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

In the Matter of

# CERTAIN SEMICONDUCTOR DEVICES, SEMICONDUCTOR DEVICE PACKAGES, AND PRODUCTS CONTAINING SAME

Investigation No. 337-TA-1010

# NOTICE OF COMMISSION DETERMINATION TO REVIEW IN PART A FINAL INITIAL DETERMINATION FINDING IN PART A VIOLATION OF SECTION 337; SCHEDULE FOR FILING WRITTTEN SUBMISSIONS ON THE ISSUES UNDER REVIEW AND ON REMEDY, THE PUBLIC INTEREST, AND BONDING; AND DENIAL OF A MOTION TO MODIFY THE ADMINISTRATIVE PROTECTIVE ORDER

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

**SUMMARY**: Notice is hereby given that the U.S. International Trade Commission has determined to review in part the final initial determination ("final ID") issued by the presiding administrative law judge ("ALJ") on June 30, 2017, finding in part a violation of section 337 of the Tariff Act of 1930, in the above-captioned investigation. The Commission has also determined to deny the motion filed on August 1, 2017, to amend the administrative protective order. The Commission requests certain briefing from the parties on the issues under review, as indicated in this notice. The Commission also requests briefing from the parties and interested persons on the issues of remedy, the public interest, and bonding.

**FOR FURTHER INFORMATION CONTACT**: Sidney A. Rosenzweig, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2532. 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 *https://www.usitc.gov*. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://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 June 24, 2016, based on a complaint filed on behalf of Tessera Technologies, Inc.; Tessera, Inc.; and Invensas Corporation, all of San Jose, California (collectively, "Tessera"). 81 Fed. Reg. 41344 (Jun. 24, 2016). The complaint alleged violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, by reason of infringement of certain claims of U.S. Patent No. 6,856,007 ("the '007 patent"); U.S. Patent No. 6,849,946 ("the '946 patent"); and U.S. Patent No. 6,133,136 ("the '136 patent"). The complaint further alleged that a domestic industry exists. The Commission's notice of investigation named 24 respondents. Those respondents are Broadcom Limited of Singapore and Broadcom Corporation of Irvine, California (collectively, "Broadcom"), and 22 manufacturers and importers of products containing Broadcom's semiconductor devices: Avago Technologies Limited of Singapore, and Avago Technologies U.S. Inc. of San Jose, California (collectively, "Avago"); Arista Networks, Inc. of Santa Clara, California; ARRIS International plc, ARRIS Group, Inc., ARRIS Solutions, Inc., ARRIS Enterprises, and Pace Ltd., all of Suwanee, Georgia, as well as Pace Americas LLC and Pace USA LLC, both of Boca Raton, Florida, and ARRIS Technology, Inc. of Horsham, Pennsylvania (collectively, "ARRIS"); ASUSTek Computer, Inc. of Taipei, Taiwan, and ASUS Computer International of Fremont, California (collectively, "ASUS"); Comcast Cable Communications, LLC, Comcast Cable Communications Management, LLC, and Comcast Business Communications, LLC, each of Philadelphia, Pennsylvania (collectively, "Comcast"); HTC Corporation of Taoyuan, Taiwan and HTC America Inc. of Bellevue, Washington (collectively, "HTC"); NETGEAR, Inc. of San Jose, California; Technicolor S.A. of Issy-Les-Moulineaux, France, as well as Technicolor USA, Inc. and Technicolor Connected Home USA LLC, both of Indianapolis, Indiana (collectively, "Technicolor"). The Office of Unfair Import Investigations is not participating in the investigation.

On June 30, 2017, the presiding administrative law judge issued the final ID. The final ID finds a violation of section 337 as to claims 16, 17, 20, and 22 of the '946 patent. ID at 262. The final ID finds that for claims 1, 2, 11, 12, 16, 24-26, and 34 of the '136 patent, the claims are infringed and not invalid, but that the existence of a domestic industry was not shown. *Id.* at 262-63. For the '007 patent, the final ID finds that infringement was shown only as to claim 18, but that for all of the asserted claims (claims 13, 16, and 18), the claims are invalid, and a domestic industry was not shown. *Id.* at 263.

