

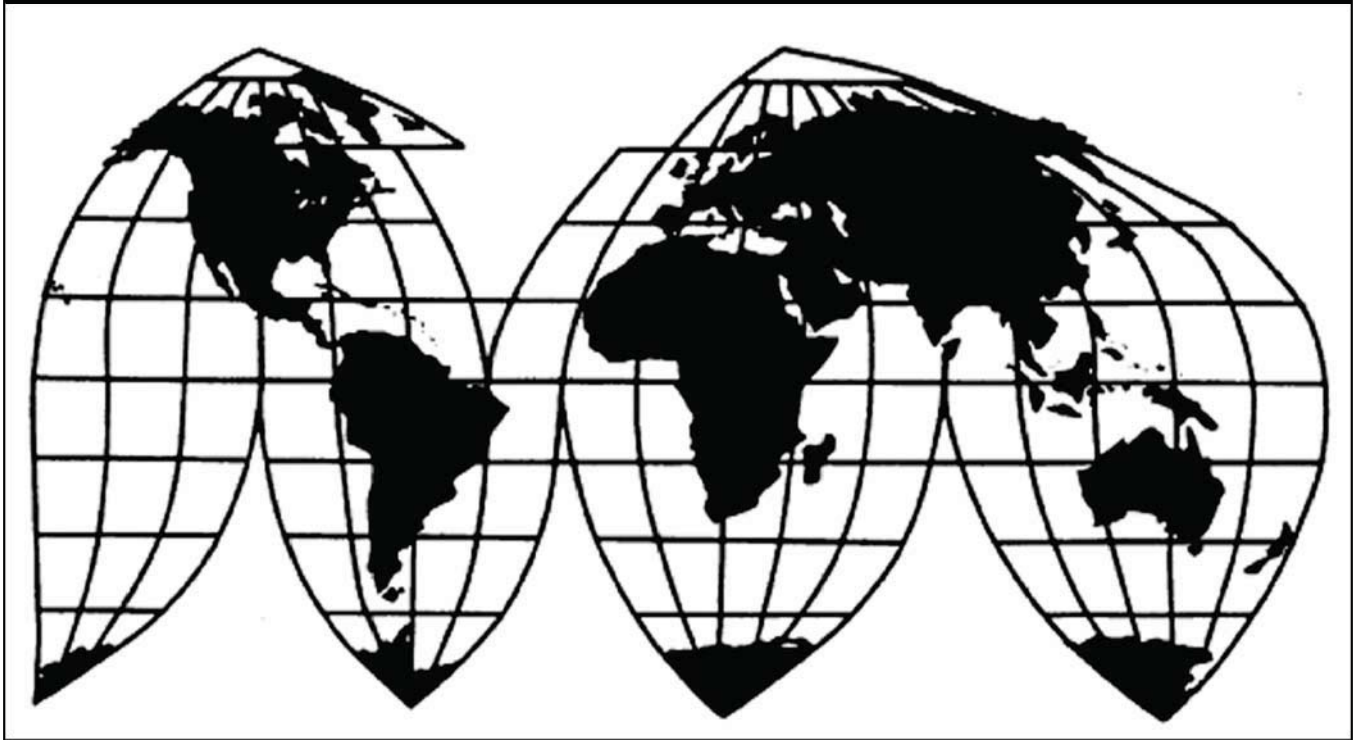
*In the Matter of*  
**Certain Liquid Crystal Display  
Devices and Products  
Containing the Same**

Investigation No. 337-TA-631

Publication 4186

December 2010

**U.S. International Trade Commission**



Washington, DC 20436

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

## **COMMISSIONERS**

**Shara L. Aranoff, Chairman**  
**Daniel R. Pearson, Vice Chairman**  
**Deanna Tanner Okun**  
**Charlotte R. Lane**  
**Irving A. Williamson**  
**Dean A. Pinkert**

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

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

Washington, DC 20436  
[www.usitc.gov](http://www.usitc.gov)

*In the Matter of*

**Certain Liquid Crystal Display  
Devices and Products  
Containing the Same**

Investigation No. 337-TA-631





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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS  
CONTAINING THE SAME**

**Investigation No. 337-TA-631  
Enforcement Proceeding**

**NOTICE OF A COMMISSION DETERMINATION NOT TO REVIEW AN  
INITIAL DETERMINATION TERMINATING THE ENFORCEMENT PROCEEDING;  
TERMINATION OF THE ENFORCEMENT PROCEEDING**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined not to review an initial determination ("ID") (Order No. 29) of the presiding administrative law judge ("ALJ") terminating the above-captioned enforcement proceeding based on a settlement agreement.

**FOR FURTHER INFORMATION CONTACT:** Clint Gerdine, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-5468. Copies of non-confidential documents filed in connection with this enforcement proceeding are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at <http://www.usitc.gov>. The public record for this enforcement proceeding may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this enforcement proceeding on December 18, 2009, based on a complaint filed by Samsung Electronics Co., Ltd. ("Samsung") of Korea. 74 *Fed. Reg.* 67248. The complaint alleges violations of the limited exclusion order and cease and desist orders issued at the conclusion of the underlying investigation, where the Commission found a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain liquid crystal display devices and products containing the same by reason of infringement of certain claims of U.S. Patent No.

6,771,344. The Commission's notice of enforcement proceeding named the following respondents: Sharp Corporation of Japan; Sharp Electronics Corporation of Mahwah, New Jersey; and Sharp Electronics Manufacturing, Company of America, Inc. of San Diego, California (collectively, "Sharp").

On February 12, 2010, Samsung and Sharp jointly moved to terminate the enforcement proceeding on the basis of a settlement agreement. No party opposed the motion.

The ALJ issued the subject ID on March 5, 2010, granting the motion for termination. He found that the motion for termination satisfies Commission rule 210.21(b). He further found, pursuant to Commission rule 210.50(b)(2), that termination of this enforcement proceeding by settlement agreement is in the public interest. No party petitioned for review of the ID. The Commission has determined not to review the ID, and the enforcement proceeding is terminated.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in sections 210.21 and 210.42(h) of the Commission's Rules of Practice and Procedure (19 C.F.R. §§ 210.21, 210.42(h)).

By order of the Commission.

A handwritten signature in black ink, appearing to read "Marilyn R. Abbott", written in a cursive style.

Marilyn R. Abbott  
Secretary to the Commission

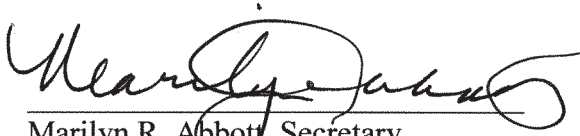
Issued: March 19, 2010

**CERTAIN LIQUID CRYSTAL DISPLAY DEVICES AND  
PRODUCTS CONTAINING THE SAME**

**337-TA-631  
(Enforcement)**

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **NOTICE OF A COMMISSION DETERMINATION NOT TO REVIEW AN INITIAL DETERMINATION TERMINATING THE ENFORCEMENT PROCEEDING; TERMINATION OF THE ENFORCEMENT PROCEEDING** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on March 19, 2010.

  
Marilyn R. Abbott, Secretary  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**On Behalf of Complainant Samsung Electronics Co.,  
Ltd.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**On Behalf of Respondent Sharp Corporation; Sharp  
Electronics Corporation; and, Sharp Electronics  
Manufacturing Company of America, Inc.:**

Blaney Harper, Esq.  
**JONES DAY**  
51 Louisiana Ave., NW  
Washington, DC 20001

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 International





**PUBLIC VERSION**

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

---

In the Matter of	)	
	)	
CERTAIN LIQUID CRYSTAL DISPLAY	)	Investigation No. 337-TA-631
DEVICES AND PRODUCTS	)	Enforcement Proceeding
CONTAINING THE SAME	)	

---

Order No. 29: Initial Determination Terminating The Enforcement Proceeding

On February 12, 2010, complainant Samsung Electronics Co. Ltd. (Samsung) and respondents Sharp Corporation, Sharp Electronics Corporation, and Sharp Electronics Manufacturing Company of America, Inc. (Sharp), moved pursuant to Commission rule 210.21(a)(2) and (b) to terminate this Enforcement Proceeding based upon settlement and licensing agreements that was alleged to resolve all outstanding patent disputes and related actions between the parties. (Motion Docket No. 631-35.)

The Commission Investigation Staff, in a response dated February 23, 2010, did not oppose Motion No. 631-35.

Movants, in support of the pending motion, argued that Sharp and Samsung have reached an agreement to settle this investigation as detailed in the attached Settlement Agreement. (Ex. A. to motion); that Sharp and Samsung have also entered into a Patent Cross-License Agreement. (Ex. B. to motion); that aside from the Settlement Agreement and Patent Cross-License Agreement, there are no other agreements, written or oral, express or implied between the parties concerning the subject matter of the investigation; and that in accordance with Commission rule 210.21(b)(1) Sharp is separately submitting a non-confidential version of the pending motion and

non-confidential, redacted versions of the Settlement Agreement and the Patent Cross-License Agreement.<sup>1</sup>

With respect to the underlying investigation, on December 21, 2007, Samsung filed a complaint with the Commission pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337. The complaint alleged that Sharp violated Section 337 based on the importation and sale of certain liquid crystal display devices and products containing same, including televisions and cellular telephone handsets by reason of infringement of: claims 6, 7, and 8 of U.S. Patent No. 6,937,311; claims 7 and 8 of U.S. Patent No. 6,771,344; claims 1-9, and 11-14, and 16 of U.S. Patent No. 7,925,196; and claims 1, 2, 15-17, 19-21, and 23 of U.S. Patent No. 7,193,666. The Commission instituted the investigation on January 25, 2008 by publication of the Notice of Investigation. 73 Fed. Reg. 4626 (Jan. 25, 2008). An evidentiary hearing was held from October 24, 2008 through October 31, 2008. The Final Initial Determination issued on January 27, 2009 finding a violation of Section 337 based on Sharp's infringement of claims 6 and 8 of the '311 patent and claims 7 and 8 of the '344 patent.

Following petitions for review by the parties, the Commission affirmed the administrative law judge's determination of violation as to the '344 patent, and reversed the determination of violation as to the '311 patent. See Commission Opinion at 1 (July 14, 2009). Based upon the finding of violation, the Commission issued a limited exclusion order prohibiting the unlicensed entry of certain Sharp LCD devices into the United States and cease and desist orders prohibiting Sharp from conducting specified activities with respect to these LCD devices.

---

<sup>1</sup> Such submission, served on February 12, 2010, has been received by the administrative law judge.

On December 1, 2009, Samsung filed a complaint for enforcement proceedings. The Commission instituted this enforcement proceeding on December 18, 2009 (74 Fed. Reg. No. 67248).<sup>2</sup>

Commission rule 210.21(a)(2) states that “[a]ny party may move at any time for an order to terminate an investigation in whole or in part as to any or all respondents on the basis of a settlement, a licensing or other agreement, including an agreement to present the matter for arbitration, or a consent order, as provided in paragraphs (b), (c), and (d) of this section.”

Commission rule 210.21(b), in turn, governs termination of an investigation by settlement or license. Commission rule 210.21(b)(1) states:

An investigation before the Commission may be terminated as to one or more respondents pursuant to section 337(c) of the Tariff Act of 1930 on the basis of a licensing or other settlement agreement. A motion for termination by settlement shall contain copies of the licensing or other settlement agreement, any supplemental agreements, and a statement that there are no other agreements, written or oral, express or implied between the parties concerning the subject matter of the investigation. If the licensing or other settlement agreement contains confidential business information within the meaning of § 201.6(a) of this chapter, a copy of the agreement with such information deleted shall accompany the motion.

The Administrative Procedure Act states that agencies should consider termination of disputes by the involved parties where “the public interest permit[s].” 5 U.S.C. § 554(c)(1). Commission rule 210.50(b)(2) also provides that in considering a motion to terminate based upon a settlement, the judge shall “consider and make appropriate findings in the initial determination regarding the

---

<sup>2</sup> By notices dated March 1, 2010, the Commission determined to rescind the limited exclusion orders and cease and desist orders issued not only in Inv. Nos. 337-TA-631 but also in 337-TA-634.

effect of the proposed settlement on the public health and welfare, competitive conditions in the U.S. economy, the production of like or directly competitive articles in the United States, and U.S. consumers.”

Movants have negotiated two agreements that resolve the dispute between the private parties in this investigation, in other investigations (e.g., 337-TA-699 and 337-TA-702), and in certain litigation in other jurisdictions including various foreign forums in Japan, Korea, Germany, and the Netherlands. The agreements consist of said Exhibits A and B. Redacted copies of the agreements have been received. Motion No. 631-35 further states that “there are no other agreements, written or oral, express or implied between the parties concerning the subject matter of the Investigation.” Thus, said Motion complies with the procedural requirements of Commission rule 210.21(b)(1).

Regarding the public interest the administrative law judge finds that the record does not indicate that the agreements between Samsung and Sharp will harm the public health and welfare, competitive conditions in the U.S. economy, the production of like or directly competitive articles in the United States, or U.S. consumers. Moreover, the public interest generally favors settlement in order to avoid needless litigation and to conserve public resources. See, e.g., Certain Semiconductor Chips with Minimized Chip Package Size & Products Containing Same (III), Inv. No. 337-TA-630, Order No. 25, at 4 (September 4, 2008) (“the termination of a respondent, such as that proposed by the motion, is generally in the public interest”); Certain Laser Imageable Lithographic Printing Plates, Order No. 7, at 4 (May 16, 2008); Certain Compact Disc and DVD Holders, Inv. No. 337-TA-482, Order No. 11, at 3 (March 7, 2003); Certain Gel-Filled Wrist Rests and Products Containing Same, Inv. No. 337-

TA-456, Order No. 16, at 5 (May 21, 2002).

Based on the foregoing, Motion No. 631-35 is granted.

This initial determination, pursuant to Commission rule 210.42(c), is hereby CERTIFIED to the Commission. Pursuant to Commission rule 210.42(h)(3), this initial determination shall become the determination of the Commission within thirty (30) days after the date of service hereof unless the Commission grants a petition for review of this initial determination pursuant to Commission rule 210.43, or orders on its own motion a review of the initial determination or certain issues therein pursuant to Commission rule 210.44.

This order will be made public unless a confidential version is received no later than the close of business on March 19, 2010.

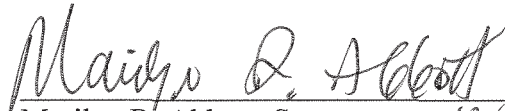


Paul J. Luckern  
Chief Administrative Law Judge

Issued: March 5, 2010

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **Public Version Order** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on April 12, 2010.

  
Marilyn R. Abbott, Secretary *JNB*  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**On Behalf of Complainant Samsung Electronics Co.,  
Ltd.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005

- Via Hand Delivery
- Via Overnight Mail
- Via First Class Mail
- Other: \_\_\_\_\_

**On Behalf of Respondents Sharp Corporation; Sharp  
Electronics Corporation; and, Sharp Electronics  
Manufacturing Company Of America, Inc.:**

Blaney Harper, Esq.  
**JONES DAY**  
51 Louisiana Avenue, NW  
Washington, DC 20001  
P- 202-879-3939  
F- 202-626-1700

- Via Hand Delivery
- Via Overnight Mail
- Via First Class Mail
- Other: \_\_\_\_\_

**CERTAIN LIQUID CRYSTAL DISPLAY DEVICES AND  
PRODUCTS CONTAINING THE SAME**

**337-TA-631  
(Enforcement)**

**PUBLIC MAILING LIST**

Heather Hall  
LEXIS-NEXIS  
9443 Springboro Pike  
Miamisburg, OH 45342

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

Kenneth Clair  
Thomson West  
1100 Thirteen Street, NW, Suite 200  
Washington, DC 20005

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**(PARTIES NEED NOT SERVE COPIES ON LEXIS OR WEST PUBLISHING)**





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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS CONTAINING  
THE SAME**

**Inv. No. 337-TA-631**

**NOTICE OF COMMISSION DETERMINATION TO RESCIND A LIMITED  
EXCLUSION ORDER AND CEASE AND DESIST ORDERS**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to rescind the limited exclusion order and cease and desist orders issued in the above-captioned investigation.

**FOR FURTHER INFORMATION CONTACT:** Clint A. Gerdine, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2310. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on January 25, 2008, based on a complaint filed by Samsung Electronics Co., Ltd. ("Samsung") of Korea. 73 *Fed. Reg.* 4626-27. The complaint, as supplemented, alleged violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain liquid crystal display ("LCD") devices and products containing the same by reason of infringement of certain claims of U.S. Patent Nos. 7,193,666; 6,771,344 ("the '344 patent"); 7,295,196; and 6,937,311 ("the '311 patent"). The complaint further alleged the existence of a domestic industry as to each asserted patent. The Commission's notice of investigation named the following respondents: Sharp Corporation of Japan; Sharp Electronics Corporation of Mahwah, New Jersey; and Sharp Electronics Manufacturing, Company of America, Inc. of San Diego, California (collectively, "Sharp").

On January 26, 2009, the presiding administrative law judge (“ALJ”) issued his final initial determination (“ID”) finding a violation of section 337 by respondents as to the ‘311 and ‘344 patents only, and issued his recommended determinations on remedy and bonding. On February 9, 2009, Sharp and the Commission investigative attorney (“IA”) filed petitions for review of the final ID. The IA and Samsung filed responses to the petitions on February 17, 2009.

On March 30, 2009, the Commission determined to review several of the ID’s findings, and requested the parties to respond to certain questions concerning those findings. The Commission also requested written submissions on the issues of remedy, the public interest, and bonding from the parties and interested non-parties. 74 *Fed. Reg.* 15301-02 (April 3, 2009).

On April 10 and April 17, 2009, respectively, complainant Samsung, the Sharp respondents, and the IA filed briefs and reply briefs on the issues for which the Commission requested written submissions. Also, the Commission received four submissions from interested non-parties on the issues of remedy, the public interest, and bonding.

On June 24, 2009, the Commission issued notice of its determination to affirm-in-part and reverse-in-part the ID. The Commission affirmed the ALJ’s finding of a violation of section 337 with respect to claims 7 and 8 of the ‘344 patent, but reversed the ALJ’s finding of a violation with respect to the ‘311 patent. 74 *Fed. Reg.* 31311-12 (June 30, 2009)

Further, the Commission issued (as modified on December 14, 2009): 1) a limited exclusion order prohibiting the unlicensed entry of LCD devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe claims 7 or 8 of the ‘344 patent, that are manufactured abroad by or on behalf of, or are imported by or on behalf of, Sharp, or any of its affiliated companies, parents, subsidiaries, licensees, contractors, or other related business entities, or successors or assigns; and 2) cease and desist orders prohibiting Sharp Electronics Corp. and Sharp Electronics Manufacturing Co. from conducting any of the following activities in the United States: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting U.S. agents or distributors for, LCD devices, including display panels and modules, and LCD televisions or professional displays containing the same that are covered by claims 7 or 8 of the ‘344 patent.

On February 12, 2010, complainant Samsung and respondent Sharp filed a joint petition to rescind the remedial orders under Commission Rule 210.76(a)(1) on the basis of a settlement agreement between the parties. The parties asserted that their settlement agreement constitutes “changed conditions of fact or law” sufficient to justify rescission of the order under Commission Rule 210.76(a)(1), 19 C.F.R. § 210.76(a)(1). The IA did not oppose the joint petition.

Having reviewed the parties’ submissions, the Commission has determined that the settlement agreement satisfies the requirement of Commission Rule 210.76(a)(1), 19 C.F.R. § 210.76(a)(1), that there be changed conditions of fact or law. The Commission therefore has issued an order rescinding the limited exclusion order and cease and desist orders previously issued in this investigation.

This action is taken under the authority of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) and section 210.76(a)(1) of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.76(a)(1)).

By order of the Commission.

A handwritten signature in black ink, appearing to read "Marilyn R. Abbott". The signature is written in a cursive, flowing style with a large initial "M".

Marilyn R. Abbott  
Secretary to the Commission

Issued: March 1, 2010

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

In the Matter of

CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS  
CONTAINING THE SAME

Investigation No. 337-TA-631

**ORDER**

Upon consideration of the joint petition by Complainant Samsung Electronics Co., Ltd. and Respondents Sharp Corporation, Sharp Electronics Corporation, and Sharp Electronics Manufacturing Company of America, Inc. to rescind the Commission's limited exclusion order and cease and desist orders, the Commission hereby **ORDERS** that:

1. The joint petition for rescission of the limited exclusion order and cease and desist orders previously issued in this investigation is *granted*.
2. The Secretary will serve this Order on the parties to this investigation and the Secretary of the Treasury, and publish notice thereof in the *Federal Register*.

By order of the Commission.

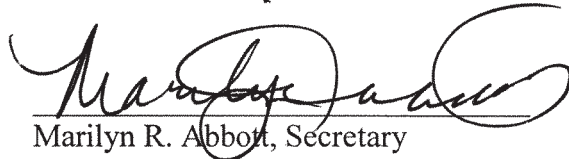


Marilyn R. Abbott  
Secretary to Commission

Issued: March 1, 2010

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **CORRECTED SERVICE, NOTICE OF COMMISSION DETERMINATION TO RESCIND A LIMITED EXCLUSION ORDER AND CEASE AND DESIST ORDERS** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on March 5, 2010.



Marilyn R. Abbott, Secretary  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**On Behalf of Complainant Samsung Electronics Co.,  
Ltd.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**On Behalf of Respondents Sharp Corporation; Sharp  
Electronics Corporation; and, Sharp Electronics  
Manufacturing Company of America, Inc.:**

Barry E. Bretschneider, Esq.  
**MORRISON & FOERSTER LLP**  
1650 Tysons Boulevard, Suite 400  
McLean, VA 22102

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_



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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS  
CONTAINING THE SAME**

**Inv. No. 337-TA-631**

**NOTICE OF INSTITUTION OF FORMAL ENFORCEMENT PROCEEDING**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has instituted a formal enforcement proceeding relating to a limited exclusion order and cease and desist orders issued at the conclusion of the above-captioned investigation.

**FOR FURTHER INFORMATION CONTACT:** Clint A. Gerdine, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, SW., Washington, D.C. 20436, telephone (202) 205-3061. Copies of all nonconfidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Washington, D.C. 20436, telephone 202-205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov/>. Hearing-impaired persons are advised that information on the matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on January 25, 2008, based on a complaint filed by Samsung Electronics Co., Ltd. ("Samsung") of Korea. 73 *Fed. Reg.* 4626-27. The complaint, as supplemented, alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain liquid crystal display devices and products containing the same by reason of infringement of certain claims of U.S. Patent Nos. 7,193,666; 6,771,344 ("the '344 patent"); 7,295,196; and 6,937,311. The complaint further alleges the existence of a domestic industry as to each asserted patent. The Commission's notice of investigation named the following respondents: Sharp Corporation ("Sharp Corp.") of Japan; Sharp Electronics Corporation ("SEC") of Mahwah, New Jersey; and Sharp Electronics Manufacturing, Company of America, Inc. ("SEMA") of San Diego, California (collectively "Sharp").

On June 24, 2009, after reviewing in part the ALJ's final initial determination and requesting submissions on the issues of remedy, the public interest, and bonding, the Commission determined that there is a violation of section 337 of the Tariff Act of 1930, as amended, and issued a limited exclusion order directed to all Sharp products found in violation and cease and desist orders directed to SEC and SEMA. The limited exclusion order prohibits the unlicensed entry of liquid crystal display ("LCD") devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe the asserted claims of the '344 patent that are manufactured abroad by or on behalf of, or imported by or on behalf of, any of the Sharp respondents. The cease and desist orders prohibit SEC and SEMA from engaging in certain activities in the United States related to the infringing LCD devices.

On December 1, 2009, complainant Samsung filed a complaint for enforcement proceedings under Commission Rule 210.75. Samsung asserts that Sharp has violated the Commission's limited exclusion and cease and desist orders by the continued practice of prohibited activities such as importing, marketing and selling infringing LCD devices, including LCD panels and modules, and LCD televisions and professional displays containing the same.

Having examined the complaint seeking a formal enforcement proceeding, and having found that the complaint complies with the requirements for institution of a formal enforcement proceeding contained in Commission rule 210.75, the Commission has determined to institute formal enforcement proceedings to determine whether Sharp is in violation of the Commission's limited exclusion order and cease and desist orders issued in the investigation, and what, if any, enforcement measures are appropriate. The following entities are named as parties to the formal enforcement proceeding: (1) complainant Samsung, (2) all Sharp respondents, and (3) a Commission investigative attorney to be designated by the Director, Office of Unfair Import Investigations.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in section 210.75 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.75).

By order of the Commission.



Marilyn R. Abbott  
Secretary to the Commission

Issued: December 14, 2009



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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DEVICES  
AND PRODUCTS CONTAINING THE SAME**

**Inv. No. 337-TA-631**

**ORDER**

On June 24, 2009, the Commission issued a limited exclusion order to respondents Sharp Corporation (“Sharp Corp.”) of Japan; Sharp Electronics Corporation (“SEC”) of Mahwah, New Jersey; and Sharp Electronics Manufacturing, Company of America, Inc. (“SEMA”) of San Diego, California (collectively “Sharp”), and cease and desist orders directed to SEC and SEMA, in the above-captioned investigation. The limited exclusion order prohibits the unlicensed entry of liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe one or more of claims 7 and 8 of U.S. Patent No. 6,771,344 (“the ‘344 patent”) that are manufactured abroad by or on behalf of, or imported by or on behalf of, Sharp, SEC, or SEMA. Comm’n Limited Exclusion Order at 1. Also, the cease and desist orders prohibit SEC and SEMA from importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting ~~U.S. agents or distributors for, certain liquid crystal display (“LCD”) devices, including display~~ panels and modules, and LCD televisions or professional displays containing the same that are covered by one or more of claims 7 and 8 of the ‘344 patent. Comm’n Cease and Desist Order at 1.

On December 1, 2009, complainant Samsung Electronics Co., Ltd. of Korea (“Samsung”) filed a complaint seeking institution of formal enforcement proceedings against Sharp. Samsung requests that the Commission “[i]nstitute a formal enforcement proceeding, pursuant to 19 C.F.R. § 210.75, to confirm the violations of the [Commission’s Limited Exclusion and Cease and Desist Orders].”

