small supply houses were "eating into our profits and our customer base daily. If we lower our prices to match the pricing of these small dealers it will dramatically affect our margins and therefore affect our bottom line profitability. If not
stopped, the practice will continue to grow and all Canon dealers will lose in the long-run." [ C ] also commented that "Canon has used the monocomponent toning system for years. They have recovered their research and development cost in the product and it is time for them to lower the cost so we can be price competitive with our competition." (CX 168).

155 In the fall of 1985, Canon began to vigorously enforce its territorial and retail restrictions on the resale of toner in conjunction with a new NP toner marketing program [ C ]

[ C ]

[ C ]

[ C ]

[ C ]

[ C ]

[ C ]; CX 130, at p. 2).

156 On October 14, 1985, Mr. Murase wrote to all the Canon dealers to inform them of the terms of Canon's new NP toner marketing program Murase's letter included the following discussion of Canon's toner marketing policy.

E. TONER MARKETING POLICY

Please be advised that toner products, subject to the terms of the NP Copier Retail Dealer Agreement, are for sale by the dealer to end users only. As such, Canon U.S.A. reserves the right to limit the Dealer's toner purchases, based on Canon U.S.A.'s estimate of the reasonable toner requirements needed to maintain the dealer's NP Copier field population.
Toner has become increasingly important as the field population of Canon NP Copiers grows. We appreciate your support of our program and your cooperation in maintaining this vital segment of the business.

On October 18, 1985, [C]

Canon did in fact restrict sales of toner to several dealerships to enforce its market allocation scheme (RX 225; Joseph Dep., JPX 21, at 304-08, 316-22, 373; RX 176; CX 7, Langone W S at attachment 8, SX 132, SX 133)

While Canon pursued a market allocation scheme for toner designed to provide dealers with a profit incentive to sell Canon-brand toner, complainant alleges that Canon also engaged in unfair methods of competition to restrain Canon dealers from selling competitive toners, and to ultimately inhibit consumer choices. By way of introduction to the following findings of fact concerning the alleged unfair acts and methods of competition,
complainant alleges that the sum total of respondents' behavior was designed to foster the attitude expressed by one Canon dealer in a letter to Canon USA just prior to the institution of this investigation. The dealer wrote: "Canon dealers can only damage the integrity of the Canon toner products by acknowledging, whether right or wrong, that another product will work in our machines. We as dealers must stick together in order to survive." (CX 166, cf., CX 156, p 5)

B Canon Characterized Competitive Suppliers as "Pirates"

160 The term "pirate toner" is used frequently among the personnel at Canon Inc. in Japan. (See CRX 6-9) Canon Inc conducted at least eleven meetings in 1983 and 1984 among production personnel in Japan to discuss independent manufactured Canon NP-compatible toner that appeared in the U.S. market (CRX 9). Notes of the sixth such meeting reveal a report on a trip to the United States and the finding that "In the US there is no perception about 'Pirate Toners' (i.e., open market)." (CRX 9)

161 The term "toner pirate" was initially used at Canon USA to denote fraudulent toner sales operations in California. These "toner pirates" typically telephoned end-users and misrepresented themselves as the end-user's regular supplier for the purpose of offering a purportedly favorable price on toner. Unsuspecting end-users were often duped into paying exorbitant prices for toner. These operations were also referred to as "boiler room operations" and "toner phoners." (Joseph Dep, JPX 21, at 313-14, Joseph Dep, JPX 20, at 218, Keller Dep, JPX 22 at Ex. 11, p 3, Salustro, Tr 2661-62, 2668-69) Canon, however, characterized independent manufacturers as "pirates" as well,
drawing no distinction between manufacturers and the above-referenced "pirates" (See e.g., RX 82, p. 4. Canon internal memorandum describing Toner Pirates as "competitive manufacturers who produce for Canon machines" See also, CX 164; CX 327, CX 328).

162 The terms "pirate toner" or "toner pirate" were used in internal Canon U.S.A. documents by District Sales Managers (CX 159), Regional Sales Managers (CX 161, CX 162), and by the Midwestern Region Manager for the Canon National Accounts (CX 163). A Canon official conceded that the term "pirate toner" was used in discussions within Canon U.S.A (Tsukada, Tr. 2826-27).

163. Haruo Murase, General Director of the Copier Division of Canon U.S.A., contrary to his denial at the hearing, used the phrase "toner pirate" or "pirate toner" when referring to Canon-compatible toner produced by competitors. A file memorandum of the Canon Dealer Advisory Council meeting of December 7, 1982, summarizes the comments on competitive toner by Mr. Murase. Murase is reported therein to have commented "Toner pirate tactics are getting more difficult to combat. This is a very complicated subject." (SX 131 at 4)

164 The terms "pirate toner" or "toner pirate" were used in letters and memoranda by Mr. Murase to Canon dealers (CX 327-28).

165 The term "toner pirate" was used in correspondence by Canon dealers to Canon Sales Managers (CX 156).
Steven Salustro testified that competitive toners were referred to as "pirate toners" in discussions at the Canon service training schools. Salustro testified that he had referred to several independent toners as "pirate toners" when speaking to dealer service technicians. (Salustro, Tr 2661-62, 2669, 2670)

The term "pirate toner" was used in dealer service-invoices to end-users. (CX 315, See Kelly, Tr 1697, CX 197d, Kelly W S at 5, Exs. 5, 9)

C Disparagement and Unfair Acts Directed Toward Esgraph

Winston Technologies was in the business of manufacturing toner for Xerox, Gestetner, Toshiba, Mita, Savin, Saxon, Royal and certain Minolta and Canon machines from 1972 to 1983. In July of 1982, Winston entered the marketplace under its tradenamen of "Esgraph" with a Canon-compatible toner for the Canon NP series of copiers. (CX 197a, Keller, W S at 1-2)

The Esgraph toner was packaged in a plain box that did not resemble the Canon toner box, and, although it did not bear the Esgraph name specifically, displayed the private label of the distributor (e.g. "United Graphics," the trademark of distributor Business Products and Supplies), and the words "For use in Canon NP (Model Number)". The words "Canon NP" were in

6/ Steven Salustro was a Canon Field Service Representative for the Canon Eastern Region. Canon service training schools are discussed infra, at FF 185-187
plain type and did not use the Canon logo (Keller Tr, 526, Murase, Tr 3043-44, Kelly, 1814-15)

170 On July 26, 1982, Mr. Haruo Murase, General Manager of Canon USA Copier Division, wrote a memorandum to all Canon NP-Copier Dealers concerning "No-Name Copier Supplies." The memorandum describes the sale of competitive toner by Canon dealers labelled "For Use in Canon NP (Model Number)" but without any designation as to the name of the manufacturer of such products. The memorandum sets forth Canon's contention that the sale of such no-name products violates Canon's rights under the Federal Trademark Law and that the dealers who sell such products are, in effect, "passing off" the no-name product as a product manufactured by Canon. Murase warned the dealers:

We wish to advise each of our authorized Canon NP-Copier Dealers that Canon U.S.A., Inc considers this practice to be a serious violation of its legal rights under the Federal Trademark Law and under the law of unfair competition. In addition, we consider such conduct a violation of the contractual obligation assumed by each authorized Dealer in its Manufacturer/Dealer Agreement to 'act in a fair, equitable and ethical manner in the course of this agreement.'

7/ Respondents allege that Murase's letter referred to liquid toner the subject of a parallel dispute between Canon and Esgraph. The letter, however, concerned "No Name Copier Supplies," it expressly dealt with toner labelled "For Use in Canon NP (model number) machines," it was dated shortly after the market introduction of Esgraph EMRT toner at the NOMDA show, and it was followed by, and referenced to, in a July 30, 1982 memorandum by Murase to the dealers which stated "As advised in my dealer memo of July 26, 1982, titled 'No-Name Copier Supplies,' you will certainly find it most beneficial to use and recommend Canon toners, made by Canon, for Canon NP copiers." (CX 48) Even if Murase was primarily referring to liquid toner when he used the word "toner," he also referred to "other supplies in cartons and containers marked "For use in Canon NP (Model Number)"

-50-
If any authorized Canon NP Copier Dealer continues the practice of selling a no-name product marked for use in a Canon NP Copier which is not authorized by or manufactured by Canon and which does not clearly state on each label and carton the correct name and address of the manufacturer of the product, Canon may take whatever action may be permitted by law to stop these practices, including the termination of the Manufacturer/Dealer Agreement with the offending authorized Canon NP Copier Dealer.

(CX 197a, Keller W S, Ex 7) (Emphasis added)

171. Esgraph responded to this letter by writing to all the Canon NP Copier dealers on September 28, 1982. James Keller, Esgraph Executive Director, explained therein that Murase's statement to the dealers concerning customer confusion and trademark violations were without merit. Specifically, Keller noted that the Esgraph box was a plain box with a label or printing stating the intended use of the product, with a label indicating the source of purchase. Keller further stated:

The last paragraph (of Murase's July 26 memo) where Mr. Murase is requiring you, the dealer, under threat of termination as a dealer, to sell nothing that is not "authorized" by Canon and identified as to the manufacturer, to a degree far beyond what is required by law, is clearly an attempt to restrain trade by intimidating you to purchase supplies only from Canon or its' authorized suppliers. Canon and its' lawyers must know that it is a violation of anti-trust law to force, whether directly or indirectly, a dealer to purchase supplies only from them. Their vigorous self-righteous over-pursuit of their rights is seriously eroding yours.

Keller also stated in his letter that Esgraph had approached the FTC and NOMDA in this matter.

8/ NOMDA is the National Office Machine Dealers Association
On September 28, 1982, Murase wrote another "Memo Regarding No-Name Products" to all Canon NP-Copier Dealers. Murase referred to his earlier memorandum concerning "'no name' products, that is products marked 'for use in Canon NP (model number)' but without any designation on the box or on the cartridge as to the name of the manufacturer of the product." Murase noted that the earlier memorandum expressed "our opinion only with respect to the distribution of 'no-name' products, meaning products where the origin of the goods are not disclosed. It did not relate to the distribution of products where the origin of the product is stated on the labels." (CX 197a, Keller W.S., Ex. 8).

We believe and our counsel agrees, that the trademark law requires the disclosure of the origin of a product so as to avoid the likelihood of confusion in the market place. This confusion is more likely if an authorized Canon dealer sells a product marked "For use in Canon NP (model number)" copier without indicating the origin of the product. Knowing that the dealer has the authorization of Canon, most consumers will assume that the dealer is selling a product manufactured by Canon unless informed otherwise. Placing a sticker on the product does not cure the problem.

(CX 53) (Emphasis added)

On October 6, 1982, Mr. Murase wrote identical letters to two of Canon's authorized dealers, [C]

[C] Murase stated:

I have the information you sent regarding Esgraph who has been soliciting Canon Dealers nationally.

We have received copies from many of our Dealers and from all indications they support Canon's position 100%. In fact, several have written to the pirate expressing their thoughts, with copies to NOMDA, the dealer organization.

(CX 327, CX 328 (emphasis added))
174. [ C ] is an authorized dealer in the [ C ] metropolitan area. Its territory includes several counties in [ C ], [ C ]. ([ C ], JPX 1 at 26-29). [ C ] employs over 300 persons in its copier division. The largest of its three divisions in terms of employees, revenues, and sales ([ C ], JPX 1 at 43-45), in 1980, it had gross sales of approximately [ C ], and in 1986 its sales were approximately [ C ] ([ C ], JPX 1 at 40). In 1980, [ C ] had [ C ] Canon service accounts, and by 1987 it had approximately [ C ] of such accounts. ([ C ] Dep, JPX 1 at 33-34)

175 [ C ] had been considering the possibility of selling Esgraph NP-compatible toner under its private label. [ C ] tested Esgraph toner and sent Esgraph its logo for design on a private label box. Esgraph completed the artwork for the box and returned it to Dupli-Fax for approval (CX 197a, Keller W.S., at 17-18; Keller, Tr at 483).

176 On October 6, 1982, Murase wrote to [ C ] in regard to dealer use of independently manufactured toner. Murase wrote therein:

We will continue to discourage Canon Dealer association with any company who wishes to remain anonymous to the user of Canon Copiers.

Canon supply products are designed specifically with Canon Copiers in mind from the day of conception of all Canon NP Copiers.

(CX 197a, Kelly W.S., Ex 10)
177. [C] never did purchase the Esgraph Canon NP-compatible toner (Keller, Tr. 483) [C] did, however, begin to repackage Canon-brand toner purchased from Canon into [C] private label boxes. The [C] boxes containing Canon-brand toner bear the [C] logo but not the Canon logo. The box does indicate that the toner is for use in Canon NP copiers but does not indicate who manufactured the toner ([C] Dep., JPX 1 at 75, 100-02). Canon was aware of this practice but never objected to it, indeed, [C] ([C] Dep., JPX 1 at 102-103, 48-49).

178. Other dealers purchase Canon-compatible toner from competitive producers and sell it in cartons with only their name on it, not identifying the manufacturer, without complaint from Canon (See e.g., B King, Tr 2033).

179. Mr James Keller, former Executive Director for Esgraph, contacted Canon dealers to sell Esgraph toner. He testified that the dealers refused to consider the Esgraph product, or if interested, returned the toner after a purchase. One dealer allegedly told Keller that if he purchased Esgraph toner he would be terminated as a Canon dealer (CX 197a, Keller W S at 16, Keller, Tr. 477).

180. The Esgraph toner was designed for the Canon NP 400 copier. In the fall of 1982, Esgraph discovered that its toner caused copy problems in the NP 210 copier. Rather than reformulate its toner, Esgraph left the market by the end of 1982 (FF 395, below).
181. The role of the service technician is to see that the machines stay in proper working condition. It is an important role — the key to the business. The opinions, expertise, and credibility of the service technician can have an important effect on the supplies that go into a copier machine (Sweeney, Tr. 677; CX 7, Langone W S, at ¶ 4, C King, Tr. 351, Maharaj, Tr. 1310).

1 Alleged Disparagement of Competitive Toners and Other Unfair Acts at the Canon Service Training Schools

   a Captive Audience of Service Technicians

182. The Canon NP-Copier Dealer Agreement requires Canon dealers to provide service for seven years after installation of any Canon copier the dealership sells, including installation, support, maintenance, and both in-warranty and out-of-warranty repairs (RX 8, at Bates No 100888-89).

183. The service on the Canon copiers for all the dealer’s customers must be in accordance with Canon USA’s service procedures. The service data contained in Canon service manuals, training manuals and technical bulletins is deemed confidential information to be retained only for reference purposes by the dealer. (RX 8, at Bates No 100888-89).

184. The Dealer Agreement requires dealers to employ such number of qualified service technicians as may from time to time be prescribed by Canon USA in view of the dealer’s service commitments, including at least one
service technician qualified for each of the Canon products sold by the dealer. A service technician is deemed to be qualified if he or she is trained by Canon USA at one of Canon USA's training centers. (RX 8, at Bates No. 100888-89)

185 Canon operates in-house training schools in each of its five operating regions (Eastern, Southeastern, Midwestern, Southwestern, Western) for the training of copier service technicians employed by Canon dealers. The courses for training the service technicians of Canon dealers are ordinarily "copier specific," that is, a course focuses on the operation and servicing of a particular model of a Canon copier. The courses are normally five to seven days in duration and run continuously all year long. (RX 717, Meola W S at 3-4, Maharaj, Tr. at 849, 853) Dealer technicians attending these courses and graduating from the Canon service training school are certified by Canon as qualified to service the particular copier model covered by the course. (RX 717, Meola W S. at 5)

186 Approximately C students were trained in 1981 in the Canon USA service training schools, and by 1986, Canon was annually training and certifying approximately C dealer service technicians. (Meola, Tr., 2392, RX 717, Meola W S. at 4)

187 Before a Canon dealer is authorized to sell any Canon copier model, its service technicians must attend the Canon service training courses pertaining to the models the dealership sells. (RX 717, Meola W S. at 4)
b Alleged Disparagement at the Training Schools

188 Mr. Shunsei Tsukada is the Director of Service for the Business Equipment Product Group at Canon U.S.A. Prior to his assignment to Canon U.S.A in May of 1981, Mr. Tsukada was the sub-chief engineer responsible for the development of the NP 400 copier. He is now responsible at the technical level for the service of all Canon copiers (Tsukada, Tr 2765-69)

189 At deposition, Mr. Tsukada noted that one of the purposes of the training classes was to promote Canon supplies for Canon copiers. (Tsukada Dep., JPX 65 at 132; Tsukada, Tr 2815) At trial, Tsukada explained that, "the classes (are) to teach the technicians how to provide service. If the dealer technicians learn how to service correctly and if they do provide good service, I think it will lead to the promotion or encouragement of -- it will lead to the promotion of Canon supplies and Canon machines in a broad sense, indirectly." (Tsukada, Tr 2817)

190 In 1982, Mr. Sam Maharaj became a Canon technical training instructor, instructing dealer technicians and regional service representatives from Canon U.S.A. on repair and preventative maintenance on Canon copiers (Maharaj Tr., 854-55) Maharaj later became a technical training supervisor charged with the responsibility of supervising the training staff for the eastern region, the site of the Canon U.S.A. headquarters. Mr. Tsukada was his direct superior (Maharaj, Tr 848-51, 2626)
191. Maharaj testified that Mr Tsukada instructed him to tell all of the other instructors that, when asked about competitive supplies by the technician trainees, the technicians should be told that the supplies are not good for the machines and that they will cause electrical and mechanical problems. (Maharaj, Tr 922-23, 2600)

192 Maharaj testified that he was advised that the technician trainees should be instructed that "if they are having problems, whether it's electrical or mechanical, and competitive supplies are used in the machine, they must advise the customer that it is no good for the machine, and they must clean it out and put the Canon supplies into the machine, and they could expect better results if they did." (Maharaj, Tr 874-75).

193 Maharaj testified that he relayed Tsukada's instructions to all of the service instructors under his supervision, including Ed Rowe, Clifford Greene, Julian Levy, and Jim Luttrell. (Maharaj, Tr 923, 2631-32)

194 Maharaj personally trained approximately two hundred (200) to four hundred (400) persons per year during his tenure with Canon USA, approximately ninety (90 percent) of which were dealer service technicians. (Maharaj, Tr , 848-50).

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9/ See credibility findings on Mr Maharaj, infra (FF 256-61)
The subject of competitive toners was discussed in the Canon training schools but it was not a part of the curriculum. Charles Meola, the Canon U.S.A. national service manager from 1980 to 1986, estimated that a technician would raise the subject from "time to time." (Meola, Tr at 2388). Maharaj estimates that the subject came up about once a week in the classes he taught. (Maharaj, Tr. 2580, 2641)

Maharaj testified that his immediate superior at Canon, at least as of January 1, 1983, Mr. Rick Smith, told him that instructors were not to directly comment upon competitive supplies even when the subject of competitive supplies was raised by one of the dealer technicians during class "because it's not good for the machine, et cetera." Smith moved to the western region and Maharaj worked under Shunsei Tsukada and George Hodge for the balance of his tenure at Canon. (Maharaj, Tr. 2638-40)

Robert Greene worked as a field service technician at American Business Products from October 1983 until January 1987, when he became a service technician for Aunyx Business Machines. During the time Greene worked for American Business Machines he serviced the entire line of Canon NP 210-500 copiers, and was assigned to spend approximately 85% of his time servicing Canon copiers. (CX 6, Greene W S., at ¶ 1)

Robert Greene attended Canon's service training school seven times and was taught by three different instructors, including Mr. Ed Rowe. At the training school, it was Greene's impression that technicians were not to allow the use of independent toners. Mr. Rowe and other instructors
allegedly told the technicians to be suspicious of independent toners and to assume that in the event of a copy quality problem, the most likely cause was use of an independent manufactured toner (CX 6, Greene W.S., at 3-4).

199 Greene testified that the Canon instructors did not flat out tell the instructors that if an independent toner was used in the machines it would cause copy quality problems, but they did state that Canon had developed the NP process, that their toner was a monocomponent toner, negatively charged, that the toner formulation was patented, and that Canon was the only company that could manufacture the toner designed to function in Canon copiers. (CX 6, Green W.S., at 4; Greene, Tr. at 1874, 1928-29; Greene Dep., JPX 14 at 70-71).

200. Mr. Mark Salustro was an Eastern Region Service Representative from July 1982 until October 1983. In this capacity he trained service technicians and assisted them in making repairs. (Salustro, Tr. 2655-56).

201. Salustro attended five Canon service training schools and was told at the training schools that independent toner did not work, and that if one has a problem with a machine -- a copy quality problem -- that the best thing to do after checking the obvious problems would be to take the independent toner out of the machine, replace it with Canon brand toner and the problem would usually be solved. (Salustro, Tr. 2657, 59-60).

10/ See credibility findings of Mr. Greene and Mr. Salustro, below. (FF 262-64).
202 Salustro testified that competitive toners were referred to as "pirate toners" in discussions at the Canon training schools. Salustro testified that he had referred to several independent toners as "pirate toners" when speaking to dealer service technicians (Salustro, Tr 2661-62, 2669, 2700)

c Disparagement by Dealer Service Technicians.

203 Sone Systems, an independent supplies dealer in Orange, California, conducted a blind test using Esgraph toner at Fluor Corporation, a large engineering firm in Irvine, California. Fluor had eighty (80) Canon copiers, all but three were NP 400 machines (CX 197a, Keller W.S. at ¶ 28; Ostergaard Tr at 1271-72) In late 1982, Sone approached Fluor with the suggestion that Fluor test independent-manufactured toner in Fluor of their NP 400 machines Each of these machines produced approximately 10,000 to 12,000 copies per month Sone's President, Erik Ostergaard, suggested that Fluor leave Canon cartons near the copiers, so that dealer technicians who serviced the machine -- from University Office Equipment, an authorized Canon dealer -- would not know that an independent toner was being tested (CX 197b, Ostergaard W.S. at ¶ 3, Ostergaard, Tr 1245, 1247-48)

204 Fluor ran approximately 200,000 copies from December, 1982 through March, 1983, using Esgraph toner without complaint or any increase in the frequency of service calls (Ostergaard, Tr 1248-49, 1258-62, CX 197b, Ostergaard W.S. at ¶ 4 and Invoice Nos 01464, 01487, 14545, 1678, 16909) After Fluor received its third order for Esgraph toner from Sone, University service technicians noticed the Esgraph packaging (Ostergaard, Tr 1261)
University service technicians allegedly began thereafter to complain about
the toner, stating that the toner was clumping and that they could not repair
the machine. The technicians also allegedly stated that the Esgraph toner was
damaging the copier drums (Ostergaard, Tr 1249-50, 1258).