On July 17, 2017, Tessera and the respondents each filed a petition for Commission review of the ID. On July 25, 2017, each responded to the other's petition. In addition, Tessera, Broadcom, Comcast, Arista, ARRIS, ASUS, HTC, Netgear, and Technicolor each filed statements on the public interest. A number of public interest submissions were submitted by the public. In particular, the Commission received submissions from: Rep. Susan Brooks (R-IN); Rep. Tony Cardenas (D-CA); Rep. Darrell Issa (R-CA); Rep. Doug Lamborn (R-CO); Rep. Edward Royce (R-CA); Rep. Mimi Walters (R-CA); Rep. Rod Woodall (R-GA); Under Armour, Inc.; Sprint Spectrum LLC; Cable Television Laboratories, Inc.; Public Knowledge and the Open Technology

Institute at New America; the Multimedia over Coax Alliance; the WiFi Alliance; and the Innovation Alliance.

On August 1, 2017, the respondents moved to modify the administrative protective order ("APO") issued in this investigation (Order No. 1 as modified by Order Nos. 38 and 42). The Commission has determined to deny that motion, and to deny the respondents' motion to file a reply. As the Commission recently reiterated, a supplier of confidential business information "may consent to the disclosure of their confidential business information to persons other than those qualified under the protective order to receive confidential business information." *Certain Digital Video Receivers & Hardware & Software Components Thereof*, Inv. No. 337-TA-1001, Comm'n Order at 2 (June 30, 2017); *accord Certain Doxorubicin & Preparations Containing Same*, Inv. No. 337-TA-300, Comm'n Mem. Op., 1991 WL 788724, at \*6 (June 3, 1991). However, neither the supplier of information (here, International Business Machines Corporation), nor a party (here, the respondents) may seek to amend the APO to allow only carefully circumscribed usage of information in certain specified European patent proceedings. To modify the APO in this manner would require the Commission to police the use of information outside the scope of Commission proceedings, which would be unduly burdensome for the Commission and unfair to other tribunals whose proceedings may be governed by different laws and rules.

Having reviewed the record of the investigation, including the ALJ's orders and the final ID, as well as the parties' petitions and responses thereto, the Commission has determined to review the final ID in part.

As to the '007 patent, the Commission has determined as follows. The Commission has determined to review, and on review, to take no position on the economic prong of the domestic industry requirement, and infringement of claim 18. The Commission has determined not to review the remainder of the ID as to the '007 patent, including the ID's findings concerning anticipation by, or obviousness over, the prior art.

As to the '946 patent and '136 patent, the Commission has determined not to review the ID's findings concerning the level of skill in the art. The Commission has determined to review all other issues for the '946 patent and the '136 patent.

In connection with the Commission's review, the Commission will rely upon the issues and arguments presented in the parties' petitions and responses thereto. The Commission notes that "[a]ny issue not raised in a petition for review will be deemed to have been abandoned by the petitioning party and may be disregarded by the Commission in reviewing the initial determination." 19 CFR 210.43(b)(2).

The parties are asked to provide additional briefing on the following issues, with reference to the applicable law and the existing evidentiary record. For each argument presented, the parties' submissions should set forth whether and/or how that argument was presented and

preserved in the proceedings before the ALJ, in conformity with the ALJ's Ground Rules (Order No. 2), with citations to the record.

- a. For the '946 patent, with regard to the construction of "trench(es)":
  - Please explain the meaning of the claim term "trench(es)" to persons skilled in the art in view of the intrinsic evidence of the '946 patent. In the context of the '946 patent, does the claim term "trench(es)" describe a specific shape-related property, such as elongated? Please discuss the relevance, if any, of *Lexington Luminance LLC v. Amazon.com Inc.*, 601 Fed. App'x 963, 970-71 (Fed. Cir. 2015), and any other cases believed to be relevant to understanding the meaning of "trench(es)" to a skilled artisan for the '946 patent.
  - Please explain the relevance, if any, of the definition of "trench" in the Applied Materials Glossary as a "groove etched in a wafer to be used as part of a device structure." Applied Materials Glossary, <u>http://www.appliedmaterials.com/resources/glossary</u> (last visited Sept. 26, 2017). Is this meaning consistent with the '946 patent claims, specification, and prosecution history as understood by skilled artisans?
  - iii. If the Commission were to construe "trench" as "a long, narrow ditch," or as a "groove etched in a wafer to be used as part of a device structure," please explain whether any accused products or domestic industry products (and if so, specifically identify which) literally infringe or practice the asserted claims, and why. Under those same constructions, please explain whether any accused products or domestic industry products (and if so, specifically identify which) under those same constructions, please explain whether any accused products or domestic industry products (and if so, specifically identify which), infringe or practice the asserted claims under the doctrine of equivalents, and why.

b. With regard to the ALJ's decision to allow Tessera to rely upon GDS files to demonstrate infringement of the '946 patent, please explain how, if at all, the respondents were prejudiced by that decision. Please identify the evidence or arguments proffered in proceedings before the ALJ or in their petition for Commission review by the respondents in support of that alleged prejudice.

c. For the '946 patent, in connection with the IBM PowerPC 750, please explain:

- i. The relevance, if any, of the die markings on the chips examined in the ICE report (RX-668) and the SI Report (RX-0499C).
- ii. Whether the IBM PowerPC 750 anticipates the asserted dependent claims under the ID's construction of "trench."
- d. With regard to the exhaustion issue for the '946 patent:
  - i. Please explain whether the accused features (including dummy trenches and dummy conductors) were part of a design supplied by Broadcom to [CBI REDACTED] or were added by [CBI REDACTED] itself, and the resulting implications for the Commission's analysis of [CBI REDACTED] in ¶ 14 of JX-501C. If the accused features (including dummy trenches and dummy conductors) were part of a design supplied by Broadcom to [CBI REDACTED], please also explain whether such features were inserted into the design with [CBI REDACTED] in ¶ 14 of JX-501C.
  - Please discuss the relevant law of exhaustion and first sale as it applies to the relationship between a fabless semiconductor company (Broadcom) and a fabricator [CBI REDACTED] who manufactures the fabless company's own chips. Please address the specific provisions of the pertinent agreement, and the relationship between those provisions and the law of exhaustion and first sale. Please also discuss the relevance, if any, the Federal Circuit decision in *Medicines Company v. Hospira, Inc.*, 827 F.3d 1363, 1373-74 (Fed. Cir. 2016) (en banc) concerning commercial sales, and any related cases. Please address the specific provisions of the pertinent agreements alleged to give rise to exhaustion, and the relationship between those provisions and the law of exhaustion and first sale.

e. With regard to infringement of the '136 patent, please explain whether Broadcom or its fabricators produced documentary evidence that demonstrates the cross-sectional structure of the accused interconnect structures in all of the accused products, including the locations of the layer of copper, barrier layer, layer of AlCu, and pad-limiting layer of claim 1 and the layer of copper, layer of isolation, barrier layer, layer of AlCu, and pad limiting layer of claim 11. To the extent that such evidence does not exist in this field of technology, please explain. To the extent that it does exist and was not produced, please explain. To the extent that it does exist and is part of the record of

this investigation, please explain its pertinence, if any, to the ID's findings concerning infringement.

f. For the '136 patent, please explain whether each of the asserted claims is obvious over Crostini claim 1, under the relevant law for double patenting, if the Commission finds that "the claimed structure solder 38 is formed directly atop the AI contact" statement constitutes clear prosecution disavowal.

- g. With regard to the exhaustion issue for the '136 patent:
  - Please explain whether, on or before May 23, 2016 (the date the complaint was filed in the instant Commission investigation), the party alleged to be licensed to the '136 patent was an [CBI REDACTED] as defined in section 5 of CX-943C (TSRA1010-00004931).
  - Please discuss the relevant law of exhaustion and first sale as it applies to the relationship between a fabless semiconductor company (Broadcom) and a company [CBI REDACTED] who provides outsourced semiconductor assembly and testing for the fabless company's own chips. Please also discuss the relevance, if any, the Federal Circuit decision in *Medicines Company v. Hospira, Inc.*, 827 F.3d 1363, 1373-74 (Fed. Cir. 2016) (en banc) concerning commercial sales, and any related cases. Please address the specific provisions of the pertinent agreement or agreements alleged to give rise to exhaustion, and the relationship between those provisions and the law of exhaustion and first sale.

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

If the Commission contemplates some form of remedy, it must consider the effects of that remedy upon the public interest. The factors the Commission will consider include the effect that an exclusion order and/or cease and desist orders would have on (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) U.S. production of articles that are like or directly competitive with those that are subject to investigation, and (4) U.S. consumers. The Commission is therefore interested in receiving written submissions that address the aforementioned public interest factors in the context of this investigation. Public interest submissions should be mindful of the ALJ's statement that the "parties have made no effort in their briefing to classify the 2,800 accused products in a way that would rationalize different treatment for different categories of products." ID at 258. The Commission wishes to develop the record, as to, *inter alia*, the following issues:

(1) Which specific products of the respondents most directly implicate the Commission's public interest factors? *See* 19 U.S.C. 1337(d)(1), (f)(1) ("the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers").

(2) How are the Commission's public interest factors implicated on a patent-claim-by-patent-claim basis for the asserted claims of the '946 patent and the '136 patent?

(3) How, if at all, may public interest concerns be accommodated by the tailoring of any remedial orders, including delaying the implementation of any Commission remedial orders as to specific products for a specific period of time?

Any person asserting that the public interest should be accommodated by tailoring any Commission remedial order as to a subset of the accused products (*e.g.*, to delay implementation of a Commission remedial order as to specific accused products) shall append to its submission one or more declarations in support of those facts in compliance with 28 U.S.C. 1746. Each declaration shall be made on personal knowledge, and shall show affirmatively that the declarant is competent to testify to the matters stated therein. Sworn or certified copies of all papers or parts thereof referred to in a declaration shall be attached thereto or served therewith.

If 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 FR 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. 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. 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. Such submissions should address the recommended determination by the ALJ on remedy and bonding.

The parties' submissions on the issues under review should not exceed 60 pages per side. Reply submissions on the issues under review should not exceed 40 pages per side. The respondents may allocate the page limits for the issues under review amongst themselves as they see fit. The page limits above are exclusive to exhibits, but parties are not to circumvent the page limits by incorporating material by reference from the exhibits or from the record.

The parties' opening and reply submissions on the issues of remedy, the public interest and bonding are to be filed separately from the submissions on the issues under review and are not governed by the page limitations recited above. The complainants' opening submission on the issues of remedy, the public interest and bonding is to include proposed remedial orders for the Commission's consideration; the date that the asserted patents expire; the HTSUS numbers under which the accused products are imported; and the names of known importers of the products at issue in this investigation.

Written submissions by the parties and the public must be filed no later than close of business on Friday, October 13, 2017. Reply submissions by the parties and the public must be filed no later than the close of business on Monday, October 23, 2017. No further submissions will be permitted unless otherwise ordered by the Commission.

Persons filing written submissions must file the original document electronically on or before the deadlines stated above and submit 8 true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-1010") in a prominent place on the cover page and/or the first page. (*See* Handbook for Electronic Filing Procedures, <u>https://www.usitc.gov/secretary</u>/ fed\_reg\_notices/ rules/ handbook\_on\_electronic\_filing.pdf). Persons with questions regarding filing should contact the Secretary (202-205-2000).

Any person desiring to submit a document to the Commission in confidence must request confidential treatment. All such requests should be directed to the Secretary to the Commission and must include a full statement of the reasons why the Commission should grant such treatment. *See* 19 CFR 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. All information, including confidential business information and documents for which confidential treatment is properly sought, submitted to the Commission for purposes of this Investigation may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of

this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All nonconfidential written submissions will be available for public inspection at the Office of the Secretary and on EDIS.

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 Part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: September 29, 2017