

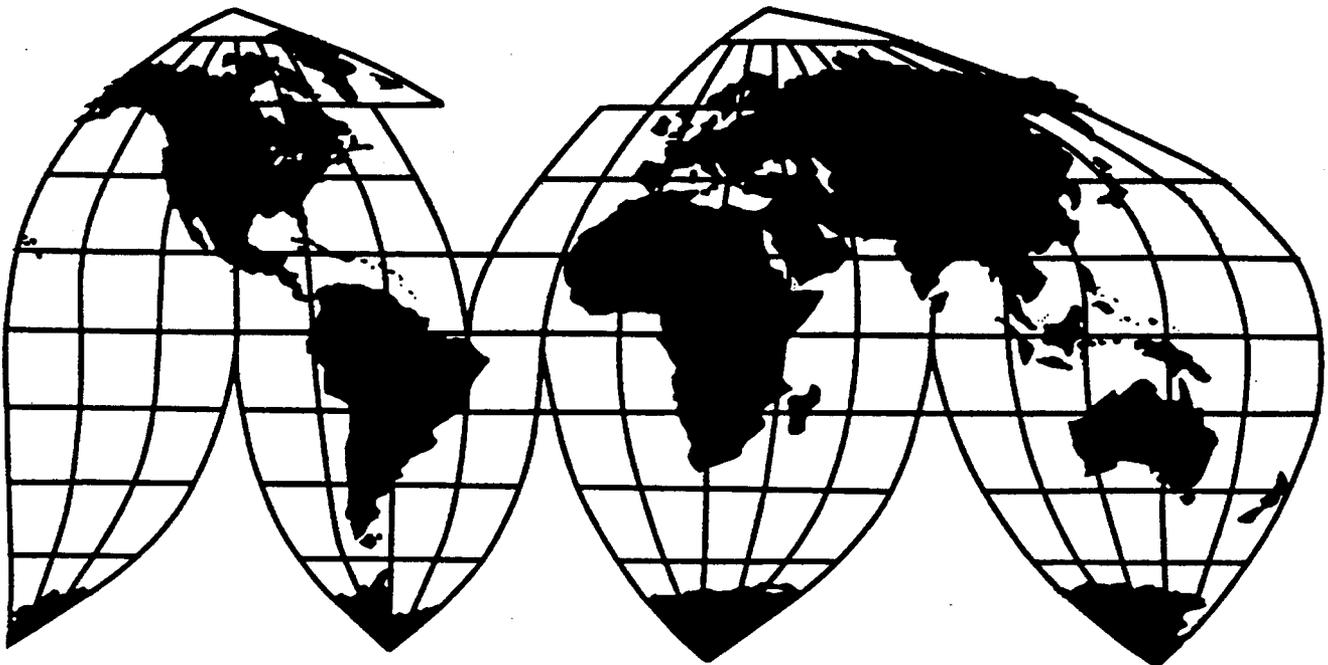
*In the Matter of*  
**Certain Hardware Logic Emulation  
Systems and Components Thereof**

Investigation No. 337-TA-383

Publication 3089

March 1998

**U.S. International Trade Commission**



Washington, DC 20436

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

## **COMMISSIONERS**

**Marcia E. Miller, Chairman**

**Lynn M. Bragg, Vice Chairman**

**Carol T. Crawford**

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

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

Washington, DC 20436

*In the Matter of*  
**Certain Hardware Logic Emulation  
Systems and Components Thereof**



**Publication 3089**

**March 1998**



UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

In the Matter of

**CERTAIN HARDWARE LOGIC  
EMULATION SYSTEMS AND  
COMPONENTS THEREOF**

Inv. No. 337-TA-383

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**NOTICE OF ISSUANCE OF A PERMANENT LIMITED EXCLUSION ORDER  
AND A PERMANENT CEASE AND DESIST ORDER**

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the Commission has issued a permanent limited exclusion order and a permanent cease and desist order in the above-captioned investigation.

FOR FURTHER INFORMATION CONTACT: Jay H. Reiziss, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-205-3116. General information concerning the Commission may also be obtained by accessing the Commission's Internet server (<http://www.usitc.gov> or <ftp://ftp.usitc.gov>)

SUPPLEMENTARY INFORMATION: This action is taken under the authority of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, and Commission rule 210.50, 19 C.F.R. § 210.50.

This investigation and temporary relief proceedings were instituted on March 8, 1996, based upon a complaint and motion for temporary relief filed on January 26, 1996, by Quickturn Design Systems, Inc ("Quickturn"). The respondents are Mentor Graphics Corporation ("Mentor") of Wilsonville, Oregon and Meta Systems ("Meta") of Saclay, France (collectively "respondents"). Meta is a wholly owned subsidiary of Mentor. The products at issue are hardware logic emulation systems, subassemblies thereof, and components thereof, including hardware logic emulation software, that are used in the semiconductor manufacturing industry to design and test the electronic circuits of semiconductor devices.

After an 11-day evidentiary hearing in April-May 1996, the presiding administrative law judge ("ALJ") issued an initial determination ("ID") granting complainant Quickturn's motion for temporary relief. On August 5, 1996, the Commission determined not to modify or vacate the ID and issued a temporary limited exclusion order against Mentor and Meta and a temporary cease and desist order against Mentor, and determined that the amount of respondents' bond during the pendency of temporary relief should be forty-three (43) percent of the entered value of imported hardware logic emulation systems and components thereof.

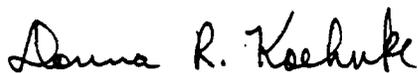
After a 14-day evidentiary hearing and two days of closing arguments, the ALJ, on July 31, 1997, issued a final ID finding that respondents had violated section 337 by infringing claims of all five of Quickturn's asserted patents. On that same date, the ALJ issued a recommended determination ("RD") recommending the issuance of a permanent exclusion order and a cease and desist order. On October 2, 1997, the Commission issued its notice of the decision not to review the ALJ's final ID, thereby finding that respondents are in violation of section 337. The Commission also requested briefs on the issues of remedy, the public interest, and bonding. On October 16, 1997, Quickturn, respondents, and the Commission investigative attorneys submitted comments on those issues, and on October 23, 1997, all parties submitted reply comments.

The Commission, having determined that a violation of section 337 has occurred in the importation, sale for importation, or sale in the United States of the accused hardware logic emulation systems and components thereof, including software, considered the issues of the appropriate form of such relief, whether the public interest precludes issuance of such relief, and respondents' bond during the 60-day Presidential review period.

The Commission determined that a permanent limited exclusion order and a permanent cease and desist order directed to domestic respondent Mentor are the appropriate form of relief. The Commission further determined that the statutory public interest factors do not preclude the issuance of such relief, and that respondents' bond under the permanent limited exclusion order and the permanent cease and desist order shall be in the amount of 43 percent of the entered value of the imported articles if the entered value is based on transaction value as defined by the U.S. Customs Service, and 180 percent of the entered value of such articles if the entered value is based on other than transaction value.

Copies of all nonconfidential documents filed in connection with this investigation are available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Washington, D.C. 20436, telephone 202-205-2000. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

By order of the Commission.



Donna R. Koehnke  
Secretary

Issued: December 3, 1997

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

In the Matter of

CERTAIN HARDWARE LOGIC  
EMULATION SYSTEMS AND  
COMPONENTS THEREOF

Inv. No. 337-TA-383

LIMITED EXCLUSION ORDER

This investigation was instituted on March 8, 1996, based upon a complaint and motion for temporary relief filed on January 26, 1996, by Quickturn Design Systems, Inc ("Quickturn") of Mountain View, California. The respondents are Mentor Graphics Corporation ("Mentor") of Wilsonville, Oregon and Meta Systems ("Meta") of Saclay, France (collectively "respondents"). Meta is a wholly owned subsidiary of Mentor. The products at issue are hardware logic emulation systems, subassemblies thereof, and components thereof, including logic boards and hardware logic emulation software, that are used in the semiconductor manufacturing industry to design and test the electronic circuits of semiconductor devices.

After an 11-day evidentiary hearing in April-May 1996, the presiding administrative law judge ("ALJ") issued an initial determination ("ID") granting Quickturn's motion for temporary relief. On August 5, 1996, the Commission determined not to modify or vacate the ID and issued a temporary limited exclusion order against Mentor and Meta and a temporary cease and desist order against Mentor, and determined that the amount of respondents' bond during the pendency of temporary relief (*i.e.*, during the remainder of the investigation) should be forty-three (43) percent of the entered value of imported hardware logic emulation systems and components thereof.

After a 14-day evidentiary hearing and two days of closing arguments, the ALJ, on July 31, 1997, issued a final ID finding that respondents had violated section 337 by infringing claims of all five of Quickturn's asserted patents. On that same date, the ALJ issued a recommended determination ("RD") recommending that the Commission issue a permanent limited exclusion order and a permanent cease and desist order. On October 2, 1997, the Commission issued notice of its decision not to review the ALJ's final ID, thereby finding that respondents are in violation of section 337. The Commission also requested briefs on the issues of remedy, the public interest, and bonding. On

October 16, 1997, Quickturn, respondents, and the Commission investigative attorneys submitted briefs on those issues, and on October 23, 1997, all parties submitted reply comments.<sup>1</sup>

The Commission, having determined to adopt the presiding ALJ's ID concluding that there is a violation of section 337 in the importation, sale for importation, or sale in the United States after importation of the accused hardware logic emulation systems, subassemblies thereof, and components thereof, and having determined that relief is warranted, considered the issues of the appropriate form of such relief, whether the public interest precludes issuance of such relief, and respondents' bond during the 60-day Presidential review period. The Commission has determined that a permanent limited exclusion order and a permanent cease and desist order (issued as a separate order) are the appropriate form of relief. The Commission has further determined that the statutory public interest factors do not preclude the issuance of such relief, and that respondents' bond during the period of temporary relief shall be in the amount of 43 percent of the entered value of infringing imported hardware logic emulators and components thereof if the entered value is based on transaction value, as defined by the U.S. Customs Service, and 180 percent of the entered value of such articles if the entered value is based on other than transaction value.

Accordingly, it is hereby ORDERED THAT --

1. Hardware logic emulation systems, subassemblies thereof, and components thereof for use therein, including logic boards and hardware logic emulation software embodied in a tangible medium (whether the software is in the form of source code, object code, or any other form), manufactured by Meta Systems of Saclay, France, or any of its affiliated companies, parents, subsidiaries, licensees, contractors, or other related entities, or their successors or assigns, that infringe one or more of claims 2-5, 15, 17-21, and 27 of U.S. Letters Patent 5,109,353, claims 1, 3-5, 7, 10-18, 22, 24, 26, and 28 of U.S. Letters Patent 5,329,470, claim 8 of U.S. Letters Patent 5,036,473, claims 1-3, 6, 8, 15, 20, and 21 of U.S. Letters Patent 5,448,496, and claims 1 and 2 of U.S. Letters Patent 5,452,231 are

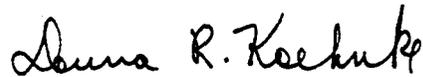
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<sup>1</sup> On July 31, 1997, the ALJ also issued Order No. 96 finding that respondents have engaged in discovery abuses and abuse of process justifying the imposition of adverse inferences of fact and monetary sanctions. The Commission has not yet acted on Order No. 96.

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

2. The hardware logic emulation systems, subassemblies thereof, and components thereof that are excluded by this Order are entitled to entry for consumption into the United States under bond in the amount of 43 percent of their entered value, if that value is based on transaction value, or 180 percent of their entered value, if that value is based on other than transaction value, pursuant to subsection (j) of section 337 of the Tariff Act of 1930, as amended 19 U.S.C. § 1337(j), from the day after this Order is received by the President until such time as the President notifies the Commission that he approves or disapproves this action but, in any event, not later than sixty (60) days after the date of receipt of this action.
3. In accordance with subsection (l) of section 337, the provisions of this Order do not apply to hardware logic emulators, subassemblies thereof, and components thereof imported by or for the United States.
4. The Commission may amend this Order in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 210.76.
5. The Secretary shall serve copies of this Order upon each party of record in this investigation and upon the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and the U.S. Customs Service.
6. Notice of this Order shall be published in the *Federal Register*.

By order of the Commission.



Donna R. Koehnke  
Secretary

Issued: December 3, 1997



UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

In the Matter of

CERTAIN HARDWARE LOGIC  
EMULATION SYSTEMS AND  
COMPONENTS THEREOF

Inv. No. 337-TA-383

ORDER TO CEASE AND DESIST

IT IS HEREBY ORDERED THAT Mentor Graphics Corporation, 8005 SW Boeckman Road, Wilsonville, Oregon, 97070, cease and desist from importing (including through electronic transmissions), selling, marketing, advertising, duplicating, distributing, offering for sale, advertising, soliciting U.S. agents or distributors for, or otherwise transferring (including through electronic transmissions) in the United States, hardware logic emulation systems, subassemblies thereof, and components thereof (including logic boards and hardware logic emulation software, whether the software is in the form of source code, object code, or some other form) that directly or contributorily infringe one or more of claims 2-5, 15, 17-21, or 27 of U.S. Letters Patent 5,109,353, claims 1, 3-5, 7, 10-18, 22, 24, 26, or 28 of U.S. Letters Patent 5,329,470, claim 8 of U.S. Letters Patent 5,036,473, claims 1-3, 6, 8, 15, 20, or 21 of U.S. Letters Patent 5,448,496, or claims 1 or 2 of U.S. Letters Patent 5,452,231 in violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337.

I  
(Definitions)

As used in this Order:

(A) "Commission" shall mean the United States International Trade Commission.

(B) "Complainant" shall mean Quickturn Design Systems, Inc., 440 Clyde Avenue, Mountain View, California, 94043.

(C) "Respondent" and "Mentor" shall mean Mentor Graphics Corporation, 8005 SW Boeckman Road, Wilsonville, Oregon, 97070.

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

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

(F) "Covered product" shall mean imported hardware logic emulation systems, subassemblies thereof, and components thereof (including logic boards and hardware logic emulation software, whether the software is in the form of source code, object code, or some other form), that directly or contributorily infringe one or more of claims 2-5, 15, 17-21, or 27 of U.S. Letters Patent 5,109,353, claims 1, 3-5, 7, 10-18, 22, 24, 26, or 28 of U.S. Letters Patent 5,329,470, claim 8 of U.S. Letters Patent 5,036,473; claims 1-3, 6, 8, 15, 20, or 21 of U.S. Letters Patent 5,448,496, or claims 1 or 2 of U.S. Letters Patent 5,452,231 during their remaining terms.