The Commission, having examined Samsung’s complaint for formal enforcement proceedings, has determined that Samsung’s complaint complies with the requirements for institution of formal enforcement proceedings. The Commission has determined to name all Sharp respondents as the enforcement respondents.

Accordingly, the Commission hereby **ORDERS THAT --**

1. Pursuant to Commission rule 210.75(b), 19 C.F.R. § 210.75(b), a formal enforcement proceeding is instituted to determine whether the enforcement respondents listed in paragraph 2 below are in violation, as applicable, of the Commission’s limited exclusion and cease and desist orders issued in the above-captioned investigation, and what, if any, enforcement measures are appropriate.
2. For purposes of the enforcement proceedings so instituted, the following are parties to the proceeding:

Complainant Samsung Electronics Co., Ltd.  
Samsung Main Bldg.  
250, 2-ga, Taepyeongno, Jung-gu  
Seoul, Korea 100-742

Respondent Sharp Corporation  
22-22 Nagaikicho, Abeno-ku  
~~Osaka 545-8522, Japan~~

Respondent Sharp Electronics Corporation  
Sharp Plaza  
Mahwah, New Jersey 07430-2135

Respondent Sharp Electronics Manufacturing Company of America, Inc.  
9295 Siempre Viva Road, Suite J2  
San Diego, California 92154

A Commission investigative attorney to be designated  
by the Director, Office of Unfair Import Investigations.

3. The enforcement proceeding is hereby certified to chief administrative law judge Paul J. Luckern, for designation of a presiding administrative law judge who will administer the appropriate proceedings and issue an enforcement initial determination ("EID"). In accordance with Commission rule 210.51(a), the administrative law judge is directed to set the earliest practicable target date for completion of the enforcement proceeding within 45 days of institution. Such target date is to exceed the date of issuance of his EID by four months.
4. The administrative law judge, in his discretion, may conduct any proceedings he deems necessary, including issuing a protective order, holding hearings, taking evidence, ordering discovery, and seeking documents from other agencies consistent with Commission rules to issue his EID. The EID will rule on the question of whether the enforcement respondents, as applicable, violated the limited exclusion order and cease and desist orders issued at the conclusion of the above-captioned investigation on June 24, 2009. All defenses not barred by claim preclusion may be raised in this proceeding.
5. The administrative law judge shall also recommend to the Commission what enforcement measures are appropriate if the respondents are found to violate the Commission's limited exclusion order and cease and desist orders. The administrative law judge, in his discretion, may conduct any proceedings he deems necessary, including taking evidence and ordering discovery, to issue his recommendations on appropriate enforcement measures.
6. Petitions for review of the EID may be filed within twelve (12) days of service of the EID. Responses to any petitions for review may be filed within eight (8) days of service of the petitions.
7. Notwithstanding Commission rule 210.75(b)(3), the EID shall become the Commission's final determination on violation 60 days after service of the EID, unless the Commission orders review of the EID or changes the deadline for determining whether to review it.
8. The Secretary shall:

- (a) Docket Samsung's complaint for a formal enforcement proceeding;
- (b) serve a copy of Samsung's "Enforcement Complaint" on the respondents to the enforcement proceeding, and advise the enforcement respondents of the provisions of Commission rule 210.75 concerning responses to a request for a formal enforcement proceeding;
- (c) serve a copy of this order upon each party to the formal enforcement proceeding;
- (d) publish notice of this order in the *Federal Register*.

By order of the Commission.

A handwritten signature in black ink, appearing to read "Marilyn R. Abbott", written in a cursive style.

Marilyn R. Abbott  
Secretary to the Commission

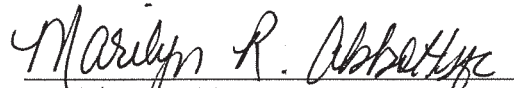
Issued: December 14, 2009

**CERTAIN LIQUID CRYSTAL DISPLAY DEVICES AND  
PRODUCTS CONTAINING THE SAME**

**337-TA-631  
(Enforcement)**

**CORRECTED PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **Notice of Investigation** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on December 18, 2009.

  
Marilyn R. Abbott, Secretary  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**COMPLAINANT**

Samsung Electronics Co., Ltd.  
Samsung Main Bldg.  
250, 2-ga, Taepyeongno, Jung-gu  
Seoul, Korea 100-742

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 International

**On Behalf of Complainant Samsung Electronics Co.,  
Ltd.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**Respondent Sharp Corporation**

Sharp Corporation  
22-22 Nagaike-cho, Abeno-ku  
Osaka 545-8522, Japan

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 International

**Respondent Sharp Electronics Corporation**

Sharp Electronics Corporation  
Sharp Plaza  
Mahway, NJ 07430-2135

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**On Behalf of Sharp Electronics Manufacturing  
Company of America, Inc.:**

Sharp Electronics Manufacturing Company of America, Inc.  
9295 Siempre Viva Road, Suite J2  
San Diego, CA 92154

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**EMBASSY OF JAPAN**

Embassy of Japan in the United States  
2520 Massachusetts Avenue, N.W.  
Washington, DC 20008

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**GOVERNMENT AGENCIES**

Edward T. Hand, Chief  
Foreign Commerce Section  
Antitrust Division  
U.S. Department of Justice  
450 5<sup>th</sup> Street NW, Room 11000  
Washington, DC 20530

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

U.S. Bureau of Customs and Border Protection  
Intellectual Property Rights Branch  
Mint Annex Building  
799 9<sup>th</sup> Street, NW, 7<sup>th</sup> floor  
Washington, DC 20229-1177

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

Elizabeth Kraus, Deputy Director  
International Antitrust, Office of  
International Affairs  
Federal Trade Commission  
600 Pennsylvania Avenue, Room 498  
Washington, DC 20580

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

Richard Lambert, Esq.  
Office of Technology Development Services  
Dept. of Health & Human Services  
National Institutes of Health  
6610 Rockledge Drive, Room 2800  
Bethesda, MD 20892

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

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

\_\_\_\_\_  
In the Matter of )

CERTAIN LIQUID CRYSTAL DISPLAY )  
DEVICES AND PRODUCTS CONTAINING )  
THE SAME )  
\_\_\_\_\_ )

Inv. No. 337-TA-631

**NOTICE OF COMMISSION DETERMINATION TO MODIFY A LIMITED  
EXCLUSION ORDER AND CEASE AND DESIST ORDERS**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to modify the limited exclusion order and cease and desist orders issued in the above-captioned investigation.

**FOR FURTHER INFORMATION CONTACT:** Clint A. Gerdine, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2310. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on January 25, 2008, based on a complaint filed by Samsung Electronics Co., Ltd. ("Samsung") of Korea. 73 *Fed. Reg.* 4626-27. The complaint, as supplemented, alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain liquid crystal display ("LCD") devices and products containing the same by reason of infringement of certain claims of U.S. Patent Nos. 7,193,666; 6,771,344 ("the '344 patent"); 7,295,196; and 6,937,311 ("the '311 patent"). The complaint further alleges the existence of a domestic industry as to each asserted patent. The Commission's notice of investigation named

the following respondents: Sharp Corporation of Japan; Sharp Electronics Corporation of Mahwah, New Jersey; and Sharp Electronics Manufacturing, Company of America, Inc. of San Diego, California.

On January 26, 2009, the ALJ issued his final initial determination (“ID”) finding a violation of section 337 by respondents as to the ‘311 and ‘344 patents only, and issued his recommended determinations on remedy and bonding. On February 9, 2009, Sharp and the Commission investigative attorney (“IA”) filed petitions for review of the final ID. The IA and Samsung filed responses to the petitions on February 17, 2009.

On March 30, 2009, the Commission determined to review the ID and requested submissions regarding the issues under review as well as remedy, the public interest and bonding. On June 24, 2009, the Commission determined that there is a violation of section 337 of the Tariff Act of 1930, as amended, and issued a limited exclusion order directed to all respondents and cease and desist orders directed to the respondents located in the U.S..

On November 24, 2009, Sharp petitioned to modify the remedial orders under Commission Rule 210.76(a)(1) in view of the remedial orders issued in 337-TA-634, *Certain Liquid Crystal Display Modules, Products Containing Same, and Methods for Using the Same*. The IA filed a response in support of the petition on November 30, 2009. On December 2, 2009, Samsung filed a response opposing the petition if not supplemented. On December 8, 2009, Sharp moved for leave to file a reply brief. The Commission has determined to deny Sharp’s motion for leave to file a reply.

Having reviewed the parties’ submissions, the Commission has determined that Sharp’s petition satisfies the requirement of Commission Rule 210.76(a)(1), 19 C.F.R. § 210.76(a)(1), for modifying the remedial orders. Accordingly, the Commission has issued orders modifying the remedial orders previously issued in this investigation.

This action is taken under the authority of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) and section 210.76(a)(1) of the Commission’s Rules of Practice and Procedure (19 C.F.R. § 210.76(a)(1)).

By order of the Commission.

  
Marilyn R. Abbott  
Secretary

Issued: December 14, 2009



UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, DC 20436

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS CONTAINING THE  
SAME**

**Investigation No. 337-TA-631**

**MODIFICATION OF LIMITED EXCLUSION ORDER**

On June 24, 2009, the Commission issued a limited exclusion order, pursuant to section 337(d) of the Tariff Act of 1930 (19 U.S.C. § 1337(d)), prohibiting the unlicensed entry of liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe the asserted claims of U.S. Patent No. 6,771,344 and that are manufactured abroad by or on behalf of, or imported by or on behalf of, Sharp Corporation, Sharp Electronics Corporation, or Sharp Electronics Manufacturing Company of America, Inc. (collectively “the Sharp respondents”). The Commission has determined to modify, in accordance with the public interest, the limited exclusion order and hereby ORDERS:

1. The limited exclusion order issued on June 24, 2009, directed to the Sharp respondents, is modified to delete the phrase “prior to the effective date of this Order,” appearing in paragraph 1, and replace it with the phrase “prior to the Commission’s determination becoming final within the meaning of 19 U.S.C. 1337(j)(4).”

2. The Secretary shall serve copies of this order on each party of record in this investigation, the Secretary of the Treasury, and U.S. Customs and Border Protection.

For the Commission.

A handwritten signature in black ink, appearing to read "Marilyn R. Abbott", written in a cursive style.

Marilyn R. Abbott  
Secretary

Issued: December 14, 2009

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, DC 20436

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS CONTAINING THE  
SAME**

**Investigation No. 337-TA-631**

**MODIFICATION OF CEASE AND DESIST ORDER**

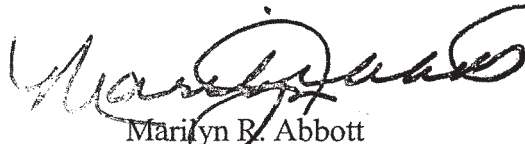
On June 24, 2009, the Commission issued a cease and desist order, pursuant to section 337(f) of the Tariff Act of 1930 (19 U.S.C. § 1337(f)), prohibiting Sharp Electronics Corporation (“SEC”) from conducting any of the following activities: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting U.S. agents or distributors for, certain liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that are covered by one or more of claims 7 and 8 of U.S. Patent No. 6,771,344 (“the ‘344 patent”). The Commission has determined to modify, in accordance with the public interest, the cease and desist order and hereby ORDERS:

1. The cease and desist order issued on June 24, 2009, directed to SEC, is modified to delete the phrase “prior to the date of issuance of this Order,” appearing in section IV, and replace it with the phrase “prior to the date this Order becomes final.”
2. The cease and desist order is further modified to add the add the following phrase to the end of the second paragraph in section V, “A Respondent filing written submissions must file the original document and two copies with the Office of the Secretary. Any Respondent desiring to submit a document to the Commission in confidence must file the original and a public version of the original with the Office of the Secretary and serve a copy of the confidential version on Complainant’s counsel,” with the accompanying footnote “Complainant must file a letter with the Secretary identifying the

attorney to receive the reports or bond information. The designated attorney must be on the protective order entered in the investigation.”

3. The Secretary shall serve copies of this order on each party of record in this investigation and the Secretary of the Treasury.

For the Commission.



Marilyn R. Abbott  
Secretary

Issued: December 14, 2009

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, DC 20436

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS CONTAINING THE  
SAME**

**Investigation No. 337-TA-631**

**MODIFICATION OF CEASE AND DESIST ORDER**

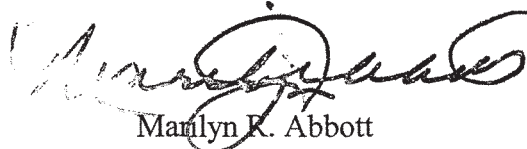
On June 24, 2009, the Commission issued a cease and desist order, pursuant to section 337(f) of the Tariff Act of 1930 (19 U.S.C. § 1337(f)), prohibiting Sharp Electronics Manufacturing Company of America, Inc. (“SEMA”) from conducting any of the following activities: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting U.S. agents or distributors for, certain liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that are covered by one or more of claims 7 and 8 of U.S. Patent No. 6,771,344 (“the ‘344 patent”). The Commission has determined to modify, in accordance with the public interest, the cease and desist order and hereby ORDERS:

1. The cease and desist order issued on June 24, 2009, directed to SEMA, is modified to delete the phrase “prior to the date of issuance of this Order,” appearing in section IV, and replace it with the phrase “prior to the date this Order becomes final.”
2. The cease and desist order is further modified to add the add the following phrase to the end of the second paragraph in section V, “A Respondent filing written submissions must file the original document and two copies with the Office of the Secretary. Any Respondent desiring to submit a document to the Commission in confidence must file the original and a public version of the original with the Office of the Secretary and serve a copy of the confidential

version on Complainant's counsel," with the accompanying footnote "Complainant must file a letter with the Secretary identifying the attorney to receive the reports or bond information. The designated attorney must be on the protective order entered in the investigation."

3. The Secretary shall serve copies of this order on each party of record in this investigation and the Secretary of the Treasury.

For the Commission.



Marilyn R. Abbott  
Secretary

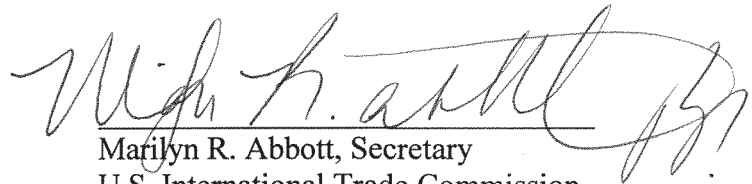
Issued: December 14, 2009

**CERTAIN LIQUID CRYSTAL DISPLAY DEVICES AND  
PRODUCTS CONTAINING THE SAME**

**337-TA-631**

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **NOTICE OF COMMISSION DETERMINATION TO MODIFY A LIMITED EXCLUSION ORDER AND CEASE AND DESIST ORDERS** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on  
December 15, 2009.



Marilyn R. Abbott, Secretary  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**On Behalf of Complainant Samsung Electronics Co.,  
Ltd.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**On Behalf of Respondents Sharp Corporation; Sharp  
Electronics Corporation; and, Sharp Electronics  
Manufacturing Company Of America, Inc.:**

G. Brian Busey, Esq.  
**MORRISON & FOERSTER LLP**  
2000 Pennsylvania Avenue, NW  
Washington, DC 20006

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_





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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS  
CONTAINING THE SAME**

**Investigation No. 337-TA-631**

**COMMISSION OPINION**

**I. SUMMARY**

On January 26, 2009, the presiding administrative law judge (“ALJ”) issued his final initial determination (“ID”) in the above-captioned investigation, finding a violation of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, as amended (“section 337”). The Commission determined to review the ALJ’s determinations with respect to U.S. Patent Nos. 6,937,311 (“the ‘311 patent”) and 6,771,344 (“the ‘344 patent”), but not the ALJ’s determinations with respect to U.S. Patent Nos. 7,295,196 (“the ‘196 patent”) and 7,193,666 (“the ‘666 patent”). On review, the Commission affirms the ALJ’s determination of violation as to the ‘344 patent, and reverses the ALJ’s determination of violation as to the ‘311 patent.

**II. BACKGROUND**

The Commission instituted this investigation on January 25, 2008, based on a complaint filed by Samsung Electronics Co., Ltd. (“Samsung”) of Korea. *73 Fed. Reg.* 4626-27. The complaint, as supplemented, alleges violations of section 337 in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain liquid crystal display (“LCD”) devices and products containing the same by reason of infringement of certain claims of the ‘666 patent, the ‘344 patent, the ‘196 patent, and the ‘311 patent. The complaint further alleges the existence of a domestic industry as to each asserted

patent. The Commission's notice of investigation named the following respondents: Sharp Corporation of Japan; Sharp Electronics Corporation of Mahwah, New Jersey; and Sharp Electronics Manufacturing Company of America, Inc. of San Diego, California (collectively "Sharp").

On March 30, 2009, the Commission determined to review the following: 1) the ALJ's construction of the claim term "domain dividers" found in the '311 patent; 2) the ALJ's determination that Sharp's LCD devices infringe the '311 patent; 3) whether the '311 patent is invalid pursuant to 35 U.S.C. § 112, ¶ 1, under the ALJ's construction for "domain dividers"; 4) the ALJ's determination that the '311 patent is not unenforceable; and 5) the ALJ's determination that the asserted claims of the '344 patent are not invalid as anticipated by U.S. Patent No. 5,309,264 ("the '264 patent" or "Lien"). The Commission determined not to review the ALJ's other determinations including: 1) the '311 patent was not proven invalid due to obviousness or derivation/non-joinder of inventors under 35 U.S.C. § 102(f); 2) claim construction of the asserted claims of the '344 patent and finding that the '344 patent is not invalid under 35 U.S.C. § 112; 3) claim construction and findings related to infringement, validity, enforceability, and domestic industry relating to the '196 patent; and 4) claim construction and findings related to infringement, validity, and domestic industry relating to the '666 patent. *See* ID at 229.

With respect to violation, the Commission requested written submissions from the parties on the following issues:

1) Whether one of ordinary skill in the art would understand that the claim term "domain dividers" in claims 6 and 8 of the '311 patent includes protrusions, in light of the intrinsic evidence and the context of the claimed invention. Please discuss *Wang Labs, Inc. v. Am. Online*, 197 F.3d 1377 (Fed. Cir. 1999) in your response.

2) Under the ID's construction for the claim term "domain dividers" which includes protrusions, whether claims 6 and 8 of the '311 patent are invalid under 35 U.S.C. § 112, ¶ 1. Please discuss *ICU Med., Inc. v. Alaris Med. Sys.*, 558 F.3d 1368 (Fed. Cir. 2009) and *LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336 (Fed. Cir. 2005) in your response.

3) Under the ID's construction of "aperture" in claims 7 and 8 of the '344 patent, (a) whether U.S. Patent No. 5,309,264 anticipates those claims; and (b) how the "orientation" of a multi-pronged aperture is determined. Assume the Commission finds that all other claim terms are met.

74 *Fed. Reg.* 15301-02 (April 3, 2009). Further, the Commission requested written submissions on the issues of remedy, the public interest, and bonding from the parties and interested non-parties. *Id.*

On April 10 and April 17, 2009, complainant Samsung, respondent Sharp, and the IA filed briefs and reply briefs on the issues for which the Commission requested written submissions. Also, the Commission received submissions from four interested non-parties on the issues of remedy, the public interest, and bonding.

#### **A. Patents at issue**

This investigation pertains to active matrix LCD panels that are used in a variety of devices and products - *e.g.*, mobile phones and computing devices, televisions, and computers to enable a visual display. These LCD panels generate high resolution images using a matrix of pixels formed by a particular structure of two substrates sandwiching transparent electrodes, liquid crystal layers, and other materials to enhance the visual display - *i.e.*, visible light received - for the user. A single LCD panel generally comprises a plurality of pixel matrices, and a plurality of LCD panels generally make up the entire visual display for the user - *e.g.*, full TV screen. The LCD panel is activated by applying voltage to the electrodes to align the liquid crystal layers in a particular manner allowing visible light to pass on to the user, preferably

creating a wide viewing angle for the user. Commonly, in the sandwich structure, the bottom electrode is a pixel electrode interconnected to a thin film transistor (“TFT”) substrate, including a plurality of gate and data lines crossing each other to input and output signals, and the top electrode is a common electrode interconnected to a color filter substrate. Both electrodes are commonly formed of indium titanium oxide (“ITO”).

Particularly, the ‘311 and ‘344 patents pertain to the formation of multi-domain LCDs that divide the liquid crystal layers into different domains so as to generate a wide viewing angle. It is well-known in the art that multi-domain LCDs may be created by rubbing, by forming protrusions on the electrodes, or by forming apertures in the electrodes where either the apertures, protrusions, or rubbing process divide the liquid crystal layer into multiple domains. *See* ID at 27-29; the ‘311 patent, col. 1:48-60; Silzars, Tr. at 1537.

**B. Products at issue**

Samsung contends that claims 6 and 8 of the ‘311 patent, and claims 7 and 8 of the ‘344 patent are infringed by a variety of Sharp’s LCD panels used in televisions, monitors, and professional displays that measure between 15 to 108 inches. *See* ID at 10, CDX-19, 20. Particularly, Sharp’s products that are accused of infringing the ‘344 patent [ ], while Sharp’s products that are accused of infringing the ‘311 patent [ ]]. *See* ID at 35-38; CDX-124 to 128.

**III. DISCUSSION**

For the reasons set forth below, we have determined to affirm-in-part and modify-in-part the final ID and to find a violation of section 337 by Sharp’s accused products. We adopt the ALJ’s findings in his final ID that are not inconsistent with our determinations and opinion.

**A. The '311 patent claim construction and infringement: "domain dividers"**

We determined to review the ALJ's construction of the limitation "domain dividers" found in claims 6 and 8 of the '311 patent. *See* the '311 patent, col. 10:41-52, 55-56.

Representative claim 6 is presented below:

6. A liquid crystal display comprising:
  - a first substrate;
  - a first electrode formed on the substrate and having a plurality of **first domain dividers**;
  - a second substrate facing the first substrate; and
  - a second electrode formed corresponding to the first electrode on the second substrate and having a plurality of **second domain dividers**,wherein at least one of the second **domain dividers** comprises a **main body and a branch extending from the main body along an edge of the first electrode**.

'311 patent, col. 10:41-52 (emphasis added).

1. *Initial Determination*

The ALJ construed the asserted claims of the '311 patent, as well as the '344 patent, as one of ordinary skill in the art would understand them. He defined a person of ordinary skill in the art as a person having a Bachelor's degree (B.S.) in electrical, mechanical, or chemical engineering or physics with at least four years of experience in making, designing, researching, and/or working with liquid crystal displays. *See* ID at 13-14.

In construing the claims, the ALJ relied on the general knowledge in the art that domains may be created in LCDs by rubbing, by forming protrusions on the electrodes, or by forming apertures in the electrodes. ID at 27-29. Particularly, the ALJ construed the term "domain dividers" to be "apertures formed in the conductive layer comprising the electrode and

protrusions formed from a dielectric layer on top of the electrodes.” ID at 29. The ALJ found that the claim limitation “domain dividers” includes apertures because the ‘311 patent specification describes dividing LCDs into multiple domains by forming apertures in field generating electrodes. Moreover, claims 9, 11, and 20 specifically recite “apertures.” ID at 25-27.

The ALJ’s finding that “domain dividers” includes protrusions is primarily based on the doctrine of claim differentiation, which states that the presence of a specific limitation in a dependent claim raises a presumption that the limitation is not present in the independent claim. *Id.* at 25-27; *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005). Thus, he noted that: (1) claim 9, dependent from claim 6, recites “[t]he liquid crystal display of claim 6, wherein either the first domain dividers or the second domain dividers are apertures,” *Id.*; (2) claim 5, dependent from independent claim 1, recites “wherein either the first or the second domain dividers are apertures,” *Id.*; (3) claim 11, dependent from independent claim 10, which also recites “domain dividers,” recites “wherein either the first domain dividers or the second domain dividers are apertures,” *Id.*; and (4) claim 20, dependent on claim 12, which recites “domain forming elements,” recites “wherein the first domain forming element is a protrusion or an aperture.” *Id.*

Primarily from this claim analysis, the ALJ found that the term “domain dividers” is not limited to apertures. In addition, he noted that the background section of the specification states that “[t]o overcome [an insufficiently wide viewing angle], multi-domain structures formed by varying rubbing directions in the alignment layers or by forming apertures in the transparent electrodes are proposed.” *Id.* (*citing* the ‘311 patent, col. 1:48-51). Further, he noted that another portion of the specification states that “[s]ince the aperture 200 is formed when a

conductive layer is patterned to form the electrode 21 by using photolithography, no separate step for forming the aperture 20 is required, and thus it is very easy to obtain a multi-domain LCD compared with other methods [used] such as rubbing.” *Id.* (citing the ‘311 patent, col. 2:58-63). He found that the references to “rubbing” in the ‘311 patent were also references to protrusions, apparently based on complainants’ expert’s testimony that, in the context of the patent, protrusions, while not formed directly from rubbing, are formed from the same base process as rubbing - *i.e.*, modifying the dielectric layer on the electrodes. ID at 27-28; *see* Smith, Tr. at 337-42, 504-18. Also, the ALJ cited Sharp’s expert testimony that both apertures and protrusions could be used to create domains. *Id.* (citing Silzars, Tr. at 1537). Further, he noted that Sharp had admitted that structures other than apertures, *e.g.*, protrusions, could be used to create domains when responding to his Order No. 21 which required submissions from the parties. *Id.*

Based on the foregoing, the ALJ found that the term “domain dividers” includes both apertures and protrusions. *Id.* [

]. ID at 35-39; CDX-123 to 128.