205. Fluor decided not to purchase the Esgraph toner and resumed
purchase of Canon-brand toner. No witness from Fluor was called to explain
its reasons for not purchasing the Esgraph toner, but Ostergaard testified
that it was due to the comments by the dealer service technician. Ostergaard
further testified that he inspected the Fluor machines and found none of the
problems described to Fluor by the technician. Moreover, Ostergaard testified
that he retrieved a sample of the Esgraph toner from Fluor, sent it to Esgraph
for testing, and that Esgraph was unable to replicate the alleged problem with
the toner (Ostergaard, Tr 1249-50).

206. Sone Systems had a similar experience with Fluor and University
Office Equipment four years later while trying to sell Nashua-brand Canon
NP-compatible toner. In March 1986, Ostergaard informed Fluor that Nashua was
offering a Canon-compatible toner that was more economical than Canon-brand
He recommended that Fluor conduct a blind test similar to the earlier test
done on Esgraph toner, i.e., test the Nashua toner for a few months in four
high-volume machines, and leave only Canon cartons under the machines
(CX 197, Ostergaard W S at ¶ 7, Ostergaard, Tr 1251-52, 1266). On April 1,
1986, Sone sent Fluor three cartons of Nashua toner without charge for test
purposes. This toner was used to produce between 15,000 and 20,000 copies.
The three cartons allegedly tested well, and on April 15, Fluor placed an
order for 78 cartons of Nashua toner (Ostergaard, Tr 1263-67, SX 124, SX
125).
207. Fluor received the Nashua toner in Nashua boxes, and Mr. Ostergaard testified that after the Canon dealer service technician had noticed that Fluor was using Nashua toner, the technician reported light copy quality problems. The technician left a handwritten note on one of Fluor's machines stating:

> Copy quality problems (light copy) in H-70 and R01 are a result of using inferior toner (Nahusa). I cannot make the copies any darker until the proper supplies are used. Thank you.

Roland
Canon Service

(CX 197b, Ostergaard W S. at ¶ 7 and attachment; Ostergaard, Tr. 1252, 1269)

208. Ostergaard testified that when Fluor threatened to return the copiers to University, University successfully serviced the copiers, even though Nashua toner was still in the machines. (Ostergaard, Tr. 1255).

209  

2. Failing Students

210 Complainant alleges that respondents, as a part of their scheme to restrain the purchase of competitive supplies, failed dealer service technicians, or refused their admission in the Canon service training schools, if such technicians were employed by dealers using competitive supplies.
(CFF 709). There is no credible evidence on the record of such a policy or practice by respondents.

3 Canon Service Procedures and Competitive Toners

a Canon Servicing Policy

211. Charles Meola was the Eastern Region Copier Service Manager for Canon between 1977 until the end of 1979. From 1980 until 1986, Meola was the Canon National Service Manager for Canon's Copier Service Division. As the National Service Manager, Meola was responsible for the development and implementation of Canon's policies for servicing copier machines and for Canon's programs for supporting dealers in servicing copiers on a national basis (RX 717, Meola, W.S at 1-2).

212. Meola testified that in providing service support to its dealers, Canon has operated with several basic service guides and manuals for each copier model. When dealer service technicians attend and complete Canon training classes, each technician receives four basic manuals: (1) a Field Service Handbook (also known as the "Troubleshooting Guide"), (2) a Field Service Manual, (3) a copier parts catalogue, and (4) a technical publication binder for the particular copier model. Meola testified that Canon's service training emphasizes that the service technicians employed by Canon dealers should use these manuals in handling servicing problems. (RX 717, Meola, W.S at 10-11, RPX 1-4, 6-7, 22-27).
Meola testified that Canon recommends that dealer service technicians follow a regular procedure for treating copier machine problems. When a customer calls a dealer with a problem, the dealer service technician must obviously attempt to assess and identify the cause of the problem. For this, the service technicians are instructed to rely heavily on the "Troubleshooting Guide." In accordance with these procedures, the technician is to first ask the customer to describe the problem. Second, the technician is to examine the copier, as appropriate, to ensure that all of its important operating elements are set according to Canon's specifications, that no parts are defective or burnt out, and that the copier is clean and not overheating.

Meola testified that in seeking to identify a particular copier problem, the technician is to focus on three basic types of problems that are most often found in the field: (1) electrical problems, such as bad circuit boards or loose connections, (2) mechanical problems, such as worn clutches or gears, and (3) poor copy quality, which may have any number of causes, including humidity and dirty optics. Meola further testified that the vast majority of these copier machine problems are entirely unrelated to the type of toner being used in the machine (RX 717, Meola, W S at 11-12).

Meola also testified that "Occasionally, copy problems or machine problems can be related to the type of toner being used in a copier." In such instances, it could be important in servicing to determine whether the toner being used was Canon-manufactured or a non-Canon toner. In order to minimize servicing time and possible expense, Canon would recommend that, in appropriate circumstances, a dealer technician should clean non-Canon toner out of a copier when copy quality problems appeared and to replace the toner with Canon-manufactured toner. Meola testified that "(t)he machine would then be
run with the Canon-manufactured toner in the same way that it had been run
with the non-Canon toner. If the machine problem or copy quality problem
would continue to exist, then the service technician would have reason to
believe that the type of toner being used -- Canon or non-Canon -- was not a
direct cause of the problem. On the other hand, if the use of Canon toner
would eliminate the problems encountered, then the technician was to tell the
user to make his or her own decision on the cause of the problem. (RX 717,
Meola, W S at 12)

b Service "Hotline"

Canon U.S.A. had an 800 number to answer questions from dealer
service technicians in the field. The service personnel in the eastern region
would answer such telephone inquiries. About once per month the training
instructors would answer telephone inquiries when the service staff were sent
to the field. (Maharaj, Tr 903, 932)

Maharaj was one of the instructors who occasionally would answer
telephone inquiries when the eastern region service staff was out in the
field. Maharaj testified that George Hodge -- the Canon Eastern Region
Service manager under Meola, and current National Account Service Manager for
copier products (RX 718, Hodge, W S. at 1) -- instructed him to answer
telephone hotline inquiries about copy quality problems by telling the service
technicians to clean competitive toners out of machines when competitive
toners were being used. (Maharaj, Tr 2604-05, 2608)
217. Specifically, Maharaj testified, if a call came in on the 800 telephone line and it involved an inquiry wherein competitive supplies were used, Canon would instruct the caller to clean the machine out completely and make all adjustments, clean the coronas, etc., and then put Canon products in. (Maharaj, Tr 931-32) Maharaj also noted that the customer was to be advised that the competitive toner is not good for the machines, and that after the toner has been replaced by Canon brand toner, if the machine still has a problem, then Canon would send a Canon service technician to the site to assist the dealer technician. (Maharaj, Tr 903, 932)

218 Although Maharaj did not regularly answer telephone inquiries, he did have a couple of occasions to instruct service technicians to clean the competitive supplies out of the machines and replace them with Canon brand. (Maharaj, Tr 2606)

c Role of Field Service Technicians

219 Canon U.S.A. has resident field technicians who help in the repair of a copier machine if a dealer service technician is having difficulty. (Meola, Tr 2368) Field service technicians are also known as field service instructors. (Hodge, Tr 2873) The primary responsibility of these Canon technical support specialists is to support dealer service technicians in the field. If a dealer service technician had a problem troubleshooting a machine, he would call the Canon field service technician to assist with the problem. (Levy, Tr 3081-82, Hodge, Tr 2870-71)
220. Mark Salustro was a Canon field service technician for Canon's eastern region in 1982 and 1983. While he was at Canon, Salustro reported to George Hodge. Salustro's duties were to "go out into the field and train (dealer) service technicians or to help them with a problem that they had on an individual machine or a group of machines, do public relations work concerning problems that an end user had with a machine, stay in the office and receive calls for machines that were broken in the field and situations where the dealer service techs couldn't fix the machine and they would ask me and I would try to give them advice on how to get the machine to operate."
(Salustro, Tr. 2655-56).

221. Salustro testified that he never saw a competitor's toner that worked as well as Canon's toner in Canon machines and that he never saw a competitive non-OEM toner that worked well in Sharp or Minolta machines. Basically it was his view that competitor's toners did not work as well as OEM toner. (Salustro, Tr. 2669-70). Salustro was familiar with Tomoegawa toner -- a toner that Canon Inc. found to be a match for the Canon brand (See FF infra) -- but nonetheless insisted that in his experience, none of the competitive toners worked. (Salustro, Tr. 2674-75) This was the way he approached his job as Eastern Service Representative, and the basis on which he serviced machines. (Salustro, Tr. 2670).

222. Salustro testified that in servicing machines in the field, if the machine had a copy quality problem, there were certain things that he would check on the machine. For instance, he would check the obvious things like coronas, the optics, et cetera. If that did not solve the problem, and
the machine had a competitor's toner in it, Salustro would instruct the dealer
service technician that accompanied him on the call to dump the competitor's
toner out of the machine and replace it with Canon-brand toner (Salustro,
Tr 2662-63). "Again, I didn't go out of my way to, you know, create more
work than was necessary. But if the situation arose and there was a problem
with the machine and the obvious things were working properly, I would take
the toner out" (Salustro, Tr 2670).

223 When Salustro received telephone inquiries about copy quality
problems, Salustro asked whether the dealer service technician had checked the
obvious things— the corona and everything else. Then Salustro would instruct
the dealer service representative to dump out the competitor's toner and put
in Canon brand toner, if competitive toner was being used. This procedure
usually solved the problem, although Salustro recalled one incident where the
copy quality problem was ultimately the result of a defective drum
(Salustro, Tr 2663, 2666).

224 Mr. Salustro testified that dealer service technicians sometimes
asked him what they should do if they go out in the field and there is a
machine running on a competitive toner. He testified that his answer to such
questions was, "you are there to fix the machine and if they're using another
brand of toner and the machine is working, leave it alone. If you have a
problem and the toner is causing the problem, you take it out and put in Canon
toner" (Salustro, Tr. 2665-66).

225 Mr. Salustro maintained that the above described procedures were
the same procedures used by all the Eastern region service technicians and
that George Hodge, the eastern region service manager, was aware of the practice. (Salustro, Tr 2666-67) Salustro testified, however, that he was instructed by George Hodge to say very little about competitive toners, and that the end-user was only to be told that Canon recommends Canon-brand toner. (Salustro, Tr 2661, 2665, 2670)

226 Mr Hodge, a witness called by Canon, testified that the field service technicians dealt with a copy quality problem by undertaking certain preliminary steps in the Canon "Troubleshooting Guide." If the copy quality problem persisted, the field service technician, working in tandem with the dealer service technician, would vacuum out the non-Canon brand toner and replace it with Canon brand toner (Hodge, Tr. 2873) Hodge also testified that there were times when it was subsequently determined that toner was not ultimately the cause of the copy-quality problem (Hodge, Tr. 2874)

227 In response to a question as to whether Salustro complied with Hodge's instruction to say as little as possible about competitive toners, Salustro noted, "I -- to the best of my memory, I did. (Salustro, Tr 2670)

228 Kenneth Hanus is the Southeast Regional Service Manager for Canon and was called as a witness by Canon. Hanus testified that if a machine is having copy quality problems, the technician will clean the machine, check the corona charging units, and check the age and condition of the photoreceptor.
In a few rare instances, poor copy quality or other problems may be associated with toner. If the technician suspects that that is the case, the technician may ask what kind of toner is being used in the machine. If it is non-Canon toner, the technician may clean the machine and replace it with Canon toner. Alternatively, if necessary, the technician may replace the entire developer assembly (which contains toner) and take the original assembly back to the shop for repair (RX 719, Hanus, W.S. at 6).

229. Other Canon dealers also discussed the procedures they following when there was a copy quality problem. In sum, they generally put the machine into specification, cleaned out the competitive toner and put in Canon brand toner (See, Locke, Tr 3227-28, 3230-31; JPX 68, [C] Dep at 41-42).

230 On July 8, 1986, Glenn Watts, Service Manager of EBM, a Canon authorized dealer, wrote to an end-user to explain EBM's servicing of the customer's machine:

On May 22, 1986, one of our technicians did a service call on your Canon NP 400 copier. The nature of the call was copy quality. The tech did all of the normal things to correct the problem but what fixed the machine was vacuuming the toner hopper and putting in Canon brand toner.

On July 3, 1986 another call was placed concerning copy quality. The technician arrived to find toner all through the machine. After cleaning the machine and making test copies, toner was starting to build up on the transport again. It appears the fix for this problem would be to vacuum the machine again and put in Canon brand toner.

If I or any member of my staff can be of further assistance, please let me know.

(CX 173)
In sum, when a dealer technician has a copy quality problem and a competitive toner is used by the end-user, the service technician was instructed by Canon to first bring the machine up to specification and clean the machine. If this didn't solve the problem they were to remove the competitive toner, and insert Canon-brand toner. If this solved the problem, the technician would inform the end-user that the problem was solved and that Canon brand toner had been used. (See, FF 219-30)

**d Service Procedures and Alleged Tampering with Machines**

Maharaj testified that dealer service technicians in his classrooms at the Canon Eastern Region Training School reported that they were told by the regional offices that when the dealer technician was having copy quality problems on a machine that used competitive toner, that the technician was to adjust the magnetic pole on the machine. Maharaj testified that the dealer service technicians reported that when they switched the position of the pole, the copy quality would improve, but that later the alteration would produce problems in the machine. (Maharaj, Tr 939-40).

At the hearing, Maharaj acknowledged that he had no recollection of whether the memorandum mentioned competitive supplies. Mr Maharaj also acknowledged that copier adjustments allegedly suggested by Mr Salustro were to improve the copy quality if competitive toner was used, and that Mr Maharaj believed that this was misguided advice because it would hurt
copy quality and the machine over the long term, and because the practice of adjusting the machines in the manner suggested was in conflict with what Canon was teaching in its training schools (Maharaj, Tr. 2539-43).

234. Mr. Salustro testified that he never told anyone to alter a machine to make it work for competitor's toner or to not make it work for competitor’s toner (Salustro, Tr. 2671-73).

235 Mr. Greene, a dealer service technician currently employed by Aunyx Business Machines, a company related to the complainant, testified that while he was at the dealership where he was previously employed, he and other service technicians occasionally made adjustments to Canon copiers using Canon or non-Canon toners in order to produce denser copy quality or to make older copiers run cleaner (Greene, Tr. 1919-20).

236. Complainant urges that certain evidence indicates that dealer service technicians were tampering with machines. It is suggested that certain dealer service technicians would adjust a machine that was using a competitive toner so that a copy quality problem would reoccur. It is alleged that the technician would inevitably be called to deal with the copy quality problem again. The machine would then allegedly be put into proper adjustment and run on Canon-brand toner. Of course, the end-user would then be told the copy quality problem was the result of the use of competitive supplies. All of this evidence was unreliable and unsubstantiated hearsay, often multiple hearsay. At best it indicated a practice exclusively at the dealer level (Maharaj, Tr. 879-80, 939-40; Kelly, Tr. 1664-65, 1744; Ostergaard, Tr. 1249, 1251, 1254, 1290-91; Wright, Tr. 549, 577; C. King, Tr. 403, 407-10).
The Canon Service Division maintains Canon copiers for Canon copier end-users. There is no credible evidence that Canon ever had a policy or practice of tampering with machines or suggesting tampering with machines for the purpose of making the machines operate unsuccessfully when using competitive supplies (See FF 232-36)

e Voiding Warranties

Complainant alleges that Canon instructed its dealers that they could void warranties if competitive toner were used in Canon machines. Complainant presented only two witnesses with direct knowledge on this point as it relates to the behavior of the respondents. Robert Greene testified that a Canon training instructor told his class that Canon would not cover replacement of certain parts -- such as fuser rollers and developing cylinders -- under warranty where the machine was using an independent toner, because Canon could not guarantee performance under such circumstances (CX 6, Greene, W S at 4) Mr Maharaj testified that he was told to instruct service technicians that Canon could void warranties where competitive supplies were used and competitive supplies caused certain problems (Maharaj, Tr 2626-27; Maharaj Dep., JPX 33, at 614-15) Maharaj conceded, however, that warranties were never really the subject of discussion in his training class (Maharaj, Tr. 950), and that he had very little actual knowledge about Canon's warranties (JPX 33, Maharaj Dep, at 398-412, 416) Moreover, Maharaj confused "warranties" and "service contracts" on more than one occasion in his testimony (Maharaj, Tr. 2626-27, JPX 33, Maharaj Dep, at 614-15)
Salustro, a former Canon regional service representative, testified that dealers did ask him whether they could void a Canon warranty when independent toner was used in a Canon machine. When Salustro raised this question with his Canon supervisor, though, he was informed of Canon's policy not to indicate that Canon's warranties could be voided by the use of competitive supplies. (Salustro, Tr 2660-61, 2665, 2685)

Canon has asserted that it has never voided a factory warranty because competing toners were used in a Canon NP copier machine. (RX 717, Meola, W S at 9, Meola Tr 2360) The record does not reflect credible evidence to the contrary.

In sum, there is no credible evidence that respondents had a policy or a practice of instructing dealers that warranties could be voided merely because the end-user put independent toner in his Canon NP copier. (See FF 238-40)

f Voiding Service Contracts

Complainant alleges that Canon taught its service technicians at the training schools and via the field service technicians that they could void service contracts if an end-user was using competitive supplies. (CFF 516-552)
243. Maharaj testified that he told his classes that use of competitive supplies would increase the number of service calls and that a dealership could void a service contract on that basis (Maharaj, Tr 877-78, 2646-47)

244. Most Canon end-users enter into service contracts with the Canon authorized dealers from whom the end-user purchases or leases the machine. For example, among the customers that purchase copier machines from Dupli-Fax -- an authorized Canon dealer -- 90% opt for service contracts (CX 197, Kairys W.S. at ¶ 14; Kairys, Tr at 755-58, King, Tr. 2023-45; Banfe Dep., JPX 1, at 37) Canon dealers generally offer three types of service agreements to end-users: (1) service call paid, all parts extra; (2) service call and parts paid, drums extra, or (3) service call, parts, and drum paid (RX 727, Rapp W S. at 34 n 37; Donnelly, Tr 1186-88).

245. Some Canon dealers' service contracts include the price of supplies (CX 197e, King W S at 1-2, King, Tr 382), and some dealers offer the option of including toner in the service contract (Compare, CX 8, Garvey W S at 7 and attachment 11, Kelley, Tr 1750-51, (Taylor Made Care Plan and Taylor Made Life Plan)).

246. In situations where the service contract does not include the price of supplies, Canon dealers have sometimes threatened to void the end-users service contract when the end-user purchases an independent toner from a source other than the dealership. In such a situation the end-user that chooses a competitive toner is faced with the prospect of paying for service on a per-call basis (See FF 247-51, infra)
247. The Taylor Made Life Plan states that, "Service necessitated as a result of inadequate key operator involvement, lack of recommended tune-ups, or use of unauthorized (inadequate or incompatible) supplies may result in service being rendered on a per call basis." (CX 197d, Kelly W S at Ex 1) (Parenthetical in original).

248. Patrick Sweeney, a former Taylor Made field sales manager, testified that Taylor Made service technicians would tell customers that if they chose to use an independent toner, they would be charged for service on a per call basis whether or not they had a service contract with Taylor Made (Sweeney, Tr 677).

249. A Taylor Made letter to at least two customers stated:

Since we can't and won't guarantee someone else's product, if the developer unit within your copier needs to be cleaned out, due to the use of unrecommended toner that causes a copy quality problem, this service will not be covered under any Taylor Made service agreement that may be in force at that time.

The only toner that Taylor Made Office Systems, Inc recognizes as recommended toner for use in your copier is that which is provided by Taylor Made Office Systems, Inc.

(CX 197d, Kelly W S at Exhibits 2 and 3) (Emphasis added)

250. Bay Repro Media Inc was an independent office supply dealer in San Jose, California (CX 198c, Cone, Tr 1823 at ¶ 1 and Ex 1). In July, 1985, KLOK radio station a Bay Repro customer, purchased sixteen cartons of Pelikan-brand toner for use in two Canon NP 210-500 series copiers (CX 198c, Cone, Tr 1824, 1936 at ¶ 2 and Ex 1). KLOK had successfully consumed eight
of the sixteen cartons of the Pelikan-brand toner when a Taylor Made service technician -- the authorized Canon dealer that serviced the KLOK copier -- made a service call. The service technician indicated that the copier was not performing well enough (CX 198c, Cone, Tr 1825, 1841 at ¶ 2 and Ex 1).

The Taylor Made service technician allegedly stated that the warranty on that machine would be void, or that Taylor Made would not honor its service contract, if KLOK used Pelikan ERMT. (Id at 1832, 1837, 1843) KLOK returned eight of the sixteen cartons to Bay Repro and Bay Repro replaced them with Canon-brand toner (CX 198c, Cone, Tr. at ¶ 2 and Ex 1).

VSL Corporation, another Bay Repro customer, had three Canon NP 210-500 series copiers (Cone, Tr at 1839) The warranties on at least one of these machines was still in effect when VSL purchased Pelikan-brand toner from Bay Repro in 1984 (Cone, Tr at 1832, 1839-40) The toner had performed satisfactorily for several months and VSL reordered a total of 60 cartons (CX 198c, Cone, Tr 1826-27 at Ex 1; D. Scott Thompson memo. 11/20/84) Taylor Made, as the only authorized Canon dealer in the area, serviced VSL's Canon copiers under service contract (CX 198c, Cone, Tr at 3, 1827, 1832) A Taylor Made service technician allegedly informed VSL that not only was the Pelikan ERMT unsatisfactory, but also that Taylor made would not honor its service contract if VSL continued to use the Pelikan toner. The Service technician added that Taylor Made would not service the machines unless Canon-brand toner purchased from Taylor Made were used in the copiers (CX 198c, Cone, Tr at ¶ 3) Bay Repro allegedly lost the VSL account because of the Taylor Made technicians' actions. (CX 198c, Cone, Tr. at ¶ 4)
The evidence shows that the dealers that discouraged the purchase of independent toner by threatening to void service contracts were, inter alia, interested not so much in selling Canon brand toner to the end-user as they were interested in being the supplier of the toner, whatever the brand (Garvey, Tr 1083-90, Greene, Tr 1887-89, 1891-94, JPX 14 at 20; CX 197d, Kelly W S at Exs 3 and 4).