(G) The terms "import" and "importation" refer to importation for entry for consumption under the Customs laws of the United States; the terms also refer to the electronic transmission of software, in whatever form, into the United States.

## II (Applicability)

The provisions of this Cease and Desist Order shall apply to Respondent and to its principals, stockholders, officers, directors, employees, agents, licensees, distributors, controlled (whether by stock ownership or otherwise) and/or majority owned business entities, successors and assigns, and to each of them, and to all other persons who receive actual notice of this Order by service in accordance with Section VII hereof, insofar as they are engaging in conduct prohibited by Section III, *infra*, for, with, or otherwise on behalf of Respondent.

**III**  
**(Conduct Prohibited)**

The following conduct in the United States is prohibited by this Order. Respondent and its principals, stockholders, officers, directors, employees, agents, licensees, distributors, controlled (whether by stock ownership or otherwise) and/or majority owned business entities and their employees and agents, successors and assigns shall not:

- (A) import or sell for importation into the United States covered product except under license of the patent owner;
- (B) offer for sale, sell, lease, loan, distribute or otherwise transfer (including electronically) in the United States (except for exportation) imported covered product except under license of the patent owner;
- (C) advertise covered product;
- (D) solicit U.S. agents or distributors for imported covered product;
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, lease, loan, duplication, transfer, or distribution of covered product;
- (F) import (including electronically) into the United States, or use, duplicate, transfer, or distribute by electronic means or otherwise, within the United States, hardware logic emulation software that constitutes covered product; or
- (G) furnish services to its customers, including software technical support, relating to covered product.

**IV**  
**(Conduct Permitted)**

Notwithstanding any other provision of this Order, specific conduct otherwise prohibited by the terms of this Order shall be permitted if, in a written instrument, the owner of U.S. Letters Patent 5,109,353, U.S. Letters Patent 5,329,470, U.S. Letters Patent 5,036,473, U.S. Letters Patent 5,448,496, and U.S. Letters Patent 5,452,231 licenses or authorizes such

specific conduct, or such specific conduct is related to the importation or sale of covered product by or for the United States.

**V**  
**(Reporting)**

For purposes of this reporting requirement, the reporting periods shall commence on January 1 and July 1 of each year, and shall end on the subsequent June 30 and December 31, respectively. The first report required under this section shall cover the period December 3, 1997, to June 30, 1998. This reporting requirement shall continue in force until the expiration date of the last to expire of the patents at issue in this investigation (*i.e.*, until April 28, 2009, the expiration date of U.S. Letters Patent 5,109,353), unless, pursuant to subsection (j) of section 337 of the Tariff Act of 1930, the President notifies the Commission within sixty (60) days after the date he receives this Order, that he disapproves this Order. Respondent shall submit the final report required by this Section within thirty 30 days of the expiration date of the last to expire of the patents at issue in this investigation (*i.e.*, by April 28, 2009, the expiration date of U.S. Letters Patent 5,109,353).

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission:

(A) The quantity in units and the value in dollars of covered product that Respondent has imported (including importations by electronic transmission) or sold or otherwise transferred (including electronically) in the United States during the reporting period and the quantity in units and value of covered product that remains in inventory at the end of the reporting period.

(B) All contracts, whether written or oral, entered into during the reporting period in question, to sell or otherwise transfer covered product during the reporting period.

In connection with the importation and sales or other transfers referred to in paragraphs (A) and (B) above, Respondent shall provide the Commission with two copies of all invoices, delivery orders, bills of lading, and other documents concerning the importation, sale, or transfer in question, including computer records of electronic transmissions. Such copies shall be attached to the reports required by paragraphs (A) and (B) above.

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

**VI**  
**(Recordkeeping and Inspection)**

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

(B) For the purposes of determining or securing compliance with this Order and for no other purpose, and subject to any privilege recognized by the federal courts of the United States, duly authorized representatives of the Commission, upon reasonable written notice by the Commission or its staff, shall be permitted access and the right to inspect and copy in Respondent's offices during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, both in detail and in summary form as are required to be retained by paragraph VI(A) of this Order.

**VII**  
**(Service of Cease and Desist Order)**

Respondent is ordered and directed to:

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

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

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

(D) The obligations set forth in paragraphs VII (B) and VII(C) above shall remain in force until the expiration date of the last to expire of the patents at issue in this investigation (*i.e.*, until April 28, 2009, the expiration date of U.S. Letters Patent 5,109,353), unless, pursuant to subsection (j) of section 337 of the Tariff Act of 1930, the President notifies the Commission within 60 days after the date he receives this Order, that he disapproves this Order.

### **VIII** **(Confidentiality)**

Any request for confidential treatment of information obtained by the Commission pursuant to Sections V and VI of the Order should be in accordance with section 210.6 of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 201.6. For all reports for which confidential treatment is sought, Respondent must provide a public version of such report with confidential information redacted at the same time that it provides the confidential report.

Information obtained by the means provided for in Sections V and VI of this Order will be made available only to the Commission and its authorized representatives, will be entitled to confidential treatment, and will not be divulged by any authorized representative of the Commission to any person other than duly authorized representatives of the Commission, except as may be required in the course of securing compliance with this Order, or as otherwise required by law. Disclosure hereunder will not be made by the Commission without ten (10) days prior notice in writing to Respondent.

### **IX** **(Enforcement)**

Violation of this Order may result in any of the actions specified in section 210.75 of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 210.75, including an action for civil penalties in accordance with section 337(f) of the Tariff Act of 1930, 19 U.S.C. § 1337(f), and any other action as the Commission may deem appropriate, including referral to the U.S. Department of Justice for possible action pursuant to 18 U.S.C. § 1001. In determining whether Respondent is in violation of this Order, the Commission may infer facts adverse to Respondent if Respondent fails to provide adequate or timely information.

**X**  
**(Modification)**

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

**XI**  
**(Bonding)**

With respect to covered product imported after December 3, 1997, the conduct prohibited by Section III of this Order may be continued during the 60-day Presidential review period subject to Respondent posting a bond in the amount of forty-three (43) percent of the entered value of the covered product in question if entered value is based on transaction value, or one hundred eighty (180) percent of the entered value if entered value is based on other than transaction value. For imported covered product for which there is no entered value (*i.e.*, electronically imported software), the bond amount shall be 43 percent of the U.S. sales price of the covered product.

This bond provision does not apply to conduct which is otherwise permitted by Section IV of this Order. Covered product imported on or after December 3, 1997, is subject to the entry bond as set forth in the permanent limited exclusion order issued by the Commission simultaneously herewith, and is not subject to this bond provision. Covered product for which a bond has been posted in accordance with paragraph 2 of the limited temporary exclusion order issued by the Commission on August 5, 1996, as modified on September 24, 1997, also is not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders (19 C.F.R. § 210.68).

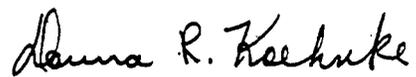
The bond and any accompanying documentation is to be provided to and approved by the Commission prior to the commencement of conduct which is otherwise prohibited by Section III of this Order.

The bond is to be forfeited in the event that the President approves, or does not disapprove within the Presidential review period, the Commission's Orders of December 3, 1997, unless the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as

to Respondent on appeal, or unless Respondent exports the products subject to this bond or destroys them and provides certification to that effect satisfactory to the Commission.

The bond is to be released in the event the President disapproves this Order, upon service on Respondent of an Order issued by the Commission based upon application therefor made by Respondent to the Commission.

By Order of the Commission



Donna R. Koehnke  
Secretary

Issued: December 3, 1997

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

In the Matter of

CERTAIN HARDWARE LOGIC  
EMULATION SYSTEMS AND  
COMPONENTS THEREOF

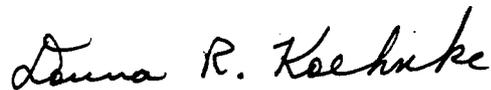
Inv. No. 337-TA-383

**CORRECTION TO CEASE AND DESIST ORDER**

It has come to the Commission's attention that the bond provision (Section XI) set forth in the permanent cease and desist order issued in the above-captioned investigation on December 3, 1997, contains an error. Accordingly, the permanent cease and desist order is hereby amended as follows:

Page 7 of the cease and desist order, Section XI, line 1, is amended to read "With respect to covered product imported before December 3, 1997, the . . ."

By Order of the Commission.



Donna R. Koehnke  
Secretary

Issued: December 31, 1997

DEC 31 17:41 '97

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OFFICE OF THE SECRETARY  
U.S. INTERNATIONAL TRADE COMMISSION  
WASHINGTON, D.C. 20436



**PUBLIC VERSION**

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

**In the Matter of**

**CERTAIN HARDWARE LOGIC  
EMULATION SYSTEMS AND  
COMPONENTS THEREOF**

**Inv. No. 337-TA-383**

**OPINION ON REMEDY, THE PUBLIC INTEREST, AND BONDING**

**INTRODUCTION AND BACKGROUND**

This investigation and temporary relief proceedings were instituted on March 8, 1996, based upon a complaint and motion for temporary relief filed on January 26, 1996, by Quickturn Design Systems, Inc ("Quickturn").<sup>1</sup> The respondents are Mentor Graphics Corporation ("Mentor") of Wilsonville, Oregon and Meta Systems ("Meta") of Saclay, France (collectively "respondents").<sup>2</sup> The products at issue are hardware logic emulation systems and components thereof that are used in the semiconductor manufacturing industry to design and test the electronic circuits of semiconductor devices.<sup>3</sup>

After an 11-day evidentiary hearing in April and May 1996, the presiding administrative law judge ("ALJ") issued an initial determination ("ID") granting Quickturn's

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<sup>1</sup> 61 *Fed. Reg.* 9486 (March 8, 1996).

<sup>2</sup> On June 13, 1996, the Commission determined not to review an initial determination adding respondents' U.S. customer, Bull HN Information Systems, Inc., as an intervenor. Notice of Commission Determination Not to Review an Initial Determination Granting the Motion of Bull HN Information Systems, Inc. to Intervene in the Permanent Relief Phase of the Investigation (June 13, 1996).

<sup>3</sup> These systems consist of reconfigurable logic devices, linked by reconfigurable interconnect devices, that can be programmed to replicate the operation of an integrated circuit ("IC") design to determine its performance characteristics under conditions that closely approximate the actual intended use. In other words, an emulation system configured with a particular circuit design can be connected to an external system (or "target" system) for which the circuit is designed, permitting the circuit to be tested under actual operating conditions. The emulator's ability to verify the operation of a circuit design before actual fabrication of a prototype device results in substantial savings of development time and costs.

motion for temporary relief.<sup>4</sup> On August 5, 1996, the Commission determined not to modify or vacate the ID, issued a temporary limited exclusion order against Mentor and Meta and a temporary cease and desist order against Mentor, and determined that the amount of respondents' bond during the pendency of temporary relief should be 43 percent of the entered value of imported hardware logic emulation systems and components thereof.<sup>5</sup>

All proceedings in the investigation were stayed on December 17, 1996, as a result of respondents' petition to the U.S. Court of Appeals for the Federal Circuit for a writ of mandamus concerning the scope of certain discovery.<sup>6</sup> On December 20, 1996, respondents' petition for mandamus was denied and the stay was dissolved. On December 30, 1996, the ALJ set a target date for completing the investigation at December 1, 1997.<sup>7</sup>

On March 20, 1997, the ALJ denied respondents' motion to terminate the investigation based on their unilateral proposed consent order. The ALJ found, *inter alia*, that the proposed consent order would allow respondents to continue importing certain components (in particular software) of the accused logic emulation systems.<sup>8</sup>

After a 14-day evidentiary hearing and two days of closing arguments, the ALJ, on July 31, 1997, issued a final ID finding that respondents have violated section 337 by infringing claims of all five of Quickturn's asserted patents. On that same date, the ALJ

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<sup>4</sup> Order No. 34: Initial Determination (July 8, 1996). The motion for temporary relief was limited to certain claims of two of the five patents asserted in the complaint by Quickturn.

<sup>5</sup> Commission Opinion on Remedy, the Public Interest, and Bonding at 1-2 (August 12, 1996)("Commission TEO Opinion"); Notice of Commission Decision Not to Modify or Vacate an Initial Determination Granting Temporary Relief, and Issuance of a Temporary Limited Exclusion Order and a Temporary Cease and Desist Order, Subject to Posting of Bond by Complainant (August 5, 1997). On August 12, 1996, the Commission approved the \$200,000 bond posted by complainant and the temporary remedial orders thus took effect. Letter from Donna R. Koehnke, Secretary of the Commission, to counsel of record (August 13, 1996). On August 15, 1997, the U.S. Court of Appeals for the Federal Circuit affirmed the Commission's temporary relief determination. *Mentor Graphics Corp. v. USITC*, Docket No. 97-1106 (*per curiam*)(unpublished opinion).

<sup>6</sup> Order No. 61 (December 17, 1996).

<sup>7</sup> Order No. 62 (January 8, 1997). The target date for completion of the investigation was initially set as March 8, 1997. Order No. 4 (March 13, 1996). The target date was enlarged to October 9, 1997, based upon a joint motion filed by Quickturn, respondents, and the Commission investigative attorneys. Order No. 40 (August 30, 1996).

<sup>8</sup> Order No. 79 at 11-15 (March 20, 1997).

issued a recommended determination ("RD") recommending the issuance of a permanent exclusion order and a cease and desist order, and Order No. 96 finding that respondents have engaged in discovery abuses and abuse of process justifying the imposition of adverse inferences of fact and monetary sanctions. The Commission has not yet acted on Order No. 96.

On September 24, 1997, the Commission granted Quickturn's petition for modification of the temporary relief bond, imposing a two-tier bond such that goods with entered values based upon transaction value are still subject to a 43 percent bond, whereas goods with entered values based on a Customs valuation methodology other than transaction value (*e.g.*, cost-based valuation) are subject to a 180 percent bond.<sup>9</sup>

On October 2, 1997, the Commission issued a notice of its decision not to review the ALJ's final ID, thereby finding that respondents are in violation of section 337. The Commission also requested briefs on remedy, the public interest, and bonding, as well as briefs on ALJ Order No. 96. On October 16, 1997, Quickturn, respondents, and the Commission investigative attorneys ("IAs") submitted main briefs on those issues, and on October 23, 1997, all parties submitted reply briefs.