## 2. *Parties’ arguments*

Sharp contends that the intrinsic record establishes that one of ordinary skill in the art would understand that “domain dividers” as used in claims 6 and 8 of the ‘311 patent does not include protrusions. Particularly, Sharp argues the following points in support of a claim construction that construes the term “domain dividers” to include apertures only: (1) all embodiments in the specification use only apertures; (2) protrusions are not described or enabled in the specification; (3) the “Summary of the Invention” section of the patent expressly states

that the “objects” of “the present invention” are achieved by apertures (‘311 patent, col. 2:3-12); (4) the specification criticizes using techniques other than apertures in the present invention; (5) the claim language itself recites an electrode “having” domain dividers, and electrodes “have” apertures, but they do not have protrusions; and (6) protrusions are “formed on” electrodes - they are not part of electrodes. Sharp’s Br. at 1. Further, Sharp asserts that the facts here are similar to *Wang Labs* and therefore the case supports its position on the proper construction of “domain dividers” because here, as in that case, only one claimed structure - the aperture - is described and enabled in the ‘311 patent. *Id.* at 11-18.

Samsung asserts that the intrinsic evidence fully supports the ID’s construction of the term “domain dividers” to include protrusions. *See* Samsung’s Br. at 3-4. Particularly, Samsung argues the following: (1) the ALJ’s construction is consistent with Federal Circuit precedent; (2) *Wang Labs* is factually distinct from the present case because the intrinsic evidence here does not require limiting “domain dividers” to the preferred embodiment; (3) one of ordinary skill in the art would understand that the claim term “domain dividers” includes protrusions as evidenced by both parties’ expert testimony; (4) the claims of the ‘311 patent require “domain dividers” to cover more than just “apertures”; (5) the ‘311 patent specification teaches other forms of “domain dividers”; and (6) the prosecution history unambiguously demonstrates that “domain dividers” also encompass protrusions. *Id.* at 3-25.

The IA and Samsung submit that the ID’s conclusion that the term “domain dividers” is not limited to apertures, but also includes protrusions, is supported by the intrinsic evidence, as well as by *Wang Labs*. IA’s Br. at 3-10; *citing Phillips*, 415 F.3d at 1312. Both the IA and Samsung rely on the doctrine of claim differentiation to argue that claim 9, which discloses domain dividers as apertures, and claim 20, which discloses a domain forming element as either



an aperture or a protrusion, would be rendered superfluous if domain dividers are limited to apertures. *Id.* Finally, Samsung and the IA both note that the Federal Circuit has “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Id.*; citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“*Liebel-Flarsheim I*”).

### 3. *Analysis*

The Commission agrees with Sharp that one of ordinary skill, in view of the intrinsic evidence relating to the ‘311 patent and the context of the claimed invention, would understand the term “domain dividers” to be limited to apertures. The Commission regards the facts of this case as resembling those of numerous Federal Circuit cases that relied either primarily or completely on the specification to limit the relevant term to a single disclosed embodiment where this sole embodiment was described as the invention itself, while at the same time other embodiments were criticized or distinguished.<sup>1</sup> Further, these cases consistently teach that the

---

<sup>1</sup> See *Wang Labs*, 197 F.3d 1377 (the court limiting the claim term at issue to the only disclosed embodiment despite this embodiment and an alternative being generally known in the art), *SciMed Life Sys., Inc. v. Adv. Cardiovascular, Inc.*, 242 F.3d 1337 (Fed. Cir. 2001) (the court limiting the claim term at issue to the only disclosed embodiment based completely on the specification so limiting the invention - *i.e.*, by criticizing prior art methods and describing the only disclosed embodiment as the invention itself); *Tronzo v. Biomet*, 156 F.3d 1154, 1159 (Fed. Cir. 1998) (the court limiting the term “cup” to a conical cup based on the disclosure of only the single embodiment and criticism of alternatives); *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882-83 (Fed. Cir. 2000) (the court limiting the relevant term to a single disclosed embodiment based on the patent’s specific disclosure and distinguishing remarks); *O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1581-82 (Fed. Cir. 1997) (limiting claims because the specification described only non-smooth or conical passages and distinguishing over the prior art based on these characteristics); and *Toro Co. v. White Consolidated Industries, Inc.*, 199 F.3d 1295, 1299-1302 (Fed. Cir. 1999) (the court construing the broader claim term “including” as requiring permanent attachment of the restriction ring to the cover, where all embodiments of the invention showed a permanently attached restriction ring and a unitary structure was described as important to the invention); (citing 37 C.F.R. § 1.83(a) (“The drawing in a nonprovisional application must show every feature of the invention specified in the claims.”)); M.P.E.P. 608.02(d)); *see also*

doctrine of claim differentiation cannot overcome proper claim scope as determined in view of the intrinsic evidence. See, e.g., *Wang Labs*, 197 F.3d at 1384; *Toro Co.*, 199 F.3d at 1302; *O.I. Corp.*, 115 F.3d at 1582.

In this case, although it was generally understood in the art that multi-domain LCDs may be created using apertures or protrusions, the term “domain dividers” itself was not a term with an ordinary meaning in the art. See ID at 28-29; citing *Silzars*, Tr. at 1537. As such, one of ordinary skill in the art must go to the specification to understand the scope of that term. See *Phillips*; *Decisioning.com*, 527 F.3d at 1308; *Watts*, 232 F.3d at 882-83.<sup>2</sup>

The entirety of the ‘311 patent’s written disclosure and illustrations, including all embodiments, are directed to using apertures to create multi-domain LCDs. The opening sentence of the Abstract uses the word “aperture” three times. It indicates that apertures are the way in which the invention creates multiple domains to obtain a wide viewing angle. The Summary of the Invention states that obtaining a wide viewing angle, and “reduc[ing] the

---

*Decisioning.com v. Federated Dep’t Stores*, 527 F.3d 1300, 1308 (Fed. Cir. 2008) (in limiting the relevant term, the court stated that “[r]ead in light of the specification, however, . . . one of ordinary skill in the art would not understand the term ‘remote interface’ in the ‘007 patent to encompass a consumer-owned personal computer.”); *Modine Mfg. Co. v. United States Int’l Trade Comm’n*, 75 F.3d 1545, 1551 (Fed. Cir. 1996) (when the “preferred embodiment” is described as the invention itself, the claims are not entitled to a broader scope than that embodiment); *Honeywell Int’l, Inc. v. IIT Industries, Inc.*, 452 F.3d 1312, 1318-19 (Fed. Cir. 2006) (the court limiting the claim term to a single disclosed embodiment in accordance with the specification, regardless of whether the patentee expressed a broader intention during prosecution); *ICU Med.*, 558 F.3d at 1374-75 (the court affirming the district court’s construction that construed the claimed “spike” term to include a “for piercing” limitation, even when this limitation is not present in the express claim language, based on how one of ordinary skill in the art would understand the claimed invention after reading the specification.).

<sup>2</sup> This conclusion is consistent with the testimony of Samsung witness Flasck that a person of ordinary skill would have to consult the specification to understand the meaning of term “domain divider.” See *Flasck*, Tr. at 1726.

disinclination of an LCD”, are objects of the invention. It then states that: “These and other objects, features, and advantages are provided, according to the present invention, by forming apertures in field generating electrodes.” Col. 2:3-5. Thus, the specification indicates that the apertures are integral to the invention.

The Summary then proceeds to describe five “aspects” of the invention, each of which is a particular size, shape or arrangement of apertures. Near the conclusion of the specification is another brief encapsulation of the invention: “According to the embodiments of the present invention, multi-domain LCDs are formed using various aperture pattern [sic] to control the arrangement of liquid crystal molecules.” Col. 10:7-9.

In contrast to apertures, the term “protrusions” does not appear in the specification of the ‘311 patent. “Rubbing,” another method generally known and used to form multi-domain LCDs, is used only in reference to the prior art and is characterized as more difficult to produce than the claimed invention. *See* the ‘311 patent, col. 4:61-63:

“[s]ince the aperture 200 is formed when a conductive layer is patterned to form the electrode 21 by using photolithography, no separate step for forming the aperture 20 [sic] is required, and thus it is very easy to obtain a multi-domain LCD compared with other methods using such as rubbing.” Col. 4:58-63.

Not only does the specification consistently describe the invention as arrangements of apertures, but it also elaborates on the way in which the disclosed apertures create the desired domains by controlling the orientation of the liquid crystals:

The arrangement of the liquid crystal molecules are almost symmetrical with respect to the *aperture* 200 and the liquid crystal molecules in opposite regions with respect to the *aperture* 200 are arranged in opposite manner, *thereby causing wide viewing angle*. . . The liquid crystal layer *is divided into several regions or domains divided by the apertures*, and the average axial direction, which means the average direction of the long axes of the liquid

crystal molecules, *in each domain is varied according to the shapes and arrangements of the apertures . . . Since the shapes and arrangements of the apertures affects [] the average axial directions of the domains and characteristics such as luminance, response time and afterimages, etc., of the LCD panels, they should be properly designed.. . . the boundaries of the aperture are preferably linear, slowly curved or bent with an obtuse angle in order to make the arrangement of the liquid crystal molecules to be uniform, thereby reducing the response time.* Cols. 4:43-47, 52-57; 5:7-11, 28-32 (emphasis added).

One of ordinary skill in the art would also understand that the specification discloses a series of embodiments with apertures that are progressively more complex in shape and arrangement and that successively improve LCD performance characteristics.<sup>3</sup> Consistent with the rest of the specification, the increasingly intricate patterns of apertures disclosed reinforces the conclusion that the apertures are integral to what is being claimed.

In contrast to these descriptions regarding the manner in which the apertures function to create domains, there is no corresponding disclosure in the specification referring to the use of protrusions to improve LCD performance. Nothing indicates that the disclosed patterns can produce the same domain effects if protrusions or other structures were substituted for apertures.

Our finding that the meaning of “domain dividers” is limited to apertures is not based solely on the fact that all embodiments involve apertures. *See Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998); *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1374 (Fed. Cir. 2005); *Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 345

---

<sup>3</sup> The specification discloses a series of embodiments with increasingly complex arrays of apertures, from embodiments with simple crosses and open-ended squares to ones with apertures that taper (narrower at the ends than in the middle) and that bend twice instead of once, with each successive embodiment offering improved performance characteristics. See Figure 3 and col. 5:57-67; Figure 5 and col. 6:56-59 and col. 7:2-5; Figure 6 and col. 7:66 to col. 8:15, Figure 8 and col. 8:35-53; and Figure 9 and col. 8:54-65.

F.3d 1318, 1327 (Fed. Cir. 2003). In our view, the evidence described above indicates that apertures are more than just alternative embodiments, but rather these aperture embodiments are clearly described as integral to the invention.

In interpreting “domain dividers” broadly, the ALJ placed heavy reliance on the doctrine of claim differentiation. ID at 25-27. We agree with the ALJ that claim differentiation creates a presumption that domain dividers are not limited to apertures. We depart from the ALJ’s analysis in that we believe the remainder of the intrinsic evidence is sufficient to overcome any such presumption. We find the facts of this case to be closer to those cases in which the Federal Circuit has found claim differentiation to be an insufficient basis on which to adopt a broad interpretation of a claim term. *See, e.g., Wang Labs*, 197 F.3d at 1384; *Toro Co.*, 199 F.3d at 1302; *O.I. Corp.*, 115 F.3d at 1582.

We have considered arguments of the IA and Samsung in favor of a broader interpretation of “domain dividers.” The IA and Samsung cite Samsung’s expert witness, Dr. Smith, who testified that references to “rubbing” in the ‘311 patent are also references to protrusions because protrusions, while not formed directly from rubbing, are formed from the same base process as rubbing - *i.e.*, modifying the dielectric layer on the electrodes. ID at 27-28; *see* Smith, Tr. at 337-42, 504-18. We do not find this testimony to be probative given that Dr. Smith admitted, in two separate portions of his testimony, that the process of rubbing does *not* lead to the formation of protrusions. *See* Smith, Tr. at 508, 513. Further, the underlying base process of modifying the dielectric layer - which leads to either rubbing or protrusions according to Dr. Smith - is not disclosed in the ‘311 patent specification. *Id.* at 508-21. In any event, because the patent specification adequately explains the meaning of “domain dividers” as used in

the claims, we need not consider such extrinsic evidence. *See Vitronics Corp. v Conceptronic*, 90 F.3d 1576, 1582-83 (Fed. Cir. 1996).

Samsung cites the language in the specification that “specific terms . . . are used in a generic and descriptive sense only and not for purposes of limitation,” as evidence that the patentee did not intend restrictive claim interpretations. Col. 10:14-17. We note that this type of boilerplate language appears in patents that the Federal Circuit has construed narrowly in the context of the intrinsic record. *See SciMed* (one of the patents at issue - U.S. Patent No. 5,156,594 - contains similar boilerplate language, col. 14:29-33). Moreover, this argument by Samsung is weakened by the beginning of the “Detailed Description” section which states that, although the invention is not limited to the particular disclosed embodiments, “these embodiments are provided so that this disclosure will be thorough and complete, and *will fully convey the scope of the invention to those skilled in the art.*” Col. 3:23-26 (emphasis added). Thus the specification states that the embodiments described therein, while not necessarily exclusive, “fully convey” the scope of the claimed invention. This suggests that, while variations on the disclosed aperture patterns could be within the scope of the invention, alternatives based on different and non-disclosed structures such as protrusions would not be included.

Regarding the arguments Samsung and the IA make based on prosecution history, Federal Circuit precedent holds that the understanding of the claims by the U.S. Patent & Trademark Office (“PTO”) examiner is largely irrelevant in the litigation context. *See In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000); *Atl. Thermoplastics Co. v. Faytex Corp.*, 970 F.2d 834, 846 (Fed. Cir. 1992). Furthermore, even the patentee’s own intentions to broaden claim scope during prosecution cannot overcome the clear limitations mandated by the specification.

*See Honeywell*, 452 F.3d at 1319 (“[E]ven if we were to agree with Honeywell that the patentee clearly expressed his intention during prosecution to have the ‘fuel injection system component’ limitation include components in addition to a fuel filter, it would not change the result in this case.”).

Given that the term “domain dividers” is not a term generally understood in the art, we do not believe that a construction limited to apertures requires “words of manifest exclusion” of other structures. *Cf. Teleflex, Inc. v. Ficosa N.A. Corp.*, 299 F.3d 1313 (Fed. Cir. 2002). Even if such exclusion were needed, we would find it to exist here in the totality of the specification which makes clear that formations of apertures, and not formations of other structures, are what was invented.

Accordingly, the Commission construes “domain dividers” to mean “apertures formed in the conductive layer comprising the electrode.”

**B. The ‘311 patent – infringement**

It is undisputed that Sharp’s LCD devices [

] ID at 37-39, CDX-123 to 128. Accordingly, we reverse the ALJ’s determination and find that Sharp’s LCD devices do not infringe claims 6 and 8.

**C. The ‘311 patent - invalidity pursuant to § 112, ¶ 1 under the ID’s construction and unenforceability due to inequitable conduct**

We determined to review whether the claims of the ‘311 patent are invalid pursuant to § 112, ¶ 1 under the ALJ’s construction for “domain dividers,” and whether the ‘311 patent is

unenforceable due to inequitable conduct. In the “Conclusions of Law” section of the ID, the ALJ found that the ‘311 patent is valid and enforceable, but he did not reference §112, ¶ 1 or make any findings of fact concerning enforceability. It is therefore uncertain whether he undertook an invalidity analysis pursuant to § 112, ¶ 1 or an enforceability analysis. ID at 229.

Sharp asserts that the ID’s construction of the term “domain dividers” in the ‘311 patent to include “protrusions” results in invalidity of asserted claims 6 and 8 pursuant to § 112, ¶ 1 because there is no support for “protrusions” in the ‘311 patent specification. Sharp’s Br. At 19-22. As discussed *supra*, the Commission rejects the ID’s construction for “domain dividers” and its finding of infringement. Thus, it is unnecessary for us to reach the issue of claim invalidity pursuant to § 112, ¶ 1. Furthermore, as the Commission has determined that Sharp’s products do not infringe the ‘311 patent, it is unnecessary for the Commission to reach the issue of unenforceability due to inequitable conduct. Accordingly, the Commission takes no position on these issues as is its prerogative under *Beloit Corp. v. United States Int’l Trade Comm’n*, 742 F.2d 1421, 1423 (Fed. Cir. 1984).

**D. The ‘344 patent - invalidity due to anticipation**

We determined to review the ALJ’s validity determinations of asserted claims 7 and 8 of the ‘344 patent in view of U.S. Patent No. 5,309,264 (“Lien”). The ALJ determined that claims 7 and 8 are not invalid as anticipated by the Lien patent. *See* ID at 112-17. Claims 7 and 8 of the ‘344 patent are presented below:

7. A liquid crystal display comprising:
  - a first substrate;
  - a second substrate, spaced apart from the first substrate;
  - a pixel region** on one of the first substrate and the second substrate; and



a field-generating electrode **on the pixel region**, the field-generating electrode having **a first aperture having a first orientation and a second aperture having a second orientation different from the first orientation of the first aperture**; wherein the **first aperture extends upwards at angle from a left side of the field-generating electrode and wherein the second aperture extends downward at angle from the left side of the field-generating electrode** and wherein the angle between the left side of the field-generating electrode and an under side of the first aperture is from **about 120 to about 150 degrees** and wherein the angle between the left side of the field-generating electrode and an under side of the second aperture is from **about 30 to about 50 degrees**.

8. A liquid crystal display comprising:

a first substrate;

a second substrate, spaced apart from the first substrate;

**a pixel region** on one of the first substrate and the second substrate; and

a field-generating electrode on the pixel region, the field-generating electrode having **a first aperture having a first orientation and a second aperture having a second orientation different from the first orientation of the first aperture**; wherein **a distance between the first aperture and the second aperture is from about 8  $\mu\text{m}$  to about 50  $\mu\text{m}$** .

'344 patent, col. 10:21-53 (emphasis added).

As explained below, the Commission affirms the ALJ's ruling that Sharp has not shown, by clear and convincing evidence, that claims 7 and 8 are anticipated by the Lien patent. Particularly, we adopt only the ALJ's finding relating to the "apertures having different orientations" limitation and his finding that Lien does not disclose a "region defined by a black matrix on a common substrate" to satisfy the "pixel region" limitation. Also, the Commission references the ALJ's recognition that Lien was indeed considered by the PTO during prosecution, and that this circumstance makes the invalidity burden "most formidable" and "extremely difficult" to satisfy. *See* ID at 111-12; *Central Soya Co. v. Geo. A. Hormel & Co.*,

723 F.2d 1573, 1577 (Fed. Cir. 1983); *Liebel-Flarsheim v. MedRad, Inc.*, 481 F.3d 1371, 1381 (Fed. Cir. 2007) (“*Liebel-Flarsheim II*”).

In addition, as described *infra*, we find that Lien sufficiently describes all other disputed claim limitations - *i.e.*, range of angles, range of distances - to have placed them in the possession of one of ordinary skill in the art. *See Helifix, Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 1346 (Fed. Cir. 2000):

### **Lien patent**

The prior art Lien patent is directed to a particular structure for a multi-domain, active matrix LCD that uses poly-sided (or multi-pronged) apertures. *See* Lien (RX-46) at Abstract, Figs. 1, 5-6. Lien discloses two substrates, a bottom TFT substrate and a top color filter substrate, sandwiching a top, common electrode with multi-pronged apertures, liquid crystal layers and other materials (*e.g.*, compensating films), and a bottom, pixel electrode. *Id.*; col. 2 to col. 5. Particularly, the multi-pronged apertures of Lien include a “double-Y” shaped configuration where its arms are disposed at 45 degree angles to the edges of the electrode; Lien also includes an embodiment in which the top electrode apertures are separated by, and aligned with, a 10 $\mu$ m slit formed in the bottom electrode. *Id.*; Fig. 5, col. 5:10-44. Further, Lien discloses that transverse gate and data lines separate a pixel electrode from other adjacent pixel electrodes on the bottom TFT substrate. Lien, Figs. 1-2, 9-15, cols. 2:31-57, 4:1-4, 59-64.

#### **a. Claims 7 and 8: “apertures of different orientations” limitation**

Claims 7 and 8 of the '344 patent disclose “a first aperture having a first orientation and a second aperture having a second orientation different from the first orientation of the first aperture.” Col. 10:28-31, 47-50. The ALJ construed the claim term “aperture” as a “continuous opening in the pixel region.” ID at 91-92. The ALJ rejected the arguments of Sharp and the IA that each prong of a multi-pronged opening may be considered a separate aperture; rather, the ALJ concluded that an entire continuous opening constitutes a single aperture. The Commission determined not to review this construction. *See 74 Fed. Reg.* 15301-02 (Apr. 3, 2009); ID at 86-92.

Sharp argues that, even under the ALJ’s construction of aperture, “orientation” of the aperture can be determined based on the angular direction of any prong of the aperture. Whether or not a prong can ever be considered to establish “orientation” of an aperture, we disagree that the relevant apertures of Lien possess different orientations. Rather, we agree with the ALJ’s view that the multi-pronged apertures disclosed by Lien are identical and therefore do not have different orientations. ID at 115.

Sharp cites to the fact that Samsung based some of its infringement arguments regarding “orientation” on the fact that, in Sharp’s products, individual prongs of apertures had a different angular position. However, in none of these cases were the apertures identical as they are in Lien.

We find that the record contains little evidence, let alone clear and convincing evidence, that a skilled artisan would find that Lien discloses apertures of different orientations. Accordingly, we affirm the ALJ’s determination that respondents have failed to demonstrate by clear and convincing evidence that Lien discloses “a first aperture having a first orientation and a

second aperture having a second orientation different from the first orientation of the first aperture.”

**b. Claims 7 and 8: “pixel region” limitation**

Claims 7 and 8 require “a pixel region on one of the first substrate and the second substrate; and a field-generating electrode on the pixel region, the field-generating electrode having a first aperture having a first orientation and a second aperture having a second orientation . . .” ‘344 patent, col. 10:25-30, 44-50.

The ALJ construed “pixel region” as “the region defined by adjoining gate and data lines on the TFT substrate, or defined by the black matrix on the common electrode substrate.” ID at 84, 112. He found that Sharp did not show, by clear and convincing evidence, that Lien discloses either a region “defined by adjoining gate and data lines on the TFT substrate”, or a region “defined by the black matrix on the common electrode substrate.” ID at 113-14.<sup>4</sup>

Claims 7 and 8 require a field-generating electrode that is on the pixel region and that has a first and second aperture. Because each of the relevant apertures in Lien - *i.e.*, those relating to the “range of angles” or “range of distances” limitations - is on the common electrode substrate, rather than the TFT substrate, it is with respect to the common electrode substrate that Lien must satisfy the requirement for “pixel region.” Given the ALJ’s construction of pixel region, this means that Lien must disclose a region “defined by the black matrix on the common electrode substrate.” The ALJ found, however, that Lien only disclosed that “[g]enerally, as is well known in the art, a black matrix material is used for normally white applications.” ID at 113 (citing

---

<sup>4</sup>We note that in the discussion of anticipation the ALJ stated that Lien must disclose *both* a region defined by data and gate lines on the TFT substrate *and* a region defined by the black matrix on the common substrate. ID at 113. As discussed herein, we find that disclosure of the requisite regions on *both* substrates is not required for Lien to anticipate the ‘344 patent.

Lien, col. 7:14-21). The ALJ cited to testimony by Sharp's expert that there was no disclosure of a black matrix in the Lien patent, and that Lien did not disclose how the black matrix may define a pixel region. ID at 113-14.

We concur with the ALJ that Lien does not disclose a pixel region as defined in the '344 patent because Lien does not disclose a region defined by a black matrix on a common electrode substrate. The '344 patent supports this limitation by showing a black matrix P with a common electrode 6 formed therein with apertures 15. *See* Fig. 3; col. 4:28-33. By contrast, Lien does not show a black matrix in any figure, nor does it describe how a black matrix would define a pixel region. Lien only states that black matrix material is generally used for normally white applications to avoid light leakage. We find that Lien does not, by clear and convincing evidence, disclose a pixel region.

Regarding the TFT substrate, the ALJ construed a pixel region as "the region defined by adjoining gate and data lines." ID at 112. Particularly, Figs. 4 and 5 of the '344 patent support this claim limitation as these figures show crossing data and gate lines 9, 81, 82 that border longitudinal electrodes 11 formed over the TFT substrate 20 to define a pixel region P. Figs. 4-5, col. 4:43-59. The ALJ noted that although Lien discloses gate and data lines, it does not disclose any region defined by said gate and data lines in the TFT substrate that contains the relevant apertures. ID at 114. He concluded that Sharp had not shown, by clear and convincing evidence, that the Lien patent disclosed a "pixel region" as defined by the '344 patent. *Id.*

We agree with the ALJ that Lien discloses gate and data lines. We further find, contrary to the ALJ, that Lien discloses a bottom TFT pixel electrode that is "separated on all sides from adjacent pixel electrodes of the same type by gate and data bus lines (not shown)." Lien, Figs. 1-7; col. 4:1-4, 62-64. We agree with the ALJ, however, that although Lien discloses gate and

data lines, it does not disclose a region defined by said gate and data lines in a TFT substrate that contains the relevant apertures (because Lien's apertures are in the common substrate). Thus, Lien does not anticipate the '344 patent because it lacks disclosure of "a field-generating electrode on the pixel region, the field generating electrode having a first aperture . . . and a second aperture [the apertures relating to the 'range of angles' or 'range of distances' limitations]," as required by claims 7 and 8 of the '344 patent.

**c. Claim 7: "range of angles" limitation**

Claim 7 requires that "the angle between the left side of the field-generating electrode and an under side of the first aperture is from about 120 to about 150 degrees and [that] the angle between the left side of the field-generating electrode and an under side of the second aperture is from about 30 to about 50 degrees." '344 patent, col. 10:35-40. The ALJ did not directly address the "range of angles" limitation in claim 7 since he found that the "apertures of different orientations" limitation was not satisfied by Lien and therefore found that claim 7 was not anticipated. ID at 115.

In our view, the two apertures 94a and 94b disclosed in the Lien patent satisfy the range of angles limitation for claim 7 because Lien expressly discloses that "an under side" of these apertures is disposed at an angle of 45 degrees with the edges of the top, common electrode 92. Lien, Fig. 5, col. 5:10-13. Accordingly, the angles from the left side of the electrode are 135 and 45 degrees, respectively, for the first aperture 94a and the second aperture 94b. *Id.* Thus, "an under side" of the apertures in Lien meets the "range of angles" limitation.