Salustro testified that dealers did inquire as to whether they could void service contracts when an independent toner was used in a machine under service contract. When Salustro raised this question with his Canon supervisor, however, he was informed of Canon's policy not to indicate that dealers could void service contracts as the result of a consumer's use of competitive supplies (Salustro, Tr 2660-61, 2665, 2685). Salustro also testified that competitive supplies did indeed cause an increase in service calls, a point that was verified by complainant's own witnesses with respect to Aunyx toner (Donnelly Dep., JPX 6, at 20-23), and with respect to competitive supplies in general (Greene, Tr 1930-31).

Maharaj also conceded during his deposition [C] [C] [C] [C] (Maharaj Dep., JPX 33, at 425-26, Maharaj Tr. 2646-47).

In sum, the evidence of record does indicate that certain Canon dealers threatened to void service contracts and did in fact void service contracts when a consumer used competitive toner. There is no evidence, however, that Canon ever told its dealers that they should void service contracts.
contracts if a consumer uses a competitive toner in its machine. Certain
Canon employees may have suggested that competitive toners cause an increase
in service calls, and it is not unlikely that of such conversations may have
centered around the fact that this affects a dealer's fixed-price service
contract, but in the main, the evidence shows that competitive toners did in
fact cause increased service visits. However, there is no evidence that Canon
couraged its dealers to abandon their service commitments to Canon
machines. (See FF 242-54).

4 Credibility of Maharaj, Salustro, and Greene

256 Mr Maharaj was deposed on four separate occasions for this
investigation, and his testimony at the hearing was presented in two segments
separated by several days. Perfect consistency cannot be expected, yet the
evidence reveals a general tendency to embellish, coupled with a hostility
toward certain Canon officials. Maharaj testified at his deposition that

[ ]
[ C ] (Maharaj Dep., JPX 30, at 125-37). Specifically,
Maharaj charged that

[ ]
[ C ] (Maharaj Dep., JPX 31, at 185-86) [ C ]

[ ] (Maharaj Dep., JPX 31, at 257-58, 175-78; Maharaj

---80---
Dep., JPX 33, at 603-06, 612-14) [C     ]   (Maharaj Dep., JPX 31, at 31, 201-02, 242-43, Maharaj Dep., JPX 32, at 369, 375) Salustro denies having written such a memorandum and the memo was not produced at trial (Salustro, Tr 2671-73) A “Concepts in Servicing” memorandum written by Salustro was indeed the subject of dispute between Canon and Salustro, but this memo makes no reference to adjustment of copiers or to competitive supplies (CX 188; Salustro, Tr 2671-73, RX 718, Hodge W S at 2) Another memorandum does indicate certain adjustments to the magnetic pole, but it does not relate to competitive toners, and in general, the practice of adjusting copiers was done to improve copy quality, if at all (CX 189). Moreover, there was testimony about adjustment of machines in relation to copy quality problems, but this testimony did not corroborate the contention that such adjustments were done for the purposes of discouraging the use of competitive supplies (FF 235)

257 Maharaj also testified that he was told to instruct service technicians that Canon could void the warranties of those customers that used competitive supplies that caused problems with the machines (Maharaj, Tr 875) He conceded, however, that warranties were never really the subject of discussion in his training classes (Maharaj, Tr 950), [C     ]   (Maharaj Dep., JPX 33, at 398-412, 416) Moreover, Maharaj confused “warranties” and “service contracts” on more than one occasion in his testimony (Maharaj, Tr 2626-27, Maharaj Dep., JPX 33, at 614-15) To the extent his testimony can be read as stating that Canon instructed the dealer service technicians they should void
service contracts if competitive supplies were used, Maharaj testified at his deposition that no one at Canon had ever told him to so instruct the students. (Maharaj Dep., JPX 33, at 425-26; Maharaj, Tr 2646-47)

258 Mr Maharaj's testimony concerning [ ] is also highly suspect [ ]. (Maharaj Dep., JPX 33, at 438-40).

Even if Mr Maharaj was mistaken concerning his dates, there are other contradictions and inconsistencies in his testimony. He testified that after the tests were run that he noticed certain changes had been made to the S-blade and magnetic poles on all of the machines and that the machines were very dirty (Maharaj, Tr 855-59, 2564-65). There was the suggestion that the machines were taken out of adjustment to somehow skew the results of the test against the competing toners. However, this makes little sense, since all of the machines, including the one running Canon toner were allegedly taken out of adjustment (Maharaj, Tr 855-59). [ ] (Maharaj Dep., JPX 33, at 453-55)

At the hearing, Mr. Maharaj stated that a Mr. Sato had told him that it was Aunyx toner that was being tested (Maharaj, Tr 2562-63) [ ] (Maharaj Dep., JPX 33, at 580). At the hearing, Mr. Maharaj stated that a Mr. Sato had told him that it was Aunyx toner that was being tested (Maharaj, Tr 2562-63) [ ] (Maharaj Dep., JPX 30, at 58-60, JPX 31, at 163-64), while
at the hearing he testified that Mr. Tsukada never told him the results of the tests (Maharaj, Tr. 2566) These and other inconsistencies in such testimony render Mr. Maharaj's testimony as to the testing of Aunyx to be non-credible

259. Mr. Tsukada testified that Canon U.S.A. did conduct yield test of Canon brand toner only, in much the same manner as the supposed tests of Aunyx and Canon toner were described by Mr. Maharaj. (Tsukada, Tr. 2823-24).

260. Mr. Maharaj testified that he had been instructed by Mr. Hodge that when a technician calls in with a copy problem and the customer is using a competitive toner the technician should clean out the non-Canon toner and put Canon toner in. If the customer insisted on using non-Canon toner the dealership should act in voiding the service contract (Maharaj, Tr. 2626-27). However, at the deposition Mr. Maharaj had testified [C]

[C]

[C]

[C] (Maharaj Dep., JPX 33, at 425-26, Maharaj, Tr. 2646-47).

261. Maharaj resigned from Canon U.S.A. after he became embroiled in a personal confrontation with his immediate supervisor, Mr. Hodge. Maharaj has filed a complaint against Canon with the New York Human Relations Commission. The complaint relates to certain racial accusations that allegedly were exchanged between Maharaj and Hodge while Maharaj was at Canon. Mr. Maharaj did receive an overall "very good" evaluation from Canon in both 1982 and 1983 (Maharaj, Tr. at 2584-92, CX 186, Bates No. 503120-23, 503132-34)
262. Mr. Robert Greene was called as a witness by complainant Aunyx. He was employed as a service technician by American Business Products of Taunton, Massachusetts, a Canon dealer, from 1983 until January 1987. However, at that time he went to work as a service technician for Aunyx Business Machines, one of the "Aunyx family," as described by Mr. Langone, president of complainant. (CX 6, R. Greene W.S., at ¶ 1, CX 7, Langone W.S., at ¶ 1)

263. Much of Mr. Greene's testimony appeared credible. However, in certain areas it seemed that he attempted to embellish the facts to please his new employer. At one point in his testimony, for example, Mr. Greene testified that he was told at the Canon service school not to let non-Canon toner be used, to replace it with Canon toner. (Greene, Tr 1879). Further cross-examination elicited the information that he was only to vacuum out the independent toner when there was a copy quality problem. (Greene, Tr 1896). In fact, he later described his normal service procedure in servicing a machine as first cleaning the machine and running copies on it. He would then check the copies against the test sheet in the service manual. If there were copy problems, he would check adjustments on the machine to see if this was the problem. If the problem seemed to be toner related he would change the toner. (Greene, Tr. 1897-1910)

264. Mark Salustro was a Canon Eastern Region Service Representative from July 1982 until October 1983. Mr. Salustro's duties while with Canon included training service technicians and assisting them in the field in making repairs, doing public relations work with end-users, and answering telephone calls from technicians in the field concerning repair problems. (Salustro, Tr 2655-56) As such, he had broad knowledge of Canon policies,
as well as with dealer and service technician practices in the field. Mr. Salustro was discharged by Canon in October 1983. (RX 718, Hodge W S, at 2-4) However, Mr. Salustro's demeanor during his testimony revealed no evidence of animosity toward Canon. In the main, his testimony seemed to support Canon's position. Mr. Salustro, had no connection whatsoever with complainant Aunyx. (Salustro, Tr. 2650-74). Mr. Salustro was called as a witness by staff counsel. (Salustro, Tr. 2650) In short, Mr. Salustro is the only completely non-biased witness who testified in this proceeding concerning the policies and practices of Canon U S A. I find his testimony concerning such matters particularly persuasive.

5. **Alleged Interference with Aunyx's Marketing Efforts**

a. **Hearsay Evidence of Coercion of Dealership**

265. [C]

[C]

[C]. (C) Dep., JPX 2, 157, 163).

266 [C]

[C]

[C] noted that

[C]

[C]

[C]

[C]

[C]

[C]
267 A draft [C] brochure prepared in connection with its marketing of Canon-type toner to Canon dealers states in pertinent part "Are you still being told (1) what you must do, (2) how you must run your business, (3) what you must buy, (4) how much profit you are allowed to make?" In writing this brochure, [C] was referring to toner for use in the NP 210-500 copiers.

268 Mr James Keller, former Executive Director for Esgraph, contacted Canon dealers to sell Esgraph toner. He testified that the dealers refused to consider the Esgraph product, or if interested, would return the toner after a purchase. One dealer allegedly told Keller that if he purchased Esgraph toner he would be terminated as a Canon dealer (CX 197a, Keller W.S at 16, Keller, Tr 477).

269 Mr Langone, President of the complainant, testified that Canon dealers told him that if they purchased independent toner, they would risk reprisals by Canon, including deprivation of full-time dealer status, elimination of national account customers, and holding up new lines of copiers and parts for service (CX 7, Langone W.S at 12-13). Specifically, Langone testified that Mr Scloss of Leslie Supply Company, an authorized Canon dealer, indicated in both 1983 and 1986 that Canon U.S.A. had put
pressure on him not to sell independent toners (CX 7, Langone W.S. at 16, Langone, Tr. 1313-14). [C], an authorized Canon dealer, allegedly told Langone that he was considering the purchase of Aunyx brand toner but he did not want that information to get back to Canon U.S.A. Langone testified that [C] appeared to be concerned that Canon would take retaliatory steps against [C] if it were to purchase Aunyx toner (CX 7, Langone W.S. at 15-16) [C], an authorized Canon dealer, allegedly told Langone that Canon U.S.A. had indicated to [C] that the [C] dealership would be in jeopardy if they used competitive toners in their Canon copiers (CX 7, Langone W.S. at 16, Langone, Tr 1315).

270. Alan MacNaughton, former Director of Sales of the Office Products Division of Nashua Corporation, testified that he was told by Taylor Made that after Taylor Made began using competitive supplies, Canon U.S.A. made it very clear to Taylor Made that they were displeased by its sale of competitive supplies (CX 9, MacNaughton W.S. at 14, MacNaughton, Tr. 90-91).

6 Coercion of Dealers and Alleged Lost Sales

a OE Canada

271. OE Canada is a dealer distributor in Canada with retail marketing operations in Toronto, Montreal, and Quebec City. It sells a wide range of office equipment products from furniture to business machines. It has over [C] employees and also operates a wholesale operation across Canada in which it sells office products to other dealers in other provinces (Devitt, Tr. 1492).
OE is an authorized Canon dealer that has been selling Canon copiers for approximately 10-11 years. It is a distributor for Canon copier products in the provinces of Ontario and Quebec. OE has sold some [ C ] NP 210-500 machines. OE started purchasing competitive toner, from IMCI, in 1987. As of August 1987, OE purchased [ C ] of its toner for use in the NP 210-500 machines from Canon and the remaining [ C ] from IMCI. (Devitt, Tr. 1493-95).

OE began testing Aunyx toner in the spring of 1985. (RX 704, Devitt W S , at 2)

OE’s revenues from the sales of Canon copiers in the 1975-1976 time period were probably around [ C ] a year. OE’s revenues from selling Canon copiers and toners in 1986 were probably [ C ] dollars. All the authorized Canon dealers for NP copiers in the provinces of Ontario and Quebec are those that are appointed by OE. (Devitt, Tr 1520-21)

Canon initially sold PC copiers in Ontario and Quebec through the OE chain of distribution. However, by 1985, when OE was testing the Aunyx toner, Canon had changed and no longer was distributing those copiers through OE. (Devitt, Tr 1539-40)

OE found it disturbing that Canon would be marketing the PC copiers through alternative sources of distribution. This was a great irritant to OE at the time OE was testing the Aunyx toner. (Devitt, Tr. 1540-41)
277. Mr. Langone, the President of Aunyx, and Devitt, the President of OE, first met in May of 1985. Langone testified that OE did not want Canon to find out about the testing of Aunyx toner through Aunyx. Devitt and Langone also discussed the volume of business that Aunyx might get from OE. Devitt allegedly indicating to Langone that OE would give Aunyx 50% of its \[C\]-carton-a-month business. Mr. Langone told OE that Aunyx had the capacity to produce this much toner (Langone, Tr. 3509-12, 3520, 3544-45).

278. Not used

279. Langone met with Devitt a second time in Devitt’s office in Toronto. At that brief meeting, Dale Dundon -- an OE technician -- indicated that the testing of the Aunyx product was going very well. Langone testified that Devitt indicated at that second meeting that he was very pleased that the testing was going well and that it was very encouraging. (Langone, Tr. 3512-14).

280. Devitt had discussions with Mr. Monihan, an Aunyx representative, about import duties and shipping costs, which costs Aunyx indicated it was able satisfactorily to absorb in its pricing. (Langone, Tr. 3546)

281. Aunyx’s toner product was tested at OE by the technical department in Montreal and also went out in a field test in some machines in Montreal and at some installations in Toronto. (Devitt, Tr. 1514).
282. Ms. Coleen Campbell was involved in the testing of the Aunyx toner at OE in conjunction with her fiance, Mr. Dundon, who was in charge of the Toronto testing. (Campbell, Tr. 3567)

283. Ms. Campbell had first-hand experience in the testing of the Aunyx toner at the OE premises, cleaning the machines and the corona wires, replacing the toner when it ran out, and running sample copies periodically. Additionally, Campbell spoke to a lot of clients who were testing the toner out in field. (Campbell, Tr. 3568). She also took part in the writing of the report on the Aunyx testing in the Toronto market area. (Campbell, Tr. 3576-77)

284. Mr. Monihan of Aunyx was extensively involved in the testing of the Aunyx-type toner by OE service technicians at the field testing in both Montreal and Toronto, and also met with Mr. Devitt. The OE service technicians with whom Monihan had contact -- Dundon, Alty, Donatelli, and Winters -- all reported that the toner was testing well on the machines.

285. Ms. Campbell testified that Allen Alty commented that there was no way that Canon would go for OE using Aunyx toner notwithstanding the positive test results. (Campbell, Tr. 3576, 3618, 3620).

286. Ms. Campbell's results were put together with those of Dundon and a report was made to management that recommended that OE start to use and sell Aunyx toner. (Campbell, Tr. 3576-77).
287. Langone testified that he met with Devitt a third time, at the NOMDA show in July of 1985. Langone testified that during this discussion, Devitt indicated that Canon had found out about the testing of Aunyx toner, that OE had found this most embarrassing, that Devitt had met with Messrs. Murase and Mitarai the previous evening at the show and that OE had been called on the carpet for the situation. Devitt, Murase and Mitarai all attended the NOMDA show in July, 1985. (Langone, Tr. 1315-17).

288. Mr. Devitt doubts that he ever met Mr. Langone at the 1985 NOMDA Show. (Devitt, Tr. 1543, 1546)

289. Mr. Devitt claims that the tests of Aunyx toner revealed that the toner was of poor quality and that Aunyx was too financially unsound to consider as a supplier. (Devitt, Tr. 1516-17, 1544-46)

290. Mr. Devitt presented the test summaries of the Aunyx tests. (RX 704, Attachment A). The test summary sheets, however, do not accurately reflect the actual machine logs of the machines on which the Aunyx toner was tested. (CX 40).

291. Mr. Devitt never told anyone at Aunyx that their toner was not testing out well, or that he had concerns about their financial wherewithal or capacity to indemnify OE. (Devitt, Tr. 1554-55).
292. EBM is an authorized Canon dealer in Nashville, Tennessee. EBM services several Canon National Accounts, including [ C ]

[ C ]. As of 1987, [ C ] of EBM's copier business was in Canon copiers. More than [C] EBM employees are involved in the marketing of Canon copiers. Its 1986 sales volume was characterized by an official of EBM as being [ C ] (Kemp Dep., JPX 23, at 22, 73-76).

293. In February 1985, Aunyx sent EBM a carton of Aunyx toner for testing. [ C ]

[ C ]. (CX 38; [ C ]

[ C ].

294. [ C ]

[ C ]

[ C ]

[ C ].

295. EBM placed a second order for the toner in October of 1985 (CX 38). [ C ]

[ C ].

EBM [ C ]

[ C ].
296. In April of 1982, General Dynamics invited eleven copier vendors, including Canon, to bid on a copier contract. Canon submitted its bid on May 12, 1982. In June 1982, General Dynamics formed a Copier Committee to evaluate the bids and to select a supplier of copiers. (RX 712, Cohen W.S. at 2-3; Cohen, Tr. at 2835)

297. Canon sent a delegation to meet with the General Dynamics' Copier Committee in St. Louis, Missouri on August 3, 1982. The delegation was composed of Canon U.S.A officials as well as representatives from dealers whose primary sales area encompassed the location of one of General Dynamics major facilities. (RX 712, Cohen W.S. at 4; Cohen 2836-37).

298. A representative of A-Copy, a Canon dealer, was included in the delegation that met in St. Louis in August of 1982. A-Copy's primary sales area encompasses the General Dynamics Groton, Connecticut facility -- one of General Dynamics' four largest divisions -- and General Dynamics' Quincy, Massachusetts Shipbuilding facility. (RX 11, RX 712, Cohen W.S. at 2-5, 7; Donnelly, Tr. at 1169).

299. On December 7, 1982, Canon and General Dynamics signed a national account contract pursuant to which Canon agreed to provide copiers to General Dynamics' four major facilities as well as providing for General Dynamics to expand the terms to other facilities. The agreement included Canon's proposal of [ C ] cost-per-copy. (RX 2, RX 712, Cohen W.S. at 6; Cohen, Tr. 2839, McLaughlin, Tr 2430)
300. In an eleven-day period prior to January 1, 1983, Canon and its dealers installed approximately six hundred (600) copiers at the four General Dynamics facilities described above, including the facility at Groton, Connecticut, but not including the Quincy facility. (RX 712, Cohen W.S., at 7)

301 On December 8, 1982, three officials from Canon's National Account Program and a representative from A-Copy, visited the General Dynamics' Shipbuilding Division in Quincy, Massachusetts. (RX 712, Cohen W.S. at 7-8). During the meeting, Tom Baldwin, the Shipbuilding Division's Manager of Communications, inquired whether Aunyx Business Machines, a Canon dealer, could install and service any Canon copiers that the division might purchase. Representatives of Canon explained that Aunyx, whose primary sales and service area is Plymouth County, Massachusetts, was not authorized under Canon's National account Program to service copiers in Quincy, which is located in Norfolk County, Massachusetts. Cohen informed Baldwin that A-Copy would be Quincy's servicing dealer if he decided to purchase machines under the national account agreement between Canon and General Dynamics. The Quincy Shipbuilding Division decided not to purchase copiers at the December meeting because of financial constraints. (RX 712, Cohen W.S. at 8; Cohen, Tr 2840-41; McLaughlin, Tr 2432-35)

302 In February 1983, Robert Donnelly and Ken Brown of Aunyx Business Machines met with the representatives of the Quincy Shipbuilding Division and submitted a proposal for the placement of Canon copiers. (Donnelly, Tr. 155; JPX 4, Donnelly Dep., at 93). At the time of this meeting, Aunyx did not know that General Dynamics had signed a national account agreement with Canon and that the terms of that agreement could, at General Dynamics' option, cover the purchase of Canon copiers by General Dynamics' Quincy facility.
303. The February proposal contemplated the use of Aunyx's Canon-compatible toner and quoted the Quincy Division a cost-per-copy price of [C] for outright purchase, [C] for lease/purchase, and [C] for contract rental. Each of these cost-per-copy proposals was higher than the [C] cost-per-copy provided under the existing national account agreement between Canon and General Dynamics. (RX 2, 4, 6, Donnelly, Tr. 1164-65).

304 In late February 1983, the General Dynamics Copier Committee informed Canon that the Quincy Shipbuilding Division had decided to purchase new copiers. Representatives of Canon and A-Copy met with representatives of the Quincy Shipbuilding Division on February 24, 1983. Again, Canon explained that A-Copy would be servicing the facilities if the Quincy Division bought its copiers pursuant to the national account agreement between General Dynamics and Canon. (RX 712, Cohen W.S. at 8-9; Cohen, Tr. 2842-43, 2852-53)

305. The Quincy facility is in Norfolk County, Massachusetts. A-Copy's primary sales and service area encompasses Norfolk County. Aunyx's primary sales and service area is restricted to Plymouth County, Massachusetts. The actual distance, however, between the A-Copy service outlet and the Quincy facility is greater than the distance between Aunyx and the Quincy facility. Aunyx is only a three to four mile drive -- across the county line -- to Quincy. (Langone, Tr. 3561-62).

306. By March 1, 1983, General Dynamics corporate office had already made the decision that the Quincy Shipbuilding Division would purchase Canon copiers under the national account agreement with Canon. (Baldwin, Tr 1479, RX 19, 20)
307. In March of 1983, a representative from Aunyx met with Baldwin of the Quincy Division and submitted a second proposal to the Quincy Division. Aunyx had learned of the cost-per-copy figures in the General Dynamics-Canon national account agreement, and quoted the Quincy Division a lower figure. (Donnelly, Tr. 1155, 1167, Donnelly Dep., JPX 4, at 68-69, 98).