Having determined that there is a violation of section 337 in this investigation, we have determined to issue a permanent limited exclusion order and a permanent cease and desist order directed to all of respondents' infringing emulation systems and components thereof, including respondents' software. The cease and desist order prohibits the electronic importation and transmission of respondents' software and requires respondents to report any importations and transfers of emulation systems and components thereof, but does not prohibit exports. We also have determined not to exempt replacement parts from the remedial orders. Finally, we have determined that the statutory public interest factors do not preclude the issuance of such relief and that respondents' bond during the Presidential review period should be set in the amount of 43 percent of entered value, if that value is based on transaction value, or 180 percent of entered value, if that value is based on a Customs valuation methodology other than transaction value. This opinion explains the basis for our determinations.

## **DISCUSSION**

### **I. REMEDY**

#### **A. A Permanent Limited Exclusion Order**

##### **1. The ALJ's RD**

The ALJ recommended that the Commission issue a permanent limited exclusion

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<sup>9</sup> Commission Opinion On Petition To Modify Temporary Relief Bond at 16.

order covering respondent Meta's hardware logic emulation systems and components thereof that directly or contributorily infringe any of the patent claims as to which a violation of section 337 has been found.<sup>10</sup> Respondents argued before the ALJ that (1) any exclusion order should be limited to those specific models of respondents' emulation systems found to have infringed Quickturn's patents; (2) any exclusion order should be limited to articles that directly infringe, and should not extend to components that indirectly infringe, including software and technical and engineering documents and tools; (3) any exclusion order should exempt repair and replacement parts; and (4) any exclusion order should not include a requirement that respondents report to the Commission all importations of emulation systems and components.

The ALJ recommended that the exclusion order (a) cover all of respondents' infringing hardware logic emulation systems, (b) cover components, including software, of hardware logic emulation systems that contributorily infringe the patent claims at issue, (c) *not* cover technical and engineering documents and tools that are used to induce infringement of the patent claims, (d) *not* exempt repair and replacement parts, and (e) include a reporting requirement. Specifically, the ALJ recommended issuance of an exclusion order directed to products covered by the claims in issue, and not limited to any specific models, in light of the fact that the Commission has traditionally found that exclusion orders should not be limited to specific models, as any such limitation "merely invites an unscrupulous respondent to change the model numbers to circumvent the order."<sup>11</sup> With respect to the inclusion of software and other components within the scope of the exclusion order, the ALJ stated that, in determining the appropriate scope of the Commission's remedial authority under section 337, it is "crucial to discern some nexus between [the] unfair methods or acts and importation before this Commission has power to act."<sup>12</sup> The ALJ found that respondents' software and other

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<sup>10</sup> RD at 184-94. Such infringing devices are covered by one or more of claims 2-5, 15, 17-21, and 27 of U.S. Letters Patent 5,109,353, claims 1, 3-5, 7, 10-18, 22, 24, 26, and 28 of U.S. Letters Patent 5,329,470, claim 8 of U.S. Letters Patent 5,036,473, claims 1-3, 6, 8, 15, 20, and 21 of U.S. Letters Patent 5,448,496, and claims 1 and 2 of U.S. Letters Patent 5,452,231.

<sup>11</sup> RD at 185, citing *Certain Cellular Radiotelephones and Subassemblies and Component Parts Thereof*, Inv. No. 337-TA-297, USITC Pub. 2361, Comm'n Op. on Remedy the Public Interest and Bonding at 5 (August 1989); *Sealed Air Corp. v. U.S. International Trade Commission*, 645 F.2d 976 (C.C.P.A. 1981) (upholding Commission remedy that required importers to show that their products did not infringe); and *Certain Integrated Circuit Telecommunication Chips*, Inv. No. 337-TA-337, Comm'n Op. at 36-37, USITC Pub. 2670 (August 1993).

<sup>12</sup> RD at 187, citing *Certain Welded Stainless Steel Pipe and Tube*, Inv. No. 337-TA-29, USITC Pub. 863, Opinion of Commissioners Minchew, Moore and Alberger at 11 (February (continued...))

components are integral parts of the infringing emulation systems. He reiterated his conclusion that those components contributorily infringe Quickturn's patents, thus finding that the imported components bear a direct relationship to the infringing imported emulation systems.<sup>13</sup>

Finally, the ALJ stated that, during consideration of the 1988 amendments to section 337, Congress noted that the predecessor version of section 337 "was designed to cover a broad range of unfair acts" and that the purpose of the amendments was "to strengthen the effectiveness of section 337 in addressing the growing problems being faced by U.S. companies from the importation of articles which infringe U.S. intellectual property rights."<sup>14</sup> He found that the 1988 amendments were intended to make section 337 a "more effective remedy" for the protection of intellectual property rights, including the rights of patentees. Based on his finding that respondents' software contributorily infringes certain claims of the patents in issue, the ALJ recommended that the exclusion order cover software and other components that contributorily infringe the claims in issue.<sup>15</sup>

Before the ALJ, respondents raised the possibility that their software will be transmitted electronically into the United States [ ] and argued that the Commission does not have jurisdiction to exclude such transmissions. In support of this argument, respondents noted that the U.S. Customs Service does not regulate electronic transmissions into the United States. The ALJ found that electronic transmission of respondents' software is not substantively different from storing the software on a magnetic medium (such as a diskette) and shipping the magnetic medium into the United States. He stated that the fact that it may be easy for respondents to circumvent an exclusion order by [ ] electronic transmissions of that software should not affect the scope of the Commission's jurisdiction or cause the Commission to limit the reach of its remedial orders.

The ALJ further stated that "the Commission's remedial power under section 337 is not necessarily limited by any view of the U.S. Customs Service."<sup>16</sup> In addition, he noted that

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<sup>12</sup>(...continued)  
1978).

<sup>13</sup> *Id.* at 186-89.

<sup>14</sup> *Id.* at 187, citing S. Rep. 100-71, 100th Cong., 1st Sess., at 128.

<sup>15</sup> *Id.* at 189.

<sup>16</sup> *Id.* at 191, citing *Certain Processes for the Manufacture of Skinless Sausage Casings and Resulting Product*, Inv. No. 337-TA-148/169 (Modification Petition), Comm'n Op. at 6-8, USITC Pub. 2812 (September 1994); *Certain Devices for Connecting Computers via*

(continued...)

Customs has a specific rule for valuing software imported on a medium.<sup>17</sup> Thus, he found that to the extent that respondents' software is contained on some medium, such as a tape, diskette, or CD-ROM, it is clearly an article subject to exclusion by the Commission.<sup>18</sup> Based on the foregoing, the ALJ recommended that the Commission's exclusion order cover electronic importations of respondents' software.

Intervenor Bull, respondents, and the IAs argued before the ALJ that any exclusion order should contain an exemption for (*i.e.*, not cover) repair and replacement parts for respondents' imported emulation systems that are already in use in the United States. Repair and replacement parts, such as logic boards and chips, are necessary for the continued operation of respondents' emulation systems. The ALJ recommended, however, that the exemption for repair and replacement parts contained in the Commission's temporary exclusion order not be included in any permanent exclusion order.<sup>19</sup> In making that recommendation, the ALJ relied principally upon the Commission's statement in its opinion on temporary relief that the exemption granted in the temporary exclusion order "would prevent disruption to the business operations of Mentor's customers during the pendency of this investigation, and grant them time to prepare for the possibility of a permanent exclusion order, which probably would not include such an exemption."<sup>20</sup> Thus, the ALJ found that "purchasers of accused Meta systems have been on notice at least since the issuance of the Commission's opinion on [temporary relief] that a permanent exclusion order, 'probably would not' include an exception for replacement parts."<sup>21</sup>

The ALJ noted that evidence of record indicates that replacement parts, such as logic boards and chips, would be available from respondents' domestic production of the accused systems and components thereof.<sup>22</sup> He also found that "it would take from only a few days to maybe a month or so before the U.S. customer could begin using complainant's emulation

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<sup>16</sup>(...continued)

*Telephone Lines*, Inv. No. 337-TA-360, Comm'n Op. at 11-14 (December 1994).

<sup>17</sup> *Id.* at 190, citing T.D. 85-124, 40 Fed. Reg. 30588.

<sup>18</sup> *Id.*, citing ID Finding of Fact ("FF") 15, 498.

<sup>19</sup> RD at 192-93.

<sup>20</sup> *Id.*, citing Commission Opinion at 9 (footnote omitted).

<sup>21</sup> *Id.* at 194 (emphasis in original).

<sup>22</sup> *Id.*, citing FF 513-515.

system."<sup>23</sup> He further noted that respondents [ ].<sup>24</sup> Accordingly, the ALJ recommended that no exceptions be included in either the permanent exclusion order or the permanent cease and desist order for repair or replacement parts.<sup>25</sup> Finally, the ALJ recommended that the exclusion order require respondents to report every instance of an entry for consumption of any of their hardware logic emulation systems or components thereof "as necessary to assist in the enforcement of the order with respect to covered products with different model designations, and with respect to software that may be imported via electronic means."<sup>26</sup>

## 2. The Parties' Comments

Respondents argued that, "although the Commission undeniably has broad discretion in its determination of the appropriate remedy, there are limits on the breadth of its authority to fashion remedial orders."<sup>27</sup> Respondents stated that the Commission's remedy must bear a "reasonable relation to the unlawful practices found to exist."<sup>28</sup> Based on the foregoing points, they requested that any remedial order issued by the Commission be limited to the products specifically adjudged to be infringing. Specifically, respondents asserted that any remedial orders should expressly extend only "to the manufacture, use, or sale of the specific infringing device, or to infringing devices no more than colorably different from the infringing device."<sup>29</sup> According to respondents, "an exclusion order directed specifically to particular infringing devices, is sufficient to deter the infringing party from making minor modifications in an

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<sup>23</sup> *Id.*, citing FF 493-494.

<sup>24</sup> *Id.* at 194-95, citing FF 528-529.

<sup>25</sup> *Id.* at 193.

<sup>26</sup> *Id.* at 194.

<sup>27</sup> Brief of Respondents Mentor Graphic Corporation and Meta Systems on the Issues of Remedy, the Public Interest, and Bonding ("Respondents' Remedy Brief") at 7.

<sup>28</sup> *Id.* at 7-8, citing *Hyundai Electronics v. U.S. International Trade Commission*, 899 F.2d 1204, 1208, 1209 (Fed. Cir. 1990) (quoting *Jacob Siegel Co. v. Federal Trade Commission*, 327 U.S. 608, 613 (1946)).

<sup>29</sup> *Id.* at 8, citing *Additive Controls & Measurement Sys., Inc. v. Flowdata, Inc.*, 986 F.2d 476, 479-80 (Fed. Cir. 1993) (citing *KSM Fastening Sys., Inc. v. H.A. Jones Co.*, 776 F.2d 1522, 1526 (Fed. Cir. 1985) (emphasis added)).

attempt to evade the injunction.”<sup>30</sup> They also argued that relief extending to all infringing devices, as recommend by the ALJ, “‘unnecessarily restrains’ Mentor’s lawful right to ‘design around’ the asserted patent claims.” Such remedial orders, respondents argued, would be punitive rather than remedial.<sup>31</sup> Alternatively, respondents requested that any Commission order “explicitly exclude from its scope any future product that is substantially different than the device specifically adjudged to be infringing (*i.e.*, because it has a substantially different architecture).”<sup>32</sup>

To support their position, respondents drew an analogy to the limits placed on injunctions by U.S. district courts in patent infringement cases, which, they argued, “must be narrowly tailored and cannot be broadly drafted.”<sup>33</sup> Respondents further argued that their proposed exclusion order is consistent with section 337, which they asserted “forbids an exclusion order covering next-generation products, which have not been imported and which have not been found to infringe.”<sup>34</sup> According to respondents, the Commission’s jurisdiction is limited to articles previously imported, thereby excluding from the reach of the Commission’s remedial powers any modified articles that are not imported until after the conclusion of an investigation.<sup>35</sup>

Respondents also argued that an exclusion order covering all infringing goods would “improperly dangle over [respondents] the specter of enforcement proceedings to be initiated by Quickturn.” They asserted that “the Commission should not issue any order that might embroil respondents in ITC enforcement litigation (no matter how ill-founded) over future products because any such order would stifle innovation.” Moreover, according to respondents, the availability of Commission modification procedures and advisory opinions is “neither useful nor sufficient for domestically manufactured systems because there is no act of import trade involved.”

Respondents further argued that software, either in source code or object code form,

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<sup>30</sup> *Id.* at 8-9, citing *KSM Fastening Sys.*, 776 F.2d at 1526.

<sup>31</sup> *Id.* at 10, citing *Joy Technologies, Inc. v. Flakt, Inc.*, 6 F.3d 770, 772-73 (Fed. Cir. 1993).

<sup>32</sup> *Id.*

<sup>33</sup> *Id.* at 9, citing *KSM Fastening Systems, Inc. v. H.A. Jones Co.*, 776 F.2d 1522, 1526 (Fed. Cir. 1985). For example, they asserted, “[a]n injunction cannot simply enjoin ‘further infringement of the patent.’” *Id.*

<sup>34</sup> *Id.* at 11.

<sup>35</sup> *Id.* at 11-12.

should not be covered by the Commission's remedial orders issued in this investigation.<sup>36</sup> Respondents repeated their argument, made previously in urging the Commission to review the ALJ's ID, that the Commission lacks jurisdiction over the source code version of their software. They argued that their software, when it exists in the form of source code, cannot contributorily infringe the claims in issue because source code is not executable by the accused emulation systems.<sup>37</sup> Respondents contended that coverage of source code is therefore beyond the Commission's remedial jurisdiction.