**d. Claim 8: "range of distances" limitation**

Claim 8 requires "wherein a distance between the first aperture and the

second aperture is from about 8  $\mu\text{m}$  to about 50  $\mu\text{m}$  . . .” ‘344 patent, col. 10:51-53. The ALJ acknowledged the language and illustration (Fig. 5) in Lien referencing two top electrode apertures to lie above and below, respectively, a 10  $\mu\text{m}$  wide cutout in a bottom electrode, but he found that this language does not clearly disclose that the cutout represents the true distance between the two apertures on the top electrode. *Id.* at 116-17. Accordingly, he found that Sharp and the IA did not establish, by clear and convincing evidence, that this limitation was disclosed by Lien. *Id.*

We find that Lien satisfies the range of distances limitation of claim 8. Particularly, Lien expressly discloses and illustrates that a bottom electrode 90 includes a cutout 91 with a width of 10 $\mu\text{m}$ , and that the two top apertures (94a, 94b) specifically lie above and below this cutout 91, as illustrated by Fig. 5, which omits any gaps between the apertures (94a, 94b) and the cutout 91. *See Lien*, Fig. 5, col. 5:34-44. In our view, there can be no clearer depiction that teaches two apertures separated by a distance of 10  $\mu\text{m}$ , and accordingly we find this limitation satisfied by Lien. In view of an explicit statement of a “10  $\mu\text{m}$  cutout” together with no separation between the apertures and the cutout, illustrated in Fig. 5, we find that Lien describes, by clear and convincing evidence, the “range of distances” limitation to one of ordinary skill in the art. *See Helifix*, 208 F.3d at 1346.

**e. Conclusion**

The Commission affirms-in-part the ALJ’s determination that claims 7 and 8 of the ‘344 patent have not been proven invalid. We agree with the ALJ that Sharp has failed to prove, by clear and convincing evidence, that these claims are invalid as anticipated by the Lien patent. We affirm those portions of the final ID’s non-invalidity determination with respect to the “apertures of different orientations” and his finding that Lien does not disclose a “black matrix”

region on a common electrode substrate to satisfy the “pixel region” limitation, and adopt other portions not inconsistent with this finding. We do find that the “range of angles” and “range of distances” limitations are met by the Lien patent, and that Lien does disclose “a region defined by adjoining gate and data lines on a TFT substrate.” Also, we adopt the ALJ’s findings that all other relevant limitations of claims 7 and 8, not discussed herein, are disclosed by Lien - *i.e.*, “first and second substrates,” “aperture,” “field-generating electrode.” These findings were not challenged by Samsung.

#### **IV. REMEDY, PUBLIC INTEREST, AND BONDING**

For the reasons set forth below, we have determined to adopt the ALJ’s recommended determination (RD) on remedy and bonding with a few modifications. *See* ID at 216-25. Also, we have determined that the public interest does not preclude the ALJ’s recommended remedy. We focus our discussion on the remedy issues in dispute only.

The Commission is authorized to issue a limited exclusion order when the Commission determines that there is a violation of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337). The ALJ recommended that the Commission issue a limited exclusion order and cease and desist orders that cover not just specifically-identified products, but all infringing products, regardless of brand-name, “that are manufactured abroad or imported by or on behalf of [the Sharp respondents], or any of their affiliated companies, parents, subsidiaries, or other related business entities, or their successors or assigns.” RD at 220-21 (*citing Certain Laser Bar Code Scanners and Scan Engines, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-551, Limited Exclusion Order (May 30, 2007)). Also, he determined that the orders should extend to downstream products - *i.e.*, Sharp televisions and professional displays - imported by, or on behalf of, Sharp containing Sharp’s manufactured infringing LCD devices. *Id.*; *Certain*



*Erasable Programmable Read-Only Memories, Components Thereof, Products Containing Such Memories, and Process for Making Such Memories*, Inv. No. 337-TA-276, Commission Opinion at 125-26 (May 1989); *Kyocera v. United States Int’l Trade Comm’n*, 545 F.3d 1340 (Fed. Cir. 2008). The ALJ found that cease and desist orders were warranted in view of evidence demonstrating that Sharp maintains a substantial inventory of the infringing products in the United States. *Id.*; citing CX-41C and CX-259C.

The ALJ did not recommend any bond because he found that Samsung did not establish any need for a bond. *Id.* at 221-25. The ALJ found that the evidence relied on by Samsung, *i.e.*, one Sharp witness (Crandall) testifying in deposition regarding a single document, did not satisfy Samsung’s burden in establishing that a bond should be set at 100% of the entered value of Sharp’s infringing products. *Id.*; citing *Certain Rubber Antidegradants, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-533, Comm’n Op. at 39-40 (July 21, 2006) (holding that it is the complainant’s burden to establish the need for a bond amount in the first place).

#### **A. Remedy**

The Commission agrees with the the ALJ’s recommendation that the appropriate relief includes a limited exclusion order and cease and desist orders directed to all of Sharp’s infringing LCD devices that are manufactured abroad or imported by or on behalf of Sharp, including downstream relief directed to any size Sharp LCD TV or professional display.<sup>5</sup> We view the “by or on behalf” language in the orders along with the language - “any of their affiliated companies, parents, subsidiaries, or other related business entities, or their successors

---

<sup>5</sup> The Commission cease and desist orders are not specifically directed to the particular respondent, Sharp Corporation of Japan.

or assigns” - as adequately addressing Samsung’s concerns that Sharp’s downstream products - e.g., LCD TVs and professional displays - might be imported without the explicit Sharp brand-name, although they include a Sharp LCD module or panel.

The limited exclusion order we issue is consistent with *Kyocera* since it applies to the products of the named respondents. *See Kyocera*, 545 F.3d at 1357-58 (“Thus, in approving such an LEO, this court did not address the Commission’s authority to exclude downstream products of third parties. The only downstream products affected by the ITC’s LEO were those of the sole adjudged violator of section 337, namely, Hyundai.”)(citing *Hyundai Electronics Industries Co. v. United States Int’l Trade Comm’n*, 899 F.2d 1204, 1206-09 (Fed. Cir. 1990)). Also, we agree with the Commission investigative attorney (“IA”) that making an exemption for smaller size Sharp TVs and professional displays would create a loophole by which Sharp and its importer partners could evade the Commission remedial orders.

**B. Public Interest**

When issuing an exclusion order under section 337(d), the Commission must weigh the remedy sought against the effect such a remedy would have on the following public interest factors: (1) the public health and welfare; (2) the competitive conditions in the United States economy; (3) the production of articles in the United States that are like or directly competitive with those subject to the investigation; and (4) United States consumers. *See* 19 U.S.C. § 1337(d)(1).

We find that the issuance of a limited exclusion order and cease and desist orders directed to infringing LCD devices produced by Sharp, and certain downstream products containing these LCD devices, would not be contrary to the public interest. No evidence exists in the record that the issuance of the Commission’s orders would harm public health, welfare, or

safety. There is nothing in the evidentiary record to indicate that Samsung and others cannot meet the demand for these types of LCDs having a wider viewing angle. Both of these circumstances obviate any public interest concerns. In addition, protection of intellectual property rights is favored under section 337.

We agree with Sharp and the IA that the public interest weighs in favor of an exemption to allow importation of service and replacement parts for Sharp LCD televisions and professional displays purchased prior to the issuance of any remedial order. *See Certain Systems for Detecting and Removing Viruses and Worms, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-510, Comm'n Op. at 6 (Aug. 23, 2005); *Certain Automated Mechanical Transmission Systems for Medium-Duty and Heavy-Duty Trucks and Components Thereof*, Inv. No. 337-TA-503, Comm'n Op. at 5-6 (May 9, 2005). Also, we agree with Sharp that any order should include a certification provision allowing importation of Sharp-branded TVs and professional displays that contain other manufacturers' LCD panels and modules - e.g., those LCD devices not produced by, or on behalf of, Sharp.

### **C. Bonding**

Section 337(j) provides for entry of infringing articles during the sixty (60) day period of Presidential review upon posting of a bond and states that the bond is to be set at a level "sufficient to protect the complainant from any injury." 19 U.S.C. § 1337(j)(3); *see also* 19 C.F.R. § 210.50(a)(3).

Regarding bonding, we agree with Sharp and the ALJ that Samsung is required to do more than just assert a lack of "meaningful price comparison" based solely on a review of a single Sharp document, in order to establish a basis for a 100% bond. Samsung has failed to present any additional evidence such as its own pricing information or even attempted to

compare its pricing with that of Sharp. Consistent with Commission precedent, Samsung should not benefit from a lack of any effort to identify any of its prices, because this information is clearly within its possession. *See Certain Connecting Devices for Use with Modular Compressed Air Conditioning Units*, Inv. No. 337-TA-587, 2008 ITC LEXIS 617, RD at \*10 (Feb. 25, 2008) (It is fundamental to a price differential analysis that the complainant seeking the imposition of a bond at least provide some evidence of its own pricing, either to demonstrate the price differential or to demonstrate the difficulty of such a task). To the contrary, Samsung has simply claimed that it was impossible to conduct a price differential analysis.

Accordingly, consistent with *Certain Rubber Antidegradants*, we find that Samsung has failed to meet its burden to establish that a 100% bond is appropriate, especially here where only one respondent is involved. Therefore, we determine that no bond should be imposed during the period of Presidential review.

## **V. CONCLUSION**

The Commission has determined that there has been a violation of section 337, and has further determined that the appropriate form of relief is: (1) a limited exclusion order prohibiting the unlicensed entry of LCD devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe claims 7 or 8 of the '344 patent, that are manufactured abroad by or on behalf of, or are imported by or on behalf of, Sharp, or any of its affiliated companies, parents, subsidiaries, licensees, contractors, or other related business entities, or successors or assigns; and (2) cease and desist orders prohibiting Sharp from conducting any of the following activities in the United States: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting U.S. agents or distributors for, LCD devices, including display panels and modules,

and LCD televisions or professional displays containing the same that are covered by claims 7 or 8 of the '344 patent.

The Commission further has determined that the public interest factors enumerated in section 337(d)(1) (19 U.S.C. § 1337(d)(1)) do not preclude issuance of the limited exclusion order or the cease and desist orders. Finally, the Commission determined that there should be no bond during the period of Presidential review.

By order of the Commission.

A handwritten signature in black ink, appearing to read "Marilyn R. Abbott". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

Marilyn R. Abbott  
Secretary to the Commission

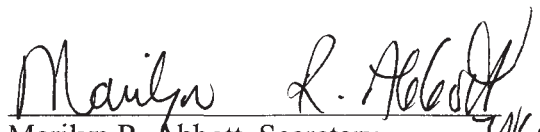
Issued: July 14, 2009

**CERTAIN LIQUID CRYSTAL DISPLAY DEVICES AND  
PRODUCTS CONTAINING THE SAME**

337-TA-631

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **COMMISSION OPINION** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on July 15, 2009.

  
Marilyn R. Abbott, Secretary  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**ON BEHALF OF COMPLAINANT SAMSUNG  
ELECTRONICS CO., LTD.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005  
P-202-783-5070  
F-202-783-2331

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**ON BEHALF OF RESPONDENTS SHARP  
CORPORATION, SHARP ELECTRONICS  
CORPORATION AND SHARP ELECTRONICS  
MANUFACTURING COMPANY OF AMERICA,  
INC.:**

G. Brian Busey, Esq.  
**MORRISON & FOERSTER LLP**  
2000 Pennsylvania Avenue, NW  
Washington, DC 20006  
P-202-887-1500  
F-202-887-0168

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

Heather Hall  
LEXIS-NEXIS  
9443 Springboro Pike  
Dayton, OH 45342

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

Kenneth Clair  
West Group  
901 Fifteenth Street, NW  
Suite 230  
Washington, DC 20005

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_





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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS CONTAINING  
THE SAME**

**Investigation No. 337-TA-631**

**NOTICE OF COMMISSION DECISION TO AFFIRM-IN-PART AND REVERSE-IN-PART A  
FINAL INITIAL DETERMINATION FINDING A VIOLATION OF SECTION 337; ISSUANCE  
OF A LIMITED EXCLUSION ORDER AND A CEASE AND DESIST ORDER; AND  
TERMINATION OF THE INVESTIGATION**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to affirm-in-part and reverse-in-part a final initial determination ("ID") of the presiding administrative law judge ("ALJ") finding a violation of section 337 by the respondents' products in the above-captioned investigation, and has issued a limited exclusion order directed against products of respondents Sharp Corporation of Japan; Sharp Electronics Corporation of Mahwah, New Jersey; and Sharp Electronics Manufacturing Company of America, Inc. of San Diego, California (collectively "Sharp"); and cease and desist orders direct against products of Sharp Electronics Corp. and Sharp Electronics Manufacturing Co.

**FOR FURTHER INFORMATION CONTACT:** Clint Gerdine, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-5468. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on January 25, 2008, based on a complaint filed by Samsung Electronics Co., Ltd. ("Samsung") of Korea. 73 Fed. Reg. 4626-27. The complaint, as supplemented, alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain liquid crystal display ("LCD") devices and products containing the same by reason of infringement of certain claims of U.S. Patent Nos. 7,193,666; 6,771,344 ("the '344 patent"); 7,295,196; and 6,937,311 ("the '311 patent"). The complaint further alleges the existence of a domestic industry as to each asserted patent. The Commission's notice of

investigation named the following respondents: Sharp Corporation of Japan; Sharp Electronics Corporation of Mahwah, New Jersey; and Sharp Electronics Manufacturing, Company of America, Inc. of San Diego, California.

On January 26, 2009, the ALJ issued his final ID finding a violation of section 337 by respondents as to the '311 and '344 patents only, and issued his recommended determinations on remedy and bonding. On February 9, 2009, Sharp and the Commission investigative attorney ("IA") filed petitions for review of the final ID. The IA and Samsung filed responses to the petitions on February 17, 2009.

On March 30, 2009, the Commission determined to review: 1) the ALJ's construction of the claim term "domain dividers" found in the '311 patent;" 2) the ALJ's determination that Sharp's LCD devices infringe the '311 patent; 3) the ALJ's determination that the '311 patent is not unenforceable; and 4) the ALJ's determination that the asserted claims of the '344 patent are not invalid as anticipated by U.S. Patent No. 5,309,264 ("the '264 patent").

The Commission requested the parties to respond to certain questions concerning the issues under review and requested written submissions on the issues of remedy, the public interest, and bonding from the parties and interested non-parties. *74 Fed. Reg.* 15301-02 (April 3, 2009).

On April 10 and April 17, 2009, respectively, complainant Samsung, the Sharp respondents, and the IA filed briefs and reply briefs on the issues for which the Commission requested written submissions. Also, the Commission received four submissions from interested non-parties on the issues of remedy, the public interest, and bonding.

Having reviewed the record in this investigation, including the final ID and the parties' written submissions, the Commission has determined to affirm-in-part and reverse-in-part the ID. Particularly, the Commission has construed the term "domain dividers" in claims 6 and 8 of the '311 patent to be "apertures formed in the conductive layer comprising the electrode." Further, the Commission has reversed the ALJ's ruling of infringement of the '311 patent by Sharp's LCD devices and determined that these devices do not infringe claims 6 and 8 under the Commission's claim construction of "domain dividers." Also, the Commission has taken no position on the validity of the '311 patent pursuant to 35 U.S.C. § 112, ¶ 1, under the ALJ's construction of "domain dividers," or the unenforceability of the '311 patent. In addition, the Commission has affirmed the ALJ's finding that claims 7 and 8 of the '344 patent are not invalid in view of the '264 patent, and affirm his determination of a violation of section 337 with respect to the '344 patent.

Further, the Commission has made its determination on the issues of remedy, the public interest, and bonding. The Commission has determined that the appropriate form of relief is both: 1) a limited exclusion order prohibiting the unlicensed entry of LCD devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe claims 7 or 8 of the '344 patent, that are manufactured abroad by or on behalf of, or are imported by or on behalf of, Sharp, or any of its affiliated companies, parents, subsidiaries, licensees, contractors, or other related business entities, or successors or assigns; and 2) cease and desist orders prohibiting Sharp Electronics Corp. and Sharp Electronics Manufacturing Co. from conducting any of the following activities in the United States: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting U.S. agents or distributors for, LCD devices, including display panels and

modules, and LCD televisions or professional displays containing the same that are covered by claims 7 or 8 of the '344 patent.

The Commission further determined that the public interest factors enumerated in section 337(d)(1) (19 U.S.C. § 1337(d)(1)) do not preclude issuance of the limited exclusion order or the cease and desist order. Finally, the Commission determined that no bond is required to permit temporary importation during the period of Presidential review (19 U.S.C. § 1337(j)). The Commission's orders and opinion were delivered to the President and to the United States Trade Representative on the day of its issuance.

The Commission has terminated this investigation. The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in sections 210.42, 210.45, and 210.50 of the Commission's Rules of Practice and Procedure (19 C.F.R. §§ 210.42, 210.45, 210.50).

By order of the Commission.

A handwritten signature in black ink, appearing to read 'Marilyn R. Abbott', written in a cursive style.

Marilyn R. Abbott  
Secretary to the Commission

Issued: June 24, 2009

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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS  
CONTAINING THE SAME**

**Inv. No. 337-TA-631**

**LIMITED EXCLUSION ORDER**

The Commission has determined that there is a violation of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) in the unlawful importation and sale of certain liquid crystal display (“LCD”) devices and products containing the same that infringe one or more of claims 7 and 8 of U.S. Patent No. 6,771,344 (“the ‘344 patent”) by Sharp Corporation (“Sharp”), Sharp Electronics Corporation (“SEC”), and Sharp Electronics Manufacturing Company of America, Inc. (“SEMA”).

Having reviewed the record in this investigation, including the written submissions of the parties, the Commission has made its determination on the issues of remedy, the public interest, and bonding. The Commission has determined that the appropriate form of relief is a limited exclusion order prohibiting the unlicensed entry of liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe the asserted claims of the ‘344 patent and that are manufactured abroad by or on behalf of, or imported by or on behalf of, Sharp, SEC, or SEMA. The Commission has also determined that the appropriate form of relief includes cease and desist orders against SEC and SEMA.

The Commission has also determined that the public interest factors enumerated in 19 U.S.C. § 1337(d) do not preclude issuance of the limited exclusion order or cease and desist orders, and that respondents may import without posting bond during the Presidential review period.

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

1. Liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that are covered by one or more of claims 7 and 8 of the ‘344 patent, and that are manufactured abroad by or on behalf of, or are imported by or on behalf of, Sharp, SEC, SEMA, or any of their affiliated companies, parents, subsidiaries, or other related business entities, or their successors or assigns, are excluded from entry for consumption into the United States, entry for consumption from a foreign-trade zone, or withdrawal from a warehouse for consumption, for the remaining term of the patent, except under license of the patent owner or as provided by law, and except for LCD devices imported for use as replacement parts for LCD televisions or professional displays imported into the United States prior to the effective date of this Order.

2. Notwithstanding paragraph 1 of this Order, the aforesaid liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same are entitled to entry into the United States for consumption, entry for consumption from a foreign-trade zone, or withdrawal from a warehouse for consumption, without posting bond pursuant to subsection (j) of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337(j), and the Presidential Memorandum for the United States Trade Representative of July 21, 2005 (70 *Fed. Reg.* 43251), from the day after this Order is received by the United States Trade Representative and until such time as the United States

Trade Representative notifies the Commission that this action is approved or disapproved but, in any event, not later than sixty (60) days after the date of receipt of this action.

3. At the discretion of U.S. Customs and Border Protection (“CBP”) and pursuant to procedures it establishes, persons seeking to import liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that are potentially subject to this Order may be required to certify that they are familiar with the terms of this Order, that they have made appropriate inquiry, and thereupon state that, to the best of their knowledge and belief, the products being imported are not excluded from entry under paragraphs 1 through 7 of this Order. At its discretion, CBP may also require persons who have provided the certification described in this paragraph to furnish such records or analyses as it deems necessary to substantiate the certification.

4. In accordance with 19 U.S.C. § 1337(l), the provisions of this Order shall not apply to liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that are imported by and for the use of the United States, or imported for, and to be used for, the United States with the authorization or consent of the Government.

5. The Commission may modify this Order in accordance with the procedures described in Rule 210.76 of the Commission’s Rules of Practice and Procedure, 19 C.F.R. § 210.76.

6. 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 CBP.

7. Notice of this Order shall be published in the *Federal Register*.

By Order of the Commission.

A handwritten signature in black ink, appearing to read "Marilyn R. Abbott". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

Marilyn R. Abbott  
Secretary to the Commission

Issued: June 24, 2009

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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS CONTAINING  
THE SAME**

**Inv. No. 337-TA-631**

**CEASE AND DESIST ORDER**

IT IS HEREBY ORDERED THAT Sharp Electronics Corporation, 1 Sharp Plaza, Mahwah, New Jersey 07430, cease and desist from conducting any of the following activities in the United States: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting U.S. agents or distributors for, certain liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that are covered by one or more of claims 7 and 8 of U.S. Patent No. 6,771,344 (“the ‘344 patent”) 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” or “Samsung” shall mean Samsung Electronics Company, Ltd. of 416 Maetan-dong, Youngtong-gu, Suwon, Kyunggi-Do, Korea 443-742.
- (C) “Respondent” shall mean Sharp Electronics Corporation, 1 Sharp Plaza, Mahwah, New Jersey 07430.
- (D) “Person” shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity or its majority owned or controlled



subsidiaries, successors, or assigns.

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

(F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.

(G) The term “covered products” shall mean certain liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe one or more of claims 7 and 8 of the ‘344 patent.

## **II.**

### **Applicability**

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

## **III.**

### **Conduct Prohibited**

The following conduct of Respondent in the United States is prohibited by the Order. For the remaining term of the patent, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, offer for sale, sell, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or

(E) aid or abet other entities in the importation, sale for importation, sale after importation, transfer, or distribution of covered products.

#### **IV.**

##### **Conduct Permitted**

Notwithstanding any other provision of this Order, specific conduct otherwise prohibited by the terms of this Order shall be permitted if:

(A) in a written instrument, the owner of the '344 patent licenses or authorizes such specific conduct, or such specific conduct is related to the importation or sale of covered products by or for the United States; or

(B) the conduct is limited to the provision of service and replacement parts for customers that purchased their covered products prior to the date of issuance of this Order.

#### **V.**

##### **Reporting**

For purposes of this reporting requirement, the reporting periods shall commence on July 1 of each year and shall end on the subsequent June 30. However, the first report required under this section shall cover the period from the date of issuance of this Order through June 30, 2009. This reporting requirement shall continue in force until such time as Respondent will have truthfully reported, in two consecutive timely filed reports, that it has no inventory of covered products in the United States.

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission the quantity in units and the value in dollars of covered products that Respondent has imported or sold in the United States after importation during the reporting period and the quantity in units and value in dollars of reported covered products that remain in inventory in the United States at the end of the reporting period.

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

## **VI.**

### **Record-keeping and Inspection**

(A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

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

## **VII.**

### **Service of Cease and Desist Order**

Respondent is ordered and directed to:

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

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

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

The obligations set forth in subparagraphs VII(B) and VII(C) shall remain in effect until the date of expiration of the '344 patent, whichever is later.

## **VIII.**

### **Confidentiality**

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

## **IX.**

### **Enforcement**

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

**X.**

**Modification**

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

**XI.**

**Bonding**

The conduct prohibited by Section III of this Order may be continued during the sixty (60) day period in which this Order is under review by the United States Trade Representative as delegated by the President, 70 *Fed Reg* 43251 (July 21, 2005), without Respondent posting a bond.

By Order of the Commission.

A handwritten signature in black ink, appearing to read 'Marilyn R. Abbott', is written over the typed name and title.

Marilyn R. Abbott  
Secretary to the Commission

Issued: June 24, 2009

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

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS CONTAINING  
THE SAME**

**Inv. No. 337-TA-631**

**CEASE AND DESIST ORDER**

IT IS HEREBY ORDERED THAT Sharp Electronics Manufacturing Company of America, Inc., 9295 Siempre Viva Road, Suite J2, San Diego, California 92154, cease and desist from conducting any of the following activities in the United States: importing, selling, marketing, advertising, distributing, offering for sale, transferring (except for exportation), and soliciting U.S. agents or distributors for, certain liquid crystal display ("LCD") devices, including display panels and modules, and LCD televisions or professional displays containing the same that are covered by one or more of claims 7 and 8 of U.S. Patent No. 6,771,344 ("the '344 patent") 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" or "Samsung" shall mean Samsung Electronics Company, Ltd. of 416 Maetan-dong, Youngtong-gu, Suwon, Kyunggi-Do, Korea 443-742.

(C) "Respondent" shall mean Sharp Electronics Manufacturing Company of America, Inc., 9295 Siempre Viva Road, Suite J2, San Diego, California 92154.

(D) "Person" shall mean an individual, or any non-governmental partnership, firm,

association, corporation, or other legal or business entity or its majority owned or controlled subsidiaries, successors, or assigns.

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

(F) The terms “import” and “importation” refer to importation for entry for consumption under the Customs laws of the United States.

(G) The term “covered products” shall mean certain liquid crystal display (“LCD”) devices, including display panels and modules, and LCD televisions or professional displays containing the same that infringe one or more of claims 7 and 8 of the ‘344 patent.

## **II.**

### **Applicability**

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

## **III.**

### **Conduct Prohibited**

The following conduct of Respondent in the United States is prohibited by the Order. For the remaining term of the patent, Respondent shall not:

- (A) import or sell for importation into the United States covered products;
- (B) market, distribute, offer for sale, sell, or otherwise transfer (except for exportation), in the United States imported covered products;
- (C) advertise imported covered products;

(D) solicit U.S. agents or distributors for imported covered products; or

(E) aid or abet other entities in the importation, sale for importation, sale after importation, transfer, or distribution of covered products.

#### **IV.**

##### **Conduct Permitted**

Notwithstanding any other provision of this Order, specific conduct otherwise prohibited by the terms of this Order shall be permitted if:

(A) in a written instrument, the owner of the '344 patent licenses or authorizes such specific conduct, or such specific conduct is related to the importation or sale of covered products by or for the United States; or

(B) the conduct is limited to the provision of service and replacement parts for customers that purchased their covered products prior to the date of issuance of this Order.