308. Prior to the Quincy Division’s eventual purchase of Canon copiers, the Quincy Division had never been instructed by the General Dynamics’ Corporate Division as to its purchase of machinery. General Dynamics’ Corporation Division in St. Louis did, however, instruct the Quincy Division to purchase copiers pursuant to the General Dynamics-Canon National Account Program. Aunyx did not get the account. (Martins, Tr. 1239, 1243).

309. Not used

F. The Canon NP Warranty Provisions

310. The Canon Warranty to authorized Canon dealers in the Canon Dealer Agreement includes the following provision:

This warranty shall be void and of no force and effect with respect to any product which is damaged as a result of (A) neglect, alteration, electric currency fluctuation or accident, (B) improper use including failure to follow operating, maintenance and environmental conditions prescribed in Canon USA’s instruction manual (C) repair by other than service representatives qualified by Canon USA and
acting in accordance with Canon USA's service
bulletins, or (D) use of supplies or parts which do
not meet Canon USA's specifications.

(RX 8 at Bates No. 100889).

311. Canon warrants its NP-copier machines as free from defects in
workmanship and material under normal use and service for ninety (90) days
after delivery. The warranty requires that all service must be performed by a
Canon authorized service representative, and states that:

This warranty shall be void and of no force and
effect if the copier is damaged as a result of
alteration of the equipment, electric current
fluctuations, improper use of the equipment, or use
of equipment supplies or spare parts not meeting
Canon's specification.

(RX 32)

312. The Canon machine warranty excludes the photoreceptor drums for
the NP 210-500 series of copiers. The Canon warranty for the drums contains
the same provision as the copier machine warranties, that "this warranty shall
be void and of no force and effect if the drum is damaged as a result of
use of . . . supplies . . . not meeting Canon's specifications." (RX 291-293).

1. Refusal to Disclose Specifications

313. In a letter to Canon U.S.A dated October 20, 1982, Insurance
Marketing Services, Inc ("IMSI") requested Canon's specifications for the
toner to be used in an NP 400 copier that IMSI had recently purchased. IMSI
indicated that it wished to use Tomoegawa toner in the NP 400, because...
Tomoegawa toner was available for $28.00 less than Canon-brand toner per four-cartridge case. IMSI noted that its service agreement with the copier dealer would be void if IMSI used supplies that did not meet the dealer's specifications. In addition to asking for Canon's toner specifications, IMSI asked whether Tomoegawa toner could be used in the NP 400 copier. (CX 160).

314. Charles Meola, Canon U S A. Inc.'s Service Administration Manager, responded to the IMSI letter by informing IMSI that Canon U.S.A. could not comment on Tomoegawa toner and that Canon U.S.A. had not had the opportunity to test Tomoegawa toner (CX 160). Mr. Meola did not send IMSI the specification for Canon NP compatible toner (Meola, Tr. at 2399-2400). Instead, Mr. Meola recommended the use of Canon-brand toner. (CX 160).

315. On February 17, 1983, Thomas Ambrose, Product Manager for Toner & Development for Pelikan, Inc., wrote to Canon U.S.A. in regard to Canon specifications for the Canon warranty. Mr. Ambrose noted that the third paragraph of the Canon machine warranty disallows a consumer to use supplies other than those that meet Canon's specifications. Ambrose asked for a copy of the specifications that a consumer might use to determine whether an alternative toner met Canon's specifications. (CX 197, Kairy's W.S., Ex. 13).

316. Haruo Murase replied to Mr. Ambrose's inquiry by informing him that, "The information that you request is proprietary information of the manufacturer and cannot be released." (CX 197, Kairy's W.S., Ex. 14).

Ambrose asked therein, "Whom becomes the judge if competitive supplies meet Canon specifications and how exactly is that determined and verified?" (CX 197, Kairy's W.S., Ex. 15).

318 Murase responded to Ambrose's second inquiry in a letter dated April 8, 1983 by informing Ambrose: "As I explained to you in my letter dated March 7, 1983, the information you requested is proprietary to the manufacturer. In the event any bona fide disputes should arise with respect to the specifications, we would attempt to resolve such dispute at that time." (CX 197, Kairy's W.S., Ex. 16)

319. After this initial round of correspondence, Mr. A.M. Kairys, Jr., Vice President and General Manager of Pelikan, Inc., met with Mr. Murase in Lake Success, New York, at Canon U.S.A.'s corporate headquarters. At this meeting, Mr. Kairys broached the idea of Pelikan becoming an alternate producer for Canon, to provide it with a second source for toner. (CX 197, Kairys W.S. at ¶ 17). Mr. Kairys memorialized his proposal in a letter to Mr. Murase on July 21, 1983. (CX 197, Kairys W.S., Ex. 17).

320. Murase did not accept Pelikan's proposal to become a second source of Canon NP-compatible toner. (Kairys, Tr. at 761).

321. On May 13, 1983, Pelikan sent samples of Pelikan brand Canon compatible toner to Canon U.S.A.'s President, Mr. Mitarai. Pelikan requested that Canon machine test the samples and verify that Pelikan brand toner was compatible with Canon's copiers and met Canon's specification. Canon returned the samples on May 20, 1983, without testing them. (CX 197, Kairys W.S., Ex. 19).
322. In a letter dated February 3, 1984, International Calculator Sales, an authorized Canon Dealer in Michigan, wrote its Canon Customers to bring a "purchase alert" to their customers' attention. The letter stated:

Canon Copier of New York constantly receives toner made by others for approval. Our chemist test and then approve such generic toners. If they are compatible with our product, when they are approved letters of approval are issued and their letters should be made available to you.

If improper toners are used, the results is a chemical action that produces light copies or jamming of the toner shoots by clogged toner particles.

Occasionally our service people have been able to free up this condition in your office. More times then not the unit must be brought in to our office for repair. The minimum cost is $100.00 for pick up and re-delivery plus the technician's time of $60.00 and any parts that need replacement.

The penny you save today, maybe the penny you spend with us.

(CX 197, Kairys W.S., Ex. 19 at p. 2).

323. On February 5, 1985, Mr. Kairys of Pelikan, Inc. again wrote Mr. Murase to inquire as to how Pelikan could submit its toner to Canon for tests to determine whether the toner was compatible and met Canon specifications. Kairys attached a copy of the International Calculator Sales letter, described above, to his correspondence with Murase. (CX 197, Kairys W.S., Ex. 19)

324. On February 22, 1985, Mr. Murase responded to Mr. Kairys inquiry by informing Kairys "that the letter apparently circulated by International Calculator Sales, Inc. is erroneous. Canon U.S.A. Inc. does not have a program to test and issue letters of approval or disapproval of toners"
manufactured or distributed by others." Murase also indicated in his letter that he intended to inform International Calculator Sales, Inc that their letter concerning Canon testing was erroneous and should be discontinued. (CX 197, Kairys W.S., Ex. 20).

325 Canon dealers have requested that Canon U.S.A verify whether competing toners were compatible with the NP 210 - NP 500 copiers and met Canon's specifications. Canon U.S.A. has declined to comment on these requests (Murase, Tr. 3017).

G. Alleged Interference with Source of Supply

1. Cartridges from [C]

326. Complainant has alleged that respondents interfered with complainant's ability to purchase cartridges for its NP-compatible toner from a domestic supplier of such cartridges, [C]. (CF 875-80).

327. Canon Business Machines, Inc. ("CBM") contracted with [C] to produce [C] toner cartridges for its NP copiers from April 1984 to September 1986. These cartridges had four pieces -- two end caps, a paper tube, and a plastic strip. [C] manufactured and assembled the parts for these cartridges in accordance with the specifications provided by CBM (RX 715, Michie W.S., at 10).
328. CBM also paid for the automatic assembly machine which \( C \) developed to put together the complete cartridge. \( C \) cost of developing this equipment was amortized over the period of its contract with CBM as a component of the cost of the completed cartridges. (RX 715, Michie W.S. at 10)

329. The CBM-\( C \) contract provided that \( C \) would not make or assemble cartridges for other companies using either the injection molding tooling developed and paid for by Canon or the automatic assembly machine developed by \( C \) and paid for by Canon. (RX 715, Michie W.S. at 10).

330. \( C \) was free to produce for other companies either parts for cartridges using molds developed by those companies or the paper tubing. Esgraph, for example, purchased the cardboard tubing for its NP toner cartridges form \( C \). (Keller, Tr. 514).

331. Aunyx has purchased completely assembled toner cartridges from Pelikan and Marpac. The Pelikan cartridge was similar to the \( C \) cartridge in that it consisted of a paper tube with two plastic end pieces. (Pickett Dep., JPX 47, at 102-03, 112, 115, 156; JPX 51, at 5-7). Marpac's original cartridge also consisted of a paper tube with plastic ends. (Pickett Dep., JPX 51, at 10).

332. In late 1984 or early 1985, Aunyx and Marpac mutually agreed to switch to an all plastic cartridge for the toner. (Pickett Dep., JPX 51, at 10, 15). Aunyx still uses Marpac's plastic cartridges today and has never had
a problem getting those cartridges from Marpac. (Pickett Dep., JPX 47, at 162; JPX 51 at 15).

333. In January 1985, Aunyx raised with [C] the possibility that it could make Canon-type toner cartridges for Aunyx. (Pickett Dep., JPX 47, at 157-58). [C] told Aunyx it could not make the exact same cartridges for Aunyx because the end pieces were made using Canon-owned molding with the Canon logo and assembled with Canon-paid equipment. (See, Pickett Dep., JPX 47 at 158). [C] informed Aunyx that it was willing to provide the paper tubing. (Pickett Dep., JPX 47 at 170; JPX 51 at 20). [C] also invited Aunyx to develop and provide its own molds for the end pieces for use by [C]. (Pickett Dep., JPX 47 at 176-77; JPX 51 at 20-22). Such tooling would have cost approximately [C]. (Pickett Dep., JPX 47, at 176-78; JPX 51, at 22; RX 715, Michie, W.S. at 11). Aunyx did not want to spend money for such tooling, and never submitted tooling to [C]. (Pickett, Tr., 1615-18). Aunyx never purchased cartridge bodies from [C]; nor did it seriously attempt to buy cartridges from [C]. (Pickett Dep., JPX 47, at 173)

334 In sum, there is no credible evidence that Canon unlawfully interfered with Aunyx's ability to purchase cartridges for its NP-compatible toner from [C]. (See, FF 326-33)
2. Supplies from

335. Complainant has alleged that respondents interfered with complainant's ability to purchase MGW-M -- a type of iron oxide used in certain toners -- from [C] in Japan. This allegation appears to have been abandoned by the complainant for lack of credible evidence. Indeed, the evidence, as outlined below, demonstrates that no such interference occurred.


337. In sum, there is no credible evidence that Canon interfered with Aunyx's ability to purchase materials for its NP-compatible toner from [C] [C]. (FF 335-36).
338. The evidence shows that various Canon dealers tested competing ERMT with the prospects of purchasing it as a private label or generic toner for use in Canon NP 210-500 copiers, throughout the period covered by the investigation, up to the present time. (FF 339-50, below).

339. The evidence shows that Aunyx sent samples of its toner out to a number of Canon dealers after the 1982 NOMDA show. (CX 1, Hanley W.S., at ¶ 12).

340. Among those dealers receiving such samples:

(a) [ C       ], a Canon dealer in [ C       ], tested Aunyx toner in late 1982 and, although the initial tests indicated good results, ultimately determined that the toner did not work. (CX 325; [ C   ], Tr. 2044, 2053-54). Aunyx's own internal records show they were having serious copy quality problems at this time. (FF 366).

(b) Locke Office Products, a Canon dealer in Maine and New Hampshire, also tested Aunyx's Canon-compatible toner in late 1982. In September 1982, Aunyx shipped 100 cartons of ERMT to Locke for testing. Locke also found the Aunyx toner to be unacceptable. (Locke, Tr 3209-13).
341. Another producer of Canon-compatible toner, Winston Technologies, had its "Esgraph" ERMT tested by at least one Canon dealer, Dupli-Fax, located in the greater Philadelphia area, in late 1982. (CX 197a, Keller W.S., at ¶ 26) Mr. Keller, of Winston Technologies, testified that the product tested out well and that Dupli-Fax would have purchased the Esgraph toner if it were not for pressure from Canon. (CX 197a, Keller W.S., at ¶¶ 26-27). However, again the record shows that the Esgraph toner was having quality problems at that time, at least in the NP 210 copier. (CX 197a, Keller W.S., at ¶¶ 31-32).

342. Nashua Corporation first marketed a Canon-compatible toner for the NP 210-500 copiers in July 1985. After the NOMDA show of that year it sent test samples to over [C] Canon dealers. [C] of these dealers later purchased Nashua ERMT. (MacNaughton, Tr. 41-42; Price Dep., JPX 53, at 11-14 and Ex. 20) Shortly thereafter, however, Nashua discovered quality problems and ceased sales until May 1986, [C] [C]. (MacNaughton, Tr. 137; Price Dep., JPX 52, at 77, 79-88; Price Dep., at JPX 53, at 46, 162 and Exs. 24, 26).

343. Office Equipment Suppliers, a Canon dealer in Dayton, Ohio, tested the Nashua toner in late 1985 or early 1986 and, although it initially found it of good quality, decided to stay with the Canon toner. Later, it found that some of its customers who were using the Nashua toner were having problems. (CX 9, MacNaughton W.S., at Exs. 1 and 2).

344. Taylor Made Office Supplies was a Canon dealer in the San Francisco area. Mr. Sweeney, who worked for Taylor Made from 1980 to February 1984, testified that Taylor Made tested a number of non-OEM Canon-compatible
toners, including Tomoegawa, during the period when he worked there. (Sweeney, Tr. 685-90). It was also shown that Taylor Made had tested Esgraph ERMT at some time in 1982, and Pelikan toner in late 1984. (Kelly, Tr. 1704; CX 197d, Kelly W.S., at 2 and Exs. 2 and 3). In fact, by May 1986, Taylor Made had tested and started to purchase toner from Nashua. (CX 165, at 5)

345 A-Kopy, an authorized Canon dealer in Toledo, Ohio has also tested a number of independently manufactured Canon-compatible toners. It tested numerous such toners, including the Pelikan, Hunt, and the early (1985) formulation of the Nashua toner. (Sawchuk, Tr. 3123-29) It found all of these to be unacceptable. (Sawchuck, Tr. 3126-29). However, it tested a Canon-compatible ERMT from a Florida company called Carbotech in late 1986 or early 1987 and began purchasing the Carbotech toner in early 1987. (Sawchuk, Tr. 3101, 3115, 3123, 3125-26). It has also tested the re-formulated Nashua toner and found it acceptable. (Sawchuk, Tr. 3127).

346. Before A-Kopy tried the Carbotech toner, it was given referrals from several Canon dealers of various sizes who were already using the Carbotech toner. It checked the referrals and found these dealers to be "quite satisfied." (Sawchuk, Tr. 3101).

347. EBM, an authorized Canon dealer in Nashville, Tennessee, tested Aunyx toners in 1985 { C }
{ C }, CX 38). { C }
{ C }
{ C }
{ C }.
OE Canada, the authorized Canon dealer in the Montreal and Toronto markets, also tested a number of independent toners for use in the Canon NP copiers. Among those tested were Aunyx, BASF, Coates and Nashua. (RX 704, Devitt W.S., at 3; Devitt, Tr. 1495-96, 1515, 1566). There is conflicting evidence as to the results of the Aunyx tests conducted in 1985. (RX 704, Devitt W.S., at 2; Campbell, Tr. 3567-77, 3585). However, OE Canada later tested Nashua and Xerox/ICMI and found both to be acceptable. (Devitt, Tr. 1503). It ultimately started to purchase the Xerox/ICMI toner, largely as the result of an indemnification agreement from Xerox providing that OE would be reimbursed by Xerox for any costs associated with the failure of the toner. (Devitt, Tr. 1551).

University Office Equipment, a Costa Mesa, California Canon dealer, has also tested and begun marketing a non-OEM toner, purchased from Nashua. It began marketing the Nashua toner shortly after April 1986 (Ostergaard, Tr. 1247, 1276-77).
I. Bundling of Copier and Toner Purchases in Quotas and Dealer Performance Standards

351. Canon U.S.A. district sales managers have a dollar quota for supplies. Supplies for quota purposes include toner, paper, labels, transparencies and perhaps some other items (Joseph Dep., JPX 20, at 187).

352. Dealers are assigned a total dollar amount per quarter, which is one way of stating their performance standard. Accessories, paper and toner are included in this dollar volume. (Joseph Dep., JPX 20, at 194, 380)

353. Twice per year, Canon's district sales managers are given quotas in which the total amount of machines and supplies to be sold is expressed in dollars. A separate quota for machines is given in terms of numbers of machines and a separate quota for supplies is given in terms of dollars. (Corbett, JPX 3, at 25-26; Joseph Dep., 20, at 385-86). If one added up the wholesale price of the machines in the dealer's performance standard and subtracted that from the overall dollar volume, one would arrive at the dollar figure for accessories and supplies assigned to that dealer under his performance standard. (Joseph Dep., JPX 20, at 195).

354 The Canon dealership agreement provides for performances standards in pertinent part:

Minimum purchase requirements shall be established by Canon U.S.A. based on Canon U.S.A.'s good faith belief in the market potential of the Territory, and after consultation with the Dealer. Unless Dealer signifies its consent to such minimum purchase requirements by signing a copy of the new Schedule A and returning the same to Canon U.S.A. within a reasonable time, Canon U.S.A. may, at its
discretion, and in addition to all other rights and remedies available to it, withhold delivery of further units of the Products. If Dealer fails to fulfill the minimum quarter annual requirements specified in Schedule "A" annexed hereto, as the same may be amended, for any two (2) successive calendar quarters, Canon U.S.A. shall give the Dealer notice of its deficiency and thirty days in which to rectify the same. If the deficiency is not cured within such time period, Canon U.S.A. may, at its discretion, and in addition to all other rights and remedies available to it, cancel this Agreement on thirty (30) days additional notice; provided, however, that Canon U.S.A. shall give such longer notice periods with respect to rectifying deficiencies and cancellation as may be required by applicable law.

(RX 8) (emphasis added)

355. There is no evidence of record that Canon's performance standards were used to inhibit dealers from purchasing independent-manufactured toner, or that the performance standards did in fact deter dealers from using independent-manufactured toners. The evidence does show that dealers did in fact test independent toners in search of a reliable alternative source of supply, and that some dealers have in fact purchased independent toners.

(FF 338-50)

J. Sweetheart Deals

356. Complainant contends that Canon offered certain dealers toner at prices that were unavailable to all dealers so as to dissuade them from purchasing competitive supplies. (CFF 710 - 713) Specifically, complainant alleges that it offered to sell A-Copy, an authorized Canon dealer, Aunyx brand toner at a price $5.00 less than the lowest available dealer price. A-Copy was not interested in purchasing Aunyx toner, allegedly due to a
special price arrangement that A-Copy had with Canon. By virtue of this special price arrangement, A-Copy was allegedly able to offer an end-user, the University of Massachusetts, Canon-brand toner at a price below the cost of Canon-brand toner available to other dealers (Monihan Tr. 1007-08; CX 1, Hanley W.S. at 9-10; CX 7, Langone W.S. at 21). Complainant's contention is based entirely on the hearsay testimony of complainant's employees, and lacks any factual support in terms of actual prices, comparative sales volumes, and other data essential to show unlawful discriminatory pricing. To the contrary, the evidence does show that the University of Massachusetts purchased Canon-brand toner from A-Copy in 1985 after it had decided to purchase Canon-brand toner only, and after it had experienced a problem with Aunyx selling them deficient Aunyx-brand toner. (RX 347; RX 348). In short, the evidence does not demonstrate that complainant abused its market power by means of price discrimination to block the sale of competitive toner or the sale of Canon-brand toner by a dealer that also manufactured and sold competitive toner.

K. Other Alleged Coercion

357. Complainant presented testimony of Canon coercion of dealerships, using such methods as holding back on parts and new generation copiers, holding up credit, and imposing unreasonable sales quotas. (CFF 563-603)

358. The record does contain some evidence that Canon withheld parts and copiers to those dealers that did not sign the Canon Dealer Agreement. Langone testified that Mr. Schloss of Leslie Supply Company, an authorized
Canon dealer, had told him that he had been reluctant to sign the 1983 Canon Dealer Agreement but did so because Canon held up supplying him with copiers. (Langone, Tr 1313-14; CX 7, Langone W.S. at 16) In addition to this hearsay testimony, the record reflects that when Murase introduced the 1983 Canon Dealer Agreement, he wrote to the dealers that they should sign the agreement and return it to Canon so as to "expedite your receipt of the upcoming new NP-Copier products." (RX 8). Aunyx has not signed the agreement and it has not received the Canon NP 9030 copier. (Murase Tr 2947). In short, the record does suggest that Canon may have withheld certain machines from dealers that did not sign the dealership agreement, but there is no reliable evidence that Canon withheld machines or supplies from dealers because they sold competitive supplies.

359 Complainant presented the testimony of Ms. Hill of Copy Products Corporation ("CPC") to substantiate its charge that Canon imposed unreasonable quotas, credit pressures, and other tactics on dealers to dissuade them from dealing in competitive toners. Ms. Hill's testimony about an isolated credit incident with Canon and problems in receiving spare parts from Canon are unrelated to competitive toner purchases by CPC. Hill testified that these incidents occurred before CPC began to sell competitive toner. (Hill, Tr. 309-13). As to unreasonable pressures on dealers through unreasonable sales quotas, the record shows that CPC's failure to adhere to such sales targets, and CPC's problems with Canon in general, was due to CPC's poor sales of Canon products rather than any unreasonableness in the quotas. CPC did not come close to meeting its schedule A quota for Canon in 1984 through 1986. Canon offered to lower the quotas each successive year. In 1985, for example, Canon reduced CPC's target from $650,000 to $450,000. (Hill, Tr. 242-44) CPC
purchased only $72,000 worth of Canon NP copier products during that year. (Hill Tr. 232). In the last eight months of 1985, CPC did not purchase a single NP copier from Canon. (Hill, Tr. 224, 247; CX 1198b, Hill W.S. at Ex. 10) Other allegations presented through Ms. Hill's testimony are simply not credible: Ms. Hill described events that occurred during a meeting that she admits she did not attend, and events at another meeting that she only attended in part (Hill, Tr. 156-59). The chronology of CPC's relations with Canon in Ms. Hill's witness statement (198b, Hill, W.S. at Ex. 2) was not prepared by Ms. Hill (Hill, Tr. 155) and her direct knowledge of such events was limited. In short, Ms. Hill's efforts to describe certain situations and events cannot be accorded much weight in view of her limited first hand knowledge of such events.