Respondents also asserted that Commission remedial orders can only prohibit the importation (or selling for importation or selling after importation) of articles that directly infringe a valid and enforceable U.S. patent. Alternatively, respondents stated that "assuming *arguendo* that the ITC has authority to prohibit the importation of articles that do not literally infringe, the [ALJ's] recommended exclusion order is flawed because it would restrict the importation of things that are not 'articles' and that do not induce infringement under 35 U.S.C. §§ 271(b)."<sup>38</sup> They asserted that the Commission's authority extends only to articles that infringe as imported.<sup>39</sup> According to respondents, "[e]ven when the importation of an article is a 'direct step' toward the subsequent purely domestic manufacture of an infringing device, that importation is not sufficient to invoke the Commission's power."<sup>40</sup> Respondents asserted that the legislative history of section 337 demonstrates that an article must be tangible

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<sup>36</sup> *Id.* at 13-25.

<sup>37</sup> *Id.* at 13-15. Source code is the language in which a programmer writes a computer program (*e.g.*, "If: X= <10 then stop; elserun"). Because computer hardware can only utilize binary code (*i.e.*, a series of 1s and 0s), the human readable source code must be converted (*i.e.*, compiled) into machine executable binary code, also known as object code. Following compilation, the object code is used by the computer to execute the steps of the source code program.

<sup>38</sup> *Id.* 13-21. Respondents asserted that the transfer of their source code cannot constitute an act of contributory infringement under section 337 because "the code is neither imported nor sold, and does not constitute a component of any patented machine." *Id.* at 13-14. According to respondents, transfer of the source code also does not constitute active inducement to infringe under section 337 because it is not related to the importation, the sale for importation, or the sale after importation of any article that infringes Quickturn's patents. *Id.*

<sup>39</sup> *Id.* at 17-21.

<sup>40</sup> *Id.* at 22 (emphasis in original), citing *Certain Cardiac Pacemakers and Components Thereof*, Inv. No. 337-TA-162, Order No. 64 (Luckern, ALJ); GC-84-108 (1984) (regarding Order No. 64 of Inv. No. 337-TA-162), citing *Certain Welded Stainless Steel Pipe and Tube*, Inv. No. 337-TA-29, at 11, USITC Pub. 863 (February 1978).

merchandise.<sup>41</sup> They also urged that, “[b]ecause Mentor’s source code is maintained in confidence and not sold, it is not an imported ‘article’ within the meaning of section 337(a)(1)(B) over which the ITC can assert jurisdiction.”<sup>42</sup> In addition, respondents argued that an exclusion order directed to infringing components “would be impermissibly vague, overbroad, and onerous” because “[i]t is not clear what would be included as ‘components’ of [respondents’ emulation systems].”

Respondents argued that the importation by electronic transmission of their infringing software should not be covered by the Commission’s remedial orders, stating that such transmissions are “energy, which is not tangible.”<sup>43</sup> They asserted that the [ ] electronic transmission of company information, “whether engineering documents, source code or object code, cannot be fairly defined as one of the ‘articles’ encompassed by section 337(a)(1)(B).” Respondents further argued that “the electronic transfer of information across international borders [cannot] constitute an act of ‘importation’ under section 337(a)(1)(B).”

Respondents objected to the ALJ’s recommendation that the exclusion order include a requirement that they report importations to the Commission, asserting that the requirement is novel and inappropriate in that the U.S. Customs Service administers exclusion orders.<sup>44</sup> Respondents noted that Customs has procedures for determining whether imported goods are subject to an exclusion order, and asserted that Quickturn’s rights are adequately protected by such procedures. They also argued that “[c]ustomers who have already purchased imported devices from Mentor should be allowed to purchase additional replacement parts,” because “[t]he ITC should not enter an order that would injure innocent businesses.”<sup>45</sup>

Respondents objected to the ALJ’s proposed reporting requirement as “unprecedented and outside of the scope of the Commission’s remedial powers” because it “would require respondents to report enumerated activities, whether purely domestic or purely foreign.”<sup>46</sup> According to respondents, such a requirement “would be improperly onerous, and if the Commission determines to impose a reporting requirement, it should be narrowly tailored to

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<sup>41</sup> To support this argument, respondents stated that “the legislative history and the entirety of Title 19 are replete with instances where the term ‘article,’ ‘merchandise,’ ‘commodity’ and ‘goods’ are used interchangeably.” *Id.* at 14.

<sup>42</sup> *Id.* at 13 (emphasis in original).

<sup>43</sup> *Id.* at 15-16.

<sup>44</sup> *Id.* at 22-23.

<sup>45</sup> *Id.* at 25.

<sup>46</sup> *Id.* at 11.

require reporting of newly imported products that have been previously adjudicated as infringing."<sup>47</sup>

Complainant Quickturn supported the ALJ's recommendation that the Commission issue a permanent limited exclusion order. With respect to the scope of the order, Quickturn stated that "no past exclusion order of the Commission . . . has been confined by its terms to the specific products examined with respect to determining whether a violation of section 337 has occurred."<sup>48</sup> According to Quickturn, the Commission "has long recognized that an exclusion order directed at specific models adjudicated to be infringing does not protect the patent owner's rights by preventing importation of all infringing merchandise, and is subject to circumvention; it fails to achieve the intended effect of exclusion orders of preventing future violations with respect to the type of products involved in the investigation."<sup>49</sup> Quickturn asserted that respondents can avail themselves of the mechanisms of a modification proceeding or an advisory opinion to demonstrate that any future products do not infringe Quickturn's patents, noting that such procedures have been judicially approved.<sup>50</sup> It further argued that, "because of respondents' actions during this investigation, and the complex nature of the infringing systems involved and the many forms of components covered by the ALJ's recommended PEO," the Commission's exclusion order should contain a provision that would require Customs to prevent the entry of any of respondents' products until the Commission has determined them to be non-infringing.<sup>51</sup>

Quickturn also urged the Commission to adopt the ALJ's recommendation to exclude respondents' software used in the infringing emulation systems. Quickturn stated that "[i]t is plain that the Meta software is a component of the infringing emulation system at issue here."<sup>52</sup> Thus, according to Quickturn, the Commission should include software in any exclusion order "in recognition of its 'responsibility under the statute to provide effective relief' when section

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<sup>47</sup> *Id.*

<sup>48</sup> Complainant Quickturn's Submission on Remedy, the Public Interest, and Bonding ("Quickturn's Remedy Brief") at 3

<sup>49</sup> *Id.*, citing *Certain Nonwoven Gas Filter Elements*, Inv. No. 337-TA-275, Comm'n Op. at 7-8, USITC Pub. 2129 (Sept. 1988); *Certain Cellular Radio Telephones*, Inv. No. 337-TA-297, Comm'n Op. at 5-6, USITC Pub. 2361 (Feb. 1991).

<sup>50</sup> *Id.*, citing *Certain Integrated Circuit Telecommunications Chips*, Inv. No. 337-TA-337, Comm'n Op. at 36-37, USITC Pub. 2670 (Aug. 1993). *Sealed Air Corporation v. U.S. International Trade Commission*, 645 F.2d 976 (C.C.P.A. 1981).

<sup>51</sup> *Id.* at 4.

<sup>52</sup> *Id.* at 5, citing ID at 166, 171, FF487.

337 is violated.”<sup>53</sup>

Quickturn also argued that the reporting requirement recommended by the ALJ is necessary and appropriate in light of what Quickturn characterized as respondents’ misleading assertions regarding the design of their current emulation product, the complex nature of the infringing system involved, and the many forms of components and other products necessarily covered by the proposed exclusion order. Quickturn urged that, “if an importation (electronic or otherwise) of a product involves the infringing system, it should be reported to the Commission.”<sup>54</sup>

According to Quickturn, respondents “read far too narrowly the Commission’s statutory authority and Notice of Investigation in arguing that electronic transmissions of respondents’ software products are not within the authority of the Commission to address.”<sup>55</sup> Quickturn argued that the ALJ properly noted that the Commission’s remedial authority is not confined by narrow readings of its terms based upon the actions of other agencies, including the U.S. Customs Service.<sup>56</sup> According to Quickturn, “[t]he Commission must prevent its remedial authority from being so circumscribed lest it become easier to circumvent Commission remedies by actions (e.g., electronic transmission of products) which are likely to be more and more common in the future.”<sup>57</sup> Otherwise, Quickturn asserted, the Commission’s section 337 authority would be severely undermined in such an increasingly electronic environment. Quickturn asserted that “[i]t would be anomalous indeed for the Commission to be able to stop, for example, the importation of a CD-ROM or disk containing respondents’ software, a component of an emulation system, but not be able to stop the use of that very same component imported in machine readable form by electronic means.”<sup>58</sup>

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<sup>53</sup> *Id.* at 7, citing *Certain Molded-In Sandwich Panel Inserts*, Inv. No. 337-TA-99, Comm’n Op. at 18-19, USITC Pub. 1297 (Oct. 1992); *Certain Dynamic Random Access Memories*, Inv. No. 337-TA-242, Comm’n Op. at 88-89, USITC Pub. 2034 (Nov. 1987); *Certain Plastic Food Storage Containers*, Inv. No. 337-TA-152, Comm’n Op. at 5, 8, USITC Pub. 1563 (August 1984).

<sup>54</sup> Complainant Quickturn’s Reply to the Submission on Remedy, the Public Interest and Bonding on Behalf of Respondents Mentor Graphics Corporation and Meta Systems (“Quickturn’s Remedy Reply”) at 17.

<sup>55</sup> *Id.* at 8.

<sup>56</sup> Quickturn Remedy Brief at 10, citing RD at 190.

<sup>57</sup> Quickturn’s Remedy Reply at 8.

<sup>58</sup> Quickturn Remedy Brief at 10.

The IAs agreed with the ALJ's recommendation to impose a permanent limited exclusion order that is applicable to all of respondents' emulation systems that are covered by the patent claims that have been found infringed.<sup>59</sup> With respect to the scope of any exclusion order, they argued that "the changing nature of respondents' hardware and software products that are at issue, and the changes in their model names," necessitates that the Commission adhere to its long-standing practice of directing remedial orders to products that are covered by the patent claims found infringed in an investigation.<sup>60</sup> According to the IAs, respondents "fail to identify any precedent that precludes the Commission from directing its remedial orders to all the products at issue in an investigation rather than to specific models of such products."<sup>61</sup> The IAs argued that respondents' citations to cases involving district court injunctions "are not persuasive here where the Commission has its own unique remedies."<sup>62</sup> They further asserted that respondents "also fail to recognize that the Commission's rules specifically provide that respondents may seek advisory opinions" concerning whether any redesigned hardware logic emulation products are subject to the outstanding remedial orders.<sup>63</sup> Thus, according to the IAs, because respondents "have not provided any compelling reason to depart from the Commission's standard practice," an exclusion order covering all infringing products is appropriate.<sup>64</sup>

The IAs argued that "[b]ecause Meta emulators cannot be operated without the imported Meta software, exclusion of that software from the United States will assist in providing an effective remedy for the Quickturn."<sup>65</sup> They noted that the ALJ ruled against respondents on the issue of whether the Commission has the authority to find that respondents' software contributorily infringes Quickturn's patent claims, and that respondents petitioned for review on the issue, but the Commission declined to grant review.<sup>66</sup> Therefore, in light of the

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<sup>59</sup> Office of Unfair Import Investigations Reply Brief Concerning Remedy, the Public Interest, and Bonding ("IAs' Remedy Reply") at 4-5.

<sup>60</sup> IAs' Remedy Reply at 5.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> *Id.* at 5, citing Commission rule 210.79(a); 19 C.F.R. §210.79(a).

<sup>64</sup> *Id.* at 7.

<sup>65</sup> *Id.* (citations omitted).

<sup>66</sup> *Id.* at 7-8, citing Petition of Respondents Pursuant to 37 C.F.R. § 210.43 Requesting Commission Review Of The ALJ's Final Initial Determination And Of Certain Portions Of

(continued...)

fact that “respondents raise no new jurisdictional arguments,” the IAs agreed with the ALJ’s recommendation that any exclusion order cover respondents’ software.<sup>67</sup> The IAs also argued that the Commission’s exclusion order should cover electronic importations of respondents’ software, stating that “[t]he prohibition against further importation and duplication of the infringing Meta software is the linchpin of the remedy recommended by the [ALJ].”<sup>68</sup>

Finally, the IAs agreed that a reporting requirement should be included in the Commission’s exclusion order. In the IAs’ view, “because respondents have contended that their Meta 100, Meta 500, and Meta 500M systems do not constitute ‘hardware logic emulation systems,’ the reporting requirement should apply to all of respondents’ products that are capable of performing hardware logic emulation functions.”<sup>69</sup> They asserted that “because respondents have previously sold Meta emulators to multinational customers for installation in the United States,” the Commission’s exclusion order should “make it clear that the respondents are required to report whether they have directly, or in concert with others, imported into the United States, sold for importation, or sold after importation hardware logic emulation systems and components thereof, including software, that infringe the patent claims at issue.”<sup>70</sup>

Intervenor Bull asserted that it “has had and will continue to have an ongoing need for replacement parts for the Meta machine, including replacement logic boards.”<sup>71</sup> Bull also

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<sup>66</sup>(...continued)

Order No. 96 at 5-9 (June 9, 1997)(Respondents’ Petition For Review); Notice Of Commission Decision Not To Review A Final Initial Determination, And Schedule For Filing Of Written Submissions On The Issues Of Remedy, The Public Interest, And Bonding, And Appeals Of ALJ Order No. 96 (October 2, 1997)(Notice Of Commission Decision Not To Review).

<sup>67</sup> See Office of Unfair Import Investigations’ Response to Respondents’ Petition for Review of the Final Initial Determination and of Certain Portions of Order No. 96 at 9-15 (August 20, 1997).

<sup>68</sup> Brief of the Office of Unfair Import Investigations Regarding Remedy, the Public Interest, and Bonding (“IAs’ Remedy Brief”) at 10, citing ID at 190-92.

<sup>69</sup> *Id.* at 10-11.

<sup>70</sup> IA’s Remedy Reply at 12 (citations omitted). The IAs current position is that they “[do] not challenge the Judge’s recommendation regarding repair and replacement parts.” IAs’ Remedy Brief at 11.

