UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES, AND COMPONENTS THEREOF, AND PRODUCTS CONTAINING SAME Investigation No. 337-TA-841

COMMISSION OPINION

I. INTRODUCTION

The Commission instituted this investigation on May 2, 2012, based on a complaint filed by Technology Properties Limited, LLC ("TPL") of Cupertino, California. 77 Fed.

Reg. 26041 (May 2, 2012). 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 Nos. 6,976,623 ("the '623 patent"), 7,162,549 ("the '549 patent"), 7,295,443 ("the '443 patent"), 7,522,424 ("the '424 patent"), 6,438,638 ("the '638 patent"), and 7,719,847 ("the '847 patent"). The complaint further alleged the existence of a domestic industry. The notice of investigation named twenty-one respondents, some of whom have since settled from the investigation. As a result of these settlements, the '638 patent is no longer at issue, as it has not been asserted against the remaining respondents. The Office of Unfair Import Investigations did not participate in this investigation.

On October 4, 2012, the presiding Administrative Law Judge ("ALJ") issued a Markman order construing disputed claim terms of the asserted patents. Order No. 23. On January 7-11, 2013, the ALJ conducted a hearing, and on August 2, 2013, the ALJ issued his

final Initial Determination ("the ID"). The ALJ found that TPL demonstrated the existence of a domestic industry, as required by 19 U.S.C. § 1337(a)(2), through TPL's licensing investments under 19 U.S.C. § 1337(a)(3)(C). ID at 152-55. The ALJ rejected TPL's domestic industry showing based upon OnSpec Electronic, Inc.'s expenses under section 337(a)(3)(A)-(C). *Id.* at 155-57. The ALJ found that TPL's technical prong showing for each patent was insufficient to demonstrate that the alleged domestic industry products actually practice one or more claims of each asserted patent. ID at 134-138. Yet, because the ALJ ruled that such a showing is not required under existing Commission precedent for licensing industries under subsection (a)(3)(C), the ALJ found that TPL showed the existence of a domestic industry in licensing the asserted patents.

The ALJ found that the respondents had not shown that any of the asserted patent claims are invalid. However, the ALJ found that TPL demonstrated infringement only of the '623 patent, and not the other patents. With respect to the '623 patent, the ALJ found that TPL demonstrated direct infringement of the asserted apparatus claims (claims 1-4 and 9-12). Accordingly, the ALJ found a violation of section 337 only as to the '623 patent. TPL asserted the '623 patent against only a subset of respondents ("the '623 respondents"), specifically Acer, Inc. ("Acer"); Kingston Technology Co., Inc. ("Kingston"); Newegg, Inc.; and Rosewill Inc. (collectively, "Newegg/Rosewill"). Thus, the ALJ found no violation of section 337 as to the remaining respondents ("the non-'623 respondents"), specifically Canon, Inc.; Hewlett-Packard Co. ("HP"); HiTi Digital, Inc. ("HiTi"); and Seiko Epson Corporation ("Seiko Epson").

¹ The ALJ also found that method claims 17-19 of the '623 patent were not infringed. The Commission does not reach those claims, which TPL concedes are no longer within the scope of the investigation, TPL Br. 12 n.3. The Commission vacates the ALJ's findings with respect to those claims.

On August 19, 2013, the parties filed petitions for review.² TPL's petition challenged the ALJ's noninfringement determinations for the '443, '424, and '847 patents ("the mapping patents"). TPL did not petition for review of the ALJ's noninfringement determination for the '549 patent. The respondents filed a petition for review, in which the '623 respondents challenged one of the ALJ's claim constructions, and independently challenged the ALJ's finding that the asserted claims of the '623 patent are not anticipated by, or obvious in view of, certain prior art. The '623 respondents also challenged the ALJ's finding that TPL demonstrated the existence of a domestic industry.

The non-'623 respondents contingently challenged the ALJ's determinations. They challenged the ALJ's domestic industry determination on the basis that "[t]here is no evidence that TPL's licensees' efforts relate to 'an article protected by' any of the asserted patents." Resp'ts Pet. 42, 54-56. The petition relies on the Federal Circuit's decision in *InterDigital Communications, LLC v. ITC*, 707 F.3d 1295 (Fed. Cir. 2013), the Court's decision denying rehearing in the appeal from Commission Investigation No. 337-TA-613, *Certain 3G Mobile Handsets and Components Thereof.* These respondents also challenged the ALJ's findings under the economic prong of the domestic industry requirement based on TPL's evidence of expenditures, as well as the nexus between those expenditures and the asserted patents.

² Complainant Technology Properties Limited LLC's Petition for Review of the Initial Determination (Aug. 19, 2013) ("TPL Pet."); Respondents Acer, Inc., Kingston Technology Company, Inc., Newegg, Inc. and Rosewill Inc.'s Petition for Review of Initial Determination Finding a Violation Based on U.S. Patent No. 6,976,623 and Respondents' Conditional Petition for Review of Initial Determination of Finding of Validity and Domestic Industry of the Remaining Patents in Suit (Aug. 19, 2013) ("Resp'ts Pet."); Contingent Petition for Review of Respondent Hewlett-Packard Company Relating to Domestic Industry (Aug. 19, 2013) ("HP Pet.").

The non-'623 respondents also argued that the four no-violation patents are invalid as anticipated or obvious in view of the prior art, and made additional non-infringement arguments for the three mapping patents, which were raised in TPL's petition.

Respondent HP filed a short petition for review on its own behalf. HP argued for a narrow interpretation of the domestic industry requirement, not only in which "articles protected by" the patent must be found to exist, but in which "protected by" has a narrow meaning:

"The articles protected by" the asserted IP are those which came to market, or are coming to market, under the protective umbrella of the asserted IP, which these articles commercialize. Articles independently created, and then taxed by a patent owner, such as TPL, are not "protected by" the IP by any reasonable interpretation of that word, and thus fail to satisfy the plain language of the statute.

HP Pet. 5.

On August 27, 2013, the parties filed responses to each other's petitions.³ In response to the domestic industry challenge lodged by the respondents collectively, TPL argued that the respondents confuse the technical prong with the economic prong and that there is no technical prong requirement for licensing under section 337(a)(3)(C). TPL Reply Pet. 28. In a short reply to HP's petition, TPL argues that HP never raised its theory of domestic industry below, making it waived, and that, in any event, HP's petition failed to satisfy Commission rule 210.43, because HP failed to explain the basis for its petition under Rule

³ Complainant Technology Properties Limited LLC's Response to Respondents Acer, Inc., Kingston Technology Company, Inc., Newegg, Inc., and Rosewill Inc.'s Petition for Review of Initial Determination Finding a Violation Based on U.S. Patent No. 6,976,623 and Response to Respondents' Conditional Petition for Review of Initial Determination of Finding of Validity and Domestic Industry of the Remaining Patents in Suit (Aug. 27, 2013) ("TPL Reply Pet."); Complainant Technology Properties Limited LLC's Response to Respondent Hewlett-Packard Company's Contingent Petition for Review Relating to Domestic Industry (Aug. 27, 2013); Respondents' Response to Complainant Technology Properties Limited, LLC's Petition for Review of the Initial Determination (Aug. 27, 2013) ("Resp'ts Reply Pet.")

210.43(b)(1) (factual findings "clearly erroneous," legal conclusions "erroneous," or that "the determination is one affecting Commission policy").

The Commission determined to review the ID in its entirety. The Commission notice solicited briefing from the parties on remedy, the public interest, and bonding, as well as on five specific questions:

- 1. Discuss, in light of the statutory language, legislative history, the Commission's prior decisions, and relevant court decisions, including *InterDigital Communications*, *LLC v. ITC*, 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013) and *Microsoft Corp. v. ITC*, Nos. 2012-1445 & -1535, 2013 WL 5479876 (Fed. Cir. Oct. 3, 2013), whether establishing a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C) requires proof of "articles protected by the patent" (i.e., a technical prong). If so, please identify and describe the evidence in the record that establishes articles protected by the asserted patents.
- 2. Discuss the construction of "accessible in parallel" in view of the prosecution history of the '623 patent (including the Examiner's Statement of Reasons for Allowance, see Salazar v. Proctor & Gamble Co., 414 F.3d 1342, 1347 (Fed. Cir. 2005)), and whether the asserted patent claims are infringed and not invalid based upon that construction. Invalidity arguments not dependent on that claim construction should not be briefed.
- 3. Comment on whether the respondents' invalidity evidence and analysis as to the Pro II system, the Uno Mas article, the Kaneshiro patent, and the '928 Publication, and TPL's evidence and analysis as to the technical prong of the domestic industry requirement, were undisputed. Please cite all evidence in the record that supports your position.
- 4. Discuss whether TPL demonstrated that the products accused of infringing the '443, '424, and '847 patents receive or interface with SD cards that operate in a four-bit-bus mode, and if so, whether the accused products infringe the asserted claims.
- If the Commission were to find that the accused products infringe the '443, '424, and '847 patents, discuss whether the SD specification invalidates the asserted claims of those patents.

Notice (October 24, 2013). The notice also solicited briefing from the public on remedy and the public interest.

On November 7, 2013, the parties filed opening submissions in response to the above-listed questions,⁴ as well as separate submissions on remedy the public interest, and bonding. That same day, non-party Intel Corp. filed comments on remedy and the public interest, supportive of the respondents. On November 15, 2013, the parties replied to each other's submissions.⁵ On December 11, 2013, TPL and Acer filed a joint motion to terminate the investigation as to Acer on the basis of a settlement agreement, which we granted in our notice terminating the investigation.

II. DISCUSSION

The respondents' petition for review and their subsequent briefing present a substantial domestic industry question, specifically, whether TPL, in alleging the existence of a domestic industry under section 337(a)(3)(C), must demonstrate the existence of articles practicing the asserted patents.⁶ We first address the patent issues in this investigation before turning to domestic industry.

⁴ Complainant Technology Properties Limited LLC's Response to the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 7, 2013) ("TPL Br."); Respondents' Written Submission Addressing Certain Issues Enumerated in the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 7, 2013) ("Resp'ts Br.").

⁵ Complainant Technology Properties Limited LLC's Reply Submission to the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 15, 2013) ("TPL Reply Br."); Reply of Respondents to the Submission of Complainant on Review of the Final Initial Determination (Nov. 15, 2013) ("Resp'ts Reply Br.").

⁶ Commissioner Aranoff dissents from the Commission's determination that a complainant is required to demonstrate the existence of articles practicing the asserted patents in order to show a domestic industry based on licensing under section 337(a)(3)(C). She does not reach the question of whether there is a statutory requirement that a complainant demonstrate the existence of articles practicing the asserted patents for engineering and research and development industries under section 337(a)(3)(C). She otherwise joins the Commission's analysis to the extent that it is not inconsistent with her dissenting views.

A. Patent-Related Issues Concerning the '623 Patent

The '623 patent is directed toward a device into which several types of memory cards can be plugged at the same time, the memory cards being "accessible in parallel to transfer data from the" first card to the second card. '623 patent claims 1, 9; accord claim 17. The accused products, after accounting for respondent Acer's recent termination from the investigation, are memory card readers distributed by Kingston and Newegg/Rosewill. ID at 24-25. TPL asserted independent claims 1, 9, and 17 and dependent claims 2-4, 10-12, and 18-19. ID at 12. For domestic industry, TPL relied upon claim 1. ID at 137.

As noted earlier, the ALJ found a violation of section 337 as to the '623 patent. The principal dispositive issue regarding this patent is whether the patentee's amendments to the claims, and explanations of those amendments, constitute disavowal as to patent scope with regard to what is meant by "accessible in parallel." The ALJ concluded that there was no disavowal and found that the accused products infringe the claims. The ALJ then found that the respondents failed to demonstrate that the asserted claims are invalid.

1. Claim Construction and Infringement: "Accessible in Parallel"

The ALJ's finding of infringement was based on his claim construction of "accessible in parallel to transfer data" from one type of memory card to another. '623 patent claims 1, 9. Under guiding case law, the words of a claim are usually afforded their "ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history." *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). An exception to this canon of construction applies "when the patentee disavows the full scope of a claim term either in the specification or during prosecution." *Id.* Throughout proceedings, the respondents argued that, based

upon prosecution history disavowal, "accessible in parallel" requires that the claimed system be able to read from one type of memory card while writing to the other.

a) Recitation of the File History

Claim 1, which is illustrative, issued from application claim 1, which called, *interalia*, for "a plurality of memory card interfaces accessible in parallel." The patent examiner rejected all of the application claims over a prior art patent application to Pua (U.S. 2002/0178307). Office Action (Aug. 22, 2003). Pua disclosed a memory card reader for connecting different types of memory cards to a computer. Pua contains a "memory card switching circuit" for controlling which memory card to access at any time. Pua ¶ 32.

In response to this rejection, the applicants explained (without amendment in this regard):

Claim 1 requires a "memory card interface apparatus comprising a plurality of memory card interfaces . . . the plurality of memory card interfaces accessible in parallel." (emphasis added). In contrast, Pua does not teach or suggest that the multiple card adapter 10 can provide parallel access to the interfaces 30. Rather, Pua merely teaches a multiple memory card adapter that provides an interface for various types of memory cards. Nowhere does Pua teach or suggest that these interfaces are accessible in parallel.

Amendment at 9 (Dec. 9, 2003) (emphasis in original).

The examiner rejected the claims again:

In response to applicant's argument that Pua et al does not teach or suggest that the multiple card adapter 10 can provide parallel access to the interfaces 30 . . . , in Pua et al the interfaces 30 are accessible in parallel in that they are connected to the memory card control interface 20 in parallel. The memory card control interface 20 includes a memory card switching circuit for managing data and command flow to the memory cards, and switches between card

Asserted independent claims 9 and 17 of the '623 patent issued from application claims 10 and 19, respectively. As claim 17 is no longer at issue, we do not address it further, though throughout the prosecution history, the amendments to issued claims 1, 9, and 17 were consistent and indistinguishable.

interfaces depending on which type of card is being accessed (see paragraphs 32, 37, and 38). Since the memory card control interface 20 is capable of accessing specific interfaces 30, the interfaces 30 are connected to the memory card control interface 20 in parallel. If the interfaces 30 were connected to the memory card control interface 20 in serial, the memory card control interface 20 would have to access one interface type While sending control signals through at least one second interface type Thus, it is clear that the interfaces 30 are connected to the memory card control interface 20 in parallel. Therefore, the teachings of Pua et al meet the claimed limitation that the interfaces are accessible in parallel.