#### **V.**

##### **Reporting**

For purposes of this reporting requirement, the reporting periods shall commence on July 1 of each year and shall end on the subsequent June 30. However, the first report required under this section shall cover the period from the date of issuance of this Order through June 30, 2009. This reporting requirement shall continue in force until such time as Respondent will have truthfully reported, in two consecutive timely filed reports, that it has no inventory of covered products in the United States.

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission the quantity in units and the value in dollars of covered products that Respondent has imported or sold in the United States after importation during the reporting period and the quantity in units and value in dollars of reported covered products that remain in



inventory in the United States at the end of the reporting period.

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

## **VI.**

### **Record-keeping and Inspection**

(A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

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

## **VII.**

### **Service of Cease and Desist Order**

Respondent is ordered and directed to:

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

covered products in the United States;

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

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

The obligations set forth in subparagraphs VII(B) and VII(C) shall remain in effect until the date of expiration of the '344 patent, whichever is later.

## **VIII.**

### **Confidentiality**

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

## **IX.**

### **Enforcement**

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

## **X.**

## **Modification**

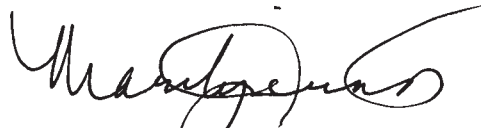
The Commission may amend this Order on its own motion or in accordance with the procedure described in section 210.76 of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 210.76.

## **XI.**

### **Bonding**

The conduct prohibited by Section III of this Order may be continued during the sixty (60) day period in which this Order is under review by the United States Trade Representative as delegated by the President, 70 *Fed Reg* 43251 (July 21, 2005), without Respondent posting a bond.

By Order of the Commission.



Marilyn R. Abbott  
Secretary to the Commission

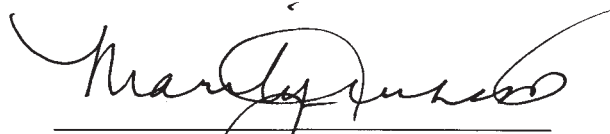
Issued: June 24, 2009

**CERTAIN LIQUID CRYSTAL DISPLAY DEVICES AND  
PRODUCTS CONTAINING THE SAME**

**337-TA-631**

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **NOTICE OF COMMISSION DECISION TO AFFIRM-IN-PART AND REVERSE-IN-PART A FINAL INITIAL DETERMINATION FINDING A VIOLATION OF SECTION 337; ISSUANCE OF A LIMITED EXCLUSION ORDER AND A CEASE AND DESIST ORDER; AND TERMINATION OF THE INVESTIGATION** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on June 24, 2009.



Marilyn R. Abbott, Secretary  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**ON BEHALF OF COMPLAINANT SAMSUNG  
ELECTRONICS CO., LTD.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005  
P-202-783-5070  
F-202-783-2331

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**ON BEHALF OF RESPONDENTS SHARP  
CORPORATION, SHARP ELECTRONICS  
CORPORATION AND SHARP ELECTRONICS  
MANUFACTURING COMPANY OF AMERICA,  
INC.:**

G. Brian Busey, Esq.  
**MORRISON & FOERSTER LLP**  
2000 Pennsylvania Avenue, NW  
Washington, DC 20006  
P-202-887-1500  
F-202-887-0168

- Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

**In the Matter of**

**CERTAIN LIQUID CRYSTAL DISPLAY  
DEVICES AND PRODUCTS  
CONTAINING THE SAME**

**Investigation No. 337-TA-631**

**NOTICE OF COMMISSION DECISION TO REVIEW-IN-PART A FINAL INITIAL  
DETERMINATION FINDING A VIOLATION OF SECTION 337; REQUEST FOR  
WRITTEN SUBMISSIONS REGARDING REMEDY, BONDING, AND THE PUBLIC  
INTEREST; AND EXTENSION OF TARGET DATE**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to review-in-part a final initial determination ("ID") of the presiding administrative law judge ("ALJ") finding a violation of section 337 in the above-captioned investigation, and to request written submissions regarding remedy, bonding, and the public interest. The Commission has also extended the target date for completion of the investigation by 30 days until May 27, 2009.

**FOR FURTHER INFORMATION CONTACT:** Clint Gerdine, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2310. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on January 25, 2008, based on a complaint filed by Samsung Electronics Co., Ltd. ("Samsung") of Korea. 73 *Fed. Reg.* 4626-27. The complaint, as supplemented, alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United

States, the sale for importation, and the sale within the United States after importation of certain liquid crystal display (“LCD”) devices and products containing the same by reason of infringement of certain claims of U.S. Patent Nos. 7,193,666 (“the ‘666 patent”); 6,771,344 (“the ‘344 patent”); 7,295,196; and 6,937,311 (“the ‘311 patent”). The complaint further alleges the existence of a domestic industry. The Commission’s notice of investigation named the following respondents: Sharp Corporation of Japan; Sharp Electronics Corporation of Mahwah, New Jersey; and Sharp Electronics Manufacturing, Company of America, Inc. of San Diego, California (collectively “Sharp”).

On January 26, 2009, the ALJ issued his final ID finding a violation of section 337 by respondents. On February 9, 2009, Sharp and the Commission investigative attorney (“IA”) filed petitions for review of the final ID. The IA and Samsung filed responses to the petitions on February 17, 2009. Also, on March 12, 2009, Sharp filed a motion to extend the target date for completion of the investigation to allow consideration of the final ID scheduled to issue in *Certain Liquid Crystal Display Modules, Products Containing Same, and Methods for Using the Same*, Inv. No. 337-TA-634, on June 12, 2009. On March 23, 2009, Samsung and the IA filed responses in opposition to Sharp’s motion. On March 26, Sharp filed a motion for leave to file a reply to Samsung’s and the IA’s responses in opposition.

Upon considering the parties’ filings, the Commission has determined to review-in-part the ID. Specifically, the Commission has determined to review: 1) the ALJ’s construction of the claim term “domain dividers” relating to the ‘311 patent;” 2) the ALJ’s determination that Sharp’s LCD devices infringe the ‘311 patent; 3) the ALJ’s determination that the ‘311 patent is not unenforceable; and 4) the ALJ’s determination that the asserted claims of the ‘344 patent are not invalid as anticipated by U.S. Patent No. 5,309,264 (“the ‘264 patent”). The Commission has determined not to review the remainder of the ID. Also, the Commission has extended the target date for completion of the investigation by 30 days until May 27, 2009, for procedural reasons. It has denied Sharp’s motion to extend the target date to the extent necessary to allow consideration of the final ID to issue in Inv. No. 337-TA-634. Also, the Commission has denied Sharp’s motion for leave to file a reply to Samsung’s and the IA’s responses in opposition to Sharp’s motion to extend the target date.

On review, with respect to violation, the parties are requested to submit briefing limited to the following issues:

- 1) Whether one of ordinary skill in the art would understand that the claim term “domain dividers” in claims 6 and 8 of the ‘311 patent includes protrusions, in light of the intrinsic evidence and the context of the claimed invention. Please discuss *Wang Labs, Inc. v. Am. Online*, 197 F.3d 1377 (Fed. Cir. 1999) in your response.
  
- 2) Under the ID’s construction for the claim term “domain dividers” which includes protrusions, whether claims 6 and 8 of the ‘311 patent are invalid under

35 U.S.C. § 112, ¶ 1. Please discuss *ICU Med., Inc. v. Alaris Med. Sys.*, No. 2008-1077, 2009 U.S. App. LEXIS 5271 (Fed. Cir. Mar. 13, 2009) and *LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336 (Fed. Cir. 2005) in your response.

3) Under the ID's construction of "aperture" in claims 7 and 8 of the '344 patent, (a) whether U.S. Patent No. 5,309,264 anticipates those claims; and (b) how the "orientation" of a multi-pronged aperture is determined. Assume the Commission finds that all other claim terms are met.

In addressing these issues, the parties are requested to make specific reference to the evidentiary record and to cite relevant authority.

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

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

When the Commission orders some form of remedy, the U.S. Trade Representative, as delegated by the President, has 60 days to approve or disapprove the Commission's action. See Presidential Memorandum of July 21, 2005, 70 *Fed. Reg.* 43251 (July 26, 2005). During this period, the subject articles would be entitled to enter the United States under bond, in an amount determined by the Commission and prescribed by the Secretary of the Treasury. The Commission is therefore interested in receiving submissions concerning the amount of the bond that should be imposed if a remedy is ordered.

**WRITTEN SUBMISSIONS:** The parties to the investigation are requested to file written submissions on the issues under review. The submissions should be concise and thoroughly referenced to the record in this investigation. Parties to the investigation, interested government agencies, and any other interested parties are encouraged to file written submissions on the issues of remedy, the public interest, and bonding, and such submissions should address the recommended determination by the ALJ on remedy and bonding. The complainant and the Commission investigative attorney are also requested to submit proposed remedial orders for the Commission's consideration. Complainants are also requested to state the dates that the patents at issue expire and the HTSUS numbers under which the accused products are imported. The written submissions and proposed remedial orders must be filed no later than close of business on April 10, 2009. Reply submissions must be filed no later than the close of business on April 17. No further submissions on these issues will be permitted unless otherwise ordered by the Commission.

Persons filing written submissions must file the original document and 12 true copies thereof on or before the deadlines stated above with the Office of the Secretary. Any person desiring to submit a document to the Commission in confidence must request confidential treatment unless the information has already been granted such treatment during the proceedings. All such requests should be directed to the Secretary of the Commission and must include a full statement of the reasons why the Commission should grant such treatment. *See* 19 C.F.R. § 210.6. Documents for which confidential treatment by the Commission is sought will be treated accordingly. All nonconfidential written submissions will be available for public inspection at the Office of the Secretary.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, and in sections 210.42-46 of the Commission's Rules of Practice and Procedure, 19 C.F.R. §§ 210.42-46.

By order of the Commission.

  
Marilyn R. Abbott  
Secretary to the Commission

Issued: March 30, 2009

  
William R. Bishop

Acting Secretary to the Commission

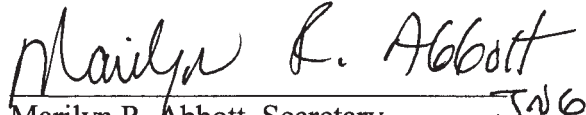


**CERTAIN LIQUID CRYSTAL DISPLAY DEVICES AND  
PRODUCTS CONTAINING THE SAME**

**337-TA-631**

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **NOTICE OF COMMISSION DECISION TO REVIEW-IN-PART A FINAL INITIAL DETERMINATION FINDING A VIOLATION OF SECTION 337; REQUEST FOR WRITTEN SUBMISSIONS REGARDING REMEDY, BONDING, AND THE PUBLIC INTEREST; AND EXTENSION OF TARGET DATE** has been served by hand upon the Commission Investigative Attorney, Stephen Smith, Esq., and the following parties as indicated, on March 31, 2009.

  
Marilyn R. Abbott, Secretary *JWB*  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

**ON BEHALF OF COMPLAINANT SAMSUNG  
ELECTRONICS CO., LTD.:**

Joseph V. Colaianni, Jr., Esq.  
**FISH & RICHARDSON P.C.**  
1425 K Street, NW, 11<sup>th</sup> Floor  
Washington, DC 20005  
P-202-783-5070  
F-202-783-2331

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_

**ON BEHALF OF RESPONDENTS SHARP  
CORPORATION, SHARP ELECTRONICS  
CORPORATION AND SHARP ELECTRONICS  
CORPORATION:**

G. Brian Busey, Esq.  
**MORRISON & FOERSTER LLP**  
2000 Pennsylvania Avenue, NW  
Washington, DC 20006  
P-202-887-1500  
F-202-887-0168

Via Hand Delivery  
 Via Overnight Mail  
 Via First Class Mail  
 Other: \_\_\_\_\_



**PUBLIC VERSION**

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

---

In the Matter of )

CERTAIN LIQUID CRYSTAL DISPLAY )  
DEVICES AND PRODUCTS )  
CONTAINING THE SAME )

---

Investigation No. 337-TA-631

Final Initial and Recommended Determinations

This is the administrative law judge's Final Initial Determination under Commission rule 210.42. The administrative law judge, after a review of the record developed, finds inter alia that there is jurisdiction and that there is a violation of section 337 of the Tariff Act of 1930, as amended.

This is also the administrative law judge's Recommended Determination on remedy and bonding, pursuant to Commission rules 210.36(a) and 210.42(a)(1)(ii). Should the Commission find a violation, the administrative law judge recommends the issuance of a limited exclusion order barring entry into the United States of infringing liquid crystal display devices and products containing respondents' infringing liquid crystal display devices and the issuance of cease and desist orders. He does not recommend any bond.

## APPEARANCES

For Complainant Samsung Electronics Co., Ltd.:

Joseph V. Colaianni, Jr., Esq.  
Fish & Richardson P.C.  
1425 K Street, NW 11<sup>th</sup> Floor  
Washington, DC 20005

Respondents Sharp Corporation; Sharp Electronics Corporation; Sharp Electronics Corporation:

Barry E. Bretschneider, Esq.  
Morrison & Foerster LLP  
1650 Tysons Blvd., Suite 400  
McLean, VA 22102

ITC Staff:

Stephen R. Smith, Esq.  
Office of Unfair Import Investigation  
U.S. International Trade Commission  
500 E Street, SW  
Washington, DC 20436

# TABLE OF CONTENTS

	PAGE
OPINION	
I. Procedural History .....	1
II. Jurisdiction Including Parties And Importation .....	3
II. General Overview of Technology In Issue .....	4
IV. Accused Products .....	10
V. The '311 Patent .....	12
A. Undisputed Facts .....	12
B. Experts .....	13
C. Person Of Ordinary Skill .....	13
D. Claims In Issue .....	14
E. Claim Construction .....	15
1. The Claimed Phrase "domain dividers" .....	25
2. The Claimed Phrase "having" .....	29
F. Infringement .....	32
G. Validity .....	42
H. Inventorship .....	47
VI. The '344 Patent .....	79
A. Undisputed Facts .....	80
B. Experts .....	80
C. Person Of Ordinary Skill .....	80

D.	Claims In Issue .....	80
E.	Claim Construction .....	81
	1. The Claimed Phrase “pixel region” .....	81
	2. The Claimed Phrase “aperture” .....	86
	3. The Claimed Phrase “a distance between the first aperture and the second aperture” .....	93
F.	Infringement .....	98
G.	Validity (Prior Art) .....	110
H.	Validity (35 U.S.C. 112) .....	130
VII.	The ‘196 Patent .....	136
	A. Undisputed Facts .....	136
	B. Experts .....	137
	C. Person Of Ordinary Skill .....	137
	D. Claims In Issue .....	137
	E. Claim Construction .....	139
	1. The Claimed Phrase “adjacent” .....	139
	F. Infringement .....	152
	G. Validity .....	153
	H. Enforceability .....	160
VIII.	The ‘666 Patent .....	164
	A. Undisputed Facts .....	164
	B. Experts .....	164

C.	Person Of Ordinary Skill .....	164
D.	Claims In Issue .....	165
E.	Claim Construction .....	166
1.	The Claimed Phrase “transflective film” .....	166
F.	Infringement .....	179
G.	Validity .....	192
IX.	Domestic Industry .....	194
A.	311 Patent .....	197
B.	‘344 Patent .....	200
C.	‘196 Patent .....	205
D.	‘666 Patent .....	208
X.	Remedy .....	216
XI.	Bond .....	221
XII.	Additional Findings .....	225
	CONCLUSIONS OF LAW .....	229
	ORDER .....	230

## ABBREVIATIONS

CBr	Complainant's Post-hearing Brief
CDX	Complainant's Demonstrative Exhibit
CPFF	Complainant's Proposed Finding
CORFF	Complainant's Objection To Respondents' Proposed Finding
COSFF	Complainant's Objection To Staff's Proposed Finding
CRBr	Complainant's Post-hearing Reply Brief
CRRFF	Complainant's Proposed Rebuttal Finding to RFF
CRSFF	Complainant's Proposed Rebuttal Finding to SPFF
CX	Complainant's Exhibit
JX	Joint Exhibit
RBr	Respondents' Post-hearing Brief
RDX	Respondents' Demonstrative Exhibit
RX	Respondents' Exhibit
RFF	Respondents' Proposed Finding
ROCF	Respondents' Objection To Complainant's Proposed Finding
ROSFF	Respondents' Objection To Staff's Proposed Finding
RRBr	Respondents' Post-hearing Reply Brief
RRCPPFF	Respondents' Proposed Rebuttal Finding To CFF
RRSFF	Respondents' Proposed Rebuttal Finding To SFF
SBr	Staff's Post-hearing Brief
SRBr	Staff's Post-hearing Reply Brief



SPFF Staff's Proposed Finding

Tr. Transcript Of Pre-hearing Conference and Hearing

## OPINION

### I. Procedural History

By notice, dated January 18, 2008, the Commission instituted an investigation, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, to determine whether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation in the United States, or the sale within the United States after importation of certain liquid crystal display devices and products containing the same by reason of infringement of one or more of claims 1, 2, 8, 15-17, 19-21, and 23 of U.S. Patent No. 7,193,666 ('666 patent), claims 7 and 8 of U.S. Patent No. 6,771,344 ('344 patent), claims 1-9, 11-14, and 16 of U.S. Patent No. 7,295,196 ('196 patent), and claims 6-8 of U.S. Patent No. 6,937,311 ('311 patent), and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

The complaint was filed with the Commission on December 21, 2007, under section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, on behalf of Samsung Electronics Co., Ltd. of Korea (Samsung). Supplements to the complaint were filed on December 28, 2007 and January 15, 2008. The complainant requested that the Commission institute an investigation and, after the investigation, issue an exclusion order and a cease and desist order. Those named in the notice of investigation as respondents and served with the complaint were Sharp Corporation, 22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan, Sharp Electronics Corporation, 1 Sharp Plaza, Mahwah, New Jersey 07430-2135 and Sharp Electronics Manufacturing, Company of America, Inc., 9295 Siempre Viva Road, Suite J2, San Diego, California 92154 (Sharp).

Order No. 3, which issued on February 21, 2008, set a target date of April 27, 2009.<sup>1</sup>

---

<sup>1</sup> The Notice of Investigation was published on January 25, 2008 (73 Fed. Reg. 4626-27.)

Hence, any final initial determination should be filed no later than Monday, January 26, 2009.

Order No. 18, which issued on September 23, 2008, granted Samsung's Motion No. 631-16 that it satisfied the economic prong of the domestic industry requirement as to each of the '196, '311, '344 and '666 patents. The Commission non-reviewed Order No. 18 on October 21, 2008.

A prehearing conference was conducted on October 25, 2008. At said conference, Sharp's Motion In Limine 631-26 was granted to the extent that it affects Messrs. Brian Napper and Richard Flasck (Tr. at 12-15). Motion In Limine 631-27 was mooted (Tr. at 15) and Sharp's Motion In Limine 631-28 was denied. (Tr. at 16-17.) At the prehearing conference complainant also limited the claims in issue to claims 6 and 8 of the '311 patent, claims 1, 2, 3, 4, 5, 6, 7, 8 and 9 of the '196 patent, claims 1, 2 and 16 of the '666 patent and claims 7 and 8 of the '344 patent. (Tr. at 54-56.) In addition, the parties have entered into a joint stipulation regarding technology in issue. See Order No. 24 which issued on January 23, 2009.

A six day evidentiary hearing was conducted on October 24, 27, 28, 29, 30, and 31. Post hearing submissions have been filed. The matter is now ready for a final decision.

The Final Initial and Recommended Determinations are based on the record compiled at the hearing and the exhibits admitted into evidence. The administrative law judge has also taken into account his observation of the witnesses who appeared before him during the hearing. Proposed findings of fact submitted by the parties not herein adopted, in the form submitted or in substance, are rejected as either not supported by the evidence or as involving immaterial matters and/or as irrelevant. Certain findings of fact included herein have references to supporting evidence in the record. Such references are intended to serve as guides to the testimony and

exhibits supporting the finding of fact. They do not necessarily represent complete summaries of the evidence supporting said findings.

## II. Jurisdiction Including Parties And Importation

Section 337 of the Tariff Act of 1930, as amended, declares unlawful 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 infringe a valid and enforceable United States patent if an industry in the United States relating to the articles protected by the patent exists or is in the process of being established. See 19 U.S.C. §§ 1337 (a)(1)(B)(i) and (a)(2). Section 337 also provides that the Commission shall investigate alleged violations of the Section and is empowered to hear and decide actions involving alleged unfair acts under the Section. Certain Steel Rod Treating Apparatus, Inv. No. 337-TA-97, Commission Opinion, 215 U.S.P.Q. 229, 231 (June 30, 1981). Section 337 proceedings are in rem, making in personam jurisdiction unnecessary. However due process requires that the notice of investigation be provided to persons with an interest in the property at issue in a manner reasonably calculated to inform them of the pendency of an action so that they may have an opportunity to appear and defend their interests. Id. at 232, Certain Ammonium Octamolybdate Isomers, Inv. No. 337-TA-477, Init. Det. at 8 (May 15, 2003).

For the private parties in this investigation, see FF 1-25 (Section XII.) The respondents have answered the complaint and participated in this investigation, thereby submitting to the jurisdiction of the Commission. (CPFF 341-342 (undisputed).) Moreover, the respondents have admitted to importation of accused LCD devices and products containing these devices. Thus in their Amended Response to the Complaint and Notice of Investigation, they stated:

6.1 Sharp admits that Samsung is asserting four patents in its Complaint. Sharp admits{

}and are then imported into the United States, sold for importation into the United States, and/or sold after importation in the United States. Sharp admits that Sharp Corp. sells{

}

(CPFF 343 (undisputed).) {

} Thus respondents provided a list of accused LCD modules, LCD televisions and professional displays, and dual displays for cellular phones. (CX-448C (Sharp's) Suppl. Resp. to Samsung's Interrogatory No. 1) at 11-16.) (See also CPFF 345 (undisputed).) Accordingly, the Commission has in rem jurisdiction over the respondents with respect to the '311 patent, the '344 patent, the '196 patent and the '666 patent.<sup>2</sup> See Amgen, Inc. v. U.S. Int'l Trade Comm'n, 902 F.2d 1532, 1536 (Fed. Cir. 1990).

Respondents in the investigation were represented by counsel, who personally appeared for respondents. Thus the Commission also has in personam jurisdiction. See Certain Audible Alarm Devices For Divers, Inv. No. 337-TA-365, Initial Determination at 3 (Feb. 2, 1995.)

### III. General Overview Of Technology In Issue

The parties have stipulated to the following general overview of technology in issue.

---

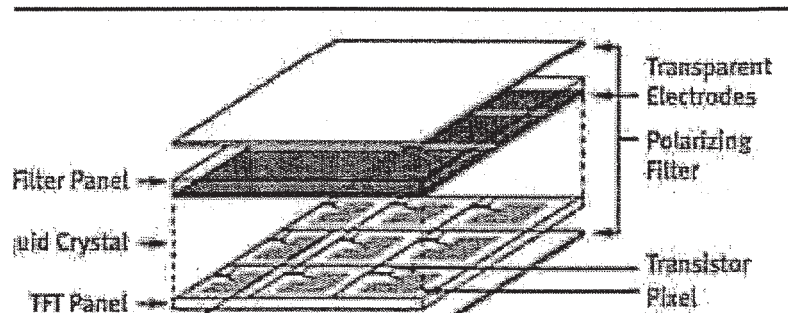
<sup>2</sup> Sharp does dispute that the Commission has subject matter jurisdiction with respect to the '311 patent on the ground that Samsung has no standing to assert the '311 patent because Samsung purportedly failed to join all of the alleged inventors. However, the administrative law judge finds that the standing argument is moot in view of the findings of the administrative law judge in Section V.H infra.

This investigation relates to various technologies used in liquid crystal displays ("LCDs") technology, including pixel electrode designs, dual display LCD modules, and signal transmission patterns. To place the issues in this investigation in their proper context, this Technology Overview section provides a brief background on the relevant operation and structure of liquid crystal displays ("LCDs").

### A. Structure of LCD Panels

Liquid crystal displays are a type of compact, light weight, low power consumption display that is replacing the historically dominant cathode ray tube in many image display applications. LCD development has moved towards ever more compact LCDs, with lower manufacturing costs and higher quality images at wider viewing angles.