<sup>71</sup> Submission of Bull HN Information Systems Inc. Concerning Remedy and the Public  
(continued...)

contended that, because [ ], it has an ongoing need for service and maintenance from respondents.<sup>72</sup> It alleged that, without access to replacement parts and technical support, it “[ ]”.<sup>73</sup> Bull asserted that an exception in the remedial orders for replacement parts and technical support is warranted as to it because it was unaware that respondents’ emulation system infringed Quickturn’s patents when it imported that unit. It also argued that it has “enormous sunk costs” incurred during the two years of using respondents’ emulation system. In particular, Bull asserted that “[ ]”.<sup>74</sup> Bull “[ ]”.<sup>75</sup>

Bull also argued that remedial orders covering replacement parts and servicing would have “no direct or indirect countervailing benefit to Quickturn,” because “Quickturn cannot provide replacement boards or other components of the Meta machine, nor can its technicians service or maintain the machine.”<sup>76</sup> According to Bull, “the evidence does not indicate that Bull would buy a Quickturn emulator if it were unable to obtain services or parts for its Meta machine.”<sup>77</sup> Rather, Bull asserted that [ ].

### 3. Discussion

#### a. The Scope of the Exclusion Order

We adopted the ALJ’s recommendation and issued a permanent limited exclusion order directed to all infringing emulation systems and components thereof manufactured abroad by

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<sup>71</sup>(...continued)  
Interest (“Bull’s Remedy Brief”) at 3.

<sup>72</sup> *Id.*

<sup>73</sup> *Id.* at 4.

<sup>74</sup> *Id.* at 12. As explained below, [ ].

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at 15.

<sup>77</sup> *Id.*

foreign respondent Meta.<sup>78</sup> The limited exclusion order is not limited to the specific models of emulation system found by the Commission to infringe, as urged by respondents. As the ALJ noted, the Commission's long-standing practice is to direct its remedial orders to all products covered by the patent claims as to which a violation has been found, rather than limiting its orders to only those specific models selected for the infringement analysis.<sup>79</sup> As the IAs noted, while individual models may be evaluated to determine importation and infringement, the Commission's jurisdiction extends to all models of infringing products that are imported at the time of the Commission's determination and to all such products that will be imported during the life of the remedial orders. We also agree with the ALJ that the central purpose of remedial orders is to ensure complete relief to the domestic industry. An exclusion order covering only specific models of an accused device could easily be circumvented, thereby denying complete relief to the domestic industry.<sup>80</sup>

Respondents argued that an exclusion order that is not limited to the specific models found to infringe Quickturn's patents might ensnare future redesigned emulation systems that do not in fact infringe. However, the Commission has indicated in past investigations that respondents who are asserting the existence of redesigned products have available to them the mechanisms of a modification proceeding or an advisory opinion by which to demonstrate that such products do not infringe.<sup>81</sup> As is appropriate, such procedures place the burden of

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<sup>78</sup> No party has requested that the Commission issue a general exclusion order and we see no reason to issue such a remedy.

<sup>79</sup> See, e.g., *Certain Curable Fluoroelastomer Compositions And Precursors Thereof*, Inv. No. 337-TA-364, Order at 2 (March 16, 1995); *Certain Neodymium-Iron-Boron Magnets, Magnet Alloys, And Articles Containing Same*, Inv. No. 337-TA-372, Order at 2, (March 29, 1996); *Certain Variable Speed Wind Turbines And Components Thereof*, Inv. No. 337-TA-376, Order at 3 (August 30, 1996); *Certain Flash Memory Circuits And Products Containing Same*, Inv. No. 337-TA-382; *Certain Toothbrushes And The Packaging Thereof*, Inv. No. 337-TA-391, Limited Exclusion Order at 1-2 (October 15, 1997).

<sup>80</sup> Indeed, as Quickturn and the IAs have pointed out, in this investigation the record shows that respondents have sold hardware logic emulation systems under a variety of model designations, such as the Meta 100, Meta 500, Meta 500M, and SimExpress. ID at FF 7; FF 292-293; FF 296. Respondents also have sold versions of their software under the trade names Meta, SimExpress, Meta Compilation Interface (MCI), and Meta Emulation Language (MEL). ID at FF 504; FF 483; FF 487; FF 504. Finally, respondents have during the course of this investigation changed the designation of their next generation product from [ ] to [ ] Respondents' Remedy Brief at 3.

<sup>81</sup> In this respect, respondents' reliance on federal court case law governing the scope of district court preliminary injunctions fails to take into account the fact that respondents can

(continued...)

demonstrating noninfringement on respondents, who have been found to be in violation of section 337, and such procedures have been judicially approved.<sup>82</sup>

Indeed, respondents' argument is flawed because it rests on the assumption that they will be successful in designing around Quickturn's patents. Moreover, it appears that respondents are attempting to shift the burden of proof of demonstrating noninfringement -- whether before Customs (in administering the exclusion order) or before the Commission (in administering the cease and desist order) -- from themselves to Quickturn. In our view, there is no reason for us to deviate from our long-standing practice of issuing exclusion orders that are directed to all products covered by the claims in issue.<sup>83</sup>

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<sup>81</sup>(...continued)

request a modification proceeding or an advisory opinion from the Commission, tools which are not available to federal district courts.

<sup>82</sup> *Sealed Air Corp. v. U.S. International Trade Commission*, 645 F.2d 976 (C.C.P.A. 1981) (upholding Commission remedy that required importers to show that their products did not infringe); and *Certain Integrated Circuit Telecommunication Chips*, Inv. No. 337-TA-337, Comm'n Op. at 36-37, USITC Pub. 2670 (August 1993). See also, *Certain Cellular Radio Telephones*, Inv. No. 337-TA-297, Comm'n Op. at 5-6, USITC Pub. 2361 (Feb. 1991); see also, *Sealed Air Corporation v. USITC*, 645 F.2d 976 (C.C.P.A. 1981) (upholding Commission remedy that required importers to show products have not infringed), and *Certain Integrated Circuit Telecommunication Chips*, Inv. No. 337-TA-337, Comm'n Op. at 36-37, USITC Pub. 2670 (Aug. 1993).

<sup>83</sup> In support of their position, respondents cited to *Certain Dynamic Random Access Memories* ("DRAMs"), Inv. No. 337-TA-242, USITC Pub. 2034 (Nov. 1987). However, *DRAMs* is inapposite to this investigation. In *DRAMs*, the Commission specifically found that changes in DRAM technology evolved rapidly even within one generation (density), and that the likelihood of technological change in a future generation, such that the patents in controversy in that case would not be infringed, was high. *DRAMs* at 88. The Commission also noted that the presiding ALJ in that investigation had correctly determined that it was possible to manufacture a functional DRAM without infringing any of the patents in controversy. *Id.* In this investigation, there has been no determination by the ALJ that it is possible to manufacture an emulation system without infringing any of the patents in controversy. There is also no indication that emulation technology changes rapidly between generations; indeed, the evidence shows that each generation of Quickturn's products has used the technologies of the patents in issue. In any event, it is clear that the exclusion order in *DRAMs* covered all infringing DRAMs of a particular density whether or not the specific model of such density had specifically been found by the Commission to be infringing. *DRAMs*, Action and Order, at 5-6.

We also have adopted the ALJ's recommendation that the exclusion order cover respondents' software. The ALJ found that respondents' software contributorily infringes one or more of the patent claims in issue, and the Commission determined not to review that determination. Having found that respondents' software contributorily infringes the claims in issue, we are of the view that our remedial orders must reach that software.

Respondents' arguments against issuance of a remedial order covering their software are variants of their central arguments that (1) their software, when in the form of source code, does not infringe any of the claims of Quickturn's patents, (2) the Commission's authority does not encompass contributory infringement and inducement to infringe, and (3) even if the Commission's authority extends to articles that contributorily infringe or induce infringement, the Commission's jurisdiction is limited to circumstances where an article that directly infringes a United States patent has been or will be imported. However, we already have adopted the ALJ's finding that respondents' software contributorily infringes the claims in issue whether imported in the form of source code or otherwise.<sup>84</sup> In addition, we do not agree with respondents' assertion that direct infringement must precede importation in order for the Commission's remedial orders to reach products, such as software, that contributorily infringe Quickturn's patents.

By its terms, section 337 is not limited to articles that *directly* infringe a valid and enforceable United States patent.<sup>85</sup> As the ALJ noted, section 337 does not distinguish

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<sup>84</sup> As discussed above, source code cannot be run by a computer unless and until it is transformed into object code. However, as the ALJ found and as respondents conceded, source code is typically considered the primary software medium. The substance -- the intellectual property -- of software is most clearly embodied in the programmer's source code. Object code is merely a form of the software that the computer can "read." Indeed, respondents do not challenge the ALJ's finding that "all [forms of software] are equivalent because one form is easily and automatically produced from another form." Rather, they have only alleged that there is "no legal authority which provides that something that can 'easily and automatically' be transformed to produce a component constitutes or is equivalent to that 'component'." In effect, if source code could not be considered a component of a patented invention, then no software could ever be considered such a component. Yet it is clear that software can be a "component" of a patented invention. See ID at 162-163, and the authorities cited therein. Indeed, respondents' software falls within the realm of patentable subject matter.

<sup>85</sup> Section 337 provides:

(a) Unlawful activities; covered industries; definitions

\* \* \*

(continued...)

between direct, contributory, or induced infringement, and the Commission has adopted the ALJ's finding that section 337 incorporates the indirect forms of infringement provided for in the patent statute. Moreover, respondents did not cite any precedent for their narrow reading of section 337. Indeed, adoption of respondents' interpretation of the Commission's jurisdiction would overturn established Commission precedent.

As the ALJ correctly noted, both before and after the 1988 amendments to section 337, the Commission has consistently held that its remedial authority extends to violations of section 337 based on indirect infringement. For example, in *Certain Sputtered Carbon Coated Computer Disks and Products Containing Same, Including Disk Drives*, Inv. No. 337-TA-350 (1993), the Commission expressly stated that "[t]he term 'infringement' is not novel to the Commission, and the Commission has made it clear, at least with respect to the term 'infringement' in defining the scope of investigation, that the term 'infringement' embraces any direct, contributory and induced infringement."<sup>86</sup> In the *Fluoroelastomer* investigation, the Commission found that certain respondents had *contributorily* infringed the asserted patent, and thereby violated section 337.<sup>87</sup> In those investigations involving indirectly infringing articles, the Commission has issued remedial orders covering the articles that indirectly infringed the patent claims in issue and those determinations have been upheld on appeal.<sup>88</sup>

Finally, direct infringement does not have to precede importation for the Commission's remedial orders to reach the contributorily infringing components. As Quickturn noted, it is not a requirement of section 337 that the unfair trade practice to which the remedial order applies originate outside of the United States so long as such prohibited products or acts

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<sup>85</sup>(...continued)

(B) The importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles that --

(i) *infringe* a valid and enforceable United States patent or a valid and enforceable United States copyright registered under Title 17;

19 U.S.C. § 1337(a)(1)(B)(i) (emphasis added).

<sup>86</sup> *Certain Sputtered Carbon Coated Computer Disks and Products Containing Same, Including Disk Drives*, Inv. No. 337-TA-350 (1993) (*Computer Disks*).

<sup>87</sup> *Fluoroelastomer*, Comm'n Op. at 4, Unreviewed ID at 63-64; *see also Certain Apparatus for the Continuous Production of Copper Rod*, Inv. No. 337-TA-52, USITC Pub. No. 1017 at 18-19 (1979) (*Copper Rod*).

<sup>88</sup> *See, e.g., Lannom Mfg. v. U.S. International Trade Commission*, 231 USPQ 32 (Fed. Cir. 1986); *American Hosp. Supply Corp. v. Travenol Lab.*, 745 F.2d 1 (Fed. Cir. 1984).

reasonably relate to the unfair trade practice sought to be remedied.<sup>89</sup> Accordingly, we agree with the ALJ's finding that issuance of a limited exclusion order directed to respondents' software is necessary and appropriate to prevent respondents' continued violation of section 337.

**b. Whether the Order Should Reach Electronic Transmissions**

We have not adopted the ALJ's recommendation that our exclusion order (as distinct from our cease and desist order) prohibit the electronic transmission of respondents' infringing software. While the Commission has the legal authority to cover electronic importations, in exclusion orders the Commission directs Customs to exclude covered articles. In issuing exclusion orders, the Commission therefore accommodates, where possible, the policies and views of Customs. As discussed below, Customs has determined not to regulate electronic transmissions.<sup>90</sup> Consequently, we have not issued an exclusion order covering electronic transmissions. As explained below, however, we have determined that it is appropriate to reach such importations in the cease and desist order issued to domestic respondent Mentor.

**c. Whether to Require Commission Examination of all Imports**

We have not adopted Quickturn's proposal to direct Customs to exclude all of respondents' imported products "unless it is established to the Customs Services' satisfaction that the [Commission] has examined the product and determined or advised that such product is not subject to the exclusion order herein."<sup>91</sup> The Commission frequently issues exclusion orders covering complex products, such as the emulation systems at issue here, without including such a provision. Customs has scientific personnel and testing laboratories to allow it to determine whether imported products are covered by a Commission exclusion order. Quickturn has not presented a compelling reason for the Commission to deviate from its normal practice in this regard.

**B. A Permanent Cease and Desist Order**

**1. The ALJ's RD**

The ALJ also recommended that the Commission issue to domestic respondent Mentor a cease and desist order, which he stated was "necessary to prevent respondents' continued

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<sup>89</sup> See *Certain Sputtered Carbon Coated Computer Disks*, Inv. No. 337-TA-350, Comm'n Op. on Motion for Summary Determination, USITC Pub. 2701 (Nov. 1993).

<sup>90</sup> See General Note 16(b) to HTSUS; 19 C.F.R. § 1414.

<sup>91</sup> Quickturn's Proposed Exclusion Order at 3, ¶ 3.

violation of section 337."<sup>92</sup> He found that Mentor has a commercially significant inventory of infringing emulation systems justifying the issuance of a cease and desist order."<sup>93</sup> He also found that there is a direct nexus between respondents' importation of their software and infringement of the patents in issue.<sup>94</sup> After noting that the Commission "has broad discretion in selecting the form, scope, and extent of its remedy" and the fact that "the Commission has issued cease and desist orders directed to purely domestic activities," the ALJ recommended issuance of a cease and desist order prohibiting (a) the importation, sale for importation, or sale after importation of respondents' hardware logic emulation systems and components thereof covered by the patent claims in issue, (b) the advertisement, offer for sale, lease, loan, or other transfer, or distribution of covered products imported into the United States prior to the entry of the cease and desist order, (c) the aiding or abetting of other entities in the importation, sale for importation, or sale after importation of covered products, (d) the importation (including via electronic transmission), sale, offer for sale, lease, loan, other transfer, duplication, or distribution (including electronic distribution) of imported software and other components that contributorily infringe the patents in issue.<sup>95</sup>

## 2. The Parties' Comments

Respondents argued that the Commission should not issue a cease and desist order because Mentor has a [ ] of accused devices and components in the United States, [ " ]

]."<sup>96</sup> They further argued that any cease and desist order should not cover their imported software because "[a]ny cease and desist order must be limited to actions related to imported hardware logic emulation systems and components thereof that directly infringe the claims of the asserted patents."<sup>97</sup> Respondents also asserted that the Commission does not have the power to affect the use or duplication in the United States of any source code, engineering documents, technical documents, or tools because the Commission's jurisdiction is limited to prohibiting unfair acts in the importation, sale for importation, and sale after importation of infringing articles.

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<sup>92</sup> RD at 196.

<sup>93</sup> RD at 195

<sup>94</sup> *Id.*

<sup>95</sup> RD at 196-98.

<sup>96</sup> Respondents' Remedy Brief at 25.

<sup>97</sup> Reply Brief on Remedy, the Public Interest and Bonding on Behalf of Respondents Mentor Graphics Corporation and Meta Systems ("Respondents' Remedy Reply") at 2, n. 1.

Respondents argued that duplication is not an importation, sale for importation, or sale after importation of an article that infringes that is within the Commission's remedial authority.<sup>98</sup> In addition, they asserted that they intend to use imported source code only to generate object code that will operate only respondents' next-generation (and purportedly noninfringing) emulation systems. According to respondents, a restriction on duplication and use of their software "may hinder the legitimate use of their source code to develop a next generation emulation system that does not infringe any of Quickturn's patents."<sup>99</sup> They argued that preventing use of the source code would make manufacturing such a noninfringing, next-generation emulation system in the United States "unreasonably expensive."<sup>100</sup> Based on the foregoing, respondents urged that any cease and desist order permit them to duplicate and use the source code form of the software in issue to assist in the development of their new products.<sup>101</sup>

Respondents also argued that a cease and desist order that prohibited support, service, and related activities would be outside the Commission's jurisdiction. They asserted that the Commission does not have jurisdiction to affect such actions "because servicing and maintaining systems within the United States do not constitute unfair acts in the importation, sale for importation, or sale after importation of infringing articles."<sup>102</sup> Respondents also argued that the Commission does not have the authority to prevent exportation of their inventory, as requested by Quickturn, "because the Commission's jurisdiction is limited to prohibiting unfair acts in the importation, sale for importation, and sale after importation of infringing articles."<sup>103</sup> They pointed out that, in the past, the Commission has specifically exempted exportation from the activities prohibited by cease and desist orders.<sup>104</sup>

Quickturn argued that the Commission should issue a cease and desist order in light of

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<sup>98</sup> *Id.* at 2-3.

<sup>99</sup> Respondents' Remedy Brief at 25.

<sup>100</sup> Respondents' Remedy Reply at 4.

<sup>101</sup> Respondents' Remedy Brief at 24-25.

<sup>102</sup> Respondents' Remedy Reply at 8.

<sup>103</sup> *Id.* at 9.

<sup>104</sup> *Id.*, citing Order to Cease and Desist, *Certain Plastic Encapsulated Integrated Circuits*, Inv. No. 337-TA-315 (Feb. 18, 1992).

respondents' commercially significant U.S. inventory of infringing emulation systems.<sup>105</sup> Quickturn also agreed with the ALJ's recommendation that the cease and desist order should apply to any transfer, duplication, or distribution of respondents' software in the United States. It argued that the Commission's cease and desist orders can reach activities other than the importation of an article, including activities in the United States such as assembling and marketing, and inducing infringement or contributorily infringing in the United States.<sup>106</sup>

Quickturn pointed out that the Commission has found that respondents' software is a component of the infringing devices, and that it was created and is modified outside of the United States, and then transferred into the United States.<sup>107</sup> As such, according to Quickturn, the software "is plainly reachable by the Commission's cease and desist authority."<sup>108</sup> Indeed, Quickturn argued, "to not reach this product would be to ignore the direct nexus which exists between respondents' importation of this software and the infringement of the patents in issue" and would "permit respondents' continued infringement of the patents in issue in violation of section 337 by use of an imported product."<sup>109</sup>

Quickturn also argued that the Commission should include as part of its cease and desist order a provision prohibiting the electronic transfer of software for respondents' infringing emulation systems. According to Quickturn, "[a]n effective remedy must prohibit an electronic transfer of the infringing software."<sup>110</sup> Quickturn argued that respondents' statements regarding their intention to attempt to design around the claims of Quickturn's patents are "wholly insufficient to establish that respondents are, or will be, using the existing contributorily infringing Meta compilation software for a non-infringing purpose."<sup>111</sup> Rather, Quickturn asserted, having found a violation of section 337, the Commission should require respondents to obtain a Commission determination of noninfringement before any such activity is permitted.

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<sup>105</sup> Quickturn's Remedy Brief at 11.

<sup>106</sup> *Id.* at 8, citing *Certain Molded-In Sandwich Panel Inserts* [] (Modification proceeding), Order to Cease and Desist, ¶ 3, USITC Pub. 1297 (Oct. 1982); *Certain Curable Fluoroelastomer Composition and Precursors Thereof*, Inv. No. 337-TA-364, Comm'n Op. at 5, USITC Pub. 2890 (March 1995); and cases cited in the ID, at 195-197.

<sup>107</sup> *Id.*, citing ID at 162-166, FF 484-505.

<sup>108</sup> *Id.* at 9.

<sup>109</sup> *Id.*

<sup>110</sup> *Id.*

<sup>111</sup> Quickturn's Remedy Reply at 19.

Quickturn asserted that respondents' request to be permitted to duplicate the existing infringing software "raises immediate doubts and concerns of the infringing nature of the allegedly redesigned [emulation system]."<sup>112</sup> In support of its position, Quickturn asserted that "the Commission can and will reach even staple articles of commerce when actual infringing use thereof within the United States by a respondent is likely, as demonstrated by past Commission decisions."<sup>113</sup> According to Quickturn, the ALJ's proposed relief, which would reach duplication of respondents' software "in every instance is tied to imported products used to infringe Quickturn's patents" and "is also entirely consistent with the broad remedial sweep of section 337."<sup>114</sup>

Quickturn argued that the Commission's cease and desist order should also prevent respondents from exporting their U.S. inventory because those products "[have been] and may be used by Mentor in a manner which violates both § 271(a) and § 271(f) of Title 35 of the United States Code."<sup>115</sup> Those provisions of the patent law prohibit, *inter alia*, the exportation of "all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States."<sup>116</sup> According to Quickturn, the combining outside of the United States of respondents' hardware emulation systems and products, which are in inventory in the United States, with their software [ ], or with each other to develop their hardware emulation systems, would constitute a violation of section 271(f).<sup>117</sup> Such acts, Quickturn asserted, constitute infringement under U.S. law and therefore violate section 337. Based on that reasoning, Quickturn argued that the Commission's cease and desist order should prohibit exportation.

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<sup>112</sup> *Id.* at 18.

<sup>113</sup> *Id.* at 15, citing *Certain Curable Fluoroelastomer Compositions and Precursors Thereof*, Inv. No. 337-TA-364, USITC Pub. 2890 (May 1995).

<sup>114</sup> *Id.* (emphasis in original), citing S. Rep. 67-595, 67th Cong., 2nd Sess., 3 (1922).

<sup>115</sup> Quickturn's Remedy Brief at 11.

<sup>116</sup> *Id.* at 13-14.

<sup>117</sup> *Id.* Quickturn also argued that, if respondents have exported inventory during the period of the temporary relief for a use that would violate section 271(f), they should be required to forfeit the bond posted thereon to Quickturn. *Id.*

The IAs argued in favor of issuance of a Commission cease and desist order.<sup>118</sup> They argued that such an order should prohibit duplication of respondents' software, contending that "[t]he ease of electronic duplication of software would convert any exemption for duplication of previously imported software into a license for the limitless growth of respondents' domestic inventory of imported infringing software."<sup>119</sup> According to the IAs, because that software was created in France and imported into the United States, the Commission may prohibit respondents from duplicating it in the United States.<sup>120</sup>

### 3. Discussion

#### a. Whether to Issue a Permanent Cease and Desist Order

We have adopted the ALJ's recommendation and determined to issue a permanent cease and desist order in this investigation. Under section 337(f)(1), the Commission can issue cease and desist orders in addition to, or instead of, an exclusion order.<sup>121</sup> The Commission traditionally has issued cease and desist orders when "commercially significant" inventories of infringing goods are present in the United States.<sup>122</sup> As the ALJ noted, we previously stated in

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<sup>118</sup> IA's Remedy Brief at 11-14.

<sup>119</sup> IAs' Remedy Reply at 9.

<sup>120</sup> *Id.*

<sup>121</sup> Section 337(f)(1) provides:

In addition to, or in lieu of, taking action under subsection (d) . . . of this section, the Commission may issue and cause to be served on any person violating this section . . . an order directing such person to cease and desist from engaging in the unfair methods or acts involved [unless precluded by consideration of enumerated public interest factors.]

19 U.S.C. § 1337(f) (emphasis added). The Commission's purpose in issuing cease and desist orders in patent-based cases has been to afford complete relief to complainants where infringing goods are already present in the United States, and thus cannot be reached by issuance of an exclusion order. *See, e.g., Certain Compound Action Metal Cutting Snips*, Inv. No. 337-TA-197, Commission Opinion at 5-7. Unlike an exclusion order, which is enforced by the U.S. Customs Service, a cease and desist order is an *in personam* order typically directed to a party in the United States and is enforced by the Commission, not Customs.

<sup>122</sup> *See, e.g., Certain Condensers, Parts Thereof and Products Containing Same, Including Air* (continued...)

this investigation, in connection with issuance of the temporary cease and desist order, that:

We believe that the presence of even one of the Meta units [ ] in the United States would constitute "commercially significant inventory," which the Commission traditionally has found warrants the issuance of a cease and desist order.<sup>123</sup>

The record shows that respondents currently have [ ] imported emulation systems in inventory.<sup>124</sup> Thus, we agree with the ALJ that respondents have a commercially significant inventory justifying the issuance of a cease and desist order.<sup>125</sup>

**b. Whether the Cease and Desist Order Should Cover Software**

As stated previously, we have broad discretion in selecting the form, scope, and extent of our remedy.<sup>126</sup> Contrary to respondents' argument that our remedial authority is limited to the actual process of importation, we have, where appropriate, issued cease and desist orders directed to purely domestic activities.<sup>127</sup> As the ALJ noted, our remedial authority under

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(...continued)

*Conditioners for Automobiles*, Inv. No. 337-TA-334, Commission Opinion at 26-28 (August 1997); *Certain Crystalline Cefadroxil Monohydrate*, Inv. No. 337-TA-293 (March 1990); *Certain Nonwoven Gas Filter Elements*, Inv. No. 337-TA-275, USITC Pub. 2129 (September 1988); *Certain Compound Action Metal Cutting Snips*, Inv. No. 337-TA-197, USITC Pub. 1831 (March 1986).

<sup>123</sup> *Certain Hardware Logic Emulation Systems and Components Thereof*, Inv. No. 337-TA-383 (Temporary Relief) Comm'n Op. at 9-10.

<sup>124</sup> ID, FF 530.

<sup>125</sup> As indicated above, respondents are enjoined from selling that inventory in the United States under the terms of the district court preliminary injunction. However, because that injunction is preliminary and therefore may be dissolved or modified, we do not believe that the existence of the injunction should affect our consideration of whether to issue a cease and desist order.

<sup>126</sup> See, e.g., *Hyundai Electronics Industries Co. Ltd. v. U.S. International Trade Commission*, 899 F.2d 1204 (Fed. Cir. 1990).

<sup>127</sup> See, e.g., *Certain Compound Action Metal Cutting Snips and Components Thereof*, Inv. No. 337-TA-197, Commission Action and Order (July 1985) (issuing cease and desist orders prohibiting domestic respondents from passing off in United States); *Certain Apparatus for*  
(continued...)

section 337 is:

not limited to proscribing only those acts which occur during the actual physical process of importation. . . . Congress intended section 337 to attack only unfair trade practices which relate to imported products. It then becomes crucial to discern some nexus between unfair methods or acts and importation before this Commission has power to act.<sup>128</sup>

Our remedial authority extends to the prohibition of all acts reasonably related to the importation of infringing products and is not limited to articles that directly infringe a United States patent. As indicated above, it is not a requirement of section 337 that the unfair trade practice to which the remedial order applies originate outside of the United States.<sup>129</sup> In addition, unfair trade practices can be reached by section 337 when such practices involve a "sale within the U.S. after importation" by an importer or an owner.<sup>130</sup>

In this investigation, we have already adopted the ALJ's finding that respondents' hardware logic emulation software contributorily infringes several of the patent claims at issue.<sup>131</sup> We also adopted his finding that no U.S. customer would purchase respondents' emulation system, domestically manufactured or imported, if the customer did not have access to respondents' software, because the system would be inoperable without the accompanying software.<sup>132</sup> It also is undisputed that the software necessary to operate the accused Meta

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<sup>127</sup>(...continued)

*Installing Electrical Lines and Components Therefor*, Inv. No. 337-TA-196, Comm'n Op. at 16 and n.24 (June 1986) (issuing cease and desist order prohibiting false advertising or passing off in the United States); *Certain Plastic Food Storage Containers*, Inv. No. 337-TA-152, Commission Action and Order at 10-11 (July 1984) (issuing cease and desist order prohibiting respondent's representations in the United States concerning interchangeability with complainant's product).

<sup>128</sup> *Welded Stainless Steel Pipe* at 11.

<sup>129</sup> *See Certain Sputtered Carbon Coated Computer Disks*, Inv. No. 337-TA-350, Comm'n. Op. on Motion for Summary Determination, USITC Pub. 2701 (Nov. 1993).

<sup>130</sup> 19 U.S.C. § 1337(a)(1)(B).

<sup>131</sup> ID at 171.

<sup>132</sup> FF 487, FF 482, FF 499.

systems [ ].<sup>133</sup> Thus, there is a direct nexus between respondents' imported contributorily infringing components, including software, and infringement of the patents in issue. We therefore agreed with the ALJ's recommendation and have issued a cease and desist order covering respondents' contributorily infringing software.

**c. Whether the Cease and Desist Order Should Cover Electronic Transmissions of Respondents' Software**

We also have adopted the ALJ's recommendation that the cease and desist order prohibit the electronic transmission of respondents' software. It is well settled that the scope of section 337 is "broad enough to prevent every type and form of unfair practice."<sup>134</sup> Software is useful only if it is reduced to an electronic form. Consequently, in applying the cease and desist order to respondents' software when it is transmitted in an electronic form (e.g., [ ]), we are simply preventing the transfer of the infringing software in the very form in which it is executed by the computer.

Indeed, a cease and desist order that did not prohibit electronic transmission would be meaningless as to the software since respondents would be free simply to transmit the software electronically to a U.S. customer, who could then copy it onto a diskette or other tangible medium for use with an infringing emulation system. As the ALJ noted, the Commission clearly could and should reach software if it were sought to be transferred on a CD-ROM or diskette. We agree with Quickturn that it would be anomalous for the Commission to be able to stop the transfer of a CD-ROM or diskette containing respondents' software, but not be able to stop the transfer of that very same software when transmitted in machine readable form by electronic means.

We do not think that the legislative history of section 337 precludes coverage of electronically transmitted software; in fact, we believe it supports the conclusion that such coverage is proper. As the ALJ noted, in passing the 1988 amendments to section 337, Congress stated that the predecessor version of section 337 "was designed to cover a broad range of unfair acts" and that the purpose of the 1988 amendments was "to strengthen the effectiveness of section 337 in addressing the growing problems being faced by U.S.

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<sup>133</sup> FF 502-505, FF 499, FF 488, FF 484-486, FF 15.

<sup>134</sup> See *Certain Welded Stainless Steel Pipe and Tube*, Inv. No. 337-TA-29, USITC Pub. 863, Opinion of Commissioners Minchew, Moore and Alberger at 39 (1978), quoting S. Rep. 595, 67th Cong., 2d Sess., at 3; *Certain Devices for Connecting Computers via Telephone Lines*, Inv. 337-TA-360, Comm'n Op. at 13-14 (December 12, 1994) ("the legislative history does make clear . . . the broad scope permitted for section 337 remedial orders.").

companies from the importation of articles which infringe U.S. intellectual property rights."<sup>135</sup> Thus, a cease and desist order that covers the electronic transmission of respondents' infringing software would be consistent with the 1988 amendments to section 337, which were intended to make section 337 a "more effective remedy" for the protection of the rights of patentees. To be fully effective, the cease and desist order must cover electronic transmission of respondents' infringing software.

We do not find persuasive respondents' argument that Customs guidelines, while not dispositive, "are nevertheless indicative of whether [Commission] jurisdiction can be had" over electronic transmissions. Specifically, respondents noted that telecommunications transmissions are specifically exempted from the Harmonized Tariff Schedule of the United States (HTSUS). However, as respondents conceded and as the ALJ found, "the Commission's remedial power under section 337 is not necessarily limited by any view of the U.S. Customs Service."<sup>136</sup>

Customs determined not to regulate electronic telephonic transmissions because it believed that it "does not have a legitimate interest or responsibility to tap as sources of revenue or statistics electronic transmission and reception of data across international borders."<sup>137</sup> Our remedial powers are fundamentally different in that we are responsible for effectively remedying violations of section 337. We agree with Quickturn that our remedy would be rendered significantly less effective if it did not extend to electronic transmissions of software.

A better analogy, if one is to be drawn, would be to the Department of Commerce's Bureau of Export Administration ("BXA"), which not only regulates the electronic transmission of data, but also specifically regulates the transmission of source code and object code over the Internet.<sup>138</sup> BXA's mandate in regulating such transmissions is to ensure the effectiveness of U.S. export control laws which extend to certain sophisticated computer software. If BXA did not reach electronic transmissions of that software, those controls would be ineffectual. Our mandate to ensure the effective protection of U.S. intellectual property rights through the prohibition against transfers of infringing products, including software, arguably is more akin to BXA's mandate than it is to Custom's interest in collecting revenue and statistics on import transactions. For this reason, we have determined that the cease and desist order should cover respondents' infringing software in whatever form it is transferred.

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<sup>135</sup> S. Rep. 100-71, 100th Cong., 1st Sess., at 128; *see also* H.R. Rep. No. 100-576 at 633.

<sup>136</sup> ID at 190.

<sup>137</sup> *Re: The Tariff Classifications of an Electronically Transmitted Computer File, from Mongolia*, 1993 U.S. Custom NY Lexis 396, NY 881983 (Feb. 3, 1993).

<sup>138</sup> *See* 15 C.F.R. § 734.2.

**d. Whether the Cease and Desist Order Should Prohibit Exports**

We have determined not to prohibit respondents from exporting infringing emulation systems or components thereof, as urged by Quickturn.<sup>139</sup> In our view, we do not have the statutory authority to prohibit the export of respondents' infringing inventory. Section 337(f) authorizes the Commission to issue a cease and desist order directing respondents to cease violating section 337 through unfair acts.<sup>140</sup> Section 337(a) defines a violation of that section in pertinent part to be "[t]he importation into the United States, the sale for importation, or the sale within the United States after importation . . . of articles that infringe a valid and enforceable United States patent."<sup>141</sup> Thus, while we have broad discretion to fashion a cease and desist order that provides complete and effective relief for violations of section 337, the exportation of respondents' inventory for sale abroad is not within the purview of activities prohibited by section 337 and therefore cannot be reached by a Commission cease and desist order. In fact, our cease and desist orders typically expressly exclude exportation from their prohibitions.<sup>142</sup>

**e. Whether the Cease and Desist Order Should Require Respondents to Report All Imports**

We have adopted the ALJ's recommendation that the cease and desist order contain a provision requiring respondents to report to the Commission every importation of any hardware logic emulation system or components thereof, including software. In the first instance, we note that the Commission must administer the bond, if any, posted by respondents under the cease and desist order. We therefore must be able to determine whether the bond is to be returned to respondents or forfeited to Quickturn.

We also agree with the ALJ that the reporting requirement will greatly assist us in enforcing the cease and desist order as it relates to respondents' contributorily infringing software, which may be imported via electronic transmission. Respondents' only objections to such a requirement were that it would be onerous and that it would impermissibly require them to report domestic activities. We do not find either objection to be persuasive. Since our remedial orders prohibit respondents from importing any infringing products, the reporting requirement should not be onerous. In addition, since the reporting requirement would apply only to imported products or to Mentor's domestic activities that directly relate to imported

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<sup>139</sup> Quickturn did not raise this issue before the ALJ and his RD did not address it.

<sup>140</sup> 19 U.S.C. § 1337(f)(1).

<sup>141</sup> 19 U.S.C. § 1337(a)(1)(B).

<sup>142</sup> *See, e.g.*, Cease and Desist Order, Certain Plastic Encapsulated Integrated Circuits, Inv. No. 337-TA-315.

products, the requirement is within our remedial authority.<sup>143</sup>

**f. Whether The Cease and Desist Order Should Prohibit Servicing Previously Imported Emulation Systems**

We have determined that the cease and desist order should prohibit respondents' activities in connection with servicing its customers. We have adopted the ALJ's finding that respondents' emulation systems directly infringe the asserted claims of Quickturn's patents. In servicing those systems, respondents would be actively and knowingly aiding and abetting their customers' direct infringement, *i.e.*, they would be inducing infringement. Thus, respondents' servicing of their emulation systems amounts to induced infringement of Quickturn's patents in violation of section 337 and must be prohibited by the cease and desist order.<sup>144</sup>

**g. Whether The Cease and Desist Order Should Cover Mentor's Importations of Software For In-House Use**

Respondents have argued that the Commission's remedial orders should exclude from their coverage software that they import for use in designing an emulation system that does not infringe Quickturn's patents. As stated above, we have adopted the ALJ's finding that respondents' software contributorily infringes several claims in Quickturn's patents when used in conjunction with respondents' hardware emulation systems. Thus, respondents' importation of their software for use on their emulation systems, whether by third parties or by respondents themselves, would violate section 337 and, in our view, must be prohibited by our remedial orders. We have in the past issued remedial orders covering activities that, viewed in isolation, might be permissible, but which could easily be conducted in association with infringing activities.<sup>145</sup> Accordingly, we have adopted the ALJ's recommendation that the cease and desist order extend to the duplication and in-house use of respondents' software because of the risk that respondents will test such software on their emulation systems in a way that infringes Quickturn's patents.

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<sup>143</sup> See *Certain Welded Stainless Steel Pipe and Tube*, Inv. No. 337-TA-29, USITC Pub. 863, Opinion of Commissioners Minchew, Moore and Alberger at 11 (1978).

<sup>144</sup> See *Flash Memory*, Comm'n Opinion at 16, citing *Manville Sales Corp. v. Paramount Sys. Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990). See also *Certain Headboxes and Papermaking Machine Forming Sections for the Continuous Production of Paper, and Components Thereof*, Inv. No. 337-TA-82, USITC Pub. No. 1138 at 18-19 (1981).

<sup>145</sup> See, *e.g.*, *Certain Personal Computers and Components Thereof*, Inv. No. 337-TA-140, USITC Pub. 1504 (March 1984), Comm'n Op. at 45 (exclusion order covered ROM-less personal computers to "avoid evasion" of the order).

**D. Whether the Remedial Orders Should Cover Repair and Replacement Parts**

As discussed above, we have found that respondents' software and other components contributorily infringe Quickturn's patents. As the Supreme Court has stated, "the traditional rule is that even repair [of an infringing article] constitutes infringement."<sup>146</sup> Accordingly, our exclusion order covers such components.

In arguing for an exception to the exclusion order for replacement parts, Bull placed considerable emphasis on the harm that it might suffer if replacement parts for the emulation systems its parent company purchased from respondents do not remain available in the United States.<sup>147</sup> Specifically, Bull has maintained that it requires respondents' emulation system to [ " ]."<sup>148</sup> Bull stated that switching to Quickturn's emulation system is not feasible because it "[

]."

However, Bull has stated that [ " ]."<sup>149</sup> Thus, Bull has stated that the harm it would incur from an exclusion order covering replacement parts would relate to [ ], which it has indicated [ ].

At the time we granted an exception for replacement parts in our temporary exclusion order, Bull did not plan to use the infringing emulation system [ ].<sup>150</sup> It was not until closing arguments in the permanent relief phase of this investigation that counsel for Bull indicated that Bull was using respondents' emulation system

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<sup>146</sup> *Aro Manufacturing Co. v. Convertible Top Co.*, 377 U.S. 476, 480 (1963) (*Aro II*).

<sup>147</sup> Bull's Remedy Brief at 11-15.

<sup>148</sup> Post-Hearing Statement of Bull HN Information Systems, Inc. Concerning the Issues of Remedy and the Public Interest at 2.

<sup>149</sup> *Id.* Bull originally estimated that [ ].  
*See* PEO Tr. at 1034-35.

<sup>150</sup> CX481 at 26-27. In testimony given after the Commission issued temporary relief in this investigation, Bull's Vice President and Treasurer testified that [ ]. CX481 at 21. See also CX295 at 2 ("[

].").

"[ ]<sup>151</sup> We see no reason to permit Bull to obtain replacement parts for its emulation system [ ]. We only granted an exception for replacement parts in the temporary exclusion order, *inter alia*, to protect innocent third party purchasers. We expressly stated that "[s]uch an exception would prevent disruption to the business operations of Mentor's customers during the pendency of this investigation, and grant them time to prepare for the possibility of a permanent exclusion order, which probably would not include such an exception."<sup>152</sup>

Bull had in excess of 15 months after receiving notice that the Commission found reason to believe that respondents' emulation systems infringe Quickturn's patents to make any necessary arrangements to avoid disruptions to its operations occasioned by issuance of a permanent exclusion order that covers replacement parts. For any new projects, Bull can utilize a non-infringing emulation system. Indeed, [

].<sup>153</sup> In addition, Quickturn has indicated that it could supply Bull with such a system without disruption to Bull's U.S. operations.<sup>154</sup> Finally, we note that respondents [

].<sup>155</sup> Thus, we see no compelling reason to permit Bull to have continuing access to infringing components through an exemption in our remedial orders.<sup>156</sup>

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<sup>151</sup> PEO Tr. at 3359-3360 (emphasis added). It was not until after the ALJ issued his RD on permanent relief that Bull maintained that [ ]. Bull's Remedy Brief at 2.

<sup>152</sup> Comm'n Op. at 6.

<sup>153</sup> See, e.g., CX295 at 12.

<sup>154</sup> PEO Tr. at 688-89.

<sup>155</sup> ID at FF 529 (citations omitted). We note that [

]. See CX479 at 93.

<sup>156</sup> The Commission has refused to exempt from the scope of a temporary exclusion order replacement parts where there were no compelling equitable considerations warranting such an exception. Specifically, in *Certain Dielectric Miniature Microwave Filters and Multiplexers* (continued...)

Other than Bull, none of respondents' U.S. customers has urged the Commission to permit the importation of replacement parts, despite the Commission's notice seeking comments on the appropriate remedy. As the ALJ found, those U.S. customers, like Bull, knew, or should have known, of the Commission's views regarding replacement parts as expressed in our temporary relief opinion. We see no equitable considerations that would warrant an exception for replacement parts for those customers. In addition, as the ALJ noted, respondents [ ], and Quickturn's emulation systems are available as replacements for respondents' infringing emulation systems.<sup>157</sup>

## II. The Public Interest

### A. The Parties' Comments

Respondents reiterated their position that the Commission should not enter "a broadly worded [remedial] order [that] would unnecessarily deter innovation and . . . improperly dangle over Mentor the specter of enforcement proceedings to be initiated by Quickturn."<sup>158</sup> In addition, respondents argued that "[a]llowing Mentor to domestically develop non-infringing systems based on Meta's technology would provide much needed competition [in the U.S. market] and provide the advanced technology that many semiconductor manufacturers have been waiting for, technology that is already available to their foreign competitors."<sup>159</sup>

Quickturn argued that, "[a]s the Commission noted in the temporary relief proceedings, the public interest favors the protection of intellectual property rights."<sup>160</sup> It further stated that it "remains able to supply the emulation needs of the U.S. market in an entirely satisfactory

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<sup>156</sup>(...continued)

*Containing Same*, Inv. No. 337-TA-359, USITC Pub. 2787, Comm'n Op. on Modification of the Initial Determination, and on the Remedy, the Public Interest, and Complainant's and Respondent's Bond at 8 (May 1994), the Commission declined to grant an exception for replacement parts in a temporary exclusion order where it appeared that the third party purchasers knew or should have known that the imported devices likely infringed a valid U.S. patent.

<sup>157</sup> ID at 193.

<sup>158</sup> Respondents' Remedy Brief at 10.

<sup>159</sup> Respondents' Remedy Reply at 15.

<sup>160</sup> Quickturn's Remedy Brief at 19.

manner."<sup>161</sup> Quickturn agreed with the Commission's statement in its temporary relief opinion that hardware logic emulators are not the type of product that in the past has resulted in public interest concerns. Finally, Quickturn stated that "[t]here have been no indications that the public interest has been harmed during the temporary relief proceedings even though U.S. consumers have been largely without respondents' product."<sup>162</sup>

The IAs stated that there is no evidence indicating that their proposed exclusion order and cease and desist order would have "a significant wide-spread impact on the public interest."<sup>163</sup> They asserted that the evidence indicates that Quickturn is capable of supplying the hardware logic emulation requirements of domestic users. According to the IAs, respondents "have also failed to establish that there is a significant likelihood that the proposed relief would substantially impact the industries that purchase hardware logic emulation systems."<sup>164</sup> They also stated that "it is in the public interest to protect a domestic industry's exclusive rights in its intellectual property," particularly in this case where "a relatively small entity owning intellectual property rights is threatened by infringing goods of a competitor with much greater financial and marketing resources."<sup>165</sup> Finally, they too agreed with the Commission's conclusion, expressed in its temporary relief opinion, that "hardware logic emulators are not the type of product that has in the past raised public interest concern (such as, for example, drugs or medical devices)...."<sup>166</sup>

## B. Discussion

Before granting relief, the Commission must consider the effect that such relief would

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<sup>161</sup> *Id.*

<sup>162</sup> *Id.* Quickturn also noted that since the issuance of the Commission's temporary relief orders, the federal district court in Oregon has issued a preliminary injunction against respondents, halting the sale of their infringing emulators in the United States. Quickturn asserted that the district court injunction "would indicate that the district court's assessment of the public interest is the same as the Commission's, i.e., there is no harm to the public interest from preventing respondents' sales of the infringing products in the U.S. market." *Id.*

<sup>163</sup> IAs' Remedy Brief at 14.

<sup>164</sup> *Id.* at 14-15.

<sup>165</sup> *Id.*, citing *Certain Cellular Radiotelephones and Subassemblies and Component Parts Thereof*, Inv. No. 337-TA-297, Order No. 21: Initial Determination Granting Complainant's Motion for Temporary Relief at 149 (August 22, 1989).

<sup>166</sup> *Id.*, citing Commission Opinion On Remedy, The Public Interest, And Bonding at 14 (August 12, 1996).

have on “the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers.”<sup>167</sup> The legislative history of this provision indicates that the Commission should decline to issue relief only when the adverse effect on the public interest would be greater than the interest in protecting the patent holder.<sup>168</sup>

We addressed the issue of the public interest when we granted temporary relief in this investigation, and we concluded then that “the statutory public interest factors do not preclude issuance of relief in this investigation.”<sup>169</sup> We agree with Quickturn that nothing has changed since the Commission issued temporary relief that warrants a different conclusion now. Respondents have only argued that the Commission’s remedial orders should not prohibit them from designing around Quickturn’s patents and establishing domestic production of noninfringing emulation systems. Nothing in the proposed remedial orders should prohibit respondents, who have extensive resources in the United States and abroad, from accomplishing either goal. Accordingly, we do not believe that the statutory public interest factors preclude issuance of the proposed relief in this investigation.

### III. The Appropriate Bond Amount

#### A. The ALJ’s RD

The ALJ recommended that respondents’ bond during the 60-day Presidential review period be set at 180 percent in view of the fact that respondents [

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<sup>167</sup> 19 U.S.C. §§ 1337(d) and (f). See also *Rosemount v. United States Int’l Trade Comm’n*, 15 U.S.P.Q.2d at 1572, 910 F.2d 819 (Fed. Cir. 1990). In *Rosemount*, the Federal Circuit, in affirming the *Pressure Transmitters* decision, stated:

We also agree with the Commission’s rejection of the view that the public interest inevitably lies on the side of the patent owner because of the public interest in protecting patent rights . . . other public interest factors are delineated in the above-quoted section 1337(e)(1) and must be taken into account.

*Rosemount*, 910 F.2d at 822, 15 U.S.P.Q.2d at 1572.

<sup>168</sup> See S. Rep. 1298, 93rd Cong., 2d Sess. 197 (1974).

<sup>169</sup> Commission Opinion On Remedy, The Public Interest, And Bonding at 14 (August 12, 1996).

].<sup>170</sup> Specifically, the ALJ applied the Commission's method of calculating the temporary relief bond and further recommended that the Commission factor in [ ], "because the [

]."<sup>171</sup> Based on what he referred to as the "current record," the ALJ recommended that a bond in the amount of 180 percent of entered value be imposed during the Presidential review period, which represents [ ]].

## B. The Parties' Comments

Quickturn supported "the general reasoning and methodological approach recommended by the ALJ" with respect to the appropriate bond during the Presidential review period.<sup>172</sup> However, Quickturn argued that the absolute amount of the bond recommended by the ALJ -- 180 percent -- should be set at a higher level, specifically, [ ] percent of entered value. Quickturn contended that in order to protect it from injury, respondents' bond "must, at minimum, account for the gross margin respondents earn on the sales of their emulation hardware and support services."<sup>173</sup> It asserted that this margin is [ ]. Such a bond amount, Quickturn argued, would protect it "by largely taking the profit out of respondents' infringement" and is "supported by an examination of Quickturn's lost gross profits on the same basis, which is about 108% [

]."<sup>174</sup> Quickturn argued that gross profit is an appropriate measure of the harm to it because such an amount would deprive respondents of any benefit from their sales under bond, and thereby "secure to Quickturn the benefit it would have received except for respondents' sales."<sup>175</sup> In other words, Quickturn asserted that only by removing respondents' gross profits can the Commission "completely offset the injury to

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<sup>170</sup> RD at 181-83.

<sup>171</sup> RD at 182, citing SX21; FF 516-520. The ALJ also found that respondents have publicly represented that "the 43 percent bond now in place has no effect on their ability to make products available in the U.S. market." *Id.*, FF 522. In addition, he found that "the record shows that complainant has sustained actual harm during the pendency of this investigation due to lost sales to respondents, in spite of the current 43 percent TEO bond." *Id.* at 182-83, FF 523-527.

<sup>172</sup> Quickturn's Remedy Brief at 15.

<sup>173</sup> *Id.* at 16.

<sup>174</sup> *Id.*

<sup>175</sup> *Id.*

Quickturn from lost sales, because the injury to Quickturn is what it would have earned in gross profit but lost as a result of the sale by respondents.”<sup>176</sup>

Quickturn further argued that “[b]ecause respondents are [ ], an adjustment had to be made to take account of [ ].”<sup>177</sup> Substituting the requested [ ] amount for the 43 percent amount used by the Commission, Quickturn arrived at a bond amount of [ ].<sup>178</sup> Alternatively, Quickturn requested that, if the Commission determines to adopt a two-tier bond for the Presidential review period, it should set that bond at [ ] for imports appraised at transaction value and [ ] for imports appraised at other than transaction value.<sup>179</sup> Finally, Quickturn took issue with respondents’ contention that it has not been harmed during the temporary relief period, stating that respondents “sales, and offers for sale [during the temporary relief period], have harmed Quickturn; [ ].”<sup>180</sup>

Respondents objected to the ALJ’s finding that the 43 percent temporary relief bond had no effect on their ability to make products available in the U.S. market, and to his finding that the record shows that Quickturn has sustained actual harm during the pendency of this investigation due to lost sales to respondents.<sup>181</sup> According to respondents, “the record indicates that the temporary exclusion order [

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<sup>176</sup> *Id.*

<sup>177</sup> *Id.* at 17.

<sup>178</sup> *Id.*, citing Complainant Quickturn’s Post-Hearing Brief on Permanent Relief at 142.

<sup>179</sup> *Id.* at 17-18. Quickturn further urged that since “[t]here is no guarantee that [ ],” it would be appropriate for the Commission simply to use the higher bonding amount as the bonding amount during the Presidential review period and make any necessary adjustments in the forfeiture proceedings required before the bond actually is forfeited to Quickturn. *Id.* at 18.

<sup>180</sup> Quickturn’s Remedy Reply at 20.

<sup>181</sup> Respondents’ Remedy Brief at 26-29.

].”<sup>182</sup> They maintained that “[

].”<sup>183</sup> [

“

].”<sup>184</sup> [

“

].”<sup>185</sup>

Respondents noted that the Commission previously rejected Quickturn’s arguments that a bond should be based on Mentor’s profits or Quickturn’s lost profits.<sup>186</sup> They argued that, even if profit margins had any relevance to a bonding calculation, “Quickturn’s calculation of respondents’ gross profit margin must be rejected” because “[

].”<sup>187</sup> Respondents also contended that Quickturn has improperly attempted to include [ ] in its bonding calculations, even though [ ] would not be relevant to a damages calculation in a federal district court patent infringement suit.<sup>188</sup>

Respondents asserted that “[t]he evidence in the record indicates that the TEO bond of 43% of entered value has been sufficient to protect Quickturn from injury and that an increase from the original TEO bond is not warranted.”<sup>189</sup> They argued that the ALJ’s findings that [ ] is inappropriately “based on [

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<sup>182</sup> *Id.* at 26, citing CX493C, Reblewski Dep. Tr., 903.

<sup>183</sup> *Id.*, citing Reblewski dep. Tr., 903 and CX-90.

<sup>184</sup> *Id.* at 27-28.

<sup>185</sup> *Id.*

<sup>186</sup> Respondents’ Remedy Reply at 12.

<sup>187</sup> *Id.* at 12-13 (emphasis in original).

<sup>188</sup> *Id.*, citing *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1551 (Fed. Cir. 1995).

<sup>189</sup> Respondents’ Remedy Brief at 26.

J.”<sup>190</sup> Based on the foregoing, respondents urged the Commission to set the 60-day Presidential review period bond at “no more than the TEO bond of 43% of entered value.”<sup>191</sup>

The IAs stated that the two-tiered bonding provision now applicable to the temporary remedial orders “remains appropriate to protect Quickturn against losses resulting from any importations and sales by respondents during the sixty-day Presidential review period.”<sup>192</sup> They argued that respondents’ assertions concerning the impact of the temporary exclusion order and temporary cease and desist order upon respondents’ profitability and on their sales of imported infringing goods “are misdirected.”<sup>193</sup> Rather, the IAs asserted, “the focus of bonding analysis is to determine the amount necessary to protect complainant against any injury.”<sup>194</sup> Accordingly, the IAs supported adoption during the Presidential review period of the two-tiered bonding provision applicable under the temporary remedial orders.

### C. Discussion

If the Commission enters an exclusion order and/or a cease and desist order, respondents may continue to import and sell their products during the Presidential review period under a bond in an amount determined by the Commission to be “sufficient to protect the complainant from any injury.”<sup>195</sup> On September 24, 1997, after taking into account the ALJ’s RD, we reiterated our determination that, to protect Quickturn from injury, the amount of respondents’ bond should include the amount of respondents’ price under-selling and an amount sufficient to offset lost revenues that Quickturn would have dedicated to research and development if it had made the sales that respondents captured. We determined that amount to be 43 percent of entered value.

However, we also modified the temporary relief bond and established a two-tier

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<sup>190</sup> *Id.* at 27-28.

<sup>191</sup> *Id.* at 28. Respondents also objected to the provision in Quickturn’s proposed cease and desist order that would require automatic forfeiture of the bond posted by respondents in the event of Presidential approval of the Commission’s decision, noting that, under the Commission’s rules (*i.e.*, rule 210.50), a bond cannot be released absent a motion and forfeiture hearing. Respondents’ Remedy Reply at 13.

<sup>192</sup> IAs’ Remedy Brief at 16-17.

<sup>193</sup> IAs’ Remedy Reply at 12.

<sup>194</sup> *Id.* at 12-13, citing 19 U.S.C. §1337(e)(1), (j)(3); Commission Opinion On Remedy, The Public Interest, And Bonding at 17-21 (August 12, 1996).

<sup>195</sup> 19 U.S.C. § 1337(j)(3); 19 C.F.R. § 210.50.

bonding structure of 43 percent for all entries appraised by Customs at transaction value and 180 percent for all entries appraised by Customs using a valuation method other than transaction value.<sup>196</sup> We established the second tier bond amount of 180 percent only to ensure that the amount of any revenue ultimately forfeited to Quickturn remained at the 43 percent level in the event respondents' importations were appraised using a valuation method other than transaction value. We do not think that respondents' attacks on the existing bond structure warrant a change in the bond rate.

In particular, respondents asserted that Quickturn has not been harmed during the temporary relief period and that the ALJ's findings with respect to [ ] are unsupported by the record. However, it is clear that respondents made [ ] during the temporary relief period. With respect to the amount that Quickturn should be compensated to offset any harm resulting from respondents' sales, respondents are correct in noting that we previously rejected Quickturn's arguments that a bond should be based on respondents' profits or Quickturn's lost profits.<sup>197</sup> Quickturn has not offered any reason for us to change that determination. Respondents similarly did not offer any evidence to contradict our finding that [ ].<sup>198</sup> Accordingly, we agree with the IAs and have maintained the current two-tiered bond rate for the 60-day Presidential review period.<sup>199</sup>

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<sup>196</sup> Commission Opinion On Petition To Modify Temporary Relief Bond at 16 (September 24, 1997).

<sup>197</sup> Commission Opinion on Remedy, the Public Interest, and Bonding at 17-21.

<sup>198</sup> See Commission Opinion On Petition To Modify Temporary Relief Bond at 11-12 (September 24, 1997).

<sup>199</sup> We also note that respondents expressly represented to the Commission that they "do not currently intend to import any of the accused emulation systems into the United States during the period of Presidential review." Respondents' Remedy Brief at 26.