Final Office Action at 3 (Mar. 5, 2004).

In attempting to overcome the rejection, the applicants amended the claims from "accessible in parallel" to "being accessible in parallel" (application claims 1 and 10), and explained:

The above-emphasized limitation of claim 1 requires that the plurality of memory card interfaces be accessible in parallel. The Examiner's above-quoted argument merely shows that the interface 30 for each type of memory card is connected to the memory card control interface 20 in parallel. However, the fact that the interface 30 for each type of memory card is connected in parallel does not mean that access to the interfaces 30 occurs in parallel.

In fact, Pua describes that the memory card control interface 20 comprises a memory card switching circuit which is switched to one of the interfaces 30 under control of a microprocessor. For example, in paragraph 32, Pua states, "If, for example, the host reads from or writes to a Compact Flash card, the microprocessor will switch this circuit to the Compact Flash interface. If, for example, the host reads from or to a Smart Media card, the microprocessor will switch this circuit to the Smart Media interface." Thus, in other words, depending on the type of card being written to or read from, the microprocessor switches the memory card switching circuit to the interface that supports the card being written to or from. Since the memory card switching circuit is switched between interfaces, it follows that no more than one interface can be operative at a given point in time. Thus, access to the interfaces does not occur in parallel.

Amendment at 7 (Apr. 29, 2004) (emphasis in original).

In his next rejection, instead of relying solely on the Pua application, the examiner relied for anticipation on U.S. Patent No. 6,381,513 to Takase. Office Action (May 27, 2004). That patent discloses a computer terminal that accommodates several memory cards at once. Takase explains that its "memory card interface 223 can simultaneously accept a plurality of memory cards 1 so that it can read, erase and write the data in parallel." Takase patent col. 13 lines 9-12.

In response to this rejection, the applicants amended application claim 1 as follows, with similar amendments to application claim 10:

(Currently Amended) A memory card interface apparatus comprising:

 a plurality of memory card interfaces, with at least a subset of the plurality of memory
 card interfaces eonfigured being selectively operable to interface with a plurality of memory
 cards of a first type, the plurality of memory card-interfaces-accessible in parallel.

Amendments (June 16, 2004). The applicants explained that the memory card system of Takase was "not subject to selection." *Id.* at 6-7; *see* Takase patent col. 14 line 34 – col. 15 line 18. The examiner disagreed, and again rejected the claims as anticipated by Takase. Office Action 15 (Sept. 2, 2004).

The applicants amended the claims again, with the amendments to claim 1 shown below:

⁸ The examiner also found the claims obvious in view of Takase and Pua together.

(Currently Amended) A memory card interface apparatus comprising:

a plurality of memory card interfaces, with at least a subset of the plurality of memory card interfaces being selectively operable to interface with a plurality of memory cards of a first type comprising a first subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type, wherein the memory card of the first type and the memory card of the second type are accessible in parallel.

Amendment (Nov. 22, 2004). The applicants explained:

Takase describes a system in which a plurality of memory cards of the same type may be accessed <u>in parallel</u>. For example, see columns 15 and 16. However, Takase fails to teach or suggest that a memory card of the first type and a memory card of a second type may be accessed in parallel.

Pua (US 2002/0178307) describes a system which provides serial access to a number of memory cards of different types (see paragraph 37, column 2). However, Pua does not teach or suggest that a memory card of a first type and a memory card of a second type may be accessible in parallel.

Thus, the combination of Takase and Pua would provide a system in which there would be parallel access for memory cards of the same type, and serial access for memory cards of different types. The combination of Takase and Pua would still fail to teach or suggest that a memory card of the first type and a memory card of the second type may be access [sic] in parallel, as recited in claim 1.

Id. at 5 (emphasis in original).

Another rejection followed, this time relying on the combination of Takase and Pua, as opposed to each individually. Office Action (Feb. 5, 2005). The examiner argued that a person of ordinary skill would have been motivated to combine the two references "in order to provide the ability to interface with a plurality of memory cards as desired/required by users, thereby increasing the versatility and appeal of the system to a greater number of users." *Id.* at 9.

In response to this rejection, the applicants amended the claims again:

(Currently Amended) A memory card interface apparatus comprising:

 a plurality of memory card interfaces comprising a first subset to interface with a
 memory card of a first type and a second subset to interface with a memory card of a
 second type, wherein the memory card of the first type and the memory card of the
 second type are accessible in parallel to transfer data from the memory card of the first
 type to the memory card of the second type.

Amendments (Apr. 27, 2005). The applicants explained:

In contrast [to the newly added limitation], Takase discloses an electronic information distributing terminal for writing electronic information (such as text information and corresponding motion image information) into a memory card. . . . Takase's terminal does not teach or suggest transfer data [sic] from the memory card of the first type to the memory card of the second type.

Also, Pua discloses a multiple memory card adapter that comprises an interface for various types of memory cards, so that only one adapter is needed to allow different types of memory cards to be read from or written to by a host computer. Pua also does not teach or suggest transfer data [sic] from the memory card of the first type to the memory card of the second type.

Thus, Takase and Pua, individually or in combination, do not teach or suggest transfer data [sic] from the memory card of the first type to the memory card of the second type, as claimed in independent claims 1, 10 and 19.

Id. at 6-7.

These amendments overcame the rejection, but the examiner issued a detailed notice of allowability explaining the improvements over the prior art, including discussion of U.S. Patent No. 6, 010,066 to Itou:⁹

Itou et al... teaches transferring data from a first memory card to a second memory card (see column 1, lines 57-62, and column 2, lines 9-14). However, Itou et al fails to teach or suggest that the first

⁹ Until this point, the examiner had relied upon Itou in connection with claims 8 and 16 of the '623 patent (application claims 8 and 17), which call for a text display.

memory card and the second memory card are different types or accessible in parallel. Since the transfer of data from a first memory card to a second memory card necessarily includes reading data from the first memory card and then writing the data to the second memory card, the examiner believes that this suggests accessing the first and second memory cards serially, rather than in parallel.

It is also noted that applicants have made a distinction between the memory cards being connected in parallel and the memory cards being accessible in parallel. As applicants have stated, the fact that interfaces are connected in parallel does not mean that access to the interfaces occurs in parallel (see page 7 of the amendment filed on 5/3/2004).

Therefore, without the benefit of applicant's teachings, there is no motivation for one of ordinary skill in the art at the time of the invention to combine the teachings of the prior art in a manner so as to create the claimed invention.

Notice of Allowability at 3 (July 19, 2005).

b) Prosecution Disavowal Based Upon the File History

The respondents argued that the effect of this exhaustive file history is to disavow switching between two memory cards from the scope of "accessible in parallel," and proposed to the ALJ a construction of "accessible in parallel" as "each transmitting or receiving data simultaneously at a given point in time." Order No. 23 at 60. TPL argued for the plain and ordinary meaning of the term, and as an alternative also argued that "accessible in parallel" means "capable of concurrent read/write access." *Id.* While this appears to be the same as the respondents' position, it is based upon a loose usage of "concurrent" in which fast switching back and forth between two memory cards is sufficient to practice the patent claims. *See, e.g.,* TPL Reply Pet. 11 n.1.

The ALJ found that the prosecution history does not disavow claim scope whereby only one memory card is accessed at a time. To the ALJ, accessible in parallel meant that any one of several inserted memory cards could be accessed at a time: "This language does

not require that the cards function simultaneously, but rather that it be possible for them to be in their respective slots simultaneously, so the operator of the system can access them without taking them in and out." Order No. 23 at 61.

We reverse the ALJ and adopt the respondents' proposed claim construction. We find that the above-quoted statement from Order No. 23 fails to take into account the applicant's statements in the prosecution history distinguishing Pua, as Pua accommodated multiple cards as well. The respondents' petition for review focuses on this point. Resp'ts Pet. 8-19. We agree with the respondents that the ALJ's construction reads the "in parallel" language out of the claims. *Id.* at 11-12. We find the applicants' statements in response to the second rejection to be especially clear to disavow claim scope. The applicants there explained: "that the interface 30 for each type of memory card is connected in parallel does not mean that access to the interfaces 30 occurs in parallel." Amendment at 7 (Apr. 29, 2004) (emphasis in original). The applicants continued (distinguishing Pua):

Pua states, "If, for example, the host reads from or writes to a Compact Flash card, the microprocessor will switch this circuit to the Compact Flash interface. If, for example, the host reads from or to a Smart Media card, the microprocessor will switch this circuit to the Smart Media interface." Thus, in other words, depending on the type of card being written to or read from, the microprocessor switches the memory card switching circuit to the interface that supports the card being written to or from. Since the memory card switching circuit is switched between interfaces, it follows that no more than one interface can be operative at a given point in time. Thus, access to the interfaces does not occur in parallel.

Id.

In support of its argument against prosecution disavowal, TPL argues that the speed with which the switching occurs constitutes parallel access. TPL Reply Pet. 14-16. This argument misapprehends the prosecution history. The prosecution history surrounding the

Pua reference does not have to do with slow switching versus fast switching, but rather with whether switching is encompassed within the phrase "accessible in parallel." Based on the applicants' representations to the PTO, switching back and forth is beyond the scope of "accessible in parallel."

TPL also argues that a finding of disavowal causes construction difficulties with claim 17 of the '623 patent. TPL Br. 11. That claim, unlike claims 1 and 9, covers a method, rather than an apparatus, and includes the step of "selectively operating the first and second subsets to provide access to the memory cards of the first and second types in parallel to transfer data from the memory card of the first type to the memory card of the second type." TPL takes the position that "selectively" in this claim means accessing one card at a time. TPL Br. 11. TPL asserts that therefore, "the examiner (aware of the applicant's remarks) would not have allowed claim 17" based upon our construction of "accessible in parallel." *Id.* at 11-12.

In response to TPL's argument, the respondents assert that claim 17 "is no longer at issue." Resp'ts Reply Br. 10. They also observe that the "selectively" language was not at issue during prosecution, and that there is no reason to conjecture what the examiner could have done if such points had been raised during prosecution. *Id.* at 10-11. Moreover, they argue that "the most natural... reading of this phrase in view of the claim language is that the word 'selectively' denotes that it is the first and second interface subsets that are selected for operation..., not that the claim allows for – or requires – operating these interfaces one at a time." *Id.* We agree with the respondents' arguments.

Based upon our claim construction, there is no dispute that the accused products use "disclaimed prior art switching circuitry." Resp'ts Pet. 14-18; TPL Reply Pet. 15-16.

Accordingly, we find that the accused products do not infringe the asserted claims of the '623 patent. 10

The respondents argued on petition that the asserted claims of the '623 patent are invalid as anticipated or obvious only under the ALJ's construction of "in parallel." Resp'ts Pet. 19-38. Because we reject the ALJ's claim construction, we do not reach the respondents' validity arguments based upon that construction.

B. Patent-Related Issues Concerning the Mapping Patents (the '443, '424 and '847 Patents)

The '443 patent was filed on July 26, 2006. It claims priority to a patent application filed in 2000. The '424 patent is a continuation of the application that issued as the '443 patent. In turn, the '847 patent is a continuation of the application that issued as the '424 patent. The three patents ("the mapping patents"), therefore, share a common specification and are directed to "universal" memory card readers or adapters, *i.e.*, devices that are capable of interfacing with multiple types of memory cards.¹¹

The following claims are asserted: from the '443 patent, independent claims 1 and 9, and dependent claims 3, 4, 7, 11, 12, and 14; from the '424 patent, independent claims 25 and 28, and dependent claims 26 and 29; and from the '847 patent independent claim 1, and dependent claims 2 and 3. ID at 12-16.

1. Infringement: "Mapping"

The asserted claims are substantially similar and the only dispute at the Commission is with respect to the "mapping" limitations in each claim:

¹⁰ Prosecution disavowal makes the doctrine of equivalents unavailable to TPL. See, e.g., American Calcar, Inc. v. American Honda Motor Co., 651 F.3d 1318, 1340 (Fed. Cir. 2011); Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995).

¹¹ Unless otherwise noted, we refer to the '443 specification for convenience.

- "a controller chip to map at least a subset of the at least one set of contact pins to a set of signal lines or power lines, based on an identified type of a memory media card." '443 patent claim 1; accord '443 patent claim 9.
- "means for mapping power, ground or data signals between said interconnection pins and said one or more contact pins depending upon the identification of the type of memory card inserted into said port." '424 patent claim 25; accord '424 patent claim 28 & '847 patent claim 1.

The ALJ construed what it means "to map":

Thus, the ALJ construes "to map at least a subset of the at least one set of contact pins to a set of signal lines or power lines, based on an identified type of the memory media card" [and the corresponding claim from '443 patent claim 9] to have its plain and ordinary meaning as outlined above and with the caveat that the mapping must occur based on the type of memory card inserted.

Order No. 23 at 32-33. 12 By "outlined above," the ALJ references his explanation that "mapping is a logical function and does not require some physical connection be changed in the device in order to accomplish it." *Id.* at 29. No party challenged the ALJ's claim construction to the Commission. 13 On review by the Commission, then, is whether, based upon the ALJ's claim construction, the accused products and domestic industry products meet this claim limitation.