VIII THE NATURE OF CANON'S COMPETITION

A. Aunyx Corporation

360. In 1980, Aunyx began an attempt to develop a toner compatible with the Canon NP 200 copier, i.e., the direct predecessor of the NP 210-500 series. (RX 416; RPX 44 at 17; Monihan Dep., JPX 35 at 35-39; RX 70, Murase W.S., at 6-8)

361. In 1981, Aunyx shifted its efforts and began to develop a toner compatible with the NP 210-500 series. (RX 427; Thompson Dep., JPX 55 at 137). During the period 1980 to 1982, Aunyx chemically analyzed samples of
Canon toner for the NP 200 and NP 400 copiers to attempt to identify their elements. (Pickett, Tr. 1597-99; Thompson Dep., JPX 55 at 138-40; RX 416, 427).

362. Following these analyses, as well as trial runs, Aunyx in 1982 started to produce a monocomponent toner (Pickett, Tr. 1599-1600). Richard Thompson, Aunyx's principal toner formulator, tried seven different types of magnetic powder in arriving at a formulation. (See, RX 436, 440, 448, 449, 450, and 452; Pickett, Tr. 1599).

363. Aunyx also incorporated into these 1982 trial formulations a resin called [C]. (RX 454). This resin was at least instrumental in causing [C]. (RX 459 at 82, 104, 131, 141; Thompson Dep., JPX 58 at 16-18; Thompson Dep., JPX 57, at 127-130; Thompson Dep., JPX 59, at 8-10, 22, 39-40).


365. Aunyx received complaints from customers that its ERMT was not producing acceptable copy quality and was causing increased service calls and

11/ The National Office Machine Dealers Association (NOMDA) conducts a trade show each year which is attended by copier system manufacturers and dealers. (Hanley Dep., JPX 25, at 28; Hanley, Tr. 967).
mechanical problems. (See CX 5, Donnelly W.S., at ¶ 4; Shaw Dep., JPX 54 at 121-23, 125; RX 347, 348, 512, 513)

366. Aunyx's own records reveal that the 1982-83 ERMT toner it produced had problems. Among other things, such records indicate that the toner [C].

(RX 459, at 82, 104, 131, 141; RX 461 at Bates Nos. 202168, 202170, 202183)

For instance, a notation on July 26, 1982 indicates that

[C]

[ C ]

[C], . . . (RX 459, at 104).

Other problems noted included [C],

[ C ]

[ C ], (RX 461, at Bates No. 202168, 202205, 202206, 202224, 202228, 202352, 202407, 202410, 202419; RX 418, at Bates No. 202443).

367. [C]

[C]

[C] (CX 325), [C]

[C], (CX 325), Tr. 2044, 2053-54).

368. Mr. Jack Wright of Wright-Moore, Inc., an independent copier supplies dealer, testified that he was favorably impressed by Aunyx's demonstration of its ERMT at the 1982 NOMDA show. He tried to purchase some of the toner, but was informed by Mr. Langone of Aunyx that it wasn't being
sold to anyone but authorized Canon dealers. He later started hearing reports that the Aunyx ERMT "had fallen flat on its face. It was no good."

(Jack Wright, Tr. 581-82; CX 198, J. Wright W.S., at ¶ 1).

369. Another manufacturer of Canon-compatible toner, Pelikan, introduced its product into the marketplace in mid-1983. (Kairys, Tr. 751). Mr. Kairy's testified that at that time, Aunyx and Winston/Esgraph had begun "to run into significant copy quality problems..." (Kairys, Tr. 758-59).

370. In September, 1982, Aunyx shipped 100 cartons of ERMT to Locke Office Products ("Locke"), an authorized Canon dealer, for testing. Locke reported to Aunyx that the Aunyx ERMT produced unacceptable copy quality and offsetting, and that its was having problems with the containers, which were falling apart and dumping excess toner into the machines. (Locke, Tr. 3209-13).

371. After producing fewer than [C] cartons of ERMT between September, 1982 and May, 1983 (see RPX 145; RPX 146; Pickett Dep., JPX 48 at 12-27), Aunyx ceased production of its ERMT for [C] months. It did not resume production until [C], although additional development efforts were made from time to time in 1983 and 1984. (Pickett, Tr. 1594; Pickett Dep., JPX 48 at 26-32; Thompson Dep., JPX 58 at 143; RPX 146, 147).

372. In September 1984, Mr. Thompson substituted different resins for [C]. This appeared to alleviate the problem of [C]. (Thompson Dep., JPX 59 at 8-10, 22, 39-40; Thompson Dep., JPX 57 at 128; RX 467, 457).
373. Aunyx began production of this new formulation in early 1985. (A few cartons of this formulation may have been produced in late 1984). Although entries in Mr. Thompson's laboratory notebook indicate Aunyx's belief that the addition of new resins was the cure for its copy quality problems (see RX 479, Thompson Dep., JPX 59 at 83-87), some problems persisted after the introduction of the improved ERMT in 1985 (Donnelly Dep., JPX 6 at 18-33). In late 1984 and into 1985, Aunyx was still experiencing some buildup of toner on the fuser rolls. Although this problem did not cause Aunyx Business Machines to pull back toner from the field, it did cause it to increase the frequency of maintenance calls somewhat. (Donnelly, Dep., JPX 6, at 20-23).

374. In November 1984, Aunyx was still reporting problems with its toner. Upon occasion, two layers would form on the development cylinder. When this occurred there would be problems "with copy quality, ripples, things like that." (Pickett Dep., JPX 49, at 168-69).

375. Sometime after March 1985, Aunyx again changed the formula for its ERMT when it substituted \([ C ]\) for \([ C ]\) as its magnetic pigment (Thompson Dep., JPX 55, at 116-23). No evidence has been submitted to show that this change affected the quality of the Aunyx ERMT. The apparent reason for this change in the formula was a possible interruption in the supply of \([ C ]\) by the \([ C ]\) supplier (Thompson Dep., JPX 55, at 115-17).

376 \([ C ]\) 
\([ C ]\)
377. On the other hand, tests run on Aunyx ERMT by OE Canada in 1985 appear to have found it a satisfactory substitute for OEM Canon toner. (Campbell, Tr. 3567-77, 3585) In fact, Ms. Campbell testified that the Aunyx toner tested in the Toronto market by OE Canada was superior to the Canon brand toner (Campbell, Tr. 3572-76). Contrary testimony does not appear credible in light of Ms. Campbell's overall testimony and apparent credibility. ([; Campbell, Tr. 3563-3628).}

378. Aunyx had initially tried to interest Canon in approving Aunyx as a U.S. source for Canon NP-toner (Langone Dep., JPX 24, at 88-102; JPX 29, at 316-20) This remained its goal until mid-1983, after communications with Mr. Murase of Canon U.S.A. finally convinced Mr. Langone that Canon was not interested in another source of toner supply. (RX 12, 13; Langone, Tr 1348-52; RX 700, Murase W.S, at 25-26; Langone Dep., JPX 29, at 316-20).}

379. In early 1983, Aunyx decided that if it could not get approval from Canon as a source of toner supply, it would try to sell Aunyx ERMT to Canon dealers, as well as directly to end users. (Langone Dep., JPX 24, at 99-102) However, it continued to focus on its attempt to sell Canon as a U.S source until after Mr Langone met with Canon officials in mid-July 1983 (Langone Dep. JPX 29, at 316-20; Langone, Tr. 1379). Aunyx did make sales calls during the interim period. (Langone, Tr. 1379).
380. Although Aunyx demonstrated its Canon-compatible toner at the NOMDA Show in July 1982, it did not begin producing it in commercial quantities until September 1982 (CX 78, Langone W.S., at ¶ 19; Complaint ¶ 18).

381. During subsequent years, Aunyx's primary sales efforts were at the annual NOMDA shows. (Monihan Dep., JPX 35, at 80) Aunyx's sales representative responsible for selling Canon-compatible toner to Canon dealers west of the Mississippi testified that he visited only 4 or 5 Canon customers each year, up until 1986 when Aunyx ceased its sales efforts for the Canon-compatible toner. (Monihan Dep., JPX 36, at 3-14). The official responsible for dealer sales east of the Mississippi could only recall one visit to a Canon dealer in 1982, and two dozen or less in 1983, to sell Canon compatible toner. (Hanley, Tr 980-82; Hanley Dep., JPX 15, at 171-73). Contacts with prospective customers was primarily by telephone and the response to such calls was generally very poor. (Hanley, Tr. 980-82).

382. Other than the customers of Aunyx Business Machines, a company related to complainant which had a Canon dealership, there is little evidence in the record of attempts by complainant to sell to end-users. In fact, Aunyx had a policy to sell to Canon authorized dealers only. (CX 5, Donnelly W.S., at ¶¶ 1, 3-4, Donnelly Dep, JPX 6, at 18-33; Hanley, Tr 992-93, 998; J Wright, Tr. 581-82)

383. The telephone records furnished by Aunyx reveal only a relatively few telephone contacts with Canon dealers in the Fall of 1982, when Aunyx began producing its Canon-compatible toner (ERMT) in commercial quantities.
Those records reveal contacts with only 7 different dealers during the month of September 1982, with total conversations lasting slightly over 40 minutes. (CX 1, Hanley W.S., Attachment 4). For the month of October 1982, the records reveal that only two additional dealers were contacted, in conversations lasting only 3 minutes. There were repeat calls to four of the September contacts, with conversations lasting a total of 14 minutes (CX 1, Hanley W.S., Attachments 4 and 5). In November 1982 there was one additional telephone contact, lasting for only 2 minutes. (CX 1, Hanley W.S., Attachment 5). Attachments 6 and 7 to the Hanley Witness Statement reveal that only a small number of new contacts were made from then through July 1983.

384. Aunyx made no attempt to sell its ERMT to the Canon dealers, other than A-Copy, in the greater Boston area, its home territory. (Langone Dep., JPX 24, at 107).

385. Aunyx ceased production of Canon-compatible toner in May 1983 (RPX 145-46). Aunyx sold only [C] cartons of Canon-compatible toner during all of 1984. (Langone Dep., JPX 29, at 324-26). Mr. Langone testified that production of the Aunyx toner had been running at such a low volume "that the toner was costing us more money than it would be if we had bought the Canon toner." (Langone Dep., JPX 29, at 325-26).

386. By 1985 when Aunyx had resumed production under a new formulation, it had decided to restrict its sales efforts to four of the larger Canon dealers in the Eastern United States and Canada--EBM, Inc. of Nashville, Tenn.; Duplifax of Pennsauken, New Jersey; A-Kopy of Glastonbury, Connecticut; and Office Equipment, Inc. of Canada (O E.) (RX 479; Thompson
Aunyx was unsuccessful in its attempts to sell to each of these dealers. (CX 1, Hanley W.S., at ¶ 18, 23, 26, CX 2, Monihan W.S., at ¶ 15). By mid-1986, Aunyx had ceased all attempts to sell ERMT to Canon dealers. In fact, there were only about [C] such contacts made after January 1, 1986. (Monihan Dep., JPX 36, at 8-10).

387. Aunyx also attempted to interest other original equipment manufacturers (OEM's) in its Canon-compatible toner. Mr. Langone contacted [C] which is a manufacturer and distributor of office products, including toners and developers. (Langone Dep., JPX 25, at 120-21, 125-26; [C], JPX 52, at 7-9). However, [C] informed Aunyx that it could purchase equivalent toner at a lower price from [C] suppliers. (Langone Dep., JPX 25, at 125-26). It also approached [C] sometime in 1985 for the purpose of selling the Canon-compatible toner. [C] had a number of concerns about dealing with Aunyx. First, Aunyx was a competitor in the manufacture and sale of [C] toner and [C] did not want to give business to a competitor. Also, Aunyx had previously sued [C] which was disinclined to deal with Aunyx because of this. (RX 126). [C] ultimately settled on another partner, [C], in the marketing of a Canon-compatible toner. (RX 224; [C] Dep., JPX 7, at 137-38, 155-69, 172).

388. Aunyx also had some dealings with [C] in 1985, apparently with the idea of having [C] produce Canon-compatible toner for it. (RX 154, 762) [C] found that Aunyx was a [C]
ultimately declined to do business with Aunyx. (RX 762).

389. Although specific production and sales figures for Aunyx have been excluded from the record as a result of Aunyx's failure to comply with certain discovery requests and orders, the record does reveal that over the period 1982-1986, it produced only a relatively small amount of Canon-compatible toner. (RPX 145-149; Pickett Dep., JFX 48, at 12-27).

B. Esgraph Toner

390. Esgraph was the trade name for a line of toner products manufactured and sold by Winston Technologies. From 1972-1983, Winston Technologies operated as an independent toner producer, making toner for numerous companies, including Xerox, IBM, Gestetner, Toshiba, Mita, Savin, Saxon, Royal and certain Minolta and Canon machines. In March 1984 the company was sold to Hercules, Inc. (CX 197a, Keller W.S., at ¶ 1-3).

391. Esgraph developed a toner for use in the Canon NP 400 copier and introduced the product at the 1982 NOMDA show. (CX 197a, Keller W.S., at ¶ 13). Esgraph's toner was well received at the NOMDA show and attracted considerable interest from Canon dealers, although approaches by Canon dealers were frequently made elsewhere at the show rather than at the booth (at the hospitality suite, at meal times, etc.). (CX 197a, Keller W.S., at ¶ 15-18).
392 At the time of the 1982 NOMDA show Mr Keller of Esgraph knew of no other independent manufacturer of Canon-compatible toner, outside of Aunyx which introduced its toner at the same show. (CX 197a, Keller W S, at ¶ 15).

393 Although the Esgraph toner was developed for the Canon NP 400 copier, Esgraph changed its packaging to include usage for machines later introduced by Canon, including the NP 210 [ 1 ] (CX 197a, Keller W.S., at ¶ 13; [ 2 ] Keller, Tr. 509-10). Esgraph did not test its Canon-compatible toner on an NP 210 before selling its toner for use in that model. (Keller, Tr. 510-11, Keller Dep., JPX 22, at 176).

394 Esgraph soon found that although its product worked well in the NP 400, there was a quality problem with respect to the NP 210 copier. (CX 197a, Keller W.S., at ¶ 32; Keller, Tr. 492, 510-11; Keller Dep., JPX 22, at 176)

395 In the Fall of 1982, Esgraph found that the NP 210 was becoming more of a factor in the market. Esgraph decided it could not sell a toner just for the NP 400, and that it would be necessary to go back and do more research to produce a toner that was compatible across a broader spectrum of Canon NP series machines. In view of resistance it had met from Canon and the Canon dealers, the fact that Canon had already dropped its price by $4.00 per carton after the 1982 NOMDA show, and the need to expend further funds for research on a broader spectrum toner, Esgraph decided to get out of the
production of Canon-compatible toner in late 1982. (CX 197a, Keller W S, at ¶ 31; Keller, Tr 510-13; [C])

396. Mr. Keller testified that Esgraph's total ERMT sales were approximately [C]. (Keller Dep., JPX 22 at 135-36). Esgraph's dealer price for ERMT was [C] per carton. (Keller Dep, JPX 22 at 191-93 and Ex. 2) At [C] per carton, Esgraph sold approximately [C] cartons of ERMT before withdrawing from the market at the end of 1982.

C. Pelikan, Inc.

397 Pelikan, Inc. of Derry, Pennsylvania is a subsidiary of Pelikan A.G., a Swiss corporation. It owns and operates, among other things, a manufacturing plant at Derry, Pennsylvania which produces competitive copying machine supplies, including toners and developers. These supplies are typically used in Xerox, IBM, Sharp and various other trade name copiers and printers. In addition, Pelikan manufactures ribbons at a plant in Franklin, Tennessee. Mr. Kairys, the Vice President and General Manager of Pelikan, Inc. believes Pelikan manufactures more ribbon cartridges to OEM's specifications than any other independent manufacturer in the world. (CX 197, Kairys W.S., at ¶¶ 1-2).

398. At the present time [C] of all Pelikan toner is to dealers, whereas [C] is to OEM's. IBM and Xerox toner sales now amount to [C] of Pelikan's dealer business. (CX 197, Kairys W S., at ¶ 3).
399. Pelikan began research and development on a toner for use in the Canon NP 210-400 series copiers in mid-1981. (Kairys, Tr. 750) It spent 24 months and a minimum of $C$ in materials, time and research effort to develop a toner for use in the NP 210, NP 300 and NP 400 copiers of Canon (Kairys, Tr 750-51; CX 197, Kairys W.S., at ¶ 10). It introduced the product into the marketplace in mid-1983 (Kairys, Tr 750-51).

400. Pelikan was so confident of the quality of its toner that it sent samples of a 20,000 copy run to Mr. Murase of Canon U S A. in attempt to become a domestic supplier of toner for Canon. Mr. Murase rebuffed the offer and did not return the copies (CX 197, Kairys W.S., at ¶ 11).

401. Pelikan tested its Canon-compatible toner only on an NP 400 machine (Kairys, Tr. 752-53, 774) It did not run tests on the NP 210 or NP 300 (Kairys, Tr 825, 827) However, it represented the toner as being usable in the NP 210 and NP 300 copiers. (Kairys, Tr. 750-51, 778, 827).

402. Pelikan sold to independent office supply dealers who competed against the Canon authorized dealer in the marketplace (Kairys, Tr 755-57)

403. At first, Pelikan's sales of the Canon toner were "ahead of [its] target." It was very excited about the potential to sell Canon-compatible toner (Kairy's, Tr. 756). It sold almost $C$ cartons of four 200 gram cartridges or equivalent in 1983. (CX 10, Pearson W.S., Table 1; CX 197, Kairys W.S., at ¶ 21)

405. Pelikan officially introduced its product into the market in May of 1983, and had over [C] in sales by the end of the year. However, it started having problems in early 1984 and, within a year, had an overwhelming number of product being sent back to it through its dealer distribution channel. (Kairys, Tr 771).

406 From a service standpoint, Pelikan's dealer distribution system was weak. Pelikan did not operate a service network. (Kairys, Tr 822-23). It did not have "an army of service people to run up and down from California to Pennsylvania to go up against . . ." the Canon dealer service technicians when problems arose with a particular machine. (Kairys, Tr. 771-72).

407 A lot of the Pelikan product was returned in 1984. (Kairys, Tr. 771)

408 When product was returned to Pelikan from the field, it would randomly sample one or two tubes in its NP 400 copier to try to duplicate the problem complained of (Kairys, Tr. 786, 752-53, 774). It was not able to duplicate the problem. It did not have any problem with copy quality (Kairys, Tr. 786-87). Accordingly, Pelikan blames the returns on exclusionary practices by the Canon dealer service technicians. (Kairys, Tr. 771-72).
409. Pelikan did not have a Canon NP 210 or NP 300 machine on which to test the product. (Kairys, Tr. 825) Nor did it have service technicians who could check the alleged copy problems out at the machine. (Kairys, Tr. 823) Further, Mr. Kairys had no knowledge as to whether the Pelikan Canon compatible toner was ever tested out on the NP 210 or NP 300 copiers, or any of the NP series of Canon copiers other than the NP 400. (Kairys, Tr. 826-30)

410. Mr. Kairys of Pelikan admitted that it was important to market a toner which is usable in all of the machines in the NP 210 to NP 500 series. He believed it was commercially disadvantageous to market a toner which could be used, at best, in only one or a few of the machines in the series. If a dealer bought a toner for use only in the NP 400, he would still have to purchase someone else's toner for the other machines in the series. Therefore, the dealer would be required to stock two different brands. Moreover, the end-user with two different model machines in the series would have to buy two different toners to use in the machines. (Kairys, Tr. 830-31).

D  Nashua Corporation

411. Nashua is a Fortune 500 company with more than [C] in sales in 1986 (Price Dep., JPX 52 at 7). Nashua's Office Products Division ("OPD") is an [C] division and is the largest independent manufacturer of imaging consumables, such as toners, developers, and paper, in the U.S. market (CX 9, MacNaughton W, at ¶¶ 1-2, Price Dep., JPX 52 at 8-9)

413. Nashua's OPD had sales of approximately $C$ in toner for all Japanese manufactured copiers in 1985. (Id.).

414. Nashua introduced its ERMT at the July, 1985, NOMDA show, but did not make its first commercial sales until August or September, 1985. (CX 9, MacNaughton W.S. at ¶ 13, MacNaughton, Tr. 40-41; Price Dep., JPX 52 at 46-48 and Ex. 6).

415. [C]

416. Nashua's telemarketing group contacted Canon authorized dealers after the NOMDA show to offer test samples of Nashua ERMT. (MacNaughton, Tr. 41-42; Price Dep., JPX 53 at 12-14 and Ex. 20). [C]

417. [C]

418. Shortly after Nashua made its first commercial sales of ERMT, Nashua received complaints that the toner was producing unacceptably light copies. (MacNaughton, Tr. 137; [C])
419. [ ]

[ ]

(Price Dep., JPX 52 at 66, 84-88)

420. [ ]

[ ]

[ ]

[ ]

(Price Dep., JPX 52 at 87-88, Price Dep., JPX 53 at 46 and Exs. 24 & 26).

421 [ ]

[ ]

[ ]

[ ]

422. [ ]

[ ]

423. Alan MacNaughton, Nashua's Director of Sales for the Office Products Division, testified that, in his opinion, from April to December, 1986, Nashua achieved only a [ C ] to [ C ] share of the market for ERMT. (MacNaughton, Tr 45, 49-50).

424. William J. Price, the General Manager of Nashua's OPD, estimated that Nashua controlled approximately [ C ] to [ C ] of the ERMT market in 1986, or slightly less than half of the [ C ] average market share that Nashua expected to obtain in 1986. (Price Dep., JPX 52 at 6, 93-94 and Ex 19; Price Dep., JPX 53 at 35-37, 46-47, and Ex. 21)
425 In September 1985, Nashua projected that it would control \( \text{C} \) of the ERMT market by January 1986, and \( \text{C} \) by December 1986. (Price Dep., JPX 52 at 60-62, 69-71 and Exs. 9, 12, 19; see also Price Dep., JPX 53 at 98-99).

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427 Mr. MacNaughton testified that it would have been acceptable to him if Nashua obtained 8% of the market selling toner through its branded dealers against an OEM. (MacNaughton, Tr. 55).

428 Nashua's quality problem in 1985 affected approximately 70% of the machine placements that used its ERMT. Nashua was aware that end users were dissatisfied with the copy quality with respect to approximately 30% of the machine placements that used Nashua ERMT. (MacNaughton, Tr. 43-47, 71).

429 After reformulation, Nashua's toner for use in the NP 210-500 copiers tested out very well. It was found to be comparable to, if not better than, the Canon OEM product. ([ C]

430 \[
\begin{array}{c}
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431. Nashua now sells its NP 210-500 toner to a number of Canon dealers, including Taylor-Made (MacNaughton, Tr. 140; Sweeney, Tr. 673, 689-90, 714; Garvey, Tr. 1110), Copy Products (Hill, Tr. 215-16, 286-88), San Sierra Business Systems (CX 197b, Ostergaard W.S., at 3-4), and University Copy Systems (CX 197b, Ostergaard W.S., at 1, Ostergaard, Tr. 1277).

**E Tomoegawa**

432. Tomoegawa is a major toner producer in Japan. Tomoegawa U.S.A., Inc. manufactured some Canon-compatible toner at its plant in Wheeling, Illinois. It may also have imported some such toner from Tomoegawa in Japan (RPX 49, at 18-19; RPX 50, at 8).

433. No witness was called from Tomoegawa and little is known of its sales practices or sales volumes. A Diamond Research Corporation survey of toner pricing in the United States, dated April 1986, indicates that Tomoegawa U.S.A. manufactures Japanese type toners and developers at its Wheeling plant and that it “produces a limited amount of toner for certain Canon copiers on an OEM contract basis.” (RPX 50, at 8) However, there is no indication therein as to which Canon copiers are involved and there is no evidence of record indicating that Tomoegawa ever produced toner for the Canon NP 210-500.
series copiers on an OEM contract basis. Moreover, other evidence indicates that Tomoegawa stopped selling toner for the NP 210-500 series machines in April 1984 (CRX 6, at 1)

434 The skimpy evidence of record concerning Tomoegawa reveals that it was selling Canon-compatible toner for use in the NP 210-500 copiers at least as early as October 1982 (CX 160), and as noted in FF 433, a Canon, Inc document dated October 17, 1984, reveals that it stopped shipping such toner in April 1984 (CRX 6, at 1)

435 A letter from Copy Data Systems, a seller of Tomoegawa toner, to a customer, dated December 9, 1983, responded to complaints concerning the performance of the toner blaming the complaint on "unscrupulous service dealers who are attempting to tie the sales of their own supplies and service together" In defending the quality of the Tomoegawa toner Mr. Shannon of Copy Data Systems stated in that letter that Tomoegawa "supplies are being used in thousands of Canon copy machines throughout the United States and to our knowledge are performing without incident" (CX 159). However, this statement cannot be relied upon in determining the volume of Canon-compatible toner sales by Tomoegawa because (1) it refers to "supplies" and may refer to other supplies as well as toner, and (2) it is likely to be mere "puffing" in view of the circumstances surrounding the writing of the letter (CX 159).

436 There is evidence that the Tomoegawa Canon-compatible toner was of good quality and gave satisfactory performance in the NP 210-500 series machines. Canon Inc. tested the Tomoegawa toner in 1984 and found that it was
a match for Canon." (CRX 6, at 1). Also, a District Sales Manager's Weekly Report, by Gunnar Amble, of Canon Copier Division, dated April 17, 1984, included a comment in "Next Week's Itinerary," that Tomoegawa toner "is showing up at many of our copier users. The customers are paying $40.00/case and are happy with the results. Apparently dealer cost is $31.00/case." (CX 158). (Emphasis added) Ironically, this is at the time period when Canon reports indicate Tomoegawa went out of the market. (CRX 6, at 1)

Mr. Garvey, president of Impro Corporation, a San Jose, California marketer of supplies for the copier market, including toner, reported that Impro had attempted to sell Tomoegawa toner for use in Canon's NP 210-500 copiers during the period 1982-1984 and did not meet with great success. It sold only 329 cartons of Tomoegawa toner. (CX 8, Garvey W.S., at ¶ 1, 10).

The April 1986 Diamond Research Corporation survey cited in FF 433, above, states "Tomoegawa's sales policies in the U.S. have been strange and erratic, according to many industry sources we have interviewed. Perhaps it is their numerous OEM ties in Japan that forces the firm to be almost paranoid about any possible hint of violation of those trusts by selling to independent distributors here." (RPX 50, at 8)

The overall record indicates that Tomoegawa was not a significant factor in the sale of Canon-compatible toner for the NP 210-500 series copiers, despite the high quality of its product. (FF 432-38)
F. Other Producers

Several other companies produced toner for certain Canon NP 210-500 copiers during the 1982-1986 time period. These include [C]

Burroughs, [C] (B King, Tr. 2044; Devitt, Tr. 1515, 1566, Gallo Dep., JPX 12, at 14-17, Locke, Tr. 3189-90). [C]

Canon Inc. in Japan also tested a toner produced by Hunt for the NP 400 copier, during the 1983-1984 time period, and found it to be inferior. (CRX 6, at 7). Little else is shown in the record, at least in the form of authenticated evidence, concerning these firms (See Canon response to Auny's Proposed Findings 1104-1108) There is no reason to believe that any were significant factors in the production and sale of Canon-compatible toner for the NP 210-500 series copiers during the 1982-1986 time period.

Delta Business Systems of Orlando, Florida began purchasing a generic toner for use in Canon NP 210-500 copiers in November 1985 [C]

After putting it into machines in the field they found severe copy inconsistencies and dramatically increased service costs. It was then withdrawn from the market. (B King, Tr. 2041-42, 2047) [C]

A satisfactory toner was finally available in early Spring 1986 and Delta Business Systems has been purchasing private label toner for use in the Canon NP 210-500 copiers from the [C] supplier since that time. (B. King, Tr 2042-43, 2047, 2057)
A-Kopy, a Canon dealer located in Toledo, Ohio, started purchasing toner for the NP 210-500 copiers in about March 1987 from a Florida firm called Carbotech. The Executive Vice President of A-Kopy testified that he had checked with several Canon dealers who were then using Carbotech toner and found them to be quite satisfied, before purchasing from Carbotech. A-Kopy's tests of the Carbotech toner indicated it was good. It now purchases 100% of its toner supplies from Carbotech (Sawchuck, Tr 3101; RX 752, Sawchuck W.S., at 1-2).

G. Xerox/

Senior management at Xerox first considered manufacturing ERMT for the Canon NP 210-500 series copiers in 1987. (Finnegan Dep., JPX 7, at 17-19, and Ex. 2) Product development had actually begun as early as 1983. (Finnegan Dep., JPX 7 at 54, and Ex. 4 at 776; Blair Dep., JPX 2 at 56, and Ex. 10). Xerox's objective was to produce a Canon toner by 1987. (Finnegan Dep., JPX 7, at Exs 2-3) Xerox did not sell any of such toner domestically during 1987. (Finnegan Dep., JPX 7, at 24, 43)
In January 1987, [C] began marketing domestically the Xerox manufactured toner for use in the NP 210-500 copiers. (Finnegan Dep., JPX 7, at 25-26, 43-47, 69-72, 117-18, 171-74; Blair Dep., JPX 2, at 26) The first shipment of such toner -- [C] -- was made to [C] on January 13, 1987. (Finnegan Dep., JPX 7, at 172). Between that date and April 25th, 1987, Xerox shipped an additional [C] pounds of this toner to [C] (Finnegan Dep., JPX 7, at 172-74) There is no evidence of record to indicate any quality problems with such toner.

OE Canada began purchasing the Xerox toner from ICMI for use in NP 210-500 machines in January 1987, and is now purchasing over 50% of its needs from ICMI. (Devitt, Tr. 1495-96, 1572-73; RX 704, Devitt W.S., at 3). A major factor in OE's decision to purchase this toner was OE's securing of an indemnification agreement from Xerox providing that OE would be reimbursed by Xerox for any costs associated with the failure of the [C] toner (Devitt, Tr. 1551)

Summary of Competitive Forces

Based upon the above facts, I find that Canon faced very weak competition in the marketing of ERMT for use in the NP 210-500 series copiers, at least up until mid-1986 when Nashua re-entered the market and early 1987 when Xerox/[C] entered the market. Each of the other competitors, with the possible exception of Tomoegawa and Carbotech, suffered quality problems, especially up through 1984, and some, such as Aunyx, had inadequate marketing programs. (FF 360-446)
448. This is not to say that Canon itself did not have any quality problems. Mr. Tsukada, Director of Service for the Business Equipment Product Group of Canon U.S A. and one of the engineers responsible for the development of the NP 400 copier, testified that the NP 210-500 series copiers frequently produced light copies and had a problem with streaking, even when Canon brand toner was used. (Tsukada, Tr. 2767-69, 2794-97).

449. Canon brand ERMT also suffered some variation in quality between batches (B. King, Tr. 2061).

450. Periods of low humidity, especially in the wintertime, cause the NP 210-500 copiers to produce light copies, even when Canon toner is used. (Tsukada, Tr. 23-27). In fact, Ms. Campbell testified that O.E. Canada experienced a 32% increase in service calls in the winter months. (Campbell, Tr. 3627).

451. There is no evidence of significant returns of Canon brand toner as a result of such quality problems.

IX. THE DOMESTIC INDUSTRY

452. Aunyx Corporation is the complainant in this matter. It is the domestic industry which is alleged in the complaint and specified in the notice of investigation to have been the victim of the alleged unfair acts and unfair methods of competition. (Complaint; Notice of Investigation).
motion to enlarge the definition of the domestic industry, made within the last month before the hearing herein, was denied as untimely. (Order No 42, dated August 12, 1987).

453. Aunyx's own records reveal serious quality problems with its Canon-compatible toner, at least up until late 1984 or early 1985. (FF 366). Even after the Aunyx toner was reformulated and sales were resumed in 1985, a witness from Aunyx Business Machines admitted that the Aunyx toner caused that servicing dealer to increase the frequency of its service calls (FF 373).

454. Aunyx's sales practices were quite sporadic and somewhat less than efficient (FF 378-89)

455. Aunyx did not have a nationwide distribution system. It worked out of its headquarters in Hingham, Massachusetts with a small sales staff. (FF 381) Its first goal was to sell to Canon U S A. itself as a domestic, secondary supplier (FF 378-79) Failing in this attempt it turned to Canon dealers, but here its efforts were quite small. (FF 379-86) It didn't even approach dealers in its home territory, other than A-Copy. (FF 384).

456. There are no production and sales figures in the record for Aunyx. Such data was stricken from the record as a sanction for failure to obey certain discovery orders in this proceeding (FF 389, Order No. 52).

457. Under the circumstances, it is impossible to find that there is an efficient and economic domestic industry, or that acts and practices of the respondents have prevented the establishment of such an industry (FF 452-56)
I. INTRODUCTION

This investigation is concerned with the importation and sale of certain electrically-resistive monocomponent toner ("ERMT") and "black powder" preparations therefor. It is alleged that the Canon respondents engaged in certain unfair methods of competition and unfair acts in the importation of such products, and in the sale thereof, by reason of certain alleged anticompetitive and unfair practices, the effect or tendency of which was allegedly to monopolize and restrain commerce in the United States, to destroy or substantially injure an efficiently and economically operated domestic industry, and to prevent the establishment of such a domestic industry.

The product in issue, toner, is the ink used to form the image in a xerographic copier machine. (FF 10) In particular, the toner we are concerned with in this investigation is that toner usable in Canon's NP 210-500 series copiers (FF 9) This is a dry toner which is specific to those machines. Only an electrically-resistive monocomponent toner formulated specifically for such machines will produce satisfactory copy therein without damaging the machines (FF 32)

It is alleged that there is a specific market for Canon-compatible ERMT, within which the Canon respondents had, and exercised, monopoly power. It is alleged that within this defined market, Canon has engaged in a number of anticompetitive practices, including disparagement, which have restrained competition and enabled Canon to maintain its monopoly position and power. It is further alleged that complainant Aunyx has suffered substantial injury as a result of such practices (Complaint and Notice of Investigation).
II JURISDICTION

The Commission has in personam jurisdiction over all of the parties to this investigation. Service of the complaint and notice of investigation was perfected on both respondents by the Commission Secretary. Respondents appeared through counsel and responded to the complaint and notice of investigation. Respondents do not contest the Commission's jurisdiction over the subject matter of this investigation. (FF 1)

III. THE RELEVANT MARKET

The necessary first step in investigating the restraint of trade as alleged in this proceeding is to define the relevant market within which to analyze competitive conditions. United States v. E. I. Du Pont de Nemours & Co., 351 U.S. 377, 393 (1956); United States v. Columbia Steel Co., 334 U.S. 495, 527, reh'g denied, 334 U.S. 862 (1948).

Each of the parties hereto has called economic experts in an attempt to establish their claims as to what is the relevant market which is to be considered in this matter. Complainant has called Dr. Pearson to establish its position that the relevant market is electrically-resistive monocomponent toner ("ERMT") for use in the Canon NP 210-50C series copier machines. (CX 10, Pearson WS). Respondents have called Dr. Rapp to support their position that the relevant market to be considered is copier "systems" or...

12/ Copier "systems," as that term is used by Dr. Rapp, means the combination of copier machines together with copier supplies and particularly those supplies whose price varies among suppliers, such as toner and drums. (Rapp, Tr. 3441)
in the alternative, all dry toners. (RX 727, Rapp W S.) Staff has called a third economic expert, Dr. Feinberg to rebut at least in part the other two economic experts, and to support the position that ERMT for the NP 210-500 Canon copiers is the relevant market. (Feinberg, Tr 3634 et seq.)

Neither Dr. Pearson nor Dr. Rapp have made a thorough study of the copier or toner markets (FF 60-90) This seriously affects the weight and credibility that can be given to their opinions.

The crux of respondents' principal argument concerning relevant market (the "systems" market) is that the ability to price toner is constrained by toner's cross-elasticity with copiers, such that rather than paying higher toner prices, a consumer would at some point choose to change copying systems altogether, thereby effecting a change in toners. (RX 727, Rapp W S, at 11-25). Dr. Rapp admitted that in determining whether complements, such as copiers and toners, are in the same market it is a matter of the strength of that complementarity which is crucial and that such strength is a function of cross-price elasticity (FF 60) However, Dr. Rapp made no attempt to determine cross-price elasticity of toners and copiers. (FF 61-63).

Similarly, complainant's expert, Dr. Pearson, based much of his opinion and testimony upon complementarity (CX 10, Pearson W S, at 11 et seq.). He too, however, failed to provide anything of record to evidence the cross-price elasticity of toners and copiers. (FF 88-90)

Dr. Rapp, in his attempts to establish copiers systems as the relevant market could point to no study or survey concerning customers' purchasing behavior that would assist in reaching a determination with regard to the
relevant market. (FF 62) Further, he did not interview any customers (large or small), any dealers (Canon or others), or any independent supply dealers, in making his analysis. (Id ) He did not even have the benefit of most of the record evidence of this investigation. (FF 63)

Dr Rapp, in his analysis, relied heavily upon the Justice Department Merger Guidelines in opining on the relevant market. In doing so, he focused on the hypothetical question of whether Canon could profitably impose a significant non-transitory increase of 10% for one year. Aside from the fact that his focus was misguided— he has not correctly applied the Justice Department Guidelines. In the first place, Dr. Rapp based his analysis on a hypothetical 10% price increase, rather than the 5% hypothesized in the Justice Department Guidelines (Merger Guidelines § 2 11, 49 Fed. Reg. at 26828) (FF 70). Secondly, Dr. Rapp's calculations significantly overstate the cost of toner as a percentage of total system cost (FF 66-70).

Among other things, Dr. Rapp has ignored costs that are the same from system to system, such as paper costs, despite the fact that this necessarily inflates the cost of toner as a percentage of total system cost. (FF 67). He has also shown a lack of knowledge as to what costs should have been included, even under the theory of his analysis. For example, he was unfamiliar with fuser rollers and admitted that they were not a part of his calculations. (FF 66, Rapp, Tr. 3443-44) He has also calculated in the cost of toner at the full dealer list price and has not taken into account any discounts to the

13/ Canon began with a natural monopoly herein through innovation. The question at issue is not so much whether Canon could raise the price, but whether it could maintain a supracompetitive price. (FF 70).
dealer or end user. (FF 68) He has also not taken into account the risks of rapid obsolescence of the copier machines in question. (FF 74).

Moreover, Dr. Rapp admitted that he had no evidence of customers shifting from system to system as a result of a price change in toner. (FF 71). He has not made any historical study of systems costs and market shares to determine the effects of systems costs on the market for copiers. (FF 72) Nor did Dr. Rapp take into account different classes of customers -- he did not even consider the differences between large national accounts (only a small percentage of Canon's business) and ordinary "down-the-street" customers in his analysis. (FF 75) He also admitted that there was no publication to which a customer could turn to determine a "system price" for a particular copier (FF 73).

The high degree of product differentiation in the copier market and the wide disparity in total systems costs between competing copiers make comparison of total system cost very difficult. (FF 81, 95). The features of the machine admittedly play an important part in purchasing a copier (FF 97). Machine reliability and copy quality are also very important purchase considerations (FF 98).

Dr. Rapp's analysis of a "dry toner" market is similarly flawed. In connection with this opinion on the ease of entry into the ERMT market, he did not review all the testimony or deposition testimony of officials of any other producer of ERMT for use in the Canon NP 210-500 machines (FF 64). Although he had consulted a chemist, or engineer, at Canon, he did not discuss with him the question of how long it would take other manufacturers to successfully enter into production and sale of the toner at issue (FF 87). He pointed
to Nashua as a successful entrant into the market, but did not know how long it took Nashua to become a successful entrant (FF 86). The evidence adduced in this investigation reveals that no competitor had the ability to enter, or did in fact enter, the NP ERMT market with success in one year or less. (FF 51) For prospective competitors to require two, three or more years in their efforts to compete with respect to NP ERMT further enhances the definition of NP ERMT as the relevant product market. Under the Department of Justice Merger Guidelines, which were themselves relied on by respondents, expert (FF 70), the many technological and other barriers which required toner manufacturers to spend more than one year in their efforts to produce and market NP ERMT demonstrate that NP ERMT is not part of a larger relevant market consisting of all dry toners. (FF 34, 35)

In view of the many shortcomings in the analyses of the economic experts in this investigation, it is clear that the identification of the relevant market will necessitate some other test which will permit a refinement of the voluminous information in the record which is found applicable to the isolation of the relevant product market. The relevant market may, of course, consist of a significant submarket within which respondents can exercise market power. As the Supreme Court held in Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it. However,
within this broad market, well-defined submarkets may exist which, in themselves, constitute product markets for antitrust purposes. [footnote and citation omitted]

It may be that mid-range copier systems, as proposed by the respondents, or in some other composition, do stretch and define outer boundaries of a product market. The same may be said about ERMT for use in Canon copiers, as put forward by complainant. However, by using the same type of analysis as in *Brown Shoe* and its progeny, Canon-compatible ERMT comprises at least a product submarket capable of monopolization and restraint, and is therefore relevant for this investigation. Testing for a submarket does nothing to disturb larger market analyses, but rather provides additional factors which may be used in determining interchangeability between different products. (See von Kalinowski, *Antitrust Laws and Trade Regulation* § 3.03[2] (1985); see also White and White, Inc. v. American Hospital Supply Corp., 723 F.2d 495, 500 (6th Cir. 1983) (text and quotation from von Kalinowski, supra). Indeed,

14/ The definition of other than broad markets by the Supreme Court has a long history, predating *Brown Shoe*. See, e.g., United States v. E.I. Du Pont de Nemours & Co., 353 U.S. 586, 593-95 (1957) (automotive fabrics and finishes constituted the relevant product market rather than the total market for finishes and fabrics; cited in *Brown Shoe*, 370 U.S. at 325), *International Boxing Club v. United States*, 358 U.S. 242 (1959) (relevant market was championship boxing contests rather than all boxing contests), *Times-Picayune Publishing Co. v. United States*, 345 U.S. 594 (1953) (relevant market was morning and afternoon newspapers rather than all advertising media).

15/ It may be observed that the facts in *Brown Shoe* centered around a prospective merger, whereas this investigation involves monopolization and restraint of trade claims such as those prohibited under the Sherman Antitrust Act. It is therefore important to note that the Supreme Court, in dicta, specifically approved of the use of *Brown Shoe*’s test of submarkets for Sherman § 2 analyses. *United States v. Grinnell Corp.*, 384 U.S. 563, 572 (1966) *Brown Shoe* quickly assumed an important place among the Circuits for Sherman § 2 analyses. See, e.g., *Case-Swayne Co. v. Sunkist Growers, Inc.*, 369 F.2d 449, 455 (9th Cir. 1966), cert. denied, 387 U.S. 932 (1967).
"[t]he problems of market definition are not confined to the determination of an overall product market" Kaiser Aluminum & Chemical Corp. v. Federal Trade Commission, 652 F.2d 1324, 1330 (7th Cir. 1981) It is no less incumbent upon those charged with the administration of § 337 to recognize any relevant product market in which restraint of trade may take place to the detriment of fair trade.

As explained in Brown Shoe:

The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors [footnote excluded] Id at 325.

The NP ERMT at issue in this investigation, as shown below, has characteristics fitting within most of the Brown Shoe indicia. It is important, however, to remain cognizant of the Supreme Court's observation in United States v. Continental Can Co., 378 U.S 441, 449 (1964), "these guidelines [of Brown Shoe] offer no precise formula for judgment and they necessitate, rather than avoid, careful consideration based on the entire

16/ In addition, it should be pointed out that the relevant antitrust market may or may not coincide with the "market" as defined under different statutes, various of the competing economic theories, or for some other purposes. For example, the Seventh Circuit has even stated that "[a]lthough economic theory would envisage defining a market solely on the basis of cross-elasticity of supply, this court has so far adhered to the view that such possibility is not meaningful " [footnote and citations omitted] Kaiser Aluminum & Chemical Corp. v. Federal Trade Commission, 652 F. 2d 1324, 1330 (7th Cir. 1981).
record." See also Kaiser Aluminum & Chemical Corp., 652 F.2d at 1329 ("[t]he definition of relevant markets . . . is a question of fact ") Submarket definitions were supported on the bases of end-use flexibility together with production flexibility. Id. at 1332; Columbia Metal Culvert Co., Inc. v. Kaiser Aluminum & Chemical Corp., 579 F.2d 20, 27-28 (3d Cir.), cert. denied, 439 U.S. 876 (1978).

In the present investigation, the facts strongly demonstrate industry recognition of the fact that NP ERMT constitutes a separate "economic entity," indeed as an attractive and distinct market. The market was perceived in enough detail to recognize the market structure and the need for a high quality product, combined with strategic pricing, in order to make a successful entry. Execution of toner development and marketing was directed from a recognition of a separate NP ERMT market. In part, this perception of a distinct NP ERMT market was fostered by specific requests for NP ERMT from a variety of sources. Recognition of NP ERMT as a distinct market also grew from a knowledge of the unique Canon NP process and the specific supplies that it requires. (FF 17-21).

The peculiar characteristics and uses of NP ERMT not only made market definition so identifiable from an industry viewpoint, but it also further added to the need to define NP ERMT as the relevant product market for the purposes of this investigation under Brown Shoe. Canon entered the copier business with the NP copying system as the first plain paper alternative to xerography. (FF 23) When Canon first introduced its NP copiers in the United States, they utilized a dual component liquid toner, with a complex and expensive process which required much servicing. (FF 25) Eventually, Canon
developed a less costly and less bothersome monocomponent technology for moderately-priced plain paper copiers, but only after first investing a large staff and a large sum of money in its development (FF 26-28).

The resulting NP 210-500 copiers ["NP copiers"] all use the same ERMT. (FF 31) In fact, NP copiers can use only NP ERMT. There is absolutely no functional interchangeability with any other product. (FF 20). In addition, at the time of its introduction, NP ERMT had distinctive composition and packaging. (FF 33).

As established above, Canon made a concerted and costly effort to develop NP toner and technology. In the wake of the development of an NP ERMT market, there are still significant obstacles to be overcome in the manufacture of competitive toner.

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17/ Toners and mid-range copier, in general, may be viewed as complements. However, the fact that two products are complementary does not mean that together they constitute a relevant product market (FF 94).

18/ Cf Advance Business Systems & Supply Co. v. SCM Corp., 287 F. Supp. 143, 153-54 (D.N.D. 1968), aff'd, 415 F.2d 55, 69 (4th Cir. 1969), cert. denied, 397 U.S. 920 (1970) (paper for use in a brand of copier was not the relevant market because the paper in question was not peculiar to the brand of copier at issue; the converse obtains in this investigation in which NP ERMT is peculiar to NP copiers without functional equivalent).

19/ The existence of barriers to entry and the degree of difficulty encountered by a new entrant can weigh heavily upon the decision whether or not to include that prospective entrant in the relevant product market (FF 34, 35, 36).
Possible patent protection of NP ERMT is among the barriers to entry for the manufacture of competitive toner (FF 38). Once a competitor has made the decision to reverse engineer and proceed with manufacture, many steps must be followed in order to manufacture a competitive product. Samples of the original toner must be obtained, in this case, Canon-brand NP ERMT. The composition of the samples must be analyzed, followed by the formulation of a chemically and functionally equivalent product. The resulting competitive toner must be tested both in its physical properties and its performance (FF 22).

NP ERMT is easily contaminated. Unless ERMT is manufactured on a separate production line, a lengthy and exhaustive purging of the production line must be conducted from mixing, milling and classification through blending. (FF 39, 41).

The development of an NP ERMT was expensive and time-consuming, especially for the successful entrants into the NP ERMT market. For example, Xerox spent approximately $C$ exclusively for the development of Canon-compatible ERMT, $C$ (FF 50). Pelikan worked for approximately two years, and spent a minimum of $C$, before introducing its NP ERMT. (FF 48). Aunyx had to conduct a substantial reformulation of its NP ERMT, even after initial marketing, and ultimately required at least three years before it could develop what it considered a satisfactory NP ERMT (FF 20/49).

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20/ For expenditures in time and money by other manufacturers of competitive product, see FF 46, 48
Even for those firms with satisfactory formulae, there are additional problems with the manufacture of NP ERMT. ERMT requires more processing than, for example, dual component toner, and it is necessary that NP ERMT be equally blended. Consequently, some firms which were already engaged in the manufacture of toner still needed to acquire additional equipment. (FF 40, 43)

Furthermore, the customers of NP ERMT are themselves distinct. As a market, they require that manufacturers of NP ERMT to market a product that is compatible with the entire NP 210-500 series of copiers. It was only commercially advantageous to produce an ERMT for the entire series. (FF 52) The customers, as users of the NP 210-500 series of copiers, necessarily must use only NP ERMT. (FF 53, 54). For that reason, a change from NP ERMT can only be effectuated with a change of copier to one outside the NP 210-500 series (FF 55)

Customers purchase NP ERMT at prices set apart from those of copying machines (FF 56) NP ERMT is sold at both retail and wholesale prices, even from Canon USA (Id) Even for national accounts, which make up only a small percentage of Canon's toner customers and whose toner prices are agreed to in advance, separate prices for toner are set, and billing may even

21/ It has been asserted by respondents that their definition of a mid-range copier system market is supported by the importance placed upon the cost-per-copy, which includes toner. Since future toner prices cannot be known, except by agreement, toner is one of many variables that cannot be accounted for with accuracy (FF 81) Moreover, any substantial cost-per-copy analysis is only an advantageous investment for, and is generally only undertaken by, large customers such as national accounts. (FF 76, 80) However, even with national accounts, customer needs generally dictate the price range of machine or machines required; and selection of a vendor is largely decided by considerations other than cost-per-copy. (FF 76)

22/ FF 78
occur separately. (FF 57). In selling competitive product, non-Canon sellers of NP ERMT must price their toner as a distinct product. (FF 58). For the competitive entrant to the NP ERMT market, special attention had to be paid to the pricing of competitive toners for marketing purposes. (FF 17, 18).

In summary, the law as applied to the facts in this investigation dictate that for an analysis of restraint of trade the relevant product market consists of NP ERMT (Brown Shoe Co. v. United States, supra).

IV. MARKET POWER

In examining the record for indicia of monopoly or market power, the most striking fact is that Canon has, at all times, controlled a very high share of the relevant market. As the innovator of the NP Projection Process, Canon assumed a natural monopoly with respect to ERMT. Indeed, Canon was the exclusive source for the product, thus giving Canon 100% of the market (FF 101). At that time, Canon had the ability to charge supracompetitive prices and possessed monopoly power. United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 394 (1956), National Collegiate Athletic Ass'n v. Board of Regents, 468 U.S. 85, 112 (1984); see also (FF 100-101)

Since introduction of ERMT, Canon's market share remained above the ninetieth percentile, at least through the time that the complaint was filed in this investigation in mid-1986. (FF 102-18) This figure is not only supported by complainant's economic expert, but also by the estimates of those in the toner industry and who attempted to enter the market of
Canon-compatible toner (FF 113-16). According to the analysis done by Nashua in their own efforts to enter the NP ERMT market, Canon had [C] of the relevant market in 1986 (FF 115). Other market participants substantially agree with this estimate. (FF 114, 115, 117). The judgement of these market participants is entitled to weight, as they were competing in the market and had need to know, with at least substantial accuracy, the competition they faced in the marketplace. See, In the Matter of The Papercraft Corp., F T C. Dkt No 8779, 78 F.T C 1352, 1405-06 (1971), Aff'd, sub nom., Papercraft Corp. v. Federal Trade Commission, 972 F.2d 927, 929 (7th Cir. 1973).

Moreover, Canon admits that it had no substantial competition until the period ranging from mid-1986 into early 1987. (FF 112)

"The significance of these high market shares is great, for "size is of course an earmark of monopoly power." United States v. Griffith, 334 U S 100, 107 n.10, (1948); see also United States v. Columbia Steel Co., 334 U S 495, reh'g denied, 334 U S. 862 (1948); American Tobacco Co. v. United States, 147 F 2d 93, 99-100 (6th Cir. 1944), aff'd, 328 U S. 781 (1946). In many cases, it is the high concentration of market shares that provides the basis for the finding of monopoly power. See, e.g., American Tobacco, 328 U.S. 781 (over two-thirds of the entire domestic field of cigarettes and to over 80% of the field of comparable cigarettes, Id. at 797); Kansas City Star Co. v.
In United States v. Grinnell Corp., 384 U.S. 563, 576 (1966), the Supreme Court held that the percentage of the relevant market held by defendants was "so high [87%] as to justify the finding of monopoly." In Grinnell the Court stated that, "87% of the business leaves no doubt that the congeries of these defendants have monopoly power." Id. at 571. Likewise, in this investigation, the percentage of the relevant market controlled by respondents has been very high, [C], and the evidence strongly indicates that it was above the ninetieth percentile during the period 1981-1986. (FF 102-18). It is clear that respondents entered and remained in a monopoly position, i.e., in possession of monopoly or market power, at least until the time that the complaint was filed in this investigation.

23/ Complainant's economic expert witness, Dr. Pearson, calculated that Canon's market share in the first half of 1986 was reduced to [C] (CX 10, Pearson W.S., at Table 1), which is still high for any firm. However, this figure was reached erroneously by including sales by [C]-manufactured ERMT did not enter the domestic market until January 1987. (FF at 104) When [C] sales are removed from the data for 1986, Canon's market share in the first half of 1986 may be calculated to be [C] (FF 104). Dr. Pearson's market share calculations also fail to include producers of Canon-compatible toners such as Tomoegawa, Hunt and Burroughs. However, the record evidences that these producers were not significant factors and would not substantially affect his figures (FF 432-41)

24/ In Grinnell, 563 U.S at 571 the Court, in addressing monopoly power, stated that "[t]he existence of such power ordinarily may be inferred from the predominant share of the market," and cited the market shares held by monopolies in American Tobacco, 328 U.S. 781, and Aluminum, 148 F 2d 416.

25/ It is equally apparent that according to the Justice Department Merger Guidelines, the ERMT market is "highly concentrated " (FF. 118, 49 Fed Reg 26823, 26830-31)
The presence of respondents' monopoly power is also illustrated by other facts of record. Competitors recognized that Canon "had a lot of room to move on price." (FF 122). At least one Canon authorized dealer recognized the price set by Canon was supracompetitive (FF 121). Respondent Canon U S A. was indeed aware that some Canon-authorized dealers were charging customers as much as three times the list price for Canon Brand toner. (FF 120). The Canon-authorized dealers have thus shown themselves to be the beneficiaries of the monopoly power that came from Canon's monopoly position in the supply of ERMT. In fact, "[m]onopoly power is the power to control price or exclude competition" United States v. E.I. du Pont de Nemours & Co., 351 U.S at 391 (1956)(cited in United States v. Grinnell Corp., 384 U.S. at 571 (1966).

Canon U S A. also obtained high profits from the sale of ERMT for use in its copiers, receiving \[ C \] in gross profits from the sales of \[ C \] of product. Thus, Canon U.S.A. realized a gross profits to sales ratio of approximately \[ C \] (FF 125) While these gross profits do not conclusively demonstrate monopoly power in and of themselves, they are consistent with, and lend considerable support to, the finding of such power. (FF 126) See United Banana Co. v. United Fruit Co., 245 F Supp 161 (D. Conn 1965) aff'd, 362 F 2d 849 (2d Cir. 1966) In fact, all of these profit and sales data reflect a market in which, far from constrained by competition from other manufacturers of ERMT, copier systems or any other product, respondents enjoyed the unmistakable characteristic of a monopolist and its power, and that is the ability to control price. The barriers to entry into this ERMT market, taking two or more years for successful entry, are also an indicia of market power. (FF 130).
V. THE GEOGRAPHIC MARKET

There is no dispute in this proceeding as to the relevant geographic market. All parties agree that the relevant geographic market is the United States market (GB at 18; SB at 25, RB at 5-11; SF 166 and Canon response thereto).

VI. IMPORTATION AND SALE

In order to invoke the subject matter jurisdiction of the Commission and to support a finding of violation of Section 337, complainant Aunyx must establish that the accused products have been imported into or sold in the United States (19 U.S.C. § 1337(a)).

From 1981 through 1984 Canon Inc was importing finished, packaged toner for use in its NP 210-500 series copiers to Canon U.S.A. for sale in the United States. (FF 131). Since 1985 Canon Inc. has been importing "black powder" preparations for such toner, in bulk form, to its wholly-owned subsidiary, CBM, in the United States, where CBM does and packages the product. (FF 132-35). It is then sold to Canon U.S.A. for sale and distribution within the United States. (FF 144) The importation of the "black powder" is tantamount to the importation of the finished toner. The finishing and packaging performed by CBM are negligible (FF 132-46).
Therefore, the ERMT for use in Canon NP 210-500 series copiers has, at all times relevant to this investigation, been imported and sold in the United States.

VII UNFAIR TRADE PRACTICES

A. Credibility of Witnesses

In reaching my findings and opinion on the allegations of unfair trade practices in this matter, I have had to judge the credibility of the various witnesses who appeared before me. In the main, most of the witnesses exhibited certain biases. Complainant's witnesses were generally from competitors of respondents, and had strong feelings that wrongs had been committed. Respondents' witnesses were largely their officers and employees, and representatives from various Canon dealers. Again, there is a natural bias toward Canon's views.

Three key witnesses in the analysis of Canon's practices are Messrs. Maharaj, Greene, and Salustro. It was particularly essential to judge the credibility of these witnesses. There were many areas of similarity in their testimony concerning Canon's practices at its service training school and in its other contacts with the dealers, dealer service technicians and end-users. However, there are also a number of significant differences.
The testimony of Mr. Maharaj is the most suspect. The record contains transcripts of four days of deposition of this witness and his testimony at the hearing is divided into two segments, separated by several days. (FF 256) Mr. Maharaj exhibited some hostility to Canon, in general, and his former superior, Mr. Hodge, in particular. (FF 256, 261) He also did not speak perfect English and this may have contributed to misunderstandings which may, in turn, have crept into his testimony.

In any event, Mr. Maharaj's testimony suffers from a number of contradictions and inconsistencies. (FF 256-60). It appears from these facts and his general demeanor that he was prone to embellish the facts somewhat. (FF 256). Therefore, I have had to discount many of his accusations.

Another witness called by complainant, Mr. Robert Greene, had formerly worked for a Canon dealer as a service technician, but was now working as a service technician for Aunyx Business Machines. His witness statement and direct testimony indicated that Canon in its service training schools instructed the trainees not to let non-Canon toner be used in the Canon copiers; to replace it with Canon toner when discovered. However, on cross-examination this testimony was greatly muted. (FF 263). It would

26/ I note that complainant cites to Mr. Maharaj's deposition testimony in support of a number of its contentions. The deposition testimony of Mr. Maharaj and other witnesses who also appeared live were received at the prehearing conference among a great number of joint deposition exhibits offered by complainant and respondent with no objection from staff. Where non-party witnesses appeared live at the hearing, it is the transcript of the live testimony which bears the principal evidentiary weight. The deposition testimony should only be considered under Rule 210 31(h) for the purpose of contradicting or impeaching the testimony of that witness or to provide certain non-contested background information. Of course, to the extent the deposition testimony does not agree with live testimony at trial, I must weigh that against the witness' credibility.
appear that there was some embellishment of his testimony to please his new employer.

On the other hand, Mark Salustro, a witness called by staff counsel, was a very credible witness. Although he had been terminated by Canon as an employee, he exhibited no hostility to his former employer. In fact, much of his testimony was favorable to Canon's position. He also had no apparent ties with complainant (FF 264). Moreover, his duties while at Canon put him in an excellent position to witness Canon's policies and practices with regard to competitive toner. (FF 264), I have, therefore, placed greater reliance on this witness than on Messrs Maharaj and Greene, in reaching this initial determination.

B. Restrictions on Intrabrand Competition

Canon distributes its copier machines, replacement parts and supplies throughout the United States through a network of over 500 independent authorized dealers. The profit margins are quite low for such dealers in the sale of machines, with the dealer profits coming largely from the sale of supplies and service (FF 147).

Copier machines are service-intensive, with the end-users relying heavily upon the dealers and the dealer technicians for repair service and preventive maintenance. (FF 148). Canon is therefore quite dependent upon its servicing dealers to please the end-users and promote good will.
Canon dealers are signatories to an agreement with Canon whereby they are limited to selling the Canon line of products at retail only, and within a primary marketing and sales territory. This provision was designed to eliminate extraterritorial sales, called "skating" by Canon. One of the principal reasons for such restriction was "to strengthen the marketing and service capabilities of the entire network of authorized NP-copiers dealers." (FF 150) Of course, one of the effects of such provision is to reduce inter-territorial sales of Canon supplies, including toner, by Canon dealers, and to help support the price of such products. (FF 153).

Under some circumstances, vertical, non-price restrictions can be found to be violative of the anti-trust laws. See, Graphic Products Distributors, Inc. v. Itek Corporation, 717 F.2d 1560 (11th Cir. 1983). However, such vertical restrictions must be judged by the rule of reason, and are not per se violations. Continental T.V., Inc. v. GTE Sylvania, Inc., 443 U.S. 36, 59 (1977).

Here, as in contrast to the Graphics case, supra, the territorial restrictions have a legitimate business purpose and are absolved under the rule of reason. Canon and the end-users depend upon the dealers in this service-intensive market to keep the Canon machines running properly. Without the profit from supplies, the dealers have less incentive to provide service to a particular customer. (FF 246) Of course, if Canon can't provide adequate service for its copiers through the dealer network, it won't be able to continue to sell copiers. As noted in the Graphics case, supra at 1567, without such restriction dealers could "take a 'free ride' on these services
by not providing them, selling [toner] at a lower price, and at the same time enjoying the competitive benefits to the brand flowing from the providing dealer's expenditures" (Citing to the Sylvania decision, at 55 n 23)

Furthermore, to the extent Canon's territorial restrictions on toner reduced intrabrand competition and raised prices on Canon brand toner, such restrictions "tend to improve rather than impair the opportunity for the monopolist's actual or potential rivals in the manufacture of the monopolized product" Areeda and Turner, Antitrust Law, ¶ 828d, Vol III, p. 327 (1978)

See also, Continental T.V., supra, at 56 n 24. In this connection it must be noted that a number of the dealers were testing competitive toners throughout the time period under investigation, and several were purchasing generic, or private label toners, toward the end of the time period under investigation (FF 338-50)

In sum, Canon's territorial restrictions, when examined under the rule of reason, were not so unreasonable as to rise to the level of a restraint of trade.

However, Canon's other alleged unfair trade practices, if substantiated, must be viewed in the light of such territorial restrictions. The evidence shows that the dealers exercised considerable influence over the machine user's choice of supplies. (FF 148) The evidence also shows that the dealers were quite insistent on being the end-user's source of supply (FF 246) Therefore, any disparagement or other unfair acts against competing toner producers, by Canon dealers, was likely to be more effective. In view of the fact the dealers did not have to fear competition on the Canon Brand, they were more susceptible to restrictions on competitive brands of toner.
C. Other Alleged Unfair Trade Practices

Canon has been accused of a number of anticompetitive and unfair trade practices that are alleged to have resulted in the maintaining of its monopoly position in violation of the antitrust laws, and of Section 337, in particular. In the main, such allegations have not been sustained by the evidence.

1. Alleged Instructions To Canon Dealers and Service Technicians.

It has not been reliably shown that Canon has instructed its dealers and dealer service technicians that all competitive toners are bad for the NP 210-500 copiers, will cause mechanical and electrical problems, and should be vacuumed out of the machine and replaced with Canon, when discovered. When the embellishments of Mr. Maharaj and Mr. Greene are discounted (FF 256-63; See, VII A, above) and the market facts are analyzed in light of the record, Canon's actual instructions to the dealers and technicians do not rise to the level of an unfair trade practice. The weight of the evidence indicates Canon's instructions to dealer technicians were related to the appropriate remedies for copy quality problems. The technicians were advised to check the adjustments on the machine and clean the coronas, etc., and that if such routine procedures do not correct the problem, and they find that a competitive toner is in the machine, vacuum out the toner, and put in Canon toner to see if this corrects the problem (FF 201, 211-12, 222-31) Even Mr. Greene, who now works for Aunyx, admitted that when he was a service technician for a Canon dealer, prior to 1987, that he would only vacuum out
competing toner when the machine had a copy quality problem, and after he had cleaned the machine and checked its specifications. (FF 263).

Mr Salustro, a discharged Canon technician and a witness for staff counsel, testified that in nineteen out of 20 cases this procedure solved the problem. (FF 223; Salustro, Tr 2663, 2666). Other facts of record substantiate the fact that this was a reasonable and justified procedure. The evidence shows that most competitive toners had quality problems, at least up until mid-1986. (FF 360-447). An employee of Aunyx Business Machines admitted that the use of Aunyx toner required increased service calls, for example. (FF 373). Esgraph admitted that its toner caused quality problems in NP copiers other than the NP 400. (FF 394). Pelikan also had copy problems. (FF 401, 407-410) Nashua toner caused copy problems until [C ] [C ]. (FF 418-20). Mr Salustro testified quite unequivocally that he never saw a competing toner that worked as well as Canon's (FF 221).

Accordingly, the instructions given by Canon to technicians do not appear unreasonable.

2. Alleged Canon Inducement of Voiding of Service Contracts.

It has also not been reliably shown that Canon instructed dealer service technicians that they may or should void service contracts where a customer insists on using a non-Canon toner. Although there is some evidence indicating that dealers and service technicians did threaten their customers,
there is no reliable evidence that such conduct was Canon-instigated or
induced. (FF 247-52) Mr Salustro’s testimony shows that he was
instructed not to tell dealer service technicians that they could void service
contracts for use of non-Canon toner, even when he was questioned by such
technicians, and even though he knew some non-Canon toner caused an increase
in service calls. (FF 253) As for the actions of the dealers, they are
independent businessmen who make their profit principally off service and
supplies (FF 147). Without some complicity by Canon in their practices in
this regard, Canon can hardly be held accountable for their actions (See,
FF 252) That is not to say that the dealers might not be justified in
voiding service contracts, in the event customers insisted on using non-Canon
toner which was causing an increased frequency of service calls. (FF 255).

3. Alleged Canon Instructions Concerning Voiding Warranties.

It has also not been reliably proven that Canon instructed the dealers
that they could void warranties on copiers and parts, if competitive toners
were used in the machine The testimony of Messrs. Greene and Maharaj must be
discounted in this regard Mr Maharaj’s testimony concerning this point was
confused, at best, and contradictory at the worst. (FF 238). The testimony of
both was rebutted by the more reliable testimony of Mr. Salustro. (FF 239)
It has also not been reliably shown that Canon ever voided a factory warranty
for this reason. (FF 240).
4 Alleged Tampering With Machines.

Again, there is no credible proof that Canon personnel ever instructed dealer technicians to take copier machines out of adjustment in order to make machines using non-Canon toner malfunction (FF 237), or even that any dealer technician ever so-tampered with a Canon machine (FF 235-36).

5. Alleged Coercion of Dealers.

Aunyx claims that it lost sales opportunities to OE Canada and EBM of Nashville, Tennessee and a copier contract with General Dynamics at its Quincy, Massachusetts shipbuilding facility due to coercion from Canon. (CF 810-74) In the case of EBM the record indicates that Aunyx's failure [C C] (FF 294-95). The General Dynamics sale at the Quincy facility was consummated before Aunyx returned with its second price proposal. The original offer of Aunyx was substantially higher than the price under Canon's national account contract, which General Dynamics accepted. (FF 299-308)

The OE Canada situation is somewhat ambiguous. Mr. Devitt of OE Canada testified that the tests run by his company determined that the Aunyx toner was of poor quality and that, in any event, Aunyx was too financially unsound to consider as a supplier. (FF 289). On the other hand, the testimony of Ms
Campbell, a former employee of OE Canada in its Toronto branch, indicates that the Aunyx toner tested out very well (FF 286). Mr Langone of Aunyx testified that he was told by Mr Devitt at the 1985 NOMDA show that Canon officials had found out he was testing Aunyx and had "called him on the carpet" for doing so (FF 287). Mr Devitt testified that he didn't think he had even seen Mr Langone at the 1985 NOMDA show. (FF 288)

I have found Ms. Campbell's testimony concerning the results of the testing more credible than that of Mr. Devitt. (FF 377) However, this does not resolve the question Mr. Devitt's testimony that he was also concerned with Aunyx's financial soundness has other foundation in the record (FF 388)

Without production and sales data in the record for Aunyx, it is impossible to tell whether it was a serious contender for the OE Canada business (FF 389)

Under all of these circumstances, there is insufficient evidence of record to show that Aunyx lost these sales opportunities as a result of coercion from Canon.

6. Failure of Proof as to Other Alleged Practices

It has also not been reliably shown that Canon has withheld new machines from dealers who purchased non-Canon toner for use in NP 210-500 copiers, or threatened to terminate them as dealers. Such evidence as was produced was pure hearsay (FF 265-70, 358-59), and must be balanced off by the fact that a number of Canon dealers continued to go to the expense (and risk, if such
charges were true) of testing non-Canon toners for possible purchase, and even purchasing such toner, throughout the time period covered by the investigation. (FF 338-50).

It has also not been proven by substantial and reliable evidence that Canon's service training school might fail, or refuse to train, technicians of dealers who used competitive toner (FF 210). The only support complainant cites for this position is the testimony of Mr. Maharaj. (CF 709).

The alleged unlawful price discrimination in favor of A-Copy has also not been established. (CF 710-13) Complainant's contention is based entirely on hearsay, and lacks any factual support in terms of actual prices, comparative sales volumes and other data which would be essential to determining whether unlawful price discrimination occurred. Moreover, evidence indicates that the loss of the University of Massachusetts business by Aunyx was not caused by a discriminatory price to A-Copy. (FF 356).

Finally, it has not been reliably proven that the Canon bundling of copier and toner purchases in their quota system has interfered with the dealers' ability to purchase independent-manufactured toner. There is no evidence of record revealing that such quota system, or performance standards, deterred dealers from using non-Canon toner (FF 351-55) Again, the evidence shows that Canon dealers were testing competing toners with a view to purchase during the relevant time period, and that some did purchase competing toner. (FF 338-50)
D. Canon's Warranty Provision.

Canon U.S.A 's warranties on the NP 210-500 copiers and on the drum and replacement parts for such copiers, all state that the warranty shall be void and of no force and effect if the copier, drum, or part is damaged "as a result of . . . use of . . . supplies . . . not meeting Canon's specifications " (FF 310-12) This wording has caused confusion concerning the ability of an end-user to purchase non-Canon, generic toner for use in a Canon copier during the warranty period. (FF 313-25). The use of the phrase "not meeting Canon's specifications," raises the expectation that there are certain specifications which can be met by a competitor that will allow its toner to be used in these Canon copiers without endangerment to the warranty. Canon has refused to provide any such specifications, or to approve any particular competitive toner for its machine (FF 314, 316, 318, 324).

Under normal competitive circumstances, Canon, or any business, cannot be expected or required to give its proprietary formulae or trade secrets to a competitor, or give public approval of a competitor's product "In general, the monopolist is under no duty to help his rivals enter, survive, or expand. Thus he need not license a patent, trade secret, or manufacturing know-how. . . Nor is he obliged to provide a sample of his product, or otherwise facilitate the comparative testing of his product against that of a rival " Areeda and Turner, Antitrust Law, Vol. III, ¶ 738m (1978) In other words, as long as a monopolist takes no unfair action to prevent competition, he is under no duty to perform any act to assist a rival.
Here, however, Canon by the terms of its warranty has indicated to the public that there are certain specifications that can be met by a rival that will enable the rival's toner or supplies to be used in Canon copiers without endangerment to the warranty on the machine. Conversely, it is implied by such language that unless a rival can show that its product meets those certain specifications, use of the rival product will endanger the customer's warranty coverage. There is evidence of record that the warranties have been so interpreted. One Canon dealer, International Calculator Sales, Inc. of Southfield, Michigan, notified its customers of the service perils of using non-approved supplies. The letter stated in part:

Canon Copier of New York constantly receives toner made by others for approval. Our chemist test and then approve such generic toners. If they are compatible with our product, when they are approved letters of approval are issued and their letters should be made available to you.

(FF 322, CX 197, Kairys W S., Ex 19, at 2).

The letter warns International Calculator's customers against the use of non-approved toner and adds the admonition

The penny you save today, maybe the penny you spend with us

(Id)

If the warranty were re-drafted to eliminate the reference to "Canon's specifications," Canon would be under no obligation to do more. It is the concern engendered that a rival must somehow prove his product meets those specifications before such product can be used in the Canon machines during the warranty period, that causes some competitive problem.
On the other hand, it is very difficult to discern any substantial competitive impact from Canon's warranty practices, especially in view of the weakness of Canon's competition during most of the relevant time period. (FF 447). The factory warranties only cover a ninety (90) day period At the most, they can be interpreted as requiring an end-user to use only Canon toner exclusively for a period of ninety (90) days after purchase.

The NP 210-500 copiers are no longer in production (FF 29). Furthermore, the record shows no evidence that a warranty on one of these copiers was ever cancelled because of the use of competitive toners. In fact, Canon witnesses have testified that it has never so acted. (FF 240). It is only by very weak circumstantial evidence that one can infer that this warranty language has caused competitive harm.

E. Disparagement - The Violation

The record evidence establishes that electrically-resistive monocomponent toner is at the very least, a significant submarket within which Canon had monopoly power during the time period 1981-1986. (FF 17-130; Sections III and IV, supra). The evidence also reveals that this monopoly position was achieved legally, through natural means, innovation and invention (FF 100-01). The law is clear that monopoly achieved through natural means is legal and not a violation of the antitrust laws United States v. Aluminum Co. of America, 148 F.2d 416, 429-30 (2d Cir. 1945), See also, California Computer Products, Inc. v. Business Machines Corp., 613 F.2d 727, 742 (9th Cir. 1979), Berkey Photo, Inc. v. Eastman Kodak Co., 603 F 2d 263, 281 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980). It is equally clear, however, that a company
may not engage in anticompetitive practices, over and above legitimate
business practices, to achieve or maintain, a monopoly. Multiflex, Inc. v.
Samuel Moore & Co., 709 F 2d 980, 990-95 (5th Cir. 1983) cert. denied, 465
U S 1100 (1984); United States v. Aluminum Co. of America, 148 F.2d at 429
Thus, if having achieved a monopoly through innovation and invention, the
Canon respondents engaged in any such unfair, anticompetitive practices to
maintain their monopoly position, such practices would be in restraint of
trade and unlawful under the antitrust laws Multiflex, Inc. v. Samuel Moore
& Co., 709 F 2d at 990-95

In the preceding subsections I have enumerated a number of complainant’s
allegations concerning business practices of Canon which have not been
substantiated on the record. However, the record does establish that the
Canon respondents have engaged in certain practices which have no legitimate
business purpose and which have had a restraining effect on competition in the
sale of the ERMT which is the subject of this investigation.

Canon has engaged in disparagement of competing products to a degree
which most likely had a restraining effect on competition (FF 149, 160-80)
Canon Inc. and Canon U S.A were possessed with the conviction that anyone
else who might produce a toner for use in their machines was a “pirate.” Had
they limited this obsession to “boardroom ruminations” it certainly would not
have constituted an unfair trade practice William Inglis & Sons Baking Co.
v. ITT Continental Baking Co., 668 F 2d 1014 (9th Cir. 1981). However, the
terms “pirate toner” and “toner pirates” pervaded the entire distribution
system for the Canon copiers in question. Mr. Murase of Canon U.S A used it
in correspondence with dealers and in meetings with Canon’s dealer council
It was used by Canon personnel in their working relations with dealers and dealer technicians. (FF 165-66). Ultimately it was used by the dealers and their technicians in their service of the end-user. (FF 165, 167)

Most importantly, in the summer and fall of 1982, when competition was first arising in the production and sale of ERMT for use in the NP 210-500 copiers, Canon's competitors were particularly sensitive to disparagement. Esgraph and Aunyx toners were introduced at the 1982 NOMDA show (FF 391-92). Esgraph in particular became an early victim of Canon's disparagement (FF 395).

The letter writing campaign of Canon in these initial stages of competition tended to dissuade Canon dealers from engaging in private labeling; purchasing an unbranded product and putting their own label on the toner before re-sale to the end-user. In fact, Mr. Murase threatened to terminate dealers who did so (FF 170-79). The letters also characterized such private label producers, and Esgraph in particular, as "pirates." (FF 173). "Piracy" is defined as "robbery on the high seas . . . the unauthorized use of another's production, invention, or conception . . . ." (Webster's New Collegiate Dictionary). It is difficult to think of a stronger, more pejorative term. Canon unequivocally stated to its dealers that Esgraph and other non-OEM producers were illegally marketing ERMT for use in the Canon NP copiers. 27

27' Canon attempts to avoid this fact by arguing that Mr. Murase's letters were concerned with an earlier incident involving toner for use in the NP 200 copier. However, the language of the correspondence is not so limited and the timing thereof coincides particularly with the entrance of Esgraph and Aunyx into the ERMT market (FF 170 n 7)
Esgraph formulated its toner for the NP 400 Canon copier, which was the first of the NP 210-500 series marketed. Shortly after introduction of the Esgraph toner, Canon brought the NP 210 on the market (FF 393-94). Esgraph was then faced with the need to invest more time and money into reformulation of its toner into a universal toner that would work in other models of this series as well as the NP 400. In view of the substantial resistance from Canon and its dealers which it had experienced upon introducing its original toner, it decided that the additional expense could not be justified. It dropped out of the market by the end of 1982 -- within six months of its entry (FF 395).

The effect on Aunyx and other competitors of this series of correspondence is not as clearly demonstrable. However, the record does show that Aunyx did not receive much response from its contacts with Canon dealers. (FF 381). The record also shows that at least one competitor, TomoeGawa, had a high quality toner, but was never able to get established in the market. (FF 432-39).

Furthermore, the disparagement did not end with these early letters from Mr. Murase to the Canon dealers. The record shows that Canon, its personnel and its dealers continued to brand its toner competition as "toner pirates" over the succeeding years. (FF 161-67). Its effects over time, however, are more nebulous. Many Canon dealers did test competing products with the prospect of purchasing private label, or non-OEM toner. (FF 338-50). The nature of competition though, was very spotty, at least through 1985. Aunyx and Pelikan had quality problems, as apparently did some of the other entrants.
for whom the record shows little else. (FF 366, 371, 373, 407-10, 447).

Additionally, Aunyx in particular, did not have a very efficient marketing program. (FF 378-89). The record indicates that some of the competing toner, including that of Tomoegewa was of good quality, but also indicates very limited success. (FF 432-39) In fact, Tomoegewa withdrew from the market by April 1984 for reasons unexplained on the record (FF 433). Thus, it is difficult to tell what effect the continued disparagement of the competition as "pirates" might have had on competition. Most certainly, however, it could not have had a beneficial effect.

In viewing this disparagement it is important to consider the integral part Canon's dealer network played in the distribution of toner and other supplies for the Canon copiers. The copier industry is a service-intensive industry. (FF 148) The end-user relies upon the dealer and its technicians to keep the copiers running and producing good quality copiers. As a result, the service technician and his dealership have an important say in what goes into the machine, in the way of parts and supplies (FF 148). If the dealer and the service technician are of a mind that a particular toner, or other supply, is harmful to the machine, or is an illegitimate "pirate" product, that belief can have a substantial effect on their dealings with the end-user.

Moreover, for the smaller competitor producers, such as Aunyx and Esgraph, the Canon dealer network represented the only practical outlet for their production. Not having a large distribution network, such as Nashua or Xerox, or Canon itself, their best access to the market was Canon dealers who might be seeking a private label or generic toner to sell at a higher margin.
of profit than that available on the OEM product (FF 378-83). The branding of such competitors as pirates, and Mr. Murase's remonstrations against selling "no-name" toner which doesn't identify the manufacturer on the carton, even if the dealer's private label is affixed (FF 172), necessarily had an inhibitory effect on some dealers. In this regard, it should be noted that the weak nature of Canon's competition throughout most of the period under investigation made its competitors particularly susceptible to this kind of unfair trade practice. (FF 447)

Accordingly, such disparagement can have far-reaching effects on competition. Furthermore, there is no legitimate business purpose for such disparagement. Multiflex, Inc. v. Samuel Moore & Co., 709 F.2d at 992.

While the full and precise effects of Canon's disparagement of "pirate toners," "toner pirates," and "no-name toners," may not be demonstrable, any doubts as to such effects should be resolved against Canon. As noted by the commentators Areeda and Turner.

"Because monopoly will almost certainly be grounded in part in factors other than a particular exclusionary act, no government seriously concerned about the evil of monopoly would condition its intervention solely on a clear and genuine chain of causation from exclusionary acts to the presence of monopoly. And so it is often said that doubts should be resolved against the person whose behavior created the problem.

Under traditional principles of antitrust law, in order to prove a violation in cases such as this, one must prove (1) intent, (2) overt acts, and (3) dangerous probability of success. *Northern Mississippi Communications, Inc. v. Jones*, 792 F.2d 1330, 1335 (5th Cir. 1986), *Multiflex, Inc. v. Samuel Moore & Company*, 709 F.2d at 990. The intent, of course, may be implied from the nature of the act. *Conoco Inc. v. Inman Oil Co., Inc.*, 774 F.2d 893, 905 (8th Cir. 1985). In this instance, it is clear that there is no legitimate business justification for the disparagement of Canon’s competition as "pirates." Canon must be held to intend the natural consequence of its act. *Multiflex*, 709 F.2d 990-95.

The "overt act" is, of course, the blatant disparagement, when Canon knew full well that there was nothing illegal, or illegitimate about the production of competing toner for its machines, and that some of the competitive toners at least were of high quality. (FF 149, 436) The "dangerous probability of success element is satisfied by Canon’s monopoly position and power and the weak nature of its competition, during the period 1981-1986. See, e.g., *Columbia Metal Culvert Co. v. Kaiser Aluminum & Chemical Corp.*, 579 F.2d 20, 25-26 n. 5, 31 (3rd Cir. 1977); *Structure Probe Inc. v. Franklin Institute*, 450 F. Supp. 1272, 1285 (E.D. Pa. 1978), aff’d mem., 595 F.2d 1214 (3rd Cir. 1979).

In *Multiflex*, the Fifth Circuit upheld a finding of attempt to monopolize under circumstances quite similar to those in the instant case. In fact, the court there found a violation despite a drastically declining market share on the part of the defendant. 709 F.2d at 991-93.
Section 337 prohibits unfair methods of competition and unfair acts in the importation and sale of articles where the effect or tendency of such unfair acts is "to restrain or monopolize trade and commerce in the United States." 19 U.S.C. 1337a The antitrust laws and the practice thereunder are at least one standard for "unfair methods of competition and unfair acts" under Section 337. In the Matter of Chicory Root-Crude and Prepared, ITC Investigation No. 337-TA-27 Thus, acts or practices which are violative of the Sherman Act are necessarily unfair methods of competition and unfair acts under Section 337. Accordingly, Canon's acts and practices in disparaging competitive toner producers constitutes a violation of Section 337.

VIII. ALLEGED CONSPIRACY TO MONOPOLIZE

It has not been reliably proven that Canon conspired with its dealers to monopolize the ERMT market. (Notice of Investigation). Complainant has not provided any direct evidence of a conspiracy between Canon and its dealers to exclude competition in the production and sale of ERMT for the NP 210-500 copiers. The testimony of witnesses indicated that some dealers may have engaged in certain exclusionary acts (See e.g., FF 244-55). However, the evidence indicates that such dealers would do so whether they were selling Canon-brand or non-Canon ERMT, (See e.g., FF 249, 255). The inference is equally plausible that Canon and its dealers acted unilaterally and that the dealer acts, if any, in these regards were purely in their self-interest.
To establish a tort-based violation of section 337, Aunyx must prove that Canon's unfair acts had the effect of, or tendency to, substantially injure or prevent the establishment of an efficiently and economically operated domestic industry. See, e.g., Certain Compound Action Metal Cutting Snips and Components Thereof, Inv No. 337-TA-197, Initial Determination at 100-09 (1986).

In proving injury, Aunyx must establish a causal connection between the injury suffered and the unfair acts committed by Canon. Textron, Inc. v. USITC, 753 F.2d 1019, 1028 (Fed Cir. 1985); Metal Cutting Snips, supra at 107. Moreover, Aunyx must establish that the injury was substantial. Akzo N.V. v. USITC, 808 F.2d 1471, 1486 (Fed Cir. 1986), cert. denied, 107 S. Ct 2490 (1987); Corning Glass Works v. USITC, 799 F.2d 1559, 1567 (Fed Cir. 1986).

Aunyx's own records reveal that it had quality problems with its toner, at least up through 1984, and that even thereafter, use of its toner caused increased service requirements (FF 453). The record evidence also reveals that Aunyx's marketing efforts left much to be desired. (FF 378-89). Finally, the record is devoid of production and sales data for Aunyx, as a result of sanctions imposed upon it for discovery order violations (FF 456). In view of all of these facts, there is insufficient evidence of record from which to infer that Canon's acts and practices caused substantial injury to Aunyx, or that Aunyx was efficiently and economically operated.
CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the subject-matter of this investigation, personal jurisdiction over Canon Inc. and Canon U.S.A., Inc., the respondents named in the Notice of Investigation, and in rem jurisdiction over the accused toner and "black powder" preparations therefor. 19 U.S.C. § 1337(b).

2. The relevant product market within which respondents' acts and practices should be judged is electrically-resistive monocomponent toner ("ERMT") for use in the NP 210-500 series of Canon copiers.

3. The relevant geographic market is the United States.

4. Respondents possessed monopoly power in the relevant market, at least until mid-1986.

5. Respondents originally obtained their monopoly position in the relevant market through natural, legal means; innovation and invention.

6. Respondents disparagement of competing toners had no legitimate business purpose and had the effect or tendency to maintain Canon's monopoly and to restrain trade in the production and sale of ERMT for use in the Canon NP 210-500 copiers.
7. There is insufficient evidence to show that Canon has conspired to monopolize the relevant toner market.

8. There is insufficient evidence to show that Canon has engaged in exclusive dealing, the effect or tendency of which is to monopolize or restrain trade and commerce in the United States.

9. There is insufficient evidence to show that Canon interfered with Aunyx's business relations.

10. There is insufficient evidence to show that Aunyx is an efficient and economically operated domestic industry, or that it has been injured by Canon's acts and practices.

11. Unfair methods of competition and unfair acts in the importation of the accused toner into the United States in furtherance of, or in maintenance of a monopoly, and which have the tendency or effect to monopolize and restrain trade and commerce in the United States are unfair acts or unfair methods of competition under 19 U.S.C. § 1337(a).

12. There is a violation of 19 U.S.C. § 1337(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 a violation of Section 337 in connection with the importation into and sale in the United States of the accused electrically-resistive monocomponent toner and "black powder" preparations therefor.

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.

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 Practice.

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Further, it is ORDERED 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 20 16(a) is to be given in camera treatment.

2. CX 331, 337-340, 354, 370, 386-389, 391, 393, 394, 397, 404, 405, 407, 408, 412, 416, 419, 423, 424, 432, 433, 439, 440, 442, 459-461, 465, 471, 492, 509-512, 519, 520, 527-532, 534, 536, 539, 540, 544, 545, and 550-555 are received in evidence (in the event the record does not now so reflect), as are exhibits 2-6 to JPX 7, the Finnegan position; exhibit 6 to JPX 52, the Price deposition, and exhibits 9, 12, 24 and 26 to JPX 53, the second Price deposition transcript, which have been cited in staff counsel's posthearing filings.

3. All motions presently outstanding in this matter are denied.

4. 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.

5. 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 Initial Determination not later than November 19, 1987.
6. 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. Mathias
Administrative Law Judge

Issued: November 10, 1987
APPENDIX

Exhibit Lists of the Parties
CERTAIN ELECTRICALLY RESISTIVE MONOCOMPONENT TONER
AND "BLACK POWDER" PREPARATIONS THEREFOR
Inv No. 337-TA-253

CERTIFICATE OF SERVICE

I, Kenneth R. Mason, hereby certify that the attached INITIAL DETERMINATION (Public Version) was served upon Stephen L. Sulzer, Esq. and Steven Schwartz, Esq., and upon the following parties via first class mail, and airmail where necessary, on November 27, 1987.

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