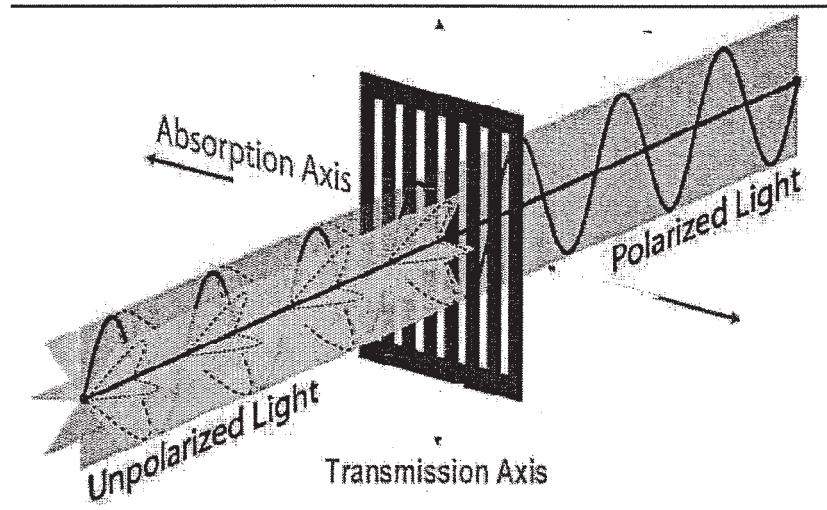
At issue in this investigation is a type of LCD commonly known as an "active matrix" LCD. Generally, active matrix LCDs generate high resolution images using a matrix of pixels formed by liquid crystal cells sandwiched between two glass plates (or substrates) on which various structures are formed or mounted. The liquid crystal cells and the glass plates are together called a "LCD panel." A generalized depiction of an LCD panel is shown below:

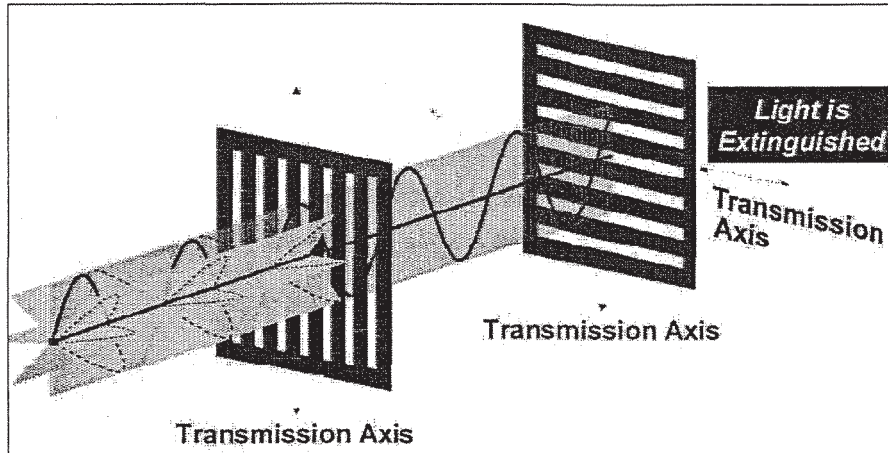


As shown in the diagram above, the pixels are arranged between the glass substrates in rows and columns, with each pixel in the

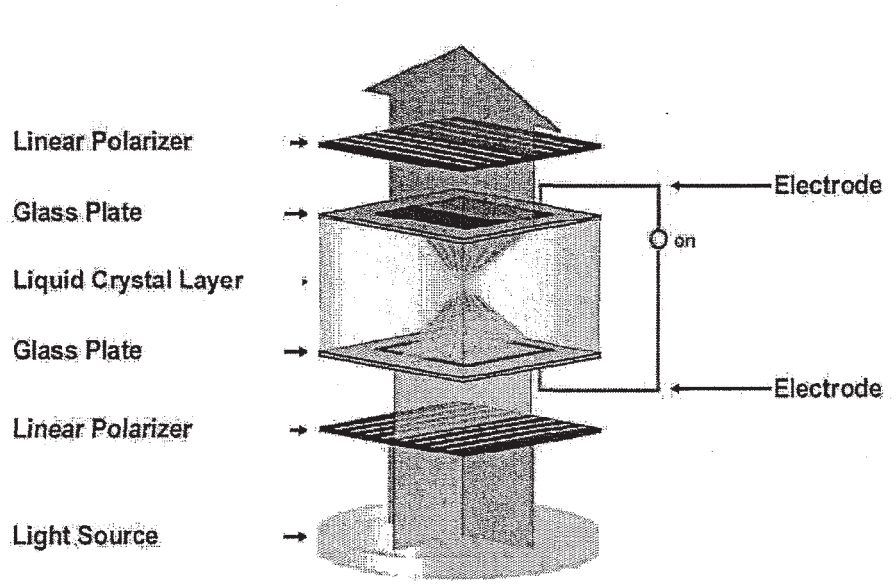
diagram above being associated with a thin film transistor switch ("TFT") having gate, source and drain (which is directly connected to the pixel electrode) terminals. The substrate on which the TFTs are formed is commonly called the "TFT substrate." The facing substrate is generally called the "color filter substrate" or the "common substrate" because of the color filters ("CF") and the common electrode that are generally mounted on that substrate.

The typical transmissive LCD panel used today, such as the ones used in the accused and domestic industry LCD televisions, displays images by affecting the transmission of light through the interplay of the LCD cell's liquid crystal molecules and the electric field resulting from the voltage applied across the TFT and common substrates' electrodes. Typically, an unpolarized light source illuminates the TFT substrate from behind. The unpolarized light becomes polarized (as illustrated below) by the transmission properties of the TFT substrate's polarizer, resulting in the now-polarized light passing through the liquid crystal medium and then confronting a blocking polarizer on the common substrate (next illustration).



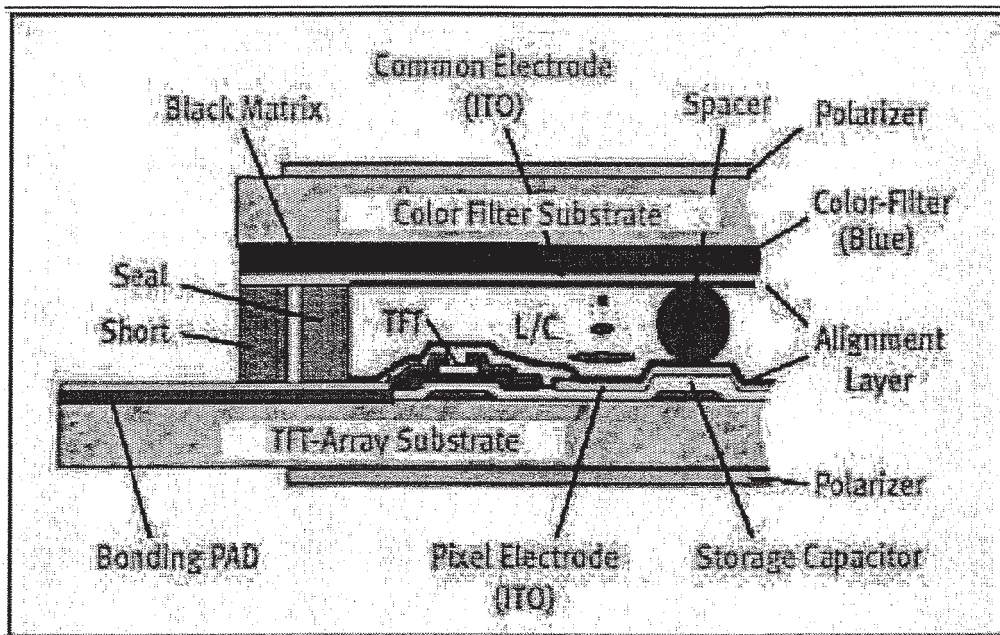


The liquid crystal molecules in the LCD cell, which is sandwiched between the TFT and CF polarizers, can alter the transmitted light's polarization through a change in their molecular orientation. Such a change in the molecules' orientation can occur when an electric field is applied on the liquid crystal molecules, causing electro-mechanical torques that result in an orientation shift. The picture below shows a pixel in bright transmission mode, where the input polarization has been almost fully transformed to the pass polarization of the CF polarizer.





To apply this orientation-controlling electric field, LCD panels use transparent electrodes formed on the inner surfaces of the LCD panel's TFT and color filter substrates. Typically made from indium titanium oxide ("ITO"), the transparent electrodes located on the TFT substrate are commonly called "pixel electrodes," while the one on the color filter substrate is commonly known as "the common electrode." As shown in the diagram below (which is not to scale), the pixel electrode, which electrically connects to the drain terminal of the TFT, receives a voltage from the data line linked to the TFT's source when the gate line applies a sufficient potential to a conductive channel between the TFT's source and drain. Optionally, a storage capacitor (Cs) may be provided to maintain (or store) the brightness-determining voltage.



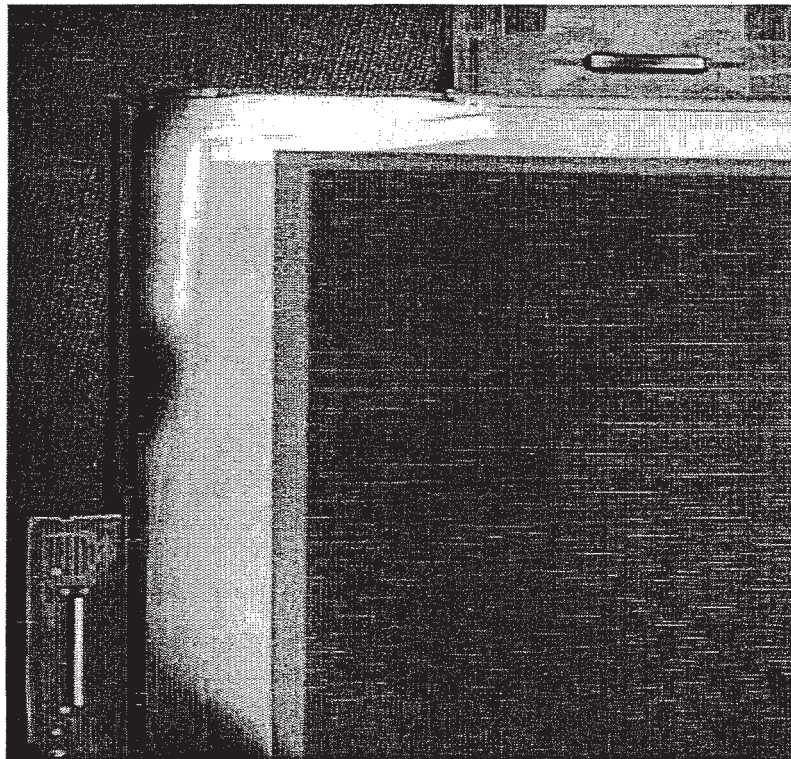
By applying time-dependent pixel-specific voltages to each pixel, the LCD system controls the light transmission of the corresponding picture element, thus varying the picture's color and brightness according to the received picture data signal.

### **B. Controlling the voltage applied to a LCD cell**

In a typical LCD display, the image data consists of pixel voltage being refreshed row by row. Within a row-charging period, the LCD device loads the pixel data for all the cells in a given row by applying a specific and desired voltage to the corresponding data

(or source) lines connected to the source of each pixel electrode's TFT. The LCD device controls the loading of data to pixel electrodes in a given row by applying a synchronized gate pulse on the gate line for that row. To ensure appropriate charging of the pixel electrode, the gate pulse's voltage needs to be high enough to turn on the TFT during the loading period. The short-duration gate "open" signal is usually a specific high positive voltage, while the gate "close" signal is a persistent low negative voltage.

To provide adequate voltage level and drive capability to switch the TFTs in each row, certain LCD devices employ gate driver integrated circuits (ICs) arranged along the sides of the TFT substrate closest to the terminals of the gate lines:



[From CX-24 at 14 (picture of a Sharp 46" LCD panel analyzed in Dr. Smith's report, with label added for illustration).] Through the use of these ICs, the LCD device applies the appropriate voltage levels synchronously with the corresponding data for only so long as the data corresponding to a given row is present on the data line.

Mounted on a flexible substrate attached to the terminals on the TFT substrate, each gate driver IC connects to the terminals on the TFT substrate through conductive lines on the flexible substrate. As with the gate signals, data driver ICs are mounted on similar flexible substrate(s) arranged along the side(s) of the TFT substrate closest to the terminals of the data (source) lines, and generate data signals for the data lines.

#### IV. Accused Products

The following is an overview of Sharp's accused products from CDX-19:

{

}

{

}

{

}

V. The '311 Patent

The '311 patent is entitled "Liquid Crystal Display Having Domain Dividers." The '311 patent issued from U.S. Patent Application Serial No. 10/861,397, filed on June 7, 2004. (JX-2.) The application names Jang-Kun Song, Kyeong-Hyeon Kim, Kye-Hun Lee, and Hea-Ri Lee as co-inventors. Id. The '311 patent claims priority to Korean application number 98-18037, filed on May 19, 1998. Id. The patent discloses a technique for creating a wide viewing angle LCD used in various display products such as televisions and cellular telephones. Id. The disclosed technique involves dividing a liquid crystal layer, interposed between two electrodes, into four domains where the liquid crystal layer indicates different average directions. Id.

A. Undisputed facts

The parties have stipulated to the following involving undisputed technology relating to the '311 patent:

The '311 patent generally discloses an LCD device. In some embodiments, a tetragonal ring shape aperture is formed in the common electrode on one substrate and a cross shape aperture is

formed at the position corresponding to the center of the tetragonal ring shape aperture in the pixel electrode on the other substrate.

A liquid crystal layer between two electrodes are divided to four domains where the directors of the liquid crystal layer have different angles when a voltage is applied to the electrodes. The directors in adjacent domains make a right angle. The tetragonal ring shape aperture is broken at midpoint of each side of the tetragon, and the width of the aperture decreases as goes from the bent point to the edge. Wide viewing angle is obtained by four domains where the directors of the liquid crystal layer indicate different directions, disclination is removed and luminance increases.

B. Experts

Samsung's David Smith was qualified as an expert in liquid crystal display technology.

(Tr. at 269.)

Sharp's Chris Silzars was qualified as an expert with respect to liquid crystal display technology as it relates to the '344 and '311 patents. (Tr. at 1296.)

C. Person of Ordinary Skill

Samsung's expert Smith opined that for the '311 and '344 patents a person of ordinary skill in the art would have either a bachelor's degree in physics or electrical, mechanical, chemical, or polymer engineering with at least four years experience in device design, specifically experience with liquid crystal material. (Tr. at 261.) Alternatively, he testified that a person of ordinary skill in the art could possess a masters degree or Ph.D. with experience in "general optoelectronic technology" with less than four years of practical experience in the field.

Id.

Sharp's expert Silzars opined that for the '311 and '344 patents a person of ordinary skill in the art would have a bachelor's degree in "one of the engineering disciplines or physics,

preferably something in electrical engineering . . .” with “at least four or five years of practical industry experience that’s pertinent to this field.” (Tr. at 1357.) For those individuals who possess an advanced degree, Silzars testified that several years of practical experience would be necessary absent a specific thesis topic “exactly pertinent to liquid crystal technology.” Id.

The administrative law judge concurs with the parties that a person of ordinary skill in the art would have a bachelor’s degree in electrical, mechanical, or chemical engineering or physics with at least four years of experience in making, designing, researching, and/or working with liquid crystal displays.

D. Claims in Issue

The asserted claims of the ‘311 patent are the following:

6. A liquid crystal display comprising:

a first substrate;

a first electrode formed on the substrate and having a plurality of first domain dividers;

a second substrate facing the first substrate; and

a second electrode formed corresponding to the first electrode on the second substrate and having a plurality of second domain dividers, wherein at least one of the second domain dividers comprises a main body and a branch extending from the main body along an edge of the first electrode.

\* \* \*

8. The liquid crystal display of claim 6, wherein the main body and the branch form an obtuse angle.

(JX-2 at 10:41-56.)

E. Claim Construction

Claim construction is a question of law. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996) (Markman); see Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1455 (Fed. Cir. 1998). In construing claims, a court should look to intrinsic evidence consisting of the language of the claims, the specification and the prosecution history as it “is the most significant source of the legally operative meaning of disputed claim language.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) (Vitronics); see Bell Atl. Network Servs., Inc. v. Covad Commc’n. Group, Inc., 262 F.3d 1258, 1267 (Fed. Cir. 2001). Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and, when necessary, to explain what the patentee covered by the claims” See U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997).

The claims themselves “provide substantial guidance as to the meaning of particular claim terms.” Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (Phillips), citing Vitronics, 90 F.3d at 1582. It is essential to consider a claim as a whole when construing each term, because the context in which a term is used in a claim “can be highly instructive.” Id. In construing claims, the administrative law judge should first look “to the words of the claims themselves . . . to define the scope of the patented invention.” Vitronics., 90 F.3d at 1582; see generally Phillips, 415 F.3d at 1312-13. Claim terms “are generally given their ordinary and accustomed meaning.” Vitronics, 90 F.3d at 1582. Moreover, each term of a claim should be given its own meaning. See Merck & Co. v. Teva Pharm., USA, Inc., 395 F.3d 1364, 1372 (Fed. Cir. 2005), cert. denied 546 U.S. 972 (2005). (Merck & Co.) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.”).



In Pause Technology, Inc. v. T.V., Inc., 419 F.3d 1326 (Fed. Cir. 2005) the Court stated:

. . . in clarifying the meaning of claim terms, courts are free to use words that do not appear in the claim so long as “the resulting claim interpretation . . . accord[s] with the words chosen by the patentee to stake out the boundary of the claimed property.” Cf. Renishaw PLC v. Marposs Società per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998) (noting that “[w]ithout any claim term susceptible to clarification . . . there is no legitimate way to narrow the property right”).

Id. at 1333. Also, claim terms are presumed to be used consistently throughout the patent, such that the usage of the term in one claim can often illuminate the meaning of the same term in other claims. Research Plastics, Inc. v. Federal Packaging Corp., 421 F.3d 1290, 1295 (Fed. Cir. 2005) (Research Plastics).

The ordinary meaning of a claim term may be determined by reviewing a variety of sources, which may include the claims themselves, dictionaries and treatises, the written description, the drawings and the prosecution history. Ferguson Beauregard/Logic Controls v. Mega Sys., LLC, 350 F.3d 1327, 1338 (Fed. Cir. 2003). “Dictionaries...are often useful to assist in understanding the commonly understood meaning of words and have been used both by our court and the Supreme Court in claim interpretation.” Phillips, 415 F.3d at 1322. The use of a dictionary, however, may extend patent protection beyond what should properly be afforded by a patent. Also, there is no guarantee that a term is used in the same way in a treatise as it would be by a patentee. Id. Moreover, the presumption of ordinary meaning will be “rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.” ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1091 (Fed. Cir. 2003).

The presence of a specific limitation in a dependent claim raises a presumption that the limitation is not present in the independent claim. Phillips, 415 F.3d at 1315. This presumption is especially strong when the only difference between the independent and dependent claims is the limitation in dispute. SunRace Roots Enter. Co., Ltd. v. SRAM Corp., 336 F.3d 1298, 1303 (Fed. Cir. 2003) (SunRace). Moreover, “claim differentiation takes on relevance in the context of a claim construction that would render additional, or different, language in another independent claim superfluous.” AllVoice Computing PLC v. Nuance Commc’ns, Inc., 504 F.3d 1236, 2007 U.S. App. LEXIS 23949, at \*23 (Fed. Cir. 2007). In addition, a claim construction that gives meaning to all the terms of a claim is preferred over one that does not do so. See Merck & Co. 395 F.3d at 1372; Alza Corp. v. Mylan Labs. Inc., 391 F.3d 1365, 1370 (Fed. Cir. 2004) (Alza) (affirming the district court’s rejection of both parties’ claim construction where those constructions meant that “the inclusion of the word ‘base’ in the claims would be redundant”). Differences between the claims are helpful in understanding the meaning of claim terms. Phillips, 415 F.3d at 1314.

The preamble of a claim may be significant in interpreting a claim. Thus, “a claim preamble has the import that the claim as a whole suggests for it.” Bell Commc’ns Research, Inc. v. Vitalink Commc’ns Corp., 55 F.3d 615, 620, 34 U.S.P.Q.2d 1816, 1820 (Fed. Cir. 1995). If said preamble, when read in the context of an entire claim, recites limitations of the claim, or if the claim preamble is “necessary to give life, meaning, and vitality” to the claim, then the claim preamble should be construed as if in the balance of the claim. Kropa v. Robie, 187 F.2d 150, 152 (CCPA 1951) (Kropa); see also Rowe v. Dror, 112 F.3d 473, 478 (Fed. Cir. 1997) (Rowe); Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257 (Fed. Cir. 1989)

(Corning Glass). Indeed, when discussing the “claim” in such a circumstance, there is no meaningful distinction to be drawn between the claim preamble and the rest of the claim, for only together do they comprise the “claim.” If, however, the body of the claim fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention’s limitations, but rather merely states, for example, the purpose or intended use of the invention, then the preamble may have no significance to claim construction because it cannot be said to constitute or explain a claim limitation. See Rowe, 112 F.3d at 478; Corning Glass, 868 F.2d at 1257; Kropa, 187 F.2d at 152.

In Pitney Bowes Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1306 (Fed. Cir. 1999) (Pitney Bowes), the preamble statement that the patent claimed a method of or apparatus for “producing on a photoreceptor an image of generated shapes made up of spots” was not merely a statement describing the invention’s intended field of use. Instead, the Court found that said statement was intimately meshed with the ensuing language in the claim; and that, for example, both independent claims concluded with the clause “whereby the appearance of smoothed edges are given to the generated shapes.” Id. Because this was the first appearance in the claim body of the term “generated shapes,” the Court found that the term could only be understood in the context of the preamble statement “producing on a photoreceptor an image of generated shapes made up of spots.” Id. Similarly, the Court found that the term “spots” was initially used in the preamble to refer to the elements that made up the image of generated shapes that were produced on the photoreceptor; that the term “spots” then appeared twice in each of the independent claims; and that the claim term “spots” referred to the components that together made up the images of generated shapes on the photoreceptor and was only discernible from the claim

preamble. Id. The Court concluded that in such a case, it was essential that the preamble and the remainder of the claim be construed as one unified and internally consistent recitation of the claimed invention. Id.

The specification of a patent “acts as a dictionary” both “when it expressly defines terms used in the claims” and “when it defines terms by implication.” Vitronics, 90 F.3d at 1582. For example, the specification “may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.” Phillips, 415 F.3d at 1323 quoting Iredto Access, Inc. v. Echostar Satellite Corp., 383 F.3d 1295, 1300 (Fed. Cir. 2004).

Importantly, a person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification. Phillips, 415 F.3d at 1314. Whatever ambiguity may exist with respect to the claim language may be resolved by an examination of the specification. Teleflex, Inc. v. Ficoso N. Am. Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002) (“The specification may assist in resolving ambiguity where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.”)

A patentee may deviate from the conventional meaning of a particular claim term by making the intended meaning of a particular claim term clear (1) in the specification or (2) during the patent’s prosecution history. Lear Siegler, Inc. v. Aeroquip Corp., 733 F.2d 881, 889 (Fed. Cir. 1984). If using a definition that is contrary to the definition given by those of ordinary skill in the art, however, the patentee’s specification must communicate a deliberate and clear preference for the alternate definition. Kumar v. Ovonic Battery Co., Inc., 351 F.3d 1364, 1368

(Fed. Cir. 2003), citing Apple Computers, Inc. v. Articulate Sys., Inc., 234 F.3d 14, 21 n.5 (Fed. Cir. 2000). In ascribing to an alternative definition rather than the ordinary meaning, the intrinsic evidence must “clearly set forth” or “clearly redefine” a claim term so as to put one reasonably skilled in the art on notice that the patentee intended to so redefine the claim term. Bell Atl. Network Servs., Inc. v. Covad Communs. Group, Inc., 262 F.3d 1258, 1268 (Fed. Cir. 2001).

The prosecution history, including “the prior art cited,” is “part of the ‘intrinsic evidence.’” Phillips, 415 F.3d at 1317. The prosecution history “provides evidence of how the inventor and the PTO understood the patent.” Id. Thus, the prosecution history can often inform the meaning of the claim language by demonstrating how an inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would be otherwise. Vitronics, 90 F.3d at 1582-83; see also Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution” quoting ZMI Corp. v. Cardiac Resuscitator Corp., 844 F.2d 1576, 1580 (Fed. Cir. 1988)); Southwall Techs., Inc. v. Cardinal IG Co., F.3d 1570, 1576 (Fed. Cir. 1995); see also Verizon Servs. Corp. v. Vonage Holdings Corp., 503 F.3d 1295, 1306 (Fed. Cir. 2007), citing Microsoft Corp. v. Multi-tech Sys., Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004) (“We have held that a statement made by the patentee during prosecution history of a patent in the same family as the patent-in-suit can operate as a disclaimer.”) The Federal Circuit in Texas Instruments Inc. v. U.S.I.T.C., 988 F.2d 1165 (Fed. Cir. 1993), stated:

As a general proposition, prosecution history estoppel is based upon a showing that an applicant amended a claim to avoid a cited prior art reference. ... Amendment of a claim in light of a prior art

reference, however, is not the sine qua non to establish prosecution history estoppel. Unmistakable assertions made by the applicant to the Patent and Trademark Office (PTO) in support of patentability, whether or not required to secure allowance of the claim, also may operate to preclude the patentee from asserting equivalency between a limitation of the claim and a substituted structure or process step.

(emphasis added) Id. at 1174 (internal citations omitted); see also Forest Labs, Inc. v Abbott Labs, 239 F.3d 1305, 1313-14 (stating that “arguments made during prosecution lead to the conclusion that the claims should be limited to their literal scope”); Bayer AG v. Elan Pharm. Corp., 212 F.3d 1241, 1252 (Fed. Cir. 2002); Wang Lab., Inc. v. Mitsubishi Elecs., Inc., 103 F.3d 1571, 1578 (Fed. Cir. 1997). The prosecution history includes any reexamination of the patent. Intermatic Inc. v. Lamson & Sessions Co., 273 F.3d 1355, 1367 (Fed. Cir. 2001).

In addition to the intrinsic evidence, the administrative law judge may consider extrinsic evidence when interpreting the claims. Extrinsic evidence consists of all evidence external to the patent and the prosecution history, including inventor testimony and expert testimony. This extrinsic evidence may be helpful in explaining scientific principles, the meaning of technical terms, and terms of art. See Vitronics, 90 F.3d at 1583; Markman, 52 F.3d at 980. However, “[e]xtrinsic evidence is to be used for the court’s understanding of the patent, not for the purpose of varying or contradicting the terms of the claims.” Markman, 52 F.3d at 981. Also, the Federal Circuit has viewed extrinsic evidence in general as less reliable than the patent and its prosecution history in determining how to read claim terms. Phillips, 415 F.3d at 1318. In addition, while extrinsic evidence may be useful, it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence. Phillips, 415 F.3d at 1319.

In Nystrom v. Trex Company, 424 F.3d 1136 (Fed. Cir. 2005), the Court stated:

... as explained in Phillips, Nystrom is not entitled to a claim construction divorced from the context of the written description and prosecution history. The written description and prosecution history consistently use the term “board” to refer to wood decking materials cut from a log. Nystrom argues repeatedly that there is no disavowal of scope of the written description or prosecution history. Nystrom’s argument is misplaced. Phillips, 415 F.3d at 1321 (“The problem is that if the district court starts with the broad dictionary definition in every case and fails to fully appreciate how the specification implicitly limits that definition, the error will systematically cause the construction of the claim to be unduly expansive.”). What Phillips now counsels is that in the absence of something in the written description and/or prosecution history to provide explicit or implicit notice to the public— i.e., those of ordinary skill in the art— that the inventor intended a disputed term to cover more than the ordinary and customary meaning revealed by the context of the intrinsic record, it is improper to read the term to encompass a broader definition simply because it may be found in a dictionary, treatise, or other extrinsic source. *Id.*

*Id.* at 1144-45. In Free Motion Fitness Inc. v. Cybex Int’l Inc., 423 F.3d 1343 (Fed. Cir. 2005),

the Court concluded that:

under Phillips, the rule that “a court will give a claim term the full range of its ordinary meaning”, Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed.Cir. 2001), does not mean that the term will presumptively receive its broadest dictionary definition or the aggregate of multiple dictionary definitions. Phillips, 415 F.3d at 1320-1322. Rather, in those circumstances, where references to dictionaries is appropriate, the task is to scrutinize the intrinsic evidence in order to determine the most appropriate definition.

*Id.* at 1348-49. In Network Commerce, Inc. v. Microsoft Corp., 422 F.3d 1353 (Fed. Cir. 2005),

the Court concluded:

As we recently reaffirmed in Phillips, “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.” Phillips, 415 F.3d at 1318. Here [expert] Coombs does not support his conclusion [the “download

component” need not contain the boot program] with any references to industry publications or other independent sources. Moreover, expert testimony at odds with the intrinsic evidence must be disregarded. Id. (“[A] court should discount any expert testimony that is clearly at odds with the claim construction mandated by . . . the written record of the patent.” (internal quotations and citation omitted). That is the case here.

Id. at 1361.

Patent claims should be construed so as to maintain their validity. However, that maxim is limited to cases in which a court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous. Phillips, 415 F.3d at 1327. If the only reasonable interpretation renders the claim invalid, then the claim should be found invalid. See, e.g., Rhine v. Casio, Inc., 183 F.3d 1342, 1345 (Fed. Cir. 1999).

Samsung and Sharp disagree on the meaning of the terms “domain dividers” and “having” as used in claims 6 and 8 of the ‘311 patent. See supra. Samsung argued that the term “domain dividers” should receive its “ordinary meaning” to a person skilled in the art, and thus should cover structures such as apertures formed in the conductive layer comprising the electrode or protrusions formed from a dielectric layer on top of the electrodes. (CDX-1110.) It further argued that there is no basis in the intrinsic evidence to strip the word “having” of its “plain and ordinary meaning.” Thus it argued that, as its expert Smith explained at the hearing, “[a]n electrode can have protrusions. It can have apertures. It can have multidomain structures formed by rubbing.” (CPFF 762; Tr. at 522.)

Respondents argued that the term “electrode . . . having . . . domain dividers” does not encompass dielectric protrusions formed on top of the electrodes, but is limited to openings in the conductive material of the electrode, which the patent calls “apertures.” (RBr at 31.) It is



argued that “having” requires the domain dividers to be “formed from” the electrode. (RBr at 30.) Thus, it is argued that “having” indicates that the “domain dividers” must be formed from the conductive material of the electrode and must be apertures. (RRCPPF 763A.)

In the staff’s view, the evidence demonstrated that a person of ordinary skill in the art at the time of the invention would have interpreted the term “domain dividers” within the meaning of the ‘311 patent to include both apertures and protrusions. (SBr at 12.) Thus, the staff argued that “[t]he claims themselves clearly demonstrate that the term ‘domain dividers’ is not limited to apertures. ... In short, under Sharp’s construction, if ‘domain dividers’ refers only to apertures, claim 6 would render claim 9 superfluous.” (SBr at 13.) The staff did not take a specific position as to the interpretation of “having.” However, in view of its position on “domain dividers” it appears to be in agreement with complainant on the interpretation of “having.”

Asserted independent claim 6 of the ‘311 patent is reproduced infra, with the disputed terms "domain dividers" and “having”, as well as “electrode”, which relates to the disputed terms, underlined:

6. A liquid crystal display comprising:

a first substrate;

a first electrode formed on the substrate and having a plurality of first domain dividers;

a second substrate facing the first substrate; and

a second electrode formed corresponding to the first electrode on the second substrate and having a plurality of second domain dividers, wherein at least one of the second domain dividers comprises a main body and a branch extending from the main body along an edge of the first electrode.

(JX-2 at 10:41-52 (emphasis added).)

1. The Claimed Phrase “domain dividers”

In construing claim language, the administrative law judge first looks to the language of the claims themselves. The claimed phrase “domain dividers” appears in asserted independent claim 6, supra.<sup>3</sup> The claimed phrase also appears in unasserted claim 9, dependent from claim 6, which provides, in pertinent part:

9. The liquid crystal display of claim 6, wherein either the first domain dividers or the second domain dividers are apertures.

(JX-2 at 10:57-59.) Thus, asserted independent claim 6 recites first and second domain dividers, see supra, while unasserted claim 9, dependent from claim 6, recites that “either the first domain dividers or the second domain dividers are apertures.” (JX-2 at 10:57-59.) If “domain dividers” included only apertures, then claim 9 would be redundant. See Phillips and SunRace, supra. As respondents’ expert Silzars testified at the hearing:

Q. Dr. Silzars, assuming that Claim 9 includes all the limitations of Claim 6, is it your opinion that it is simply repetitive of Claim 6 or is it your opinion that it is not repetitive of Claim 6?

A. If we make that assumption that it is repetitive of Claim 6, yes.

(Tr. at 1628; see also CPFF 720 (“If claim 6 were limited to apertures, then claim 9 does not add anything to claim 6, and claim 9 simply repeats what is already in claim 6”)) (undisputed by

---

<sup>3</sup> Because asserted claim 8 is dependent on claim 6, it inherently contains the claimed phrase “domain dividers.”

respondents<sup>4</sup>.)

Additionally, unasserted independent claim 1 recites, in pertinent part:

1. A liquid crystal display, comprising:

... a first electrode formed on the first substrate and having a plurality of first domain dividers;

... a second electrode formed corresponding to the first electrode on the second substrate and having a plurality of second domain dividers;

wherein the first domain dividers and the second domain dividers have a bent portion in plane view.

(JX-2 at 10:19-29 (emphasis added).) Unasserted claim 5, dependent from claim 1, recites:

5. The liquid crystal display of claim 1, wherein either the first domain dividers or the second domain dividers are apertures.

(JX-2 at 10:38-40 (emphasis added).) As with claims 6 and 9, supra, the additional limitation in claim 5 supports a finding that the claimed phrase “domain dividers” is not limited to apertures.

Unasserted independent claim 10 recites, in pertinent part:

10. A liquid crystal display comprising:

... a first electrode formed on the inner surface of said first substrate and having a plurality of first domain dividers;

... a second electrode formed corresponding to the first electrode on the inner surface of the second substrate having a plurality of second domain dividers; [and]

a plurality of domains formed by the first domain dividers and the second domain dividers, wherein the number of average axial directions of liquid crystal in a group of adjacent domains is four....

---

<sup>4</sup> Claim 9 is dependent from claim 6. Thus, it “includes all the limitations of Claim 6.”  
See supra.

(JX-2 at 10:60-11:15 (emphasis added).) Unasserted dependent claim 11 is dependent on claim 10 and recites:

11. The liquid crystal display of claim 10, wherein either the first domain dividers or the second domain dividers are apertures.

(JX-2 at 11:16-17 (emphasis added).) As with claims 6 and 9, supra, claims 10 and 11 support a finding that the claimed phrase “domain dividers” is not limited to apertures. Moreover, unasserted independent claim 12 recites, in pertinent part:

12. A liquid crystal display, comprising:

... a plurality of first domain forming elements, each formed on the bottom surface of the second substrate and formed corresponding to a center of each portion of the pixel electrode ....

(JX-2 at 11:19-34 (emphasis added).) Additionally, unasserted claim 20, dependent from unasserted independent claim 12, recites:

20. The liquid crystal display of claim 12, wherein the first domain forming element is a protrusion or an aperture.

(JX-2 at 12:35-36 (emphasis added).) Though claim 12 uses the phrase “domain forming elements” and does not use the phrase “domain dividers,” the additional limitation of claim 20 demonstrates that both protrusions and apertures were considered as methods of creating domains and were considered part of at least one embodiment of the invention. Based on the foregoing, the administrative law judge finds that the claims of the ‘311 patent support a finding that “domain dividers” are not limited to apertures.

Referring to a portion of the specification of the ‘311 patent, it recites the following:

To overcome the above-described problem,  
multi-domain structures formed by varying rubbing

directions in the alignment layers or by forming apertures in the transparent electrodes are proposed. (JX-2 at 1:48-51 (emphasis added).)

Since the aperture 200 is formed when a conductive layer is patterned to form the electrode 21 by using photolithography, no separate step for forming the aperture 20 is required, and thus it is very easy to obtain a multi-domain LCD compared with other methods using such as rubbing.

(JX-2 at 4:58-63 (emphasis added).) Thus, the specification discloses that, in addition to apertures, multi-domain structures may be created by methods such as rubbing alignment layers instead of using apertures. Id. Said portion of the specification thus further supports the finding that domain dividers are not limited to apertures.

Extrinsic evidence also supports a finding that the claimed phrase “domain dividers” is broader in scope than apertures. For example, respondents’ expert Silzars testified as follows:

Q. Well, they're both used for the same purpose, correct?

A. They're both used for the purpose of creating domains, yes.

Q. So functionally they are substitutes, correct?

A. I -- what I want to clarify is that it's -- it's not as simple as -- if I have a protrusion, I can't just take the same layout and make it an aperture and assume that it will work the same way. They both will function to create domains. But the details of the design do not make them interchangeable.

Q. So you may have to change things elsewhere in the design to compensate for the fact that you now have an aperture instead of a protrusion. But in terms of creating domains and enhancing the viewing angle of a display, apertures and protrusions are substitutes for one another?

A. They both will accomplish that result.

(Tr. at 1537 (emphasis added).)

In addition, in their responses to educational Order No. 21 Requiring Submissions From Complainant, Respondents, and the Staff, which issued on October 9, 2008, respondents admitted that the phrase “domain dividers” encompasses more than apertures. (Resp. Responses to Questions at 19-20.) Specifically, respondents stated:

[I]t is possible that domain dividers other than apertures could be formed from the electrode layer, which is part of the electrode layer. For example, a conductive protrusion formed of the electrode material, which is part of the electrode, could be a domain divider because the electrode “has” the protrusion. For instance, the ‘703 patent and its priority applications disclose that it is possible to create structures other than apertures from [sic] electrode layer for the purpose of creating and regulating domains.

Id. (internal citations omitted; emphasis added).

Based on the foregoing, the administrative law judge finds that the claimed phrase “domain divider” should include at least apertures formed in the conductive layer comprising the electrode and protrusions formed from a dielectric layer on top of the electrodes.

2. The Claimed Phrase “having”

With respect to the claimed phrase “having,” claim terms are generally given their ordinary meanings, as understood by a person of ordinary skill in the art, absent evidence that the patent applicants intended to define said terms in another way. See supra. Complainant argued that, under the ordinary meaning of “having,” “[a]n electrode can have protrusions. It can have apertures. It can have multidomain structures formed by rubbing,” while respondents argued that “having” indicates that the “domain dividers” must be formed from the conductive material of

the electrode and must be apertures. See supra. In construing a claim phrase, the administrative law judge first looks to the language of the claims. The claimed phrase “having” appears in asserted claim 6 of the ‘311 patent. Thus, claim 6 reads in pertinent part:

6. A liquid crystal display comprising:

... a first electrode formed on the substrate and having a plurality of first domain dividers;

... a second electrode formed corresponding to the first electrode on the second substrate and having a plurality of second domain dividers ....

(JX-2 at 10:41-52 (emphasis added).) The claimed phrase "having" also appears in unasserted claims 1, 10 and 12 of the ‘311 patent, which read, in pertinent part:

1. A liquid crystal display, comprising:

... a first electrode formed on the first substrate and having a plurality of first domain dividers;

... a second electrode formed corresponding to the first electrode on the second substrate and having a plurality of second domain dividers .... (JX-2 at 10:20-29 (emphasis added).)

10. A liquid crystal display comprising:

a first substrate having an inner surface and an outer surface;

a first electrode formed on the inner surface of said first substrate and having a plurality of first domain dividers;

a second substrate facing the first substrate and having an inner surface and an outer surface;

a second electrode formed corresponding to the first electrode on the inner surface of the second substrate having a plurality of second domain dividers .... (JX-2 at

10:60-11:15 (emphasis added).)

12. A liquid crystal display, comprising:

a first substrate having a top surface and a bottom surface;

... a second substrate having a top surface and a bottom surface .... (JX-2 at 11:19-34 (emphasis added).)

None of the claims of the '311 patent indicate that the patentee used the claimed phrase "having" such that it is restricted to apertures formed from the conductive material of the electrode.

(RRCPPF 763A.)

Referring to the '311 patent, the claimed phrase "having" appears in the title, viz. "Liquid Crystal Display Having Domain Dividers" (JX-2, Title (emphasis added)) and six portions of the specification:

The present invention relates to a liquid crystal display having [sic] wide viewing angle. (JX-2, Background, 1:14-15 (emphasis added).)

As described above, since the long axes of the liquid crystal molecules in the off state is [sic] perpendicular to the substrates, the VATN LCD having crossed polarizers may have sufficiently [sic] dark state. (JX-2, Background, 1:40-43 (emphasis added).)

The shape of the first and second electrodes according to the present invention makes the liquid crystal layer therebetween to be divided into four regions having different average directions of the long axes, thereby causing [sic] wide viewing angle. (JX-2, Summary, 2:45-49 (emphasis added).)

A liquid crystal layer 100 including a nematic liquid crystal having negative dielectric anisotropy is interposed between the substrates 10 and 20. (JX-2 at 3:39-41 (emphasis added).)



The slow axis, which is the direction having a largest refractive index, of the a-plate or biaxial compensation film may be parallel or perpendicular to the polarizing directions. (JX-2 at 7:41-43 (emphasis added).)

The various arrangement [sic] of pixels having different average axial directions are possible, and these embodiments are so shown in FIGS. 14 and 15. (JX-2 at 9:59-61 (emphasis added).)

As seen from the foregoing, neither the title nor the cited portions of the specification, supra, indicate that the patentee intended “having” to be restricted only to apertures formed from the electrode. See Phillips, supra.

Based on the foregoing, the administrative law judge finds that “having,” as used in the ‘311 patent, includes both apertures formed in the conductive layer comprising the electrode and protrusions formed from a dielectric layer on top of the electrode.

#### F. Infringement

Resolution of the question of infringement of patent claims requires a two-step analysis. First, the patent claims must be construed, as a matter of law, to determine their scope and meaning. Second, a factual inquiry must be conducted in order to compare the claims, as properly construed, to the accused device or process. See MBO Labs., Inc. v. Becton, Dickinson & Co., 474 F.3d 1323, 1329 (Fed. Cir. 2007); see also Zelinski v. Brunswick Corp., 185 F.3d 1311, 1315 (Fed. Cir. 1999) (citing Markman, 52 F.3d at 976).

The second step of the infringement analysis, which is a factual inquiry, focuses on whether the patent claims encompass the accused device or process literally or under the doctrine of equivalents. Zelinski, 185 F.3d at 1315. Samsung bears the burden of demonstrating infringement by a preponderance of the evidence. Cross Med. Prods., Inc. v. Medtronic Sofamor

Danek, Inc., 424 F.3d 1293, 1310 (Fed. Cir. 2005). To prove literal infringement, Samsung must show that an accused product contains every limitation in the asserted claims. WMS Gaming Inc. v. Int'l Game Tech., 184 F.3d 1339, 1350 (Fed. Cir. 1999). Alternatively, the accused products may also infringe the patent claims under the doctrine of equivalents if the differences between the accused products and the claimed invention are “insubstantial.” Desper Prods. Inc. v. QSound Labs, Inc., 157 F.3d 1325, 1338 (Fed. Cir. 1998). Equivalency of an element of a claim to an element of an accused device is determined on an element-by-element basis at the time of infringement. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 40 (1997); Certain Electric Robots and Component Parts Thereof, Inv. No. 337-TA-530, Final Initial and Recommended Determinations, 2005 ITC LEXIS 868, at \*107 (Dec. 19, 2005) (unreviewed).

“[P]rosecution history estoppel limits the broad application of the doctrine of equivalents by barring . . . equivalents . . . relinquished . . . during prosecution.” Conoco, Inc. v. Energy & Env'tl. Int'l, 460 F.3d 1349, 1363 (Fed. Cir. 2006); see also Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 733-34 (2002). Prosecution history estoppel arises in two ways: (1) by making a narrowing amendment to the claim (“amendment-based estoppel”) or (2) by surrendering claim scope through argument to the patent examiner (“argument-based estoppel”). Deering Precision Instruments v. Vector Distribution Systems, Inc., 347 F.3d 1314, 1324-25 (Fed. Cir. 2003).

Specifically, amendment-based estoppel arises when a patentee makes “a narrowing amendment to satisfy any requirement of the Patent Act . . . .” Festo, 535 U.S. at 736. Amendments that do not narrow a claim’s scope or do not affect patentability do not create amendment-based estoppel. However if the prosecution record shows no reason for the

amendment, it is presumed that the narrowing amendment was made to satisfy the requirements of patentability. *Id.* at 736, 739. Therefore, a patentee bears the burden of showing that narrowing amendments were not made for patentability purposes. *Id.*

Argument-based estoppel arises when a patentee makes statements that differentiate his invention from the prior art. *See, e.g. Deering*, 347 F.3d at 1326-27. A patentee invokes argument-based estoppel whenever the prosecution history “evince[s] a clear and unmistakable surrender of subject matter.” *Pharmacia & Upjohn Co. v. Mylan Pharmaceuticals, Inc.*, 170 F.3d 1373, 1376-77 (Fed. Cir. 1999) (citation omitted). The court applies an objective test to determine when subject matter has been “clearly” and “unmistakably” surrendered: would “a competitor . . . reasonably believe that the applicant had surrendered the relevant subject matter.” *AquaTex Industries, Inc. v. Techniche Solutions*, 419 F.3d 1374, 1382 (Fed. Cir. 2005)(quoting *Cybor*, 138 F.3d at 1457.) If the court determines that the patentee “clearly” and “unmistakably” surrendered equivalents, argument-based estoppel bars the elements at issue from encompassing the disavowed equivalents. *Deering*, 347 F.3d at 1326-27.

A person may also infringe a patent claim indirectly. Section 271 (b) of the Patent Act provides that “[w]hoever actively induces infringement of a patent shall be liable as an infringer.” To establish liability for induced infringement, “a patent holder must prove that once the defendants knew of the patent, they actively and knowingly aided and abetted another’s direct infringement.” *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1305 (Fed. Cir. 2006) (*DSU Med. Corp.*) (citations omitted). However, “[t]he mere knowledge of possible infringement by others does not amount to inducement; specific intent and action to induce infringement must be proven.” *Id.*

Additionally, 35 U.S.C. § 271(c) provides that:

[w]hoever offers to sell or sells within the United States . . . a component of a patented machine, manufacture, combination or composition . . . constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article of commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

Thus, “[i]n order to succeed on a claim of contributory infringement, in addition to proving an act of direct infringement, plaintiff must show that defendant knew that the combination for which its components were especially made was both patented and infringing, and that defendant’s components have no substantial non-infringing uses.” Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1312 (Fed. Cir. 2005). Direct infringement is a necessary element of induced and contributory infringement. DSU Med. Corp., 471 F.3d at 1303.

Complainant argued that it presented ample evidence showing that Sharp's accused products meet each limitation of asserted claims 6 and 8 of the '311 patent; that the only limitation that Sharp has disputed is "having . . . domain dividers" under its “tortured” construction; that in essence, Sharp concedes infringement if the administrative law judge adopts Samsung and the staff's proposed construction that allows domain dividers to cover apertures or protrusions citing (RBr at 38 (offering no noninfringement position under Samsung's construction)); that neither Sharp nor its expert contests this conclusion; and that accordingly, if the administrative law judge adopts Samsung's and the staff's proposed construction of the disputed limitation for the claimed phrase “domain dividers” there is no dispute that the Sharp's accused LCD devices infringe claims 6 and 8. (CRBr at 67.)

Respondents argued that the accused Sharp products do not infringe claims 6 or 8 of the '311 patent because they do not use "electrodes having domain dividers" on both the first and second substrates as required by claims 6 and 8 of the '311 patent; that every accused Sharp product uses protrusions on the CF substrate to create domains; that the protrusions are formed on the electrode on the CF substrate, out of a dielectric material; that the electrodes themselves are formed out of a conductive material; and that accordingly, the accused Sharp products do not infringe the asserted claims "under Sharp's construction" because the alleged domain dividers are not formed from the conductive material of the electrodes on both the TFT and CF substrates to create domains.<sup>5</sup> (RBr at 38.)

The staff argued that Samsung demonstrated, by a preponderance of the evidence, that Sharp's accused LCD products satisfy the "domain dividers" limitation of claim 6 of the '311 patent under the staff's proposed construction. The staff also argued that Samsung demonstrated, by a preponderance of the evidence, that Sharp's accused display device products infringe claim 8 of the '311 patent under the staff's proposed construction. (SBr at 44-45.)

The administrative law judge has found supra that the claimed phrase "domain dividers" should include at least apertures formed in the conductive layer comprising the electrode and protrusions formed dielectric layer on top of the electrodes. Such a finding is consistent with complainant's and the staff's proposed interpretation for the claimed phrase "domain dividers".

Respondent "admits that its products contain apertures on the TFT substrate and

---

<sup>5</sup> Sharp noted that the accused Sharp products do not infringe under Sharp's construction of "domain divider," because the protrusions in the accused Sharp products are made out of a different material than the electrodes (i.e., a dielectric material instead of a conductive material) and are therefore not an integral part of the electrodes; and that another reason for non-infringement is that Sharp's protrusions are not apertures.

protrusions on the color filter substrate.” (SFF IV.2 (undisputed).) Additionally, respondents’ expert Silzars testified:

Q. And the way the apertures are made is the apertures in figure 1 are formed in the electrode layer, correct?

A. That's correct.

Q. And the protrusions are formed in the electrode layer by adding them on top, correct?

A. Yes.

(Tr. at 1540 (emphasis added).) Complainant’s expert Smith testified similarly:

CDX-123 identifies the first substrate, ... the first electrode and the first domain dividers and the plurality of them, these are apertures. CDX-124, there's a second substrate, the color filter substrate with second domain dividers.

(Tr. at 342 (emphasis added).)

The administrative law judge finds with respect to asserted claim 6 of the ‘311 patent that the accused products have a “first substrate” and “a “first electrode formed on the substrate and having a plurality of first domain dividers.” Thus, the accused products use apertures on the TFT substrate. (Silzars, Tr. at 1400.) CDX-123 identifies the TFT substrate as the first substrate, the first electrode and the first domain dividers and the plurality of domain dividers are apertures. (Smith, Tr. at 342-343; CDX-123; CX-359C at 5; CX-360C at 4.) The administrative law judge further finds that the accused products have a “second substrate facing the first substrate.” Thus CDX-124 shows the color filter substrate as the second substrate. (Smith, Tr. at 342-343; CDX-124; CX-359C at 5; CX-360C at 4.) He also finds that the accused products have a plurality of “domain dividers” on each electrode. Thus Sharp’s products use protrusions on the

color filter substrate (Silzars, Tr. at 1400) which protrusions comprise a main body, which is shown in blue in a V-shaped object, with a branch, shown as a green vertical extension, extending from the main body along an edge of the first electrode. (Smith, Tr. at 342-343; CDX-124.) Also, the administrative law judge finds that the two electrodes in Sharp's LCD panels have similar patterns of construction for the two kinds of domain dividers, protrusions and apertures. (Smith, Tr. at 343; CDX-125.) The administrative law judge, referring to claim 6 of the '311 patent also finds that CDX-124 shows the second domain dividers on the color filter substrate (or second substrate.) (Smith, Tr. at 342-343; CDX-124; CX-359C at 5; CX-360C at 4); and that an electrode can have an aperture as a domain divider, and it can have a protrusion as a domain divider, and therefore, an electrode has domain dividers in both substrates. (Smith, Tr. at 365.) The administrative law judge also finds that the accused products have a domain divider that "comprises a main body and a branch extending from the main body along an edge of the first electrode". Thus CDX-126 shows an overlay of the color filter protrusion domain divider on the first electrode, and the protrusion extends from the main body along an edge of the first electrode (Smith, Tr. at 342-343; 345:-346; CDX-126; CX-360C at 4-5) and slide CDX-127C shows an example of a computer aided design program illustrating the overlay of branches from the color filter electrode over the electrode on the TFT layer. (CDX-127C; CX-391C at SHJ 94196; Smith, Tr. at 345-346.)

Referring to claim 8 of the '311 patent, said claim 8, which is dependent on claim 6, has the added requirement that the main body and the branch form an obtuse angle. (JX-2, '311 patent, claim 8.) The administrative law judge finds that slide CDX-128 identifies the main body and the branch and shows that the angle is greater than 90 degrees, which defines obtuseness.

(Smith, Tr. at 347; CDX-128; CX-359C at 7; CX-360C at 5.)

Based on the foregoing, the administrative law judge finds that complainant has established, by a preponderance of the evidence, that the accused products infringe each of claims 6 and 8 of the '311 patent.

With respect to contributory infringement, complainant argued that the “accused LCD panels and modules practice every element of the asserted claims and therefore constitute components of the patented inventions;” that third parties, such as{ } who import the accused products that the respondents sell for importation directly infringe the asserted patents (CFF 1953); and that components offered for sale by Sharp (LCD panels and modules) that contribute to the infringement of the patents-in-suit do not have substantial non-infringing uses, and Sharp has produced no evidence to the contrary (CPFF 1954). (CBr at 156.)

Each of respondents and the staff has objected to proposed findings relied on by complainant.

While complainant argued that the LCD panels constitute “components of the patented inventions,” asserted claims 6 and 8 of the '311 patent claim LCD panels. Hence, complainant have not established what the “patented inventions” referred to by complainant supra are. Moreover, CFF 1954 relies on CX-652, which is not in evidence.

With respect to induced infringement of the asserted claims, complainant argued that respondents have exhibited a specific intent to induce infringement (CBr at 158); that Sharp Corp. has exhibited a specific intent to induce these acts of direct infringement by providing directions, demonstrations, guides, manual, training for use, and other materials that encourage the infringing use of the accused Sharp LCD panels and modules (CBr at 158; CPFF 1976); and



that respondent Sharp Electronics Manufacturing Company of America (SEMA) has exhibited a specific intent to induce these acts of direct infringement by{

}

Each of respondents and the staff have objected to CX-652, CX-653 and CX-65, which exhibits are the support for CPFF 1976. They have also objected to CPFF 1977.

Specific intent to induce infringement must be established by complainant. See DSU Med. Corps., supra. However, CX-652, CX-653 and CX-65 are not in evidence. (See Complainant's "Amended Final Public Exhibits" and "Amended List of Confidential Exhibits" dated January 13, 2009.) In addition CPFF 1977 relies only on JX-31C at 32-33, which is deposition testimony of Mark Crandell. Said pages 32 and 33 read:

{

}

{

}

{

}

(JX-31C at 31-33.) The administrative law judge finds nothing in said pages establishing a specific intent and action to induce infringement.

G. Validity

Respondents argued that under Sharp and Samsung's proposed constructions of "domain dividers" and Samsung's proposed construction of "overlap," the asserted claims of the '311 patent are invalid because of obviousness in light of publication Kubota (RX-172) in combination with Hirata et al. U.S. Patent No. 5,872,611 ('611 patent) (RX-41). (RBr at 46.)

Complainant argued that Sharp and Sharp's expert Silzars have not presented any testimony or opinion on obviousness with respect to claim 8; that Kubota lacks many limitations of claims 6 and 8 of the '311 patent; and that Hirata does not teach or suggest the limitations that are not present in Kubota. (CBr at 249-52.)

The staff argued that it does not believe Sharp clearly and convincingly demonstrated that Hirata and Kubota render claims 6 and 8 obvious; that Sharp's expert Silzars never opined on any reason or teaching why these two references would be combined, and offered a naked conclusion that it would be easy to combine the references; that neither of said references clearly and convincingly discloses "a main body and branch extending from the main body" as required by claims 6 and 8 of the '311 patent; and that as Samsung's expert Smith observed, Hirata discloses a jagged aperture running throughout the width of a pixel, but the edges of said aperture are certainly not clearly and convincingly a main body and branch as required by the asserted

claims. (SBr at 70-71.)

Although a patent is presumed valid upon issue, see 35 U.S.C. § 282, it is invalid as anticipated if it “was known or used by others in this country, or patented or described in a printed publication” before the claimed invention, id. § 102(a), or if it was “patented or described in a printed publication . . . more than one year prior” to the filing date. Id. § 102(b). However, for anticipation, “all of the elements and limitations of the claim must be shown in a single prior reference, arranged as in the claim.” Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 1383 (Fed. Cir. 2001) (emphasis added).

Under 35 U.S.C. § 103, a patent is valid unless “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The ultimate question of obviousness is a question of law, but “it is well understood that there are factual issues underlying the ultimate obviousness decision.” Richardson-Vicks Inc. v. The Upjohn Co., 122 F.3d 1476, 1479 (Fed. Cir. 1997); Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1570 (Fed. Cir. 1997). The Federal Circuit has rejected “broad conclusory statements regarding the teaching of multiple references” so as to guard against “the subtle but powerful attraction of a hindsight-based obviousness analysis.” In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). It is not proper to use the patents in issue as templates from which to piecemeal prior art references. As the Federal Circuit has stated: “[t]o draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use the invention as a template for its own reconstruction--an illogical and inappropriate process by which to determine patentability.” Sensonics, Inc. v.

Aerosonic Corp., 81 F.3d 1566, 1570 (Fed. Cir. 1996); (citing W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1553 (Fed. Cir. 1983)). “The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made.” (Id. citing Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138 (Fed. Cir. 1985).)

In KSR Int’l v. Teleflex, 127 S.Ct. 1727 (2007) (KSR), the Supreme Court reaffirmed its long-standing obviousness test:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

Id. at 1734 (quoting Graham v. John Deere Co., 383 U.S. 1, 17-18, (1966)). However, the Supreme Court found that the Federal Circuit had addressed the question of obviousness in a manner contrary to 35 U.S.C. § 103 and Supreme Court precedents. Thus it stated:

Seeking to resolve the question of obviousness with more uniformity and consistency, the Court of Appeals for the Federal Circuit has employed an approach re-ferred to by the parties as the “teaching, suggestion, or motivation” test (TSM test), under which a patent claim is only proved obvious if “some motivation or suggestion to combine the prior art teachings” can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. See, e.g., Al-Site Corp. v. VSI Int’l, Inc., 174 F.3d 1308, 1323-1324 (CA Fed. 1999). KSR challenges that test, or at least its application in this case. See 119 Fed. Appx. 282, 286-290 (CA Fed. 2005). Because the Court of Appeals addressed the question of obviousness in a manner contrary to §

103 and our precedents, we granted certio-rari, 547 U.S. , 126 S. Ct. 2965, 165 L. Ed. 2d 949 (2006). We now reverse.

127 S.Ct. at 1734-35, (emphasis added).

Respondents have admitted that Kubota does not disclose at least a plurality of first domain dividers and a plurality of second domain dividers as required by the asserted claims.

Thus respondents' expert Silzars testified:

Q. Do you have an opinion as to whether Kubota discloses first and second domain dividers?

A. It discloses -- it does not disclose a plurality of second domain dividers. I only see one domain divider if we look at this main body of this aperture going horizontally across the pixel. So there's a domain divider, but I don't see a plurality of them, in this particular figure.

Q. So you're saying there are not a plurality of which domain dividers?

A. Well, we can say, depending on which one we choose, it's a little hard from this figure, I'd have to go back and read the patent. But either the first domain dividers or the second domain dividers do not have a plurality and I guess we'll leave it at that for now.

\* \* \*

A. If we read Claim 6, we have a first substrate, first electrode, and we have a second substrate, second electrode, and what we are not able to find in Kubota is the plurality of first domain dividers and plurality of second domain dividers.

So it's the plurality that's required by Claim 6. We can find one, rather than a multiplicity of them.

(Tr. at 1405, 1654 (emphasis added).)

As to the reason why one of ordinary skill in the art would combine Hirata and Kubota,

respondents' expert Silzars testified:

\* \* \*

- Q. Looking at RDX-228, did you also consider the '611 patent which is RX-41 in connection with Kubota which is RX-172?
- A. Yes, I did. And what we have in the '611 patent is that we have a description of the plurality of domain dividers and the configuration would be very easily combinable with Kubota. So if you take the, any of the description in Kubota of how to handle the end portions and if we combine it with the plurality of domain dividers in the '611 patent, it would be a relatively obvious combination that you could add the end pieces from Kubota to the domain dividers of the '611 patent and achieve the objective of the '311, Claim 6.

(Tr. at 1405-06.)

The administrative law judge finds that Silzars' testimony provides no reason as to why a person of ordinary skill in the art would combine Kubota with the '611 patent. Moreover, there is expert testimony by complainant's expert Smith:

- Q. So now, let's look at the combination of Kubota and Hirata. Do you recall how Dr. Silzars pointed to a figure in Hirata to add a few additional plurality of domain dividers to Kubota, do you agree with him?
- A. Well, Hirata is one technology that discloses a number of structures that possibly are apertures that alternate, but neither of them discloses a branch, neither discloses a main body in a branch, neither discloses an obtuse angle, and in fact, if you try to -- if Kubota's structure is to somehow stabilize the domains, then you wouldn't apply it in Hirata because Hirata achieves that in a different way. The two technologies really are kind of incompatible and wouldn't be combined.

(Tr. at 2073-74 (emphasis added).)

Based on the foregoing, the administrative law judge finds that respondents have not

established, by clear and convincing evidence, that the asserted claims are obvious in light of Kubota (RX-172) and Hirata et al. (RX-41.)

H. Inventorship

Respondents argued that the '311 patent is invalid under 35 U.S.C. § 102(f) because complainant allegedly derived claims 1, 3, and 4 of the '311 patent<sup>6,7</sup> from the work of Fujitsu employees (who are now Sharp employees) and failed to name said employees as co-inventors of the '311 patent. (RBr at 39-45; RRBr at 19-39.) Said claims at issue here are:

1. A liquid crystal display, comprising:

a first substrate;

a first electrode formed on the first substrate and having a plurality of first domain dividers;

a second substrate facing the first substrate; and

a second electrode formed corresponding to the first electrode on the second substrate and having a plurality of second domain dividers;

wherein the first domain dividers and the second domain dividers have a bent portion in plane view.

\* \* \*

3. The liquid crystal display of claim 1, wherein the first domain dividers and the second domain dividers are interleaved with each other.

4. The liquid crystal display of claim 1, wherein a number of

---

<sup>6</sup> Sharp did not present a 35 U.S.C. § 102(f) defense for claims 6-8 or 10 of the '311 patent.

<sup>7</sup> The named inventors on the '311 patent are Jang-Kun Song, Kyeong-Hyeon Kim, Kye-Hun Lee, and Hea-Ri Lee. (JX-2 at SSNG0000028.)



average axial directions of domains defined by the first domain dividers and the second domain dividers is four.

(JX-2 at 10:19-29, 32-37.) The parties agree that claim 1 of the '311 patent requires domain dividers that have bent portions on both electrodes; that claim 3 requires that the domain dividers be interleaved; and that claim 4 requires that the domain dividers define four average axial domain directions. (RFF.IV.10-12; CPFF 3802.)

Respondents argued that said Fujitsu employees conceived, reduced to practice, and disclosed the subject matter of claims 1, 3, and 4 of the '311 patent to Samsung during a collaboration between Samsung and Fujitsu from December 1997 to April 1998. (RBr at 39-45; RRBBr at 19-39.) In support of their allegations, respondents pointed to references RX-34, RX-194C, RX-195C, RX-196C (CX-782C)<sup>8</sup>, RX-198C, JX-6, and the deposition testimony of Song<sup>9</sup>.

The staff argued that respondents fulfilled their burden of proving, by clear and convincing evidence, that Fujitsu employees co-invented claims 1, 3, and 4 of the '311 patent. (SBr at 63-69; SRBr at 12-16.)

Complainant argued that the named inventors on the '311 patent were in possession of the subject matter of claims 1, 3, and 4 prior to any contact between Samsung and Fujitsu. (CBr at 224-36; CRBr at 117-21, 124.) Complainant also argued that CX-782C is evidence that Samsung was in possession of the subject matter of said claims in the Fall of 1997. (CBr at 224

---

<sup>8</sup> CX-782C is complainant's certified translation of the Korean document bearing the Bates numbers SSN0345470-79. RX-196C is respondents' certified translation of the same Korean document. While the administrative law judge cites to CX-782C in this initial determination, he has reviewed each translation and concludes that, in substance, they are the same. (See also RRBBr at 33, stating that "CX-782C was also admitted as RX-196C.")

<sup>9</sup> Song, a named inventor on the '311 patent, is a senior engineer at Samsung who has worked there since February 1996. (RFF.III.111-13 (undisputed).)

and 226-31.) Complainant further argued that respondents presented no evidence of conception by Fujitsu or of an enabling communication of Fujitsu's alleged conception to Samsung, and thus did not prove that the '311 patent's named inventors derived the invention from Fujitsu or that any Fujitsu employee should be named as a co-inventor. (CBr at 224-36 and 244-48; CRBr at 121-22, 126-28.) In addition, complainant argued that respondents' validity challenge to claims 1, 3, and 4, which are not asserted by complainant in this investigation, does not affect the validity of asserted infringed claims 6 and 8. (CBr at 248-49; CRBr at 117.)

An issued patent enjoys a presumption that the named inventors are the true inventors. Hess v. Advanced Cardiovascular Sys. Inc., 106 F.3d 976, 980 (Fed. Cir. 1997) (Hess). However, a person is not entitled to a patent if "he did not himself invent the subject matter sought to be patented." 35 U.S.C. § 102(f). Inventorship is a question of law that is based upon underlying questions of fact. Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1362 (Fed. Cir. 2004) (Lilly).

Derivation, pursuant to 35 U.S.C. § 102(f), requires that the respondents clearly and convincingly establish 1) prior conception of the invention by another and 2) that such conception was communicated to an inventor of the patent at issue. See Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1576 (Fed. Cir. 1997) (Gambro). "Conception is the formation in the mind . . . of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376 (Fed. Cir. 1986). Conception "must be proven by evidence showing what [has been] disclosed to others and what that disclosure means to one of ordinary skill in the art." In re Jolley, 308 F.3d 1317, 1321 (Fed. Cir. 2002)). Communication of such conception

must be sufficient to enable one of ordinary skill in the art to construct and successfully operate the patented invention; a communication that merely renders the invention obvious is not sufficient for purposes of 35 U.S.C. § 102(f). Gambro, 110 F.3d at 1578; see also Brand v. Miller, 487 F.3d 862, 869-70 (Fed. Cir. 2007).

Failure to name an inventor, pursuant to 35 U.S.C. § 102(f), renders a patent invalid if there exists clear and convincing proof that the alleged unnamed inventor was in fact a co-inventor. Pannu v. Iolab Corp., 155 F.3d 1344, 1349 (Fed. Cir. 1998) (Pannu). “[A] person is a joint inventor only if he contributes to the conception of the claimed invention.” Lilly, 376 F.3d at 1358-59 (emphasis added). In Lilly, the Federal Circuit stated:

[T]he alleged joint inventor seeking to be listed on a patent must demonstrate that his labors were conjoined with the efforts of the named inventors. Joint inventorship under section 116 can only arise when collaboration or concerted effort occurs[, i.e.,] when the inventors have some open line of communication during or in temporal proximity to their inventive efforts . . . .

Id. at 1359 (emphasis added). Further:

[T]he law of inventorship does not hinge co-inventor status on whether a person contributed to the conception of all the limitations in any one claim of the patent. Rather, the law requires only that a co-inventor make a contribution to the conception of the subject matter of a claim. See 35 U.S.C. § 116 (“Inventors may apply for a patent jointly even though . . . each did not make a contribution to the subject matter of every claim of the patent.”).

Id. at 1361-62 (emphasis added). Thus, if a co-inventor contributed to the conception of a claim of a patent, even if only to one, non-asserted claim, he is an owner of all claims of the patent. Id.; see also Lucent Techs., Inc. v. Gateway, Inc., 543 F.3d 710, 721 (Fed. Cir. 2008); Israel Bio-Engineering Project v. Amgen, Inc., 475 F.3d 1256, 1263-64 (Fed. Cir. 2007). “If nonjoinder of

an actual inventor is proved by clear and convincing evidence, a patent is rendered invalid.”

Pannu, 155 F.3d at 1349. Therefore, if a co-inventor of any claim, asserted or non-asserted, is omitted from the face of the patent, the patent is invalid.<sup>10</sup>

Any challenge to inventorship, including nonjoinder of a co-inventor, must be proven by clear and convincing evidence and the alleged joint inventor’s conception must be corroborated. Hess, 106 F.3d at 980. “When an alleged infringer attacks the validity of an issued patent, [the] well-established law places the burden of persuasion on the attacker to prove invalidity by clear and convincing evidence.” Technology Licensing Corp. v. Videotek, Inc., 545 F.3d 1316, 1327 (Fed. Cir. 2008) (Tech. Licensing) (emphasis added). The respondents’ burden of persuasion never shifts to the complainant; the risk of “decisional uncertainty” remains on the respondents. Id.; see also PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1303, 1305 (Fed. Cir. 2008); Pfizer, Inc. v. Apotex, Inc., 480 F.3d 1348, 1360 (Fed. Cir. 2007) (Pfizer). Thus, it is the respondents’ burden to prove by clear and convincing evidence that one or more Fujitsu employees is a co-inventor of claims 1, 3, and 4 of the ‘311 patent. Failure to do so means that respondents lose on that point. Tech. Licensing, 545 F.3d at 1327. “[I]f the fact trier of the issue is left uncertain, the party with the burden [of persuasion] loses.” Id.

Respondents also bear the burden of going forward with evidence, i.e., the burden of production. Id. This is “a shifting burden the allocation of which depends on where in the

---

<sup>10</sup> Generally, in cases of nonjoinder, 35 U.S.C. § 256 affords the patentee the opportunity to correct inventorship on the patent. If the error occurred without deceptive intent and may be corrected, then nonjoinder shall not invalidate the patent. However, correction of inventorship is not a possibility in this investigation because the administrative law judge does not have the authority to order correction of a patent. See, e.g., Certain EPROM, EEPROM, Flash Memory, and Flash Microcontroller Semiconductor Devices and Prods. Containing Same, Inv. No. 337-TA-395, Order No. 69 (Jan. 13, 2000).

process of a trial the issue arises.” Id. However, this burden does not shift until the respondents present “evidence that might lead to a conclusion of invalidity.” Pfizer, 480 F.3d at 1360. Once a respondent “has presented a prima facie case of invalidity, the patentee has the burden of going forward with rebuttal evidence.” Id.

Referring to reference CX-782C, relied on by respondents and the staff, said reference is an internal Samsung report{

} Respondents did not dispute this fact. (RBr at 42.) Reference CX-782C is entitled,{ } and indicates that it was prepared by Song on December 29, 1997, and approved by Song, as well as the other inventors on the ‘311 patent. {

{

}

}

{

} Thus, the administrative law judge finds that Samsung believed that both its multi-domain PVA and Fujitsu's MVA were technologies that had potential for use in an LCD panel. (CX-782C at SSN0345471.) He also finds that Samsung began developing its technology in 1996 and had completed{ } of testing through November 1997. (CX-782C at SSN0345471.) He further finds that{ }and, as of December 1997, had achieved better results than Samsung with respect to characteristics. (CX-782C at SSN345471.)

{

}

{

}

{

}

{

}

{

}

{

}

{

}

{

}

The administrative law judge finds that CX-782C establishes that,{

}Samsung knew that multi-domain formation was necessary; that,{

} Samsung knew that domain formation works



well when the top and bottom substrate patterns repeat and that texture decreases in a closed pattern (when the endpoints of the top and bottom patterns are close together); and that,{

} Samsung had achieved an almost-closed polygon shape when viewing the top and bottom patterns together by bending the end portion and Samsung knew that a symmetrical pattern was beneficial with regard to texture. The administrative law judge also finds that CX-782C discloses that further testing of{

} was necessary. (See CX-782C at SSN0345485{

} (emphasis added).)

{

} Samsung

does not comment upon Fujitsu's MVA{

}

{

}

{

}

{

}

{

}

{

}

{

}

The administrative law judge finds that the{ } depicted in

{ } are significant because those patterns represent

Samsung's attempts to exemplify the optimal pattern conditions set forth supra.

(CX-782C at SSN0345484.) He further finds that the{ } patterns are slight variations of { } (Compare CX-782C at SSN0345477 with CX-782 at SSN0345484.) In addition, the administrative law judge finds that the{ } patterns of{ } are similar to Figures 3 and 6 of the '311 patent, illustrated infra. (Compare CX-782C at SSN0345484 with JX-2 SSNG0000031 and SSNG0000033.)

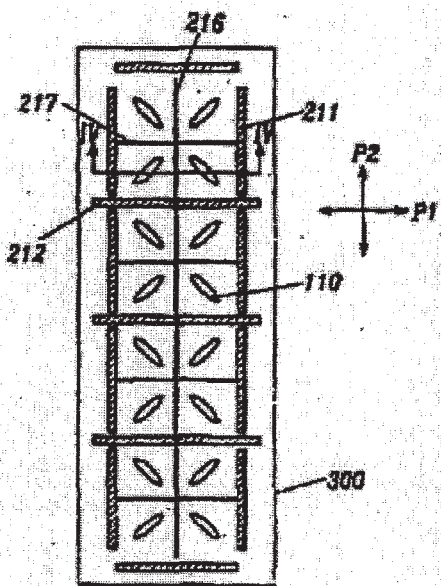


Fig. 3

JX-2 at SSNG0000031

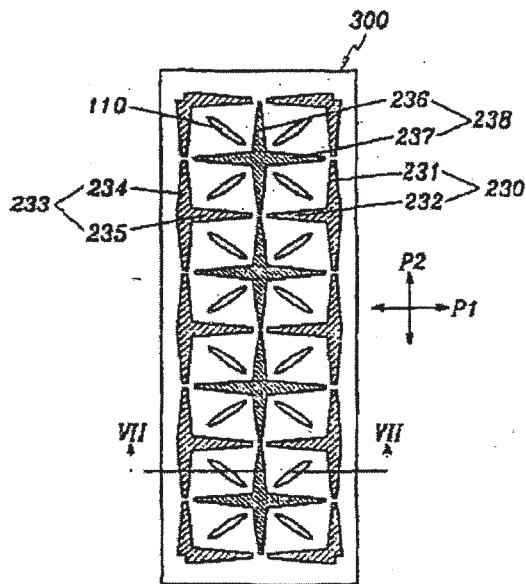


Fig. 6

JX-2 at SSNG0000033

(JX-2 at SSNG0000031 and SSNG0000033.) Figures 3<sup>12</sup> and 6<sup>13</sup> are the first and third

<sup>11</sup> "Ptn" is an abbreviation for "pattern" (See, e.g., CX-782C at SSN0345484.)

<sup>12</sup> In Figure 3, the areas labeled 211, 212, 216, and 217 represent apertures; the area labeled 110 represents a liquid crystal molecule; and the area labeled 300 represents a single

embodiments, respectively, of the '311 patent. (JX-2 at SSNG0000031, SSNG0000033, SSNG0000041, SSNG0000042, SSNG0000043-44.) Figures 3 and 6 depict domain dividers that have bent portions on both electrodes (claim 1); that are interleaved (claim 3); and that define four average axial domain directions (claim 4). The administrative law judge finds that the{  
} patterns in{ } also show domain dividers that have bent portions on both electrodes; that are interleaved; and that define four average axial domain directions.

{

}

---

pixel region. (CX-782C at SSNG0000042-32.) P1 and P2 represent polarizing directions. (CX-782C at SSNG0000043.)

<sup>13</sup> In Figure 6, the areas labeled 230-238 represent apertures; the area labelled 110 represents a liquid crystal molecule; and the area labeled 300 represents a single pixel region. (CX-782C at SSNG0000044.) P1 and P2 represent polarizing directions. (CX-782C at SSND0000044.)

{

To the contrary, the administrative law judge finds that CX-782C,{

} which are similar to patterns contained in the  
'311 patent, which demonstrate the elements of claims 1, 3, and 4.

The administrative law judge finds that respondents and the staff focused heavily on specific sentence fragments appearing in CX-782C in support of the position that the '311 patent is invalid under 35 U.S.C. § 102(f), without analyzing such fragments in the context of an entire sentence or the section to which they belong. (RBr at 43-44; RRBr at 32, 36-38; SBr at 66-67, 69; SRBr at 12-13.) For example, respondents argued that, in CX-782C,{

} Instead, the administrative law judge finds that it is clear that Samsung did not achieve the optimal domain size and pattern width{

} The administrative law judge finds nothing in CX-782C to suggest that Samsung was dissatisfied with the pattern itself.

The administrative law judge further finds that CX-782C is primarily directed to the activities of Samsung. {

{

}



14 {

}

{

} To the contrary, the administrative law judge finds that CX-782C suggests conception by Samsung, with respect to those claims, in November-December of 1997.

Respondents and the staff also relied on the deposition testimony of Song<sup>15</sup> as alleged evidence that, e.g., “the invention of the ‘311 patent was not conceived or reduced to practice until 1998 -{

} Specifically, respondents argued that Song admitted that “conception occurred after Samsung had developed its{ } patterns shown in RX-196C[(CX-782C)].” (RRBr at 33.) However, the administrative law judge finds that Song’s deposition testimony indicates that he did not understand exactly what “MVA” stands for; in fact, Song testified that he worked on{ } not MVA. (JX-51C at 124-25, 134.)<sup>16</sup> The administrative law judge also finds that Song did not believe that the first conception of the “invention of the ‘311 patent” occurred in April 1998, and only believed that it “may have been” conceived during a brainstorming session in January or February 1998. (JX-51C at 125-26 (emphasis added).) He further finds that Song believed that the first actual reduction to practice

---

{ }

<sup>15</sup> Song appeared at deposition as a corporate designee for Samsung and testified on Samsung’s behalf regarding conception and reduction to practice with respect to the ‘311 patent. (JX-51C.)

<sup>16</sup> The administrative law judge finds that counsel for the parties agreed during Song’s deposition that Song’s testimony was not limited based on the scope of the corporate deposition notice to Samsung, (JX-51C at 146-48), and also that counsel for respondents failed to make clear when questions directed to Song required a response regarding his personal capacity or a response regarding his capacity as Samsung’s corporate designee.



of the “invention of the ‘311 patent” may have been around January or February 1998, based on materials created at the end of 1997. (JX-51C at 134.)

The administrative law judge finds that it is unclear what counsel for respondents were referring to by the phrase “invention of the ‘311 patent,” (e.g., the “invention” of claims 6 and 8 of the ‘311 patent or the “invention” of claims 1, 3, and 4 of the ‘311 patent, which is the invention at issue here). The administrative law judge also finds that Song repeatedly testified at the hearing that the “invention” of the ‘311 patent that was conceived in 1998 was the branch pattern depicted in Figure 13 of said patent. (Tr. at 2004-05, 2015-16, 2020-23, 2027-28, 2030-31, 2036-37.) The administrative law judge further finds that Song testified that the “bent” patterns were conceived of, tested, and evaluated in 1997. (Tr. at 1995-97, 2027-28.) For example, Song testified as follows:

{

}

(Song, Tr. at 1995-96 (emphasis added).) Finally, the administrative law judge finds that Song’s hearing testimony is not inconsistent with his deposition testimony cited by respondents and the staff.

Respondents further argued that, as a result of Song’s testimony, Samsung cannot rely on its{ } patterns, referred to supra, as evidence that Samsung conceived of{

} However, the administrative law judge has found, supra, that CX-782C