Explained at the simplest level, memory cards have sets of contacts for communication. The cards are read from or written to by connecting a pin to each contact (or to at least some of the contacts). *See, e.g.*, '443 patent col. 5 lines 22-24. The '443 patent teaches that notwithstanding that different types of cards have different contacts, an adapter can use the same pin for different cards. Figure 4, for instance, is a "table of pin mappings" that shows how 21 pins could be used to service a "Smart Media" card, an "MMC/SD" card,

¹² For the means-plus-function limitations, the ALJ found that the recited function is the same as for the mapping in the non-means-plus-function claims, and that the corresponding structure is a controller. *Id.* at 35-37.

¹³ The respondents had urged a narrower definition based upon prosecution disclaimer, *id.* at 28-30, but they chose not to advance that argument to the Commission.

or a Memory Stick. Figure 5 is a "table of pin mappings" that shows how 18 pins could be used to control an even greater variety of cards. When a pin is shared, it is said in the patent to be "multiplexed." The patent specification discusses Figure 5 in greater detail. '443 patent col. 6 lines 25-47.

The accused products are memory card readers that are designed to accommodate SD cards and MMC cards, and no others. The patent explains that these two types of cards "have the same form factor but slightly different pin-out." '443 patent col. 2 lines 1-2. The similarities are such that every further reference of these two types of memory cards in the asserted patents is conflated as "MMC/SD," including in Figures 4 and 5.

The respondents argued, and the ALJ found, that the claimed mapping does not occur because the operation of MMC and SD cards is substantially the same. ID at 37-48. SD cards can operate in one of two manners, with either a one-bit data bus (*i.e.*, reading or writing one bit of information at a time) or with a four-bit data bus (*i.e.*, reading or writing four bits in parallel, like a four-lane road instead of a one-lane road). In single-bit data bus usage, there is no genuine dispute that the MMC and SD cards operate in essentially the same manner. What remains is a theory of infringement reliant upon an SD card utilizing a four-bit data bus. The only difference is that four-bit-bus operation of an SD card uses three more pins than an MMC card (or than one-bit-bus operation of an SD card). ID at 45-46.

The parties' petitions for review contended that the ALJ's comparison of four-bit data-bus SD versus MMC was inconsistent. In particular, the ID states as follows:

The ALJ finds that Mr. Berg explained that distinguishing between an SD and MMC cards does not show evidence of the claimed "mapping" because, the evidence only shows that

according to the SD specification. (RX-2885C, Q/A 81-92; see also id. at Q/A 103-05, 110, 112-13, 119-21 (as to Acer).) Specifically, the

ALJ finds that a communication with an MMC card and communication with an SD card occurs across a 1-bit wide data bus. (*Id.* at 87.) The ALJ finds that Mr. Buscaino provided no evidence that any device ever operates using a data bus wider than 1-bit when an SD card is inserted, and Mr. Berg explained that such functionality is optional. (*Id.* at 88, 91-92.) Thus, although the ALJ notes that TPL's arguments regarding mapping were eminently reasonable, the ALJ finds that they have not proven that the "mapping" elements found in all the asserted claims of the '443, '424, and '847 Patents.

Accordingly, the ALJ finds that because TPL has failed to prove the presence of all of the elements of the asserted claims, TPL has failed to prove infringement of the asserted claims of the '443, '424, and '847 Patents.

ID at 48. But the ALJ also addressed the operation of the accused products in a four-bit bus mode. See, e.g., ID at 40-41 (

On review, we reverse the ALJ's determination that TPL failed to show that the accused products can transfer data to or from SD cards with a four-bit-bus, and we vacate in its entirety the paragraph reprinted in the block quotation above. We find that TPL demonstrated, by a preponderance of the evidence, operation of the accused products in a four-bit-bus mode. TPL Br. 26-31; TPL Reply Br. 22-27. As discussed extensively in TPL's briefing, the evidence of record demonstrated the accused products all have connectors with pins for the four bits of data and that the controllers in the accused products are designed to process four bits of data. TPL Br. 26-31. We agree with TPL's characterization of the record that "neither Respondents nor Respondents' experts or fact witnesses dispute that the accused controllers operate in 4-bit SD mode when an SD card is

¹⁵ The respondents' arguments in their briefs to the Commission regarding whether the accused products operate in four-bit mode are inconsistent with the evidence of record.

¹⁴ We give no weight to the ALJ's statement in the block quotation that certain TPL arguments were "eminently reasonable." We do not adopt that statement.

inserted and in 1-bit MMC mode when an MMC card is inserted into the card connector." TPL Br. 41; see also id. at 31.

Moreover, we agree with TPL that its substantial showing went well beyond what is necessary pursuant to the language of the asserted claims. We find that TPL showed that the accused products are at least capable of operating in a four-bit bus mode, and that is all that is ordinarily required for apparatus claims. The Commission most recently addressed this issue in Certain Semiconductor Chips and Products Containing Same, Inv. No. 337-TA-753, Comm'n Op. 37-39 (July 31, 2012). That case presented a factually analogous question. The Commission considered the following Federal Circuit authorities in detail: Fantasy Sports Properties, Inc. v. Sportsline.com, Inc., 287 F.3d 1108, 1118 (Fed. Cir. 2002); Silicon Graphics, Inc. v. ATI Technologies., Inc., 607 F.3d 784, 794 (Fed. Cir. 2010); and ACCO Brands, Inc. v. ABA Locks Manufacturer Co., 501 F.3d 1307, 1310 (Fed. Cir. 2007). The claim language here is similar to that at issue in Silicon Graphics and Fantasy Sports. 16 Accordingly, it was not incumbent upon TPL to demonstrate actual use of the accused products in four-bit-bus mode. 17 Accordingly, we disagree with the first full paragraph of page 48 of the ID, in which the ALJ limits TPL's showing to one-bit-bus operation of the SD card, for which reason it has been vacated. We note that this paragraph in the ID was in

¹⁶ In Silicon Graphics, the patent claims called for "a rasterization circuit . . . that rasterizes the primitive according to a rasterization process," and the Federal Circuit found that the claim language merely required circuitry with the ability to rasterize. Silicon Graphics, 607 F.3d at 795. Fantasy Sports included claim language calling for a computer that included "means for setting up individual football franchises"; and other "means" for selecting rosters, trading players, and so forth. The court found that the infringing software (apparatus) included these means "regardless whether that means is activated or utilized in any way." Fantasy Sports, 287 F.3d at 1118. The claims in ACCO, on the other hand, called for a computer lock with: "a pin, coupled through said housing, for extending into said security slot proximate said slot engaging portion when said slot engagement member is in said locked position to thereby inhibit rotation of said slot engagement member to said unlocked position." ACCO, 501 F.3d at 1310. The Federal Circuit there found that the lock would only infringe after a user inserted the lock into a computer and turned the key to lock it. Id. at 1313-14.

¹⁷ As discussed earlier, in any event, we have also found that TPL demonstrated such operation.

conflict with earlier passages of the ID, including from page 45 through the top of page 48, which analyzed four-bit-bus SD operation.

While we vacate one paragraph of the ID, we affirm the remainder of the ALJ's analysis of the accused products. In so doing, we affirm the ALJ's determination that a "card reader does not need to perform the claimed 'mapping' to accommodate SD and MMC card types in the same slot." ID at 46. We disagree with TPL's contention that the ALJ's reasoning was based solely on the SD Specification's initialization processes. TPL Pet. 18-25, 34-35; *see* ID at 47-48. Rather, the ALJ explained that the "only difference between" SD and MMC "cards is that the data in the SD card is a four bit bus, which requires four pins for data, and the MMC card only requires one." ID at 45 (citing RX-2369.0019; RDX-0482). The ALJ explained that the "I

The ALS explained that the

(citing RX-2888C, Q/A 56-60, 160-79; RX-22369.0019-20; JX-0068.0019-20; RDX-0412;

RDX-0480; RDX-0481). We agree with the ALJ that "[

]." Id. at 45 (citing CX-354C.18; CX-296C.27).

As the ALJ extensively and correctly discussed, in order to communicate with the SD and MMC cards, no mapping is required. Similarly, the mere use of additional signal lines in some circumstances but not others, based upon fixed assignments, does not constitute mapping. ID at 45; Resp'ts Br. 45-46 (citing RX-2885C, Q/A 265, 313, 355, 414, 461, 522, 564; RX-2888C Q/A 589, 634-35 (HP); RX-2888C Q/A 92, 180-88, 926-27; RX-3418C; RX3450 (Seiko Epson); RX-2888C Q/A 835-36, 864-65, CX-0322 (Newegg/Rosewill); RX-2888C, Q/A 256-76, 285-94, 226-47, 250-53 (Canon); RX-2885C, Q/A 75-80 (HP); RX-

2888C Q/A 761-62 (Kingston); RX-2888C, Q/A 453-64; RX-3481C, Q/A 30-36 (HiTi); Tr. 538-39).

2. Invalidity

On petition for review, the respondents contingently petitioned for review of the ALJ's determination that the asserted patent claims are not invalid as anticipated in view of certain prior art references. Resp'ts Pet. 60-73. *See* Resp'ts Pet. 62 (SD Specification); Resp'ts Summary of Pet. VI ("To the extent that the Commission reverses the ALJ's finding of non-infringement for the '443, '424, and '847 patents, the Commission should nonetheless find no violation because the record evidence clearly shows that these patents are invalid.").

We have determined to reach two of these arguments. In particular, Question No. 3 of the Commission notice of review asked the parties to brief whether TPL contested the respondents' invalidity arguments regarding Japanese patent publication JP H11-15928 ("the '928 Publication") (RX-817). The ALJ found that the '928 Publication is prior art to the mapping patents under 35 U.S.C. § 102(b), but found that the respondents' arguments in support of invalidity were too cursory to be preserved. ID at 108. Question No. 3 in the Commission notice asked whether invalidity in view of the '928 Publication was uncontested, in which case the Commission might excuse the lack of detailed briefing as to issues for which there was no genuine material dispute. See, e.g., Certain Mobile Devices, Associated Software and Components Thereof, Inv. No. 337-TA-744, Comm'n Op. 11-16 (May 18, 2012).

The respondents here argued that the '928 Publication anticipates all the asserted claims of the mapping patents, by describing the publication in only one paragraph, Resp'ts Post-Hearing Br. 153-54, and then asserting anticipation based upon citation to expert

testimony, *id.* at 154. Resp'ts Post-Hearing Br. 154. We affirm the ALJ's application of his ground rules because TPL challenged the respondents' invalidity argument based upon the '928 Publication. *See* TPL Post-Hearing Br. 254; CX-1205C at 157-169, Q/A 974-1035; TPL Post-Hearing Reply Br. 73-75. We note that the respondents moved to strike some of TPL's arguments from TPL's post-hearing reply brief, *see* Resp'ts Br. 34 & n.16, but they did not petition for review of denial of their motion, Resp'ts Pet. 67-69. In view of the ALJ's evidentiary determination that TPL's arguments for the '928 Publication were proper, we sustain the ALJ's application of his ground rules that the respondents' briefing was too cursory to demonstrate invalidity in view of the '928 Publication clearly and convincingly.

We also affirm the ALJ's determination that the respondents failed to demonstrate that the mapping patents are invalid in view of of European Patent 1 037 159 (RX-985) ("Lipponen") and its counterpart U.S. Patent No. 6,612,498 (RX-807). Respt's Pet. 60. These patents teach a memory card reader for reading an MMC card as well as a SIM card. RX-0895 at 1. The only dispute is whether a SIM card – used inside a mobile telephone – is a "memory card" or "memory media card" within the scope of the patent claims. The ALJ concluded that the SIM card, which is used principally for subscriber identification as opposed to data storage, is not a memory card. ID at 105. We find that the respondents have not carried their burden to demonstrate that a person of skill in the art would have understood the claimed "memory media card" to encompass a SIM card as used in Lipponen. In Lipponen, the SIM card, while acknowledged to have memory on it, is used to enable a mobile telephone to access a network. RX-985 at 2 ¶¶ 4-6; see also TPL Reply Pet. 44-46.

We do not reach the respondents' other invalidity arguments.

C. Patent-Related Issues Concerning the '549 Patent

There had been a fifth patent asserted before the ALJ. The claims of the '549 patent are all directed toward systems and methods in which a "controller chip" determines whether the memory card itself has a controller, such that if the memory card does not, the "flash adapter" (the memory card reader) uses "firmware" to "manage error correction" in the memory card. '549 asserted patent claims 7 and 11; see also unasserted claim 1. The accused products were memory card readers that can read "xD" cards in addition to other types of cards. See ID at 77-78; TPL Post-Hearing Br. 196-97. xD cards, unlike other memory cards, lack an onboard controller. See id. The principal question before the ALJ was whether detecting the presence of an xD card is sufficient to detect whether a memory card contains a controller. The ALJ concluded that sensing an xD card was not detecting a controller, and therefore found that TPL failed to demonstrate infringement. TPL did not petition for review of that finding, and the Commission affirms the ALJ's finding of noninfringement as to the '549 patent for the reasons set forth in the ALJ's discussion of direct infringement on pages 73-81 of the ID. We do not reach, and vacate, the remainder of the ALJ's findings regarding the '549 patent, including findings regarding invalidity, as well as the ALJ's interpretation (ID at 69-73) of the Commission opinion from Certain Electronic Devices With Image Processing Systems, Components Thereof, and Associated Software, Inv. No. 337-TA-724 (Dec. 11, 2011).

D. The Domestic Industry Requirement

The principal domestic industry question on review is whether a showing of articles protected by the asserted patents is necessary in order for TPL to demonstrate the existence of a domestic industry under section 337(a)(3)(C). Question No. 1 of the Commission notice

of review sought briefing on this issue from the parties. To address this question, we discuss the history of section 337(a)(3) and recent decisions of the Federal Circuit before turning to the facts of this investigation.

1. The 1988 Amendments to Section 337 and Commission Practice in Response Thereto

Under paragraph (a)(2) of section 337, a complainant must show that an industry "relating to the articles protected by the patent . . . exists or is in the process of being established" in the United States. 19 U.S.C. § 1337(a)(2). Paragraph (a)(3) expands upon paragraph (a)(2) as follows:

- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—
 - (A) significant investment in plant and equipment;
 - (B) significant employment of labor or capital; or
 - (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

19 U.S.C. § 1337(a)(3).

Paragraph 337(a)(3) was added to the Tariff Act as part of the Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418, 102 Stat. 1107 (1988) ("1988 Act"). The 1988 Act effected significant changes in the requirements for intellectual-property-related investigations under section 337, including patent-based investigations, which comprise the bulk of section 337 investigations. Commission precedent prior to 1988 "customarily defined the domestic industry as consisting of the domestic operations of the patentee devoted to the exploitation of the teachings of the patent at issue," with "[e]xploitation of

¹⁸ Paragraph (a)(3) of section 337 applies to patents, registered copyrights, federally registered trademarks, registered semiconductor mask works, and certain vessel designs. 19 U.S.C. § 1337(a)(1)(B)-(a)(1)(E).

patent rights" including "domestic production and manufacture, development and sale of patented product[s]." *Certain Foam Earplugs*, Inv. No. 337-TA-184, Initial Determination, 0085 WL 1,127,231 at *56 (Nov. 30, 1984), *not reviewed*, 50 *Fed. Reg.* 4277 (Jan. 30, 1985). The 1988 amendments codified such precedent by adding subparagraphs 337(a)(3)(A) and (B) to the statute encompassing "significant investment in plant and equipment," and "significant employment of labor or capital." In addition, domestic industry was broadened to include new subparagraph 337(a)(3)(C), for "substantial investment in" the "exploitation" of the asserted intellectual-property right. 1988 Act § 1342(a) (amending 19 U.S.C. § 1337).

The domestic industry requirement of Section 337, as amended in 1988, has been interpreted by the Commission to consist of an "economic prong" and a "technical prong." See, e.g., Alloc, Inc. v. ITC, 342 F.3d 1361, 1375 (Fed. Cir. 2003). The "economic prong" of the domestic industry requirement is satisfied when it is determined that significant or substantial economic activities and investments set forth in subsections (A), (B), and/or (C) of subsection 337(a)(3) have taken place or are taking place. Certain Variable Speed Wind Turbines & Components Thereof, Inv. No. 337-TA-376, USITC Pub. No. 3003, Comm'n Op. at 21 (Nov. 1996). "To determine whether an industry relates to the protected articles (the 'technical prong' of the domestic industry requirement), the Commission examines whether the industry produces articles covered by the asserted claims." Alloc, 342 F.3d at 1375. To meet the technical prong, at least under section 337(a)(3)(A)-(B), it has been held that the complainant must establish that it practices at least one claim of the asserted patent. See Certain Microsphere Adhesives, Process for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes, Inv. No. 337-TA-366, Comm'n Op., 1996 WL 1056095, at *7-8 (Jan. 16, 1996). "The test for satisfying the 'technical prong' of the

industry requirement is essentially the same as that for infringement, *i.e.*, a comparison of domestic products to the asserted claims." *Alloc*, 342 F.3d at 1375. Thus, the term "technical prong" has been used to refer to a requirement that articles exist that are covered by at least one claim of the asserted patent.

The Commission has established that the "its" in "substantial investment in its exploitation" of subparagraph (a)(3)(C) refers to "the patent, copyright, trademark, mask work, or design." See Certain Microcomputer Memory Controllers, Components Thereof and Products Containing Same, Inv. No. 337-TA-331, Order No. 6, 1992 WL 811,299, at *2 (Jan. 8, 1992), not reviewed, 57 Fed. Reg. 5710 (Feb. 12, 1992). This analysis comports with the legislative history of the 1988 Act, in which an earlier version of subparagraph (C) called for a "substantial investment in exploitation of the intellectual property right, including engineering, research and development, or licensing." H.R. Rep. No. 100-576 at 634 (Apr. 20, 1988) (Conference Report for H.R. 3, "Omnibus Trade and Competitiveness Act of 1988"). See also InterDigital Commc'ns, LLC v. ITC, 707 F.3d 1295, 1297 (Fed. Cir. 2013) ("The parties agree that the word 'its' in the last clause of paragraph 337(a)(3) refers to the intellectual property at issue.").

Until now, and relying substantially upon the legislative history of the 1988 Act, our practice has been not to require a complainant to demonstrate for purposes of a licensing-

¹⁹ The effect of such an interpretation of subparagraph (C) is to require the showing of a nexus between investment and the asserted intellectual property right. That is to say that the investment must be in "its" exploitation, and without the demonstration of such a nexus, the investment would not be cognizable under subparagraph (C). The Commission's most extensive analysis of the nexus issue, which collected Commission determinations on the matter, is the Commission opinion in *Navigation Devices*. See Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. at 7-13 (revised public version). We do not revisit those issues here.

²⁰ This conference report was expressly incorporated as part of the legislative history of enacted H.R. 4848. Pub. L. 100-418 § 2 (H.R. 4848) (Aug. 23, 1988).

based domestic industry the existence of protected articles practicing the asserted patents.²¹
Although there may have been protected articles actually practicing the asserted patents in our past investigations, such a showing was not mandatory. The decisions in these cases instead focused on whether the complainants' showings of licensing expenditures were tied sufficiently closely to the patents asserted in each investigation.

2. The Federal Circuit's InterDigital Decisions

InterDigital²² is the appeal of the Commission determination in Certain 3G Mobile

Handsets and Components Thereof, Inv. No. 337-TA-613. In that investigation, although the

Commission found no violation of section 337, the Commission found the domestic-industry
requirement to be satisfied, and respondent-intervenors Nokia, Inc. and Nokia Corp.

(collectively, "Nokia") challenged that finding on appeal.

a) Commission Proceedings

In the course of the 3G Mobile Handsets investigation, the ALJ issued two summary IDs regarding domestic industry. In Order No. 26, the ALJ granted complainant InterDigital Communications LLC's ("InterDigital") motion for summary determination that it satisfied the economic prong of the domestic industry requirement of section 337(a)(3)(C) through InterDigital's U.S.-based expenditures toward its own SlimChip product family (on which

²¹ Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432 ("Minimized Chip Packages"), Order No. 13 at 11-12, not reviewed, Notice, 66 Fed. Reg. 58424 (Nov. 21, 2001); Certain Digital Processors and Digital Processing Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-559 ("Digital Processors"), Initial Determination at 81-92 (May 11, 2007), not reviewed in relevant part, Notice at 2 (Aug. 6, 2007); Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. 6-16 (Aug. 8, 2011) (Corrected Public Version) (portfolio licensing); Certain Liquid Crystal Display Devices, Including Monitors, Televisions, and Modules, and Components Thereof, Inv. Nos. 337-TA-741 & -749, Comm'n Op. 108-15 (June 14, 2012) (portfolio licensing); Certain Semiconductor Chips and Products Containing Same, Inv. No. 337-TA-753, Comm'n Op. 44-51 (Aug. 17, 2012) (Public Version).

²² InterDigital Commc'ns, LLC v. ITC, 690 F.3d 1318 (Aug. 1, 2012) ("InterDigital I"), reh'g denied, 707 F.3d 1295 (Jan. 10, 2013) ("InterDigital II").

InterDigital intended to rely to satisfy the technical prong). Order No. 26 at 2 n.2 (Mar. 26, 2008) (public version). No petitions for review were filed, and the Commission determined not to review the ID. Notice at 2 (May 5, 2008).

In Order No. 42, the ALJ issued an ID granting complainant InterDigital's motion for summary determination that its licensing activities satisfied the economic prong of the domestic industry requirement of section 337(a)(3)(C). Order No. 42 (March 10, 2009) (public version). In that ID, the ALJ relied upon the *Minimized Chip Packages* and *Digital Processors* investigations we discussed above. *Id.* at 4-5. He found that InterDigital had invested a substantial amount of money in its licensing program and that InterDigital had demonstrated a nexus between the asserted patents and its licensing expenditures. *Id.* at 5-17. There was no dispute that "InterDigital licenses its wireless technology and patents to significant handset and device manufacturers throughout the world," and that through "its ongoing research and development, InterDigital developed proprietary technology that was ultimately incorporated into the wireless communications standards referred to generally as 3G." *Id.* at 6. Left unsaid, at least expressly, was that these licensees import and sell such handsets in the United States. Nokia filed a petition for review, but we determined not to review the ID. Notice at 2 (Apr. 9, 2009).

In view of Commission precedent that there was no separate technical prong for licensing, there was no need for InterDigital to present evidence at the hearing as to its licensing activities, the subject of Order No. 42. Consequently, InterDigital did not pursue such a showing at the hearing, and its post-hearing brief (unlike its pre-hearing brief) relied entirely on licensing. In his final ID, the ALJ found no violation of section 337 because the accused Nokia mobile handsets did not infringe the asserted claims. See Notice, 74 Fed. Reg.

55068 (Oct. 26, 2009). The ID only devoted one sentence to domestic industry: "The domestic industry requirement has been satisfied based upon complainants' licensing activities, see Order No. 42 (March 10, 2009) (unreviewed)." Final Initial and Recommended Determinations 225 (Aug. 14, 2009). There was no analysis in the ID concerning the previous Order No. 26, regarding a domestic industry founded upon, *interalia*, InterDigital's research and development expenses.

On review, the Commission clarified certain claim constructions, but terminated the investigation with a finding of no violation owing to noninfringement. 74 Fed. Reg. 55068. InterDigital took an appeal and Nokia intervened to defend the Commission's finding of no violation of section 337 on the additional basis that InterDigital failed to demonstrate a domestic industry through its licensing. InterDigital I, 690 F.3d at 1329.

b) The Federal Circuit's Decision in InterDigital I

On appeal, the Federal Circuit reversed certain claim constructions that undergirded the finding of noninfringement, remanding the investigation to the Commission. *Id.* at 1320. The court rejected Nokia's challenge to the Commission's domestic industry determinations. The court agreed with the Commission's finding that "the required United States industry can be based on patent licensing alone; it does not require that the articles that are the object of the licensing activities (*i.e.*, the 'articles protected by the patent') be made in this country." *Id.* at 1329. The Court noted that the Commission had been consistent in reaching this conclusion and that the Commission has not "required that the licensed product be manufactured in this country."

The Federal Circuit's focus on "made in this country" was based upon the legislative history of the 1988 Act. See, e.g., 132 Cong. Rec. 30811 (Oct. 14, 1986) (subparagraph (C) "does not require actual (Footnote continued on the next page)

c) The Federal Circuit's Decision in InterDigital II

Nokia filed a combined petition for rehearing and rehearing *en banc*.²⁴ Nokia argued that the Commission and the court had improperly construed section 337 to read out the requirement for "articles" in connection with subpart (C) domestic industries. Nokia argued that the statute's requirement of articles is supported by past Federal Circuit decisions and by the 1988 legislative history. Nokia Reh'g Pet. 3-5 (Sept. 17, 2012). According to Nokia, "there must be articles protected by the patent actually in the United States." *Id.* at 9 n.1.

On January 10, 2013, the Federal Circuit denied rehearing and rehearing *en banc*, but issued a supplemental panel opinion in support of the earlier panel decision. The court explained that because "Nokia made a much more detailed argument" on domestic industry "on rehearing than it did in its brief on the merits, a response to Nokia's expanded submission is appropriate." *InterDigital II*, 707 F.3d at 1297. In that opinion, the Federal Circuit provides a comprehensive discussion of the legislative history of the 1988 amendments. *Id.* at 1300-04.

After endorsing the Commission's longstanding interpretation that the word "its" in subparagraph 337(a)(3)(C) refers "to the intellectual property at issue," the Federal Circuit explained as follows:

The Commission and the court construed those phrases to define the subject matter that is within the statute's protection. With respect to subparagraph (A) of paragraph 337(a)(3), the "significant investment in plant or equipment" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent" in question. That requirement will typically be met if the

production of the article in the United States if it can be demonstrated that significant investment and activities of the type enumerated are taking place in the United States") (emphasis added).

²⁴ Combined Pet. for Panel Reh'g and Reh'g En Banc of Intervenors Nokia Inc. and Nokia Corporation, *InterDigital Commc'ns*, *LLC v. ITC*, No. 2010-1093 (Fed. Cir. Sept. 17, 2012) ("Nokia Reh'g Pet.").

investment in plant and equipment is directed at production of articles protected by the patent. Similarly, with respect to subparagraph (B) of paragraph 337(a)(3), the "significant employment of labor or capital" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent." That requirement will likewise typically be met by a showing that significant labor or capital is being expended in the production of articles protected by the patent. Applying the same analysis to subparagraph (C) of paragraph 337(a)(3) produces a parallel result that is consistent with the Commission's and this court's statutory construction: The "substantial investment in [the patent's] exploitation, including engineering, research and development, or licensing" must be "with respect to the articles protected by the patent," which means that the engineering, research and development, or licensing activities must pertain to products that are covered by the patent that is being asserted. Thus, just as the "plant or equipment" referred to in subparagraph (A) must exist with respect to articles protected by the patent, such as by producing protected goods, the research and development or licensing activities referred to in subparagraph (C) must also exist with respect to articles protected by the patent, such as by licensing protected products. This accords with the common description of the domestic industry requirement as having two "prongs": the "economic prong," which requires that there be an industry in the United States, and the "technical prong," which requires that the industry relate to articles protected by the patent. [Citing the Commission opinions in Stringed Musical Instruments and Variable Speed Wind Turbines.]

Id. at 1297-98 (emphasis added).

The highlighted passages in the block quotation expressly hold that there is an "articles" requirement for subparagraph (C), in addition to (A) and (B). That interpretation is reiterated later in the opinion as well. *Id.* at 1299 ("The only question is whether the [sic] InterDigital's concededly substantial investment in exploitation of its intellectual property is 'with respect to the articles protected by the patent."). We find that the only plausible interpretation of the opinion is to impose an "articles" requirement for subparagraph (C) domestic industries, including licensing-based domestic industries.²⁵

²⁵ In view of the record of the underlying investigation in 3G Mobile Handsets, the Commission does not find its interpretation of InterDigital II to conflict with the Court's disposition of the appeal before it. In (Footnote continued on the next page)

There are several statements in the Court's opinion that we view as susceptible to being misconstrued. The sentence in *InterDigital II* that the articles are "found in the products that" InterDigital has licensed or "is attempting to exclude," *id.* at 1299, read out of context, might be construed to suggest that a complainant can rely on the accused products to satisfy the domestic industry requirement. Such a reading would make the "articles" requirement illusory because every investigation is founded upon a respondent's "importation into the United States, . . . sale for importation, or . . . sale within the United States after importation," of "articles." 19 U.S.C. § 1337(a)(1)(B). We reject such an interpretation, and conclude that, given the context of the *InterDigital* facts, the Court recognized merely that the licensed domestic industry products and the accused products practiced the same standards and thus practiced the patents, if at all, in the same way.

Similarly, another sentence that might be taken out of context is: "As long as the patent covers the article that is the subject of the exclusion proceeding, and as long as the party seeking relief can show that it has a sufficiently substantial investment in the exploitation of the intellectual property to satisfy the domestic industry requirement of the statute, that party is entitled to seek relief under section 337." *Id.* at 1304. We do not view that sentence as eliminating or excusing the demonstration of articles protected by the asserted patents. The preceding sentence in the Federal Circuit's opinion explains that it "is

particular, there appears to have been no genuine dispute that InterDigital's many licensees practice the asserted patents in the United States in the same manner that the accused infringers do, see InterDigital II, 707 F.3d at 1299; 3G Mobile Handsets, Final ID at 85-94 (WCDMA standard requirements); 3G Mobile Handsets, Order No. 42 at 6 (incorporation into 3G standards), and therefore specific identification of those products was not required in Commission proceedings prior to the Federal Circuit's review. In addition, although InterDigital did not rely upon engineering and research and development investment in Commission proceedings, the Federal Circuit does not strictly apply waiver in all appeals, and there appears to have been no genuine dispute about the existence of InterDigital's investment. InterDigital II, 707 F.3d at 1299 (finding "substantial investment by InterDigital in the research and development that led to the patents in suit"); id.. at 1298-99 ("The evidence before the Commission showed that InterDigital is a large, publicly traded company" that "has been engaged in research, development, engineering, and licensing of [CDMA] technology in the United States which work later

transitioned into research, development, engineering, and licensing of [WCDMA].").

not necessary that the party manufacture the product that is protected by the patent, and it is not necessary that any other domestic party manufacture the protected article." *Id.* at 1303-04. Put differently, the existence of an article practicing the patent is required, but that article need not be made in the United States. The Federal Circuit reiterated that point, expressly, in the following paragraph: "Congress recognized the development in the United States of industries that devoted substantial investment to the exploitation of patent rights through engineering, research and development, and licensing, but not entailing domestic production of the goods that were protected by those patents." *Id.* at 1304.

On May 10, 2013, Nokia filed a petition for a writ of certiorari on, *inter alia*, the domestic industry issue. On October 15, 2013, the Supreme Court denied Nokia's petition.

3) The Federal Circuit's Decision in Microsoft

On October 3, 2013, the Federal Circuit decided *Microsoft Corp. v. ITC*, 731 F.3d 1354 (Fed. Cir. 2013), an appeal from the Commission determination in *Certain Mobile Devices, Associated Software, and Components Thereof*, Inv. No. 337-TA-744. In that investigation, complainant Microsoft argued for the existence of a domestic industry based upon the existence of "mobile devices allegedly loaded with the Microsoft Windows mobile operating system, in which Microsoft had invested substantial resources in the United States." *Microsoft*, 731 F.3d at 1358.

In *Microsoft*, the Federal Circuit held that there is an articles requirement for subparagraph (C) domestic industries, at least with regard to subparagraph (C) domestic industries based upon engineering and research and development. The Federal Circuit held as follows:

To establish a violation of section 337, Microsoft had to show not just infringement by Motorola's products but the existence of a domestic

industry "relating to the articles protected by the patent." 19 U.S.C. § 1337(a)(2), (3). The ALJ determined that Microsoft failed to make that domestic-industry showing because it did not offer sufficient proof of articles that were actually protected by the patent. . . . According to the ALJ, because Microsoft did not point to evidence that its expert examined client applications in fact running on third-party mobile phones or confirmed how they operated, Microsoft failed to show that there is a domestic industry product that actually practices the '376 patent. The Commission affirmed this determination. . . .

In this appeal, we do not reach Microsoft's challenge to the noninfringement determination because we find substantial evidence to support the Commission's finding of no domestic industry, which suffices to support its finding of no violation based on this patent. There is no question about the substantiality of Microsoft's investment in its operating system or about the importance of that operating system to mobile phones on which it runs. But that is not enough under the statute. Section 337, though not requiring that an article protected by the patent be produced in the United States, unmistakably requires that the domestic company's substantial investments relate to actual "articles protected by the patent." 19 U.S.C. § 1337(a)(2), (3). A company seeking section 337 protection must therefore provide evidence that its substantial domestic investment—e.g., in research and development—relates to an actual article that practices the patent, regardless of whether or not that article is manufactured domestically or abroad. InterDigital Commc'ns v. Int'l Trade Comm'n, 707 F.3d 1295, 1299, 1304 (Fed.Cir.2013).

731 F.3d at 1361-62 (emphasis added).

Thus, *Microsoft* confirms our reading of *InterDigital II* with respect to the articles requirement. While *Microsoft* was decided in the context of engineering and research and development, we do not interpret the opinion to provide a special, and more lenient, test for licensing-based industries. Rather, the Court discusses "research and development as an example, with the general statement that an article is required: "A company seeking section 337 protection must therefore provide evidence that its substantial domestic investment—*e.g.*, in research and development—relates to an actual article that practices the patent, regardless of whether or not that article is manufactured domestically or abroad." *Id.* at 1362. Additionally, special treatment for licensors is inconsistent with *InterDigital II*, which

did not distinguish between licensing and non-licensing activity under subparagraph (C), but instead looked at all of the subparagraph (C) activities together.

4) The Parties' Arguments About the Effect of the Federal Circuit Decisions Our notice of review asked the parties to brief the following question:

Discuss, in light of the statutory language, legislative history, the Commission's prior decisions, and relevant court decisions, including *InterDigital Communications, LLC v. ITC*, 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013) and *Microsoft Corp. v. ITC*, Nos. 2012-1445 & -1535, 2013 WL 5479876 (Fed. Cir. Oct. 3, 2013), whether establishing a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C) requires proof of "articles protected by the patent" (*i.e.*, a technical prong). If so, please identify and describe the evidence in the record that establishes articles protected by the asserted patents.

Notice at 3.

TPL has taken the position that there is no articles requirement for licensing industries. TPL Br. 7. TPL's discussion is replete with citations to *InterDigital II* regarding "the articles protected by the patent," TPL Br. 1, 3,8 and "the product that it has licensed," *id.* at 3, 4, 7, 8, without ever explaining what those "articles" or "products" are in this investigation, and if they are not present, why that should be excused. We do not find TPL's arguments to be persuasive.

The respondents' position on review is the same as that which respondent HP alone took at the petition stage. HP Pet. 3-5. The respondents recognize that accused products cannot be the articles protected by the patents. Resp'ts Br. 10-12. But the respondents

²⁶ Non-party Intel Corp. filed comments ostensibly on remedy and the public interest. Those comments make the same points as the respondents' briefing on domestic industry. Comments of Intel Corporation Regarding Remedy and the Public Interest in Response to Commission's Notice of Commission Determination to Review Final Initial Determination (Nov. 7, 2013). Non-party Ford Motor Company filed comments on public issues as well. Ford noted that the complainant could not prove that it was making or selling products covered by the patents in this investigation. Letter from William J. Coughlin, Assistant General Counsel, Intellectual Property, Ford Motor Company, to Hon. Lisa R. Barton, Acting Secretary to the Commission (Sept. 6, 2013).

would draw a distinction between patent-holders who license their patents to enable the production of protected articles and patent-holders who license others who already make articles that practice the patent. *Id.* at 9 ("Under this test, a complainant relying on licensing would be required to demonstrate both that its licensing investments are production-driven and that its licensee is making an effort to put the licensed patent to practical use."). In addition, the respondents confuse the test for domestic industry with the test for the process of establishing a domestic industry.

We reject the respondents' invitation to impose a production-driven requirement on licensing-based domestic industries. We note that we have expressed a preference – but not a requirement – for production-driven licensing, giving more weight to evidence of such licensing. See, e.g., Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. 25 & n.20 (Aug. 8, 2011).

The respondents base their position on the premise that "article protected by" the patent "must be a product that came to market, or is expected to come to market, under the protective umbrella of the asserted patent that the product commercializes." Resp'ts Br. 7; HP Pet. 5. We find that the plain meaning of "protected by" does not support the respondents' position. By way of example, a licensee benefits in the marketplace from having a license to practice the invention, and thus to make, use, and sell its protected products, while unprotected competitors making the same or similar products are subject to lawsuits and infringement determinations.

²⁷ A logical consequence of respondents' narrow definition of "protected by" would be that a manufacturing company that acquires a patent would not be able to rely on its own pre-existing products to establish the technical prong of the domestic industry requirement.

We also find that the respondents' proffered legislative history of the 1988 Act does not support the respondents' proposed requirement. Indeed, prior to the recent Federal Circuit decisions, we found that the policies supported by the legislative history of the 1988 Act point away from, rather than toward, the result sought by the respondents.²⁸

The respondents' position is also untenable because it is inconsistent with the facts of *InterDigital* itself. InterDigital asserted its patents against those who already practiced certain telecommunications standards, and yet the Federal Circuit credited InterDigital's licensing toward its demonstration of a subparagraph (C) domestic industry. Moreover, it appears that the respondents wish to treat licensing differently, and punitively, from other subparagraph (C) investments. Especially in view of the Federal Circuit's treatment of the subparagraph (C) activities and investments together, we see no basis for singling out any subparagraph (C) activity for special treatment, in conflict with Federal Circuit authority.

Moreover, even if the meaning of "protected by" were as malleable as the respondents contend, and thus subject to Commission interpretation under *Chevron USA Inc.*v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984), the respondents offer no sound policy reasons for interpreting the statute in the manner they seek. Specifically, the respondents wish to invite an inquiry in every investigation as to the motivations not merely of the complainant-licensor, but of its licensees, specifically what they intended to obtain

²⁸ For discussions of the legislative history, see, e.g., Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432 ("Minimized Chip Packages"), Order No. 13 at 11-12, not reviewed, Notice, 66 Fed. Reg. 58424 (Nov. 21, 2001); Certain Digital Processors and Digital Processing Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-559 ("Digital Processors"), Initial Determination at 81-92 (May 11, 2007), not reviewed in relevant part, Notice at 2 (Aug. 6, 2007).

²⁹ The respondents attempt to explain away *InterDigital* in a footnote, but their explanation fails to establish that InterDigital's licensing efforts were production-oriented. Resp'ts Br. 6-7 n.6; Respt's Reply Br. 5-6.

from their licenses, and what they actually did obtain (*i.e.*, whether the actual effect of the license was to bring products to market sooner). Requiring such a showing is needlessly burdensome and costly to the complainant, its licensees, and the Commission; unreasonably subjective; and unwarranted in view of the statutory language and legislative history. Additionally, the respondents would offer no relief to an inventor-complainant in certain circumstances, such as when an industry copies her invention – maybe verbatim from the published patent – before the complainant has had an opportunity to engage in production-oriented efforts of her own. Resp'ts Br. 9; *id.* at 12 ("Unless a licensee entered the license *prior to* researching, engineering and manufacturing its own product, there is no link between that previously infringing product and a complainant's alleged licensing investment."). We disagree with the respondents that their construction of the statute is permissible or appropriate, either under the plain meaning of the statute or its legislative history.

The respondents also appear to confuse the domestic industry test with the separate test for a complainant in the process of establishing a domestic industry. Resp'ts Br. 8. In the respondents' effort to make production-driven licensing the touchstone, they argue that doing so "is analogous to proving that a domestic industry 'is in the process of being established." Resp'ts Br. 9 (quoting 19 U.S.C. § 1337(a)(2)); see also Resp'ts Reply Br. 5 & nn. 4-5. Commission precedent – and the legislative history underpinning that precedent – requires the complainant alleging an industry "in the process of being established" to "demonstrate that he is taking the necessary tangible steps to establish such an industry in the United States." Certain Stringed Musical Instruments & Components Thereof, Inv. No. 337-TA-586, Comm'n Op., 2008 WL 2139143, at *10 (May 16, 2008) (quoting H. Rep. 100-40 at 157); see also Motiva, LLC v. ITC, 716 F.3d 596, 599-601 (Fed. Cir. 2013). The respondents

seem to assume that this process-of-establishment test is a production test, but they offer no reason why the business in the process of being established cannot instead be a licensing business, *i.e.*, a business in which a patent owner seeks to offer licenses to its intellectual property rights. This type of business was at issue in *Motiva, LLC v. ITC*, 716 F.3d 596, 601 (Fed. Cir. 2013), for example. Second, the "tangible steps" test is important to avoid "process of establishing" from subsuming domestic industry. Process-of-establishing necessarily calls for activity that is directed to launching a nascent industry by requiring a demonstration of the likelihood that the industry will be established in the future. The respondents cite statements meant to reign in abuse of "process of establishing" – Resp'ts Reply Br. 5 n. 5 – as though they applied instead to tests for the existence of a domestic industry. There is no sound reason – and no legislative intent – for applying this higher burden to showing the existence of a domestic industry.

Based on the *InterDigital* and *Microsoft* decisions, a complainant alleging the existence of a domestic industry under 19 U.S.C. § 1337(a)(3)(C) must show the existence of articles. As discussed extensively earlier, the substantial investment, once protected articles have been shown, is in exploitation of the intellectual-property rights, "including engineering, research and development, or licensing." *Id.* We reject the respondents' proposed production-driven requirement, which is in conflict with the plain language of the statute and its legislative history.

³⁰ We note that this investigation involves only TPL's specifically identified articles. We recognize that future investigations may present questions regarding the existence of an article, see, e.g., Certain Multiple-Beam Equalization Systems for Chest Radiography and Components Thereof, Inv. No. 337-TA-326, Order No. 26, 1991 WL 788679, at *3 (Aug. 20, 1991) (discussing preparation of "a working model of the article practicing the patent claims" in connection with the investigation), and we do not reach such issues here. We also do not reach issues related to the analysis for industries in the "process of being established," see generally Stringed Musical Instruments, Comm'n Op., 2008 WL 2139143, at *10.

5) Whether TPL Demonstrated the Existence of Domestic Industry Articles

Having concluded that TPL must demonstrate the existence of protected articles practicing the asserted patents under subparagraphs (A), (B), and (C) of paragraph 337(a)(3), we turn to TPL's showings as to articles in this investigation, and we conclude that TPL failed to demonstrate the existence of articles practicing the asserted patents.

TPL attempted to establish the existence of a domestic industry based upon subparagraphs (A), (B), and (C) before the ALJ. TPL's petition for review, however, raised only subparagraph (C), and within subparagraph (C) only licensing-related investment. In response to Question No. 1 of the notice of review, which asked whether articles are required under subparagraph (C), and if so, what they are, TPL maintained that no such showing is required, and therefore failed to identify any such articles in connection with its response to that question. TPL Br. 1-8. Nonetheless, TPL did attempt to show the existence of articles under subparagraphs (A) and (B) before the ALJ. The ALJ rejected TPL's showing in part because TPL had failed to brief its arguments adequately, in violation of the ALJ's Ground Rules. Question No. 3 in the notice asked whether TPL's technical-prong showing was uncontested, in which case, as discussed earlier, the Commission might excuse the lack of detailed briefing as to issues for which there was no genuine material dispute. See, e.g., Certain Mobile Devices, Associated Software and Components Thereof, Inv. No. 337-TA-744, Comm'n Op. 11-16 (May 18, 2012).

For the '623 patent, for which the ALJ found a violation of section 337, TPL relied before the ALJ upon its licensees' memory card readers, specifically the Lenovo H320-4041-

³¹ TPL did not argue that there is a domestic industry in the process of being established, pursuant to 19 U.S.C. § 1337(a)(2). See TPL Post-Hearing Br. 267-289.

1JU and the Belkin PM00525-A. TPL's arguments are undisputed, and identical to the infringement dispute presented earlier. *See* TPL Br. 22; Resp'ts Br. 13. Based upon our claim construction of "accessible in parallel," TPL failed to demonstrate that these domestic industry products meet the "accessible in parallel" limitation of claim 1 of the '623 patent. Accordingly, we find that TPL failed to demonstrate the existence of protected articles practicing the '623 patent, as is required for subparagraphs (A)-(C) of the domestic industry requirement. ³²

For the mapping patents, TPL relied on certain OnSpec products. In 2006, the original patent assignee, OnSpec Electronic, Inc. ("OnSpec"), assigned the asserted patents to MCM Portfolio LLC (formerly FMM Portfolio LLC). See CX-939C at Q/A 45-56. The complainant TPL received an exclusive license to assert the asserted patents and to collect royalties. See, e.g., id. OnSpec designed memory controllers, which it had third parties produce for OnSpec's customers. See id. at Q. 46. It is undisputed that in 2008, years prior to the complaint here, OnSpec ceased to exist, though TPL still sells a small number of OnSpec products designed prior to OnSpec's dissolution. CX-1084C (sales chart); CX-0941C at Q/A 23, 35, 55; CX-939C at Q/A 47-51; RX-2886C at Q/A 35-42, 45-46.

We affirm the ALJ's determination, and adopt his reasoning, that TPL cannot avail itself of OnSpec's investments (for all asserted patents, and as to all subparagraphs of section 337(a)(3)). ID at 155-157. Nonetheless, TPL could still have demonstrated the existence of a domestic industry by identifying protected articles that practice the mapping patents and by

³² TPL's brief to the Commission only references the '549 patent once in passing. TPL Br. 21. We affirm the ALJ's determination that TPL's conclusory statements regarding the technical prong were insufficient to meet TPL's burden. ID at 135. We have affirmed the ID's determination of non-infringement, and therefore also affirm the ALJ's extension of that determination to TPL's domestic industry products, which operate in the same way as the accused products. ID at 135.

relying on TPL's own investments in the mapping patents, specifically TPL's investments in licensing.

We affirm the ALJ's application of his ground rules to find that TPL failed to demonstrate the existence of articles practicing the mapping patents. In their response to Ouestion No. 3 in the notice of review, the respondents argue that whether TPL's domestic industry products practice the mapping patents was materially disputed, Resp'ts Br. 13, pointing repeatedly to a portion of their expert's witness statement. Id. (citing RX-2888C, Q/A 984-994). The respondents cited that portion in their post-hearing reply brief, where they challenged TPL's proof. Resp'ts Post-Hearing Reply Br. 95-96. TPL's discussion in its opening post-hearing brief was cursory, TPL Post-Hearing Br. 228-233, and we conclude that the ALJ did not abuse his discretion to conclude that TPL's arguments were too scant to carry TPL's burden to demonstrate the existence of articles practicing the mapping patents. We note that TPL tried to cure this defect in its post-hearing reply brief, TPL Post-Hearing Reply Br. 45-49, but agree with the ALJ that this showing was untimely, ID at 137-138. In response to the Commission notice, TPL pointed to little to demonstrate that domestic industry articles practice the mapping patents beyond the same statements from its reply post-hearing brief that the ALJ found inadequate. TPL Br. 21-23. Because TPL did not demonstrate the existence of articles practicing the mapping patents, it cannot demonstrate the existence of a domestic industry.33

³³ We therefore do not reach whether the economic prong would have been met if articles had been shown.

IV. CONCLUSION

For the foregoing reasons, we find that TPL failed to demonstrate that the accused products infringe and that domestic-industry articles practice, the asserted patents. The existence of articles is, in view of recent Federal Circuit authority, a requirement for demonstrating the existence of a domestic industry. The Commission terminates this investigation with a finding of no violation of section 337.

By order of the Commission.

Lisa R. Barton

Acting Secretary to the Commission

January 9, 2014

DISSENTING VIEWS OF COMMISSIONER SHARA L. ARANOFF

U.S.C. § 1337(a)(3)(C), the complainant is not required to prove the existence of "articles" protected by the relevant patent or other intellectual property right. I believe this interpretation of the statute is supported by the language and legislative history of the 1988 amendments to section 337, consistent with nearly 25 years of agency practice, and consistent with the Court of Appeals for the Federal Circuit's ("Federal Circuit") holdings in *InterDigital I* and *II*. The interpretation adopted by the Commission leads to the very same unjust results that led Congress to amend section 337's domestic industry requirement in 1988 to add the licensing provision. Accordingly, I dissent from the Commission's finding that complainant Technology Properties Limited LLC ("TPL") was required to establish the "technical prong" of the domestic industry requirement in order to show a domestic industry based on licensing activities under section 337(a)(3)(C).

Statutory Language

The domestic industry requirement is described in section 337(a)(2) and (a)(3). Those provisions provide as follows:

- (2) Subparagraphs (B), (C), (D), and (E) of paragraph (1) apply only if an industry in the United States, relating to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.
- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—
- (A) significant investment in plant and equipment;
- (B) significant employment of labor or capital; or
- (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

TPL attempts to establish an engineering and research and development domestic industry case under section 337(a)(3)(C) by relying on the investments of OnSpec Electronic, Inc. ("OnSpec"). I agree with the Commission that TPL cannot rely on OnSpec's investments and consequently cannot establish engineering and research and development industries. Therefore, I do not reach the question of whether there is a statutory requirement that a complainant demonstrate the existence of articles practicing the asserted patents for engineering and research and development industries under section 337(a)(3)(C).

To properly answer the question of whether the "licensing" language of section 337(a)(3)(C) requires that a complainant prove the existence of "articles" protected by the relevant patent or other intellectual property right in order to establish a licensing-based industry, the statutory language must be considered in context of the purpose for which it was adopted. See Chapman v. Houston Welfare Rights Org., 441 U.S. 600, 608 (1979) ("As in all cases of statutory construction, our task is to interpret the words of these statutes in light of the purposes Congress sought to serve."); Candle Corp. of America v. Int'l Trade Comm'n, 374 F.3d 1087, 1093-94 (Fed. Cir. 2004) ("[W]here textual ambiguity exists, we must look beyond the bare text... to the context in which it was enacted and the purposes it was designed to accomplish."). Any understanding of the statutory language must also be guided by Commission precedent. Accordingly, I describe the legislative history that gave rise to the licensing provision of section 337(a)(3)(C) and the Commission precedent that has interpreted the provision.

The Domestic Industry Requirement and the 1988 Amendments to Section 337

Section 337 was passed into law by the Tariff Act of 1930, but its origins date back to section 316 of the Tariff Act of 1922. Congress saw section 316 as a trade remedy directed at "unfair methods of competition and unfair acts in the importation of articles" that were not addressed by the newly-minted Anti-Dumping Act of 1916. It was not until 1930 that a divided panel of the U.S. Court of Customs and Patent Appeals ruled that section 316 could apply to patent infringement. Frischer & Co., Inc. v. Bakelite Corp., 39 F.2d 247 (CCPA 1930).

Like other trade remedies, Congress intended section 337 to protect American industries and American workers. Thus, section 316 provided that: "unfair methods of competition and unfair acts in the importation of articles into the United States . . . the effect or tendency of which is to destroy or substantially injure an industry, efficiently and economically operated, in the United States, or to prevent the establishment of such an industry, or to restrain or monopolize trade and commerce in the United States, are hereby declared unlawful." Tariff Act of 1922, Pub. L. No. 67-318, § 316(a), 42 Stat. 858, 943-44 (1922); see also S. Rep. No. 67-595, 2d Session, at 3 (1922) ("The provision relating to unfair methods of competition in the importation of goods is broad enough to prevent every type and form of unfair practice and is, therefore, a more adequate protection to American industry than any antidumping statute the country has ever had."); compare with 19 U.S.C. §§ 1677(4), (7) (defining domestic industry and material injury in the Title VII context), and 19 U.S.C. § 2252 (section 201).

While the statutory language has been amended a number of times since 1922, one basic premise has remained the same: the imposition of relief under section 337 is contingent upon the existence of a domestic industry and not merely upon ownership of a valid and infringed U.S. patent or other intellectual property right. *See John Mezzalingua Assocs. v. Int'l Trade Comm'n*, 660 F.3d 1322, 1327-28 (Fed. Cir. 2011); S. Rep. No. 100-71, at 129 (1987); H.R. Rep. No.100-40, Pt. 1, at 157 (1987).

Prior to 1988, the statute provided that:

Unfair methods of competition and unfair acts in the importation of articles into the United States, or in their sale by the owner, importer, consignee, or agent of either, the effect or tendency of which is to destroy or substantially injure and industry, efficiently and economically operated, in the United States, or to prevent the establishment of such an industry, or to restrain or monopolize trade and commerce in the United States, are declared unlawful

19 U.S.C. § 1337(a) (1982).2

The Commission interpreted this pre-1988 statutory language to require evidence of manufacturing in the United States to satisfy the domestic industry requirement. For example, In Certain Miniature, Battery-Operated, All-Terrain, Wheeled Vehicles, Inv. No. 337-TA-122, complainants alleged patent infringement and false designation of origin by certain imported toy trucks. In that investigation, complainants' own STOMPER toy vehicles were manufactured under license by an unrelated company in Hong Kong. Complainant Goldfarb's U.S. activities consisted of designing and licensing toy truck designs to toy manufacturers. Complainant Schaper's U.S. activities consisted of further developing Goldfarb's designs into a complete engineering model, engineering drawings, and tooling for the manufacture of each toy truck design. Upon importation of the toy trucks manufactured, packaged and inspected in Hong Kong, Schaper performed some minor packaging and quality control operations in the United States, along with promotion, advertising and marketing activities.

While the ALJ found that complainants' activities established the existence of a domestic industry, the Commission reversed. The Commission reasoned that "the essence of Goldfarb's business in this case is licensing and the concomitant collection of royalties" and that "[d]efining 'industry' as the mere ownership or licensing of patent rights would be contrary to Commission precedent, legislative history, and the logical construction of the statute's wording." Opinion of Chairman Eckes, Commissioner Stern and Commissioner Haggart at 8 (Oct. 1982). The Commission found that Schaper's U.S. activities were both too minor and too unrelated to production to count toward establishment of a domestic industry. *Id.* at 9-11. On appeal, the Federal Circuit affirmed the Commission's finding of no domestic industry, holding that the "patent must be exploited by production in the United States". *Schaper Mfg. Co. v. Int'l Trade Comm'n*, 717 F.2d 1368, 1371 (Fed. Cir. 1983) ("There is nothing in the statute or its legislative

The legislative history of the Trade Act of 1974 provides: "In cases involving the claims of U.S. patents, the patent must be exploited by production in the United States, and the industry in the United States generally consists of the domestic operations of the patent owner, his assignees and licensees devoted to such exploitation of the patent." H.R. Rep. No. 93-571, at 78 (1973).

history to indicate that such activities, which do not involve either manufacture or production or servicing of the patented item, are meant to be protected by section 337.").

The Commission reached a similar result in Certain Products with Gremlins Character Depictions, Inv. No. 337-TA-201. In that case, complainant Warner Brothers alleged infringement of three copyrights by certain souvenir items related to its popular Gremlins feature film. Warner Brothers claimed the existence of a domestic industry exploiting the relevant copyrights through its marketing, financial, and legal activities related to the licensing of the Gremlins copyrights. Warner Brothers' own copyrighted souvenir items were manufactured by licensees both inside and outside the United States, but Warner Brothers did not offer evidence of its licensees' domestic production activities in support of its domestic industry claim. While conceding that Warner Brothers' licensing activities were more substantial in monetary terms than those involved in Toy Vehicles, the Commission stated that "[p]roduction-related activities distinguish a domestic industry from an importer or inventor. It is clear from section 337, its legislative history, past Commission decisions, and Schaper that section 337 protects domestic industries, not importers or inventors." Comm'n Op., 1986 ITC LEXIS 313, at *163 (Mar. 1986). The Commission concluded: "Because [Warner Brothers'] activities relate solely to the servicing of the intellectual property rights in question and are not the type of activities that Congress intended to protect by section 337, we reverse the ALJ on this issue." Id. at *171.4

It was against this background that intellectual property owners began to lobby Congress for changes to section 337's domestic industry requirement that would permit certain non-manufacturing entities to obtain relief from infringing imports. Congress requested that the General Accounting Office prepare a study, which analyzed the extent to which the Commission was finding no violation of section 337 based on a complainant's failure to show domestic manufacturing. See GAO Report to Selected Congressional Subcommittees, International Trade: Strengthening Trade Law Protection of Intellectual Property Rights, NSIAD-86-150 (Aug. 13, 1986). Industry associations weighed-in in support of expanding the domestic industry definition to encompass non-manufacturing activities like licensing and research and development. See, e.g., Intellectual Property Rights: Hearings before the Subcomm. on Int'l

The Federal Circuit made clear that it was not precluding the possibility that a complainant's non-production (and non-licensing) domestic activities might (unlike Schaper's) be great enough in some future case to establish a domestic industry. "As the statute now stands, Congress did not mean to protect American importers (like Schaper) who cause the imported item to be produced for them abroad and engage in relatively small nonpromotional and non-financing activities in this country." 717 F.2d at 1373. The Federal Circuit also noted that: "If, as appellants suggest, present-day 'economic realities' call for a broader definition to protect American interests (apparently including many of today's importers) it is for Congress, not the courts or the Commission, to legislate that policy." *Id.*

In her dissent, Vice Chairman Liebeler argued that the plain language of section 337 did not require evidence of manufacturing to establish a domestic industry, but left room for consideration of any domestic economic activity by complainant that adds economic value to an intellectual property right. Chairman Liebeler opined that domestic "service" activities, such as licensing, should be sufficient to establish a domestic industry, but that non-domestic activities (i.e. foreign manufacturing) should not. See Dissenting Views of Vice Chairman Liebeler, 1986 ITC LEXIS 313, at *204-220.

Trade of the S. Finance Comm., 99th Cong. 188 (1986) (statement of Richard C. Witte, Vice President, Intellectual Property Owners, Inc.). Commission Chairwoman Dr. Paula Stern confirmed in statements before Congress that "the mere licensing activities of an intellectual property owner do not constitute a domestic industry" in light of the Wheeled Vehicles and Gremlins decisions unless the invention is commercialized. See Intellectual Property and Trade: Hearings before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the H. Comm. on the Judiciary, 99th Cong. 470–474 (1986).

The legislative history makes clear that Congress's intent, in amending section 337 in 1988, was to reverse the Commission's practice of limiting section 337 relief to complainants that engage in the domestic manufacture of a product practicing the asserted patent or other intellectual property right. See H.R. Rep. No. 99-581, Pt.1, at 112 (1986) (explaining that the proposed legislation sought to address the Wheeled Vehicles and Gremlins decisions). Congress sought a broader definition of domestic industry, one that would provide access to relief under section 337 to entities previously excluded. The 1987 House Report therefore states:

The Committee is concerned, however, that in some recent decisions the Commission has interpreted the domestic industry requirement in an inconsistent and unduly narrow manner. In order to clarify the industry standard, a definition is included which specifies that an industry exists in the United States with respect to a particular article involving an intellectual property right if there is, in the United States, --

- 1. Significant investment in plant and equipment;
- 2. Significant employment of labor or capital; or
- 3. Substantial investment in the exploitation of the intellectual property right including engineering, research and development or licensing.

The first two factors in this definition have been relied on in some Commission decisions finding that an industry does exist in the United States. The third factor, however, goes beyond ITC's recent decisions in this area. This definition does not require actual production of the article in the United States if it can be demonstrated that significant investment and activities of the type enumerated are taking place in the United States. Marketing and sales in the United States alone would not, however, be sufficient to meet this test. The definition could, however, encompass universities and other intellectual property owners who engage in extensive licensing of their rights to manufacturers.

H. R. Rep. No.100-40, Pt. 1, at 157 (emphasis added); see also H. R. Rep. No. 100-576, at 634 (1988) (Conference Report for the "Omnibus Trade and Competitiveness Act of 1988" also

using the language "substantial investment in exploitation of the intellectual property right, including engineering, research and development, or licensing").

As the highlighted language indicates, Congress was concerned with expanding the definition of domestic industry to cover domestic activities other than manufacturing that exploit the relevant intellectual property right. While the legislative history does make passing reference to the idea that patentees license their rights "to manufacturers," that was likely the only licensing model that Congress was aware of at the time. The main point in the passage is not that Congress wanted to change from a domestic industry definition premised on domestic production to one based on domestic OR foreign production (the latter of which is nowhere mentioned), but that it wanted to change from a domestic industry definition premised on domestic production to one based on domestic production OR other substantial domestic economic activities that exploit the asserted intellectual property right.

Indeed, in the course of debate over the 1988 amendments, Congress gave serious consideration to proposals, including one supported by the Administration, to eliminate any domestic industry requirement from section 337. See Intellectual Property Rights: Hearings before the Subcomm. on Int'l Trade of the S. Finance Comm., 99th Cong. 11-13 (1986) (Finance Committee Trade Staff Memo to Finance Committee Members) ("Finance Committee Memo"). Opponents of eliminating the domestic industry requirement argued that such a change would turn the Commission into a forum where two foreign companies that import products into the United States, one of which owns a U.S. patent but neither of which engages in meaningful economic activity in the United States, could adjudicate patent rights. See Intellectual Property and Trade: Hearings before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the H. Comm. on the Judiciary, 99th Cong. 70 (1986) (statements of Dr. Paula Stern, Chairwoman, Int'l Trade Comm'n) ("We would be the arbiter as to who gets the marketplace among the importers."). Ultimately, Congress adopted a "middle ground," explaining that:

Although the injury test has been eliminated for intellectual property rights cases, a complainant must establish that a U.S. industry relating to the articles *or* intellectual property right concerned "exists or is in the process of being established." This requirement was maintained in order to preclude holders of U.S. intellectual property rights who have no contact with the United States other than owning such intellectual property rights from utilizing section 337. The purpose of the Commission is to adjudicate trade disputes between U.S. industries and those who seek to import goods from abroad. Retention of the requirement that the statute be utilized on behalf of an industry in the United States retains that essential nexus.

H.R. Rep. No.100-40, Pt. 1, at 156-157 (emphasis added); S. Rep. No. 100-71, at 129; see also Finance Committee Memo at 11 ("Those favoring retention of the industry requirement argue

that its elimination would in some cases leave the ITC merely protecting one foreign producer from another, with no appreciable benefit of U.S. jobs or production capability."). Thus, Congress was focused on extending section 337 to protect domestic jobs and economic activity associated with IP rights, without proof of manufacturing activities, be they domestic or foreign.

In passing the 1988 amendments, Congress listed a number of specific types of entities that it thought could not meet the domestic industry requirement under pre-1988 Commission practice, but should be able to do so under the amended definition. These entities included "universities and other intellectual property owners who engage in extensive licensing" (H. R. Rep. No.100-40, Pt. 1, at 157); inventors (133 Cong. Rec. S. 1795 (Feb. 4, 1987) (statement of Sen. Lautenberg) ("the New York inventor of fibre optic waveguide")); "the California movie studio that licenses the Gremlins character" (*id.*); "a start-up biotech firm" (*id.*); and "universities and small businesses" (132 Cong. Rec. H. 1784 (April 10, 1986) (statement of Rep. Kastenmeier)).

Ultimately, the final language adopted by Congress in 1988 is slightly different than the language quoted in the 1987 House Report noted above. Specifically, the statute has since 1988 provided as follows:

- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—
- (A) significant investment in plant and equipment;
- (B) significant employment of labor or capital; or
- (C) substantial investment in *its* exploitation, including engineering, research and development, or licensing.⁵

19 U.S.C. § 1337(a)(3) (emphasis added).

Commission Practice Since the 1988 Amendments

Soon after the enactment of the 1988 amendments, complainants began filing cases invoking subparagraph (a)(3)(C). In a series of investigations in the 1990s, Commission ALJs issued decisions holding that a complainant asserting a licensing-based domestic industry under

I have been unable to find any information in the legislative history of the 1988 amendments to section 337 that explains why the language quoted in the 1987 House Report ("substantial investment in the exploitation of the intellectual property right") was changed to "substantial investment in its exploitation" (the key statutory language at issue in the present investigation). See H. R. Rep. No. 100-576, at 634. Nonetheless, it would be difficult to conclude that, by making this change, Congress intended to change the meaning of the statute in a manner that would undermine the purposes for which the new statutory language was being adopted.

section 337(a)(3)(C) did not need to show that either it or its licensee practiced the asserted patent. 6 See Certain Microcomputer Memory Controllers, Components Thereof, and Products Containing Same, Inv. No. 337-TA-331, Order No. 6, 1992 WL 811299, at *4 (Jan. 8, 1992), not reviewed, 57 Fed. Reg. 5710 (Feb. 12, 1992). ("The word 'its' before the word 'exploitation' in (C) must refer to exploitation of the patent (because it is singular) rather than to exploitation of 'articles protected by the patent' (which are plural)"); Certain Dynamic Sequential Gradient Compression Devices and Component Parts Thereof, Inv. No. 337-TA-335, ID, 1992 WL 12 668881, at *43 (May 15, 1992), not reviewed in relevant part, 1992 WL 1266888, at *2 (June 15, 1992) ("non-manufacturing activities such as research and development and engineering (as well as licensing) can be sufficient to constitute a domestic industry. Accordingly, a complainant in a Section 337 investigation need not manufacture the product covered by the claims of the patent in order to establish that a domestic industry exists."); Certain Digital Satellite System (DSS) Receivers and Components Thereof, Inv. No. 337-TA-392, ID, 1997 WL 696255, at *8 (Oct. 20, 1997) ("Illn view of the language of criterion (C) and its legislative history, supra, complainant has satisfied the domestic industry requirement if complainant has invested a substantial amount of money to exploit the [asserted] patent. [The ALJ] further finds that the statute does not require a complainant to manufacture the patented product nor does it require that a complainant show that a product covered by the [asserted] patent is made by complainant's licensees."), taking no position on domestic industry on review where respondents did not oppose the ALJ's domestic industry determination, 62 Fed. Reg. 65285 (Dec. 11, 1997).

In Certain Semiconductor Chips with Minimized Chip Package Size and Products
Containing Same, Inv. No. 337-TA-432 ("Semiconductor Chips"), the Commission was squarely
presented with the issue of whether a complainant is required to show that it or one of its
licensees practices a patent-in-suit in order to find that a domestic industry exists based on
licensing under section 337. In that investigation, complainant Tessera did not undertake to
show any specific articles practiced the asserted patents. In fact, respondent Texas Instruments
had moved for sanctions on the grounds that Tessera allegedly misled the Commission by

6

During this period the Commission's ALJs, and eventually the Commission itself, first coined the terms "economic prong" and "technical prong" with respect to the statutory domestic industry requirement. See, e.g., Certain Integrated Circuit Telecommunications Chips and Products Containing Same, Including Dialing Apparatus, Inv. 337-TA-337, Order No. 44, 1992 WL 811431 (July 22, 1992). The term "economic prong" is loosely used to refer to the various "investment" requirements set out in section 337(a)(3), while the term "technical prong" is loosely used to refer to the statutory language in both (a)(2) and (a)(3) referring to "articles protected by the patent, copyright, trademark, or mask work concerned." The Commission first used these terms in an opinion in 1996. See Certain Variable Speed Wind Turbines and Components Thereof, Inv. No. 337-TA-376, Comm'n Op., 1996 WL 1056330, at *13-14 (Aug. 30, 1996). Since that time, some decisions have said that there is no technical prong requirement with respect to licensing industries, see, e.g., Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432, Order 13 at 11 (June 5, 2002), not reviewed, Notice, 66 Fed. Reg. 58424 (Nov. 21, 2001), while others have said that the technical prong is the requirement that the licensing activities are actually related to the asserted intellectual property right. See Certain Stringed Musical Instruments and Components Thereof, Inv. No. 337-TA-586, Comm'n Op., at 14 (May 16, 2008). Despite the frequent use of these shorthand terms by the Commission, its ALJs, and parties before the agency, it is important to note that these terms are not statutory and that it is the statutory language setting forth what is required to establish a domestic industry that is at issue in this investigation.

alleging satisfaction of the technical prong of the domestic industry requirement in its complaint, but then never attempted to offer proof of the existence of an actual article during the investigation.

On summary determination, the ALJ held that "as a matter of law, a complainant is not required to show that it or one of its licensees practices a patent-in-suit in order to find that a domestic industry exists pursuant to 19 U.S.C. § 1337 (a)(3)(C), which pertains to licensing." Order 13 at 11 (June 5, 2002). The ALJ's analysis considered both the language of the statute and the legislative history. He concluded that the words "its" in section 337(a)(3)(C) "cannot refer to the 'articles' protected by the patent." *Id* at 12. The ALJ reasoned that "[b]ecause of the singular nature of the word 'its,' it must refer to the singular noun 'patent' or one of the other forms of intellectual property, which are all enumerated in the singular." *Id*. Although Texas Instruments petitioned for review, the Commission determined not to review the initial determination. 66 Fed. Reg. 58424 (Nov. 21, 2001). The initial determination therefore became the final determination of the agency. Ultimately, the Commission found a violation of section 337.

Again, in Certain Digital Processors and Digital Processing Systems, Inv. No. 337-TA-559 ("Digital Processors"), the Commission rejected the notion of an articles requirement for licensing under section 337(a)(3)(C). In that investigation, complainant Biax argued that it satisfied the domestic industry requirement based on licensing activities alone. Biax never established the existence of any specific articles that practiced the asserted patent.

The ALJ disposed of the articles issue explaining that, "[w]hen a complainant relies on the existence of a licensing program to satisfy subsection (C), the complainant need not show that it or one of its licensees practices the patent-in-suit in order for the Commission to find a domestic industry." ID at 85 (June 21, 2007). In so doing, the ALJ provided an extensive discussion of the legislative history of the 1988 amendments. *Id.* at 88-95. The ALJ concluded that it was clear that the intent of Congress was to allow entities that were actively licensing their patents in the United States to be able to avail themselves of the trade remedies offered by section 337. On review, the Commission determined not to review the pertinent portions of the ID, thus adopting the ALJ's ruling on domestic industry, but ultimately found no violation of section 337 on other grounds. Comm'n Notice at 2 (Aug. 6, 2007).

More recently, in Certain 3G Wideband Code Division Multiple Access (WCDMA) Handsets, Inv. 337-TA-601 ("3G Wideband Handsets"), the Commission again reaffirmed its understanding of the statute and legislative history. Similar to Digital Processors, complainant InterDigital did not undertake to show that any specific articles practiced the asserted patents. On summary determination, the ALJ found the existence of a domestic industry based purely on InterDigital's substantial investments in its licensing program. Order No. 20 (Feb. 20, 2009). Relying on Commission precedent, the ALJ rejected Samsung's argument regarding an alleged articles requirement. The ALJ explained that the statute for purposes of licensing "does not

require a complainant 'to manufacture the patented product nor does it require that a complainant show that a product covered by the . . . patent is made by the complainant's licensees." *Id.* at 4. The Commission determined not to review, and thus adopted, the ALJ's initial determination. Comm'n Notice (July 25, 2008).

The Commission's longstanding interpretation of section 337(a)(3)(C) with respect to the requirements for establishing a domestic industry based on licensing stands in stark contrast with its practice under sections 337(a)(3)(A) and (a)(3)(B), where it has always required a complainant to prove that it produces "articles" that practice at least one claim of each asserted patent (or that are covered by an asserted copyright, trademark, or mask work). See, e.g., Certain Stringed Musical Instruments and Components Thereof, Inv. No. 337-TA-586, Comm'n Op., at 13 (May 16, 2008) ("With respect to section 337(a)(3)(A) and (B), the technical prong is the requirement that the investments in plant or equipment and employment in labor or capital are actually related to 'articles protected by' the intellectual property right which forms the basis of the complaint.").⁷

In the current investigation, the ALJ's ID finding that complainant TPL proved it satisfied the domestic industry requirement is consistent with the 25 years of Commission practice described above. The ALJ found that TPL maintained an extensive licensing program with respect to the asserted patents, based on evidence of the activities of the activities

The Federal Circuit's InterDigital Decisions

The Federal Circuit has recently addressed the requirements for establishing a domestic industry based on licensing under section 337(a)(3)(C) in its decisions in *InterDigital I* and

The Commission has never issued an opinion definitively ruling on whether a complainant asserting the existence of a domestic industry under section 337(a)(3)(C) based on engineering or research and development must, as a matter of law, prove that it produces an article that practices at least one claim of the asserted patent. As a practical matter, it is difficult to imagine how a complainant could show that it had made a substantial investment in the exploitation of a patent through engineering or research and development other than by showing that it spent resources to develop a product using the relevant technology. Thus, it is not surprising that complainants routinely offer such proof. Nonetheless, from a purely legal standpoint, one could argue that it is sufficient, but not necessary, to prove the existence of "articles" to demonstrate the existence of a domestic industry based on research and development or engineering.

InterDigital II. InterDigital Commc'ns, LLC v. Int'l Trade Comm'n, 690 F.3d 1318 (Fed. Cir. 2012) ("InterDigital I"); InterDigital Commc'ns, LLC v. Int'l Trade Comm'n, 707 F.3d 1295 (Fed. Cir. 2013) ("InterDigital II"). For the reasons discussed below, I believe my decision in this investigation is consistent with the Federal Circuit's holdings in its InterDigital opinions.

Thereof, Inv. 337-TA-613 ("Mobile Handsets"). In Mobile Handsets, similar to the current investigation, complainant InterDigital alleged a domestic industry based on licensing under section 337(a)(3)(C). Before the ALJ, InterDigital moved for summary determination that it satisfied the domestic industry requirement based solely on its investment in licensing activities in the United States. InterDigital did not undertake to show that any specific articles, including any licensee products manufactured abroad, practiced the asserted patents. In response to InterDigital's motion, respondent Nokia argued that the motion should be denied because a complainant seeking protection under the statute must show the existence of an article protected by the patent for licensing-based domestic industries. See Order No. 42 (July 27, 2009).

The ALJ granted InterDigital's motion finding the existence of a domestic industry under section 337(a)(3)(C) based purely on InterDigital's substantial investments in licensing. *Id.*Relying on Commission precedent, including *Semiconductor Chips* and *3G Wideband Handsets*, the ALJ rejected Nokia's argument regarding an alleged articles requirement. *Id.* at 17. The ALJ explained that the statute for purposes of licensing "does not require a complainant 'to manufacture the patented product nor does it require that a complainant show that a product covered by the . . . patent is made by the complainant's licensees." *Id.* at 5. The Commission determined not to review the ALJ's initial determination, which therefore became the final determination of the agency. Comm'n Notice (April 9, 2009).

On appeal, the Federal Circuit's initial panel opinion, *InterDigital I*, affirmed the Commission's domestic industry finding. *See InterDigital I*, 690 F.3d at 1329 ("The administrative law judge held that InterDigital's activities satisfied the domestic industry requirement, and *we agree*.") (emphasis added). Citing *Digital Processors* and *3G Wideband Handsets*, the Court explained that "the Commission has consistently ruled that a domestic industry can be found based on licensing activities alone." *Id.* at 1330. The Court also noted that "[i]f there were any ambiguity as to whether the statute could be applied to a domestic industry consisting purely of licensing activities, the Commission's consistent interpretation of the statute to reach such an industry would be entitled to deference under the principles of *Chevron*." *Id.* Because the Federal Circuit affirmed the Commission, stated that the Commission's statutory interpretation was entitled to *Chevron* deference, and approvingly noted the Commission's long practice of not requiring proof of the existence of articles, I understand *InterDigital I* to hold that a domestic industry under section 337(a)(3)(C) can be supported by substantial investments in licensing activities alone without proof of the existence of any articles. *Id.* at 1329.

In response to Nokia's petition for panel rehearing or rehearing en banc, the Federal Circuit subsequently issued a supplemental opinion, *InterDigital II*, in support of its decision in *InterDigital I. See* 707 F.3d 1295 (Fed. Cir. 2013). That opinion, however, contains a number of passages that are difficult to reconcile either with each other or with the Court's ultimate decision to uphold the Commission's domestic industry determination. Some language suggests that the Court intended to impose an "articles" requirement for licensing under section 337(a)(3)(C), in addition to sections 337(a)(3) (A) and (B). For example, the Court stated:

The Commission and the court construed those phrases to define the subject matter that is within the statute's protection. With respect to subparagraph (A) of paragraph 337(a)(3), the "significant investment in plant or equipment" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent" in question. That requirement will typically be met if the investment in plant and equipment is directed at production of articles protected by the patent. Similarly, with respect to subparagraph (B) of paragraph 337(a)(3), the "significant employment of labor or capital" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent." That requirement will likewise typically be met by a showing that significant labor or capital is being expended in the production of articles protected by the patent. Applying the same analysis to subparagraph (C) of paragraph 337(a)(3) produces a parallel result that is consistent with the Commission's and this court's statutory construction: The "substantial investment in [the patent's] exploitation, including engineering, research and development, or licensing" must be "with respect to the articles protected by the patent," which means that the engineering, research and development, or licensing activities must pertain to products that are covered by the patent that is being asserted. Thus, just as the "plant or equipment" referred to in subparagraph (A) must exist with respect to articles protected by the patent, such as by producing protected goods, the research and development or licensing activities referred to in subparagraph (C) must also exist with respect to articles protected by the patent, such as by licensing protected products. This accords with the common description of the domestic industry requirement as having two "prongs": the "economic prong," which requires that there be an industry in the United States, and the "technical prong," which requires that the industry relate to articles protected by the patent.

707 F.3d at 1297-98 (emphasis added).

In a similar manner, the Court also stated the following, which could be interpreted to endorse an "articles" requirement for licensing-based industries:

The only question is whether the [sic] InterDigital's concededly substantial investment in exploitation of its intellectual property is "with respect to the articles protected by the patent." That requirement is satisfied in this case because the patents in suit protect the technology that is, according to InterDigital's theory of the case, found in the products that it has licensed and that it is attempting to exclude.

Id. at 1299.

However, the Court's *InterDigital II* opinion also includes language that indicates that the Court was actually rejecting an "articles" requirement for a domestic industry premised on licensing under section 337(a)(3)(C). Notably, the Federal Circuit explained that, as it had done in the initial panel opinion, it was interpreting section 337(a)(3)(C) consistent with Commission precedent. 707 F.3d at 1298 ("As noted in the panel opinion in this case, the Commission has consistently construed subparagraph (C) in that manner."). In fact, the Court cited *Digital Processors* and *Semiconductor Chips* as being "consistent" with its ruling. *Id.* (noting that the Federal Circuit was "adopting the same statutory interpretation" as the Commission). As described above, those investigations clearly held that there is no "articles" requirement for a licensing-based domestic industry.

Further, when the Court summed-up its view and set forth its holding, the Court stated the following, which does not appear to impose an articles requirement:

It is not necessary that the party manufacture the product that is protected by the patent, and it is not necessary that any other domestic party manufacture the protected article. As long as the patent covers the article that is the subject of the exclusion proceeding, and as long as the party seeking relief can show that it has a sufficiently substantial investment in the exploitation of the intellectual property to satisfy the domestic industry requirement of the statute, that party is entitled to seek relief under section 337.

Id. at 1303-04.

Taken together, I find that the language of *InterDigital II* is, when viewed as a whole, ambiguous on the issue of an "articles" requirement. That being said, in my view the better

reading of the *InterDigital* opinions is that they do not bind the Commission to requiring an articles requirement for licensing-based industries under section 337(a)(3)(C). That view is the only one that is consistent with the Federal Circuit's ultimate decision to uphold the Commission's determination of the existence of a domestic industry where InterDigital did not allege, and the Commission never found, any specific articles that practiced the asserted patents. It also squares with the fact that the Federal Circuit stated that it was acting consistent with Commission precedent, granting the Commission *Chevron* deference, and citing Commission investigations where the Commission held that there was no articles requirement for licensing.

Further, I believe my view is the better reading given that the Court did not remand the issue of domestic industry to the Commission even though it remanded the issue of patent infringement after the Court modified the Commission's claim constructions. *See InterDigital I*, 690 F.3d at 1330 ("Because the Commission erred in construing the claim terms 'code' and 'increased power level' and in finding, based on those claim constructions, that Nokia's products do not infringe InterDigital's patents, we reverse the administrative law judge's determination of non-infringement and remand for further proceedings."). If there were an articles requirement, the Federal Circuit should have remanded the question of whether any articles satisfy the Court's new claim constructions, as it did with the question of patent infringement. *See Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003) ("The test for satisfying the 'technical prong' of the industry requirement is essentially the same as that for infringement, i.e., a comparison of domestic products to the asserted claims."). Instead, the Court affirmed the Commission's domestic industry findings.

The Federal Circuit's later-issued decisions in *Microsoft Corp. v. Int'l Trade Comm'n*, 731 F.3d 1354 (Fed. Cir. 2013), and *Motiva, LLC v. Int'l Trade Comm'n*, 716 F.3d 596 (Fed. Cir. 2013), do not change my view. Neither of those cases squarely addressed the technical prong requirement for licensing-based industries alleged to exist under section 337(a)(3)(C). *Motiva* addressed the question of whether alleged investments in licensing sufficed to establish that a domestic industry was "in the process of being established." *See* 716 F.3d at 600-01. *Microsoft*, on the other hand, holds that there is an articles requirement for a research-and-development-based domestic industry under section 337(a)(3)(C). 731 F.3d at 1361-62. As noted above in footnote 7, there are substantial reasons for differential proof requirements for industries based on licensing and those premised on investment in research and development. In particular, while a license to a particular patent ties expenditures to exploitation of that patent, generally it would be difficult to tie engineering or research-and-development efforts to a particular patent (as opposed to a general field of technology) without demonstrating that the patent is actually practiced, which, in tangible form would require the existence of an article. Further, one cannot

To put it another way, the only way to conclude that the *InterDigital* opinions on their own impose an articles requirement for licensing-based industries is to accept that the Federal Circuit misunderstood Commission precedent, misunderstood the facts that were in front of it with respect to InterDigital's asserted domestic industry, and assumed that the Commission had found articles protected by the patents, when it had not done so.

"exploit" an "article" through licensing. Rather, one "exploits" a "patent," or other intellectual property, through licensing.

Conclusion

When Congress amended section 337 in 1988 to add section 337(a)(3)(C), it made very clear its intent to enable certain specific categories of IP rights holders to pursue claims under the statute. These entities included inventors, small businesses, universities, start-ups, and licensing service industries. See S. Rep. No. 100-71, at 129; H. R. Rep. No.100-40, Pt.1, at 157; 133 Cong. