

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

In the Matter of

**CERTAIN SEMICONDUCTOR CHIPS  
WITH DRAM CIRCUITRY, AND  
MODULES AND PRODUCTS  
CONTAINING SAME**

**Inv. No. 337-TA-819**

**NOTICE OF COMMISSION DETERMINATION TO REVIEW THE FINAL INITIAL  
DETERMINATION IN PART; TERMINATION OF THE INVESTIGATION WITH  
RESPECT TO U.S. PATENT NO. 7,659,571; SCHEDULE FOR FILING WRITTEN  
SUBMISSIONS ON THE ISSUES UNDER REVIEW AND ON REMEDY, PUBLIC  
INTEREST, AND BONDING**

**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 issued by the presiding administrative law judge in the above-captioned investigation on March 26, 2013. The Commission has determined not to review the final initial determination of no violation with respect to U.S. Patent No. 7,659,571, and the investigation is terminated with respect to that patent. The Commission requests certain briefing from the parties on the issues under review, as indicated in this notice. The Commission also requests briefing on the issues of remedy, the public interest, and bonding.

**FOR FURTHER INFORMATION:** Clark S. Cheney, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone 202-205-2661. 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 December 21, 2011, based on a complaint filed by Elpida Memory, Inc., of Tokyo, Japan and Elpida Memory (USA) Inc. of Sunnyvale, California (collectively, "Elpida"). *76 Fed. Reg.* 79215 (Dec. 21, 2011). The complaint alleged violations of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), based on infringement of several U.S. patents. The notice of investigation named Nanya Technology Corporation of Tao Yuan, Taiwan and Nanya

Technology Corporation, U.S.A. of Santa Clara, California (collectively, “Nanya”), as respondents. The Office of Unfair Import Investigations did not participate in the investigation.

On March 26, 2013, the presiding administrative law judge (“ALJ”) issued a final ID finding a violation of section 337 based on infringement of five patents and no violation with respect to a sixth patent. In particular, the ALJ found a violation based on infringement of claims 8-11 and 17-18 of U.S. Patent No. 6,150,689 (“the ’689 patent”); claims 4, 14, and 20 of U.S. Patent No. 6,635,918 (“the ’918 patent”); claim 27 of 7,495,453 (“the ’453 patent”); claims 5-6 of U.S. Patent No. 7,713,828 (“the ’828 patent”); and claims 1-2 of U.S. Patent No. 7,906,809 (“the ’809 patent”). The ALJ found no infringement of and no domestic industry for articles protected by 7,659,571 (“the ’571 patent”) and accordingly found no violation of section 337 with respect to that patent. The ALJ also found claims 17 and 18 of the ’453 patent to be invalid. The ALJ issued a recommended determination (“RD”) on remedy and bonding. The ALJ recommended a limited exclusion order be issued against Nanya barring entry of infringing DRAM articles. The ALJ recommended additional briefing on an appropriate bond, or alternatively that the bond be set at one percent.

On April 8, 2013, complainant Elpida filed a petition for review of the ALJ’s determination that claims 17 and 18 of the ’453 patent are invalid. The same day Nanya filed a petition for review of a number of the determinations in the ID that were adverse to it. Nanya also presented a contingent petition for review of the validity of the ’571 patent in the event that Elpida petitioned for review of the ALJ’s non-infringement and no domestic industry determinations with respect to that patent.

Having examined the record of this investigation, including the ID, the petitions for review, and the responses thereto, the Commission has determined to review the ALJ’s determination of violation with respect to the ’689 patent, the ’918 patent, the ’453 patent, the ’828 patent, and the ’809 patent. The Commission has determined not to review the ALJ’s determination of no violation with respect to the ’571 patent, and the investigation is terminated with respect to that patent.

The parties are requested to brief their positions on the issues under review with reference to the applicable law and the evidentiary record, including intrinsic patent evidence and expert testimony. In connection with its review, the Commission is particularly interested in the following issues:

1. With respect to the validity of the ’453 patent, please address the following:
  - a. What record evidence suggests that the ODT-leg portion of the circuit and the non-ODT-leg portion of the circuit in U.S. Patent Publication No. 2006/0126401 to Ba (RX-107) should or should not have the same number of legs?
  - b. What impedance are the ODT legs of Ba attempting to match? What impedance are the non-ODT legs of Ba attempting to match? Does any disclosure in Ba suggest that ODT-leg portion of the circuit and the non-ODT-leg portion of the circuit should be impedance-matched to each other?

- c. Does the two-chip embodiment found in paragraph 10 of Ba have any relevance to the question of whether the ODT-leg portion of the circuit and the non-ODT-leg portion of the circuit should or should not have the same number of legs?
  - d. What record evidence supports a conclusion that the claimed “output control circuit” in the ’453 patent, which “activates a first number of unit buffers in common when an ODT impedance is set to a first value and activates a second number of unit buffers in common when the ODT impedance is set to a second value,” would have been obvious in view of Ba?
  - e. What record evidence supports a conclusion that one ODT leg described in Ba corresponds to a “unit buffer” as described in the asserted claims of the ’453 patent? What record evidence, including expert testimony, supports a conclusion that two or more ODT legs in Ba correspond to a “unit buffer”?
2. With respect to the ’828 patent, please address the following, including whether arguments relating to any of the following have been waived:
- a. Elpida’s complaint alleges, *inter alia*, that the “sale,” “importation,” and “use” of Nanya semiconductors constitutes infringement of the asserted “method of forming” claims of the ’828 patent. What legal support exists for the propositions that (1) the sale of an article infringes a method claim; (2) the importation of an article infringes a method claim; or (3) the use of an article infringes a claim to a “method of forming” the article?
  - b. Elpida’s complaint alleges a violation of 19 U.S.C. § 1337(a)(1)(B)(i) based on the importation, sale for importation, and sale after importation of Nanya semiconductors. What is Elpida’s theory of infringement under that statutory subsection?
  - c. Of what relevance, if any, is 19 U.S.C. § 1337(a)(1)(B)(ii) to the allegations in Elpida’s complaint concerning the asserted claims of the ’828 patent?
  - d. Is a cause of action under 19 U.S.C. § 1337(a)(1)(B)(i) mutually exclusive to a cause of action under 19 U.S.C. § 1337(a)(1)(B)(ii)? Why or why not?
  - e. What evidence in the record, if any, indicates where Nanya allegedly performs the method steps of the asserted claims of the ’828 patents? Do those processes occur entirely outside the United States? Of what relevance is the location where a method is performed to the infringement analysis here?

- f. What evidence in the record, if any, indicates where Elpida allegedly performs the method steps of the asserted claims of the '828 patent? Do those processes occur entirely outside the United States?
  - g. What evidence in the record, if any, shows that Elpida has met its burden to show the existence of a domestic industry “relating to the articles protected by” the claims of '828 patent? Can a “method of forming” claim “protect” an “article” under 19 U.S.C. § 1337(a)(2) and (3)? How is satisfaction of this statutory requirement similar to or different from an infringement analysis? Of what relevance is the location where the method is performed to a domestic industry analysis?
  - h. With respect to the validity of the '828 patent, of what relevance is the disclosure of “formation of a silicon growth layer 9 in the source/drain region” on page 14 of the Yamada prior art reference (RX-0027.014)? Is element 9 part of the source/drain region? What record evidence informs the answer to these questions?
  - i. With respect to the validity of the '828 patent, the Yamada prior art reference discloses at RX-0027.006 “MOSFET source/drain regions 10 comprising n+ diffusion layers are raised up by a silicon growth layer 9, with the n+ diffusion layer 10 formed from the surface of the silicon growth layer 9 which is raised up.” What is the significance of the phrase “raised up,” used twice in this disclosure? Does this support a conclusion that element 9 is part of the source/drain region? What record evidence informs the answer to these questions?
3. With respect to the '809 patent, please address the following:
- a. Is there any support in the '809 patent specification for the claim phrase “substantially the same” other than passages that use the phrase “substantially in agreement”? Is there any significance to the fact that the applicants of the '809 patent distinguished proposed claims that used the phrase “substantially in agreement” by stating the prior art electrodes were “substantially wider” (*see* JXM-12 at 7-10)? Does this statement influence a proper understanding of the phrase “substantially in agreement” as it is used in the '809 patent specification? Should that understanding of the specification also apply to claims that use the phrase “substantially the same”? Does the term “wider” connote a comparison of size?
  - b. Must the claim terms “formed in a semiconductor substrate” and “formed on the semiconductor substrate” be given mutually exclusive meanings, or may the terms overlap in meaning? Please identify all evidence, including evidence from the patent figures, indicating how a person of ordinary skill in the art would interpret these two phrases at the time of the invention.

- c. What are the implications for infringement and domestic industry if the Commission were to adopt Nanya's proposed construction of the claim phrase, "upper surface which is substantially the same as the lower surface and aligned with the lower surface"?
  - d. Has Nanya presented a sufficiently detailed petition to preserve an argument that the ALJ's technical prong determination is erroneous with respect to the '809 claim term "wherein a cross-sectional area of each elevated source and drain region in any plane parallel to the substrate is greater than the area of the upper or lower surfaces thereof"? What would be the consequence of adopting Nanya's proposed interpretation of that term with respect to infringement and domestic industry?
4. With respect to bonding, Nanya is requested to submit and summarize relevant evidence of license agreements referred to in the ALJ's RD at page 5. Elpida is requested to submit and summarize relevant bonding evidence referred to in the RD at page 6. The parties are both requested to present arguments concerning an appropriate bond based on record evidence and appropriate legal authorities.

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 *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).

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.

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 *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 all of the issues identified in this notice. 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 ALJ's recommendation on remedy and bonding set forth in the RD. Complainant Elpida is also requested to submit proposed remedial orders for the Commission's consideration. Elpida is also requested to state the dates that each of the asserted patents are set to expire and the HTSUS numbers under which the accused products are imported. Initial written submissions and proposed remedial orders must be filed no later than close of business on Friday, July 19, 2013. Initial written submissions by the parties shall be no more than 75 pages, excluding exhibits. Reply submissions must be filed no later than the close of business on Friday, July 26, 2013. Reply submissions by the parties shall be no more than 40 pages, excluding exhibits. No further submissions on these issues 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 C.F.R. 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-819") in a prominent place on the cover page and/or the first page. (*See Handbook for Electronic Filing Procedures*, [http://www.usitc.gov/secretary/fed\\_reg\\_notices/rules/handbook\\_on\\_electronic\\_filing.pdf](http://www.usitc.gov/secretary/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 C.F.R. § 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. A redacted non-confidential version of the document must also be filed simultaneously with the any confidential filing. All non-confidential 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 sections 210.42-46 and 210.50 of the Commission's Rules of Practice and Procedure (19 C.F.R. §§ 210.42-46 and 210.50).

By order of the Commission.



Lisa R. Barton  
Acting Secretary to the Commission

Issued: July 2, 2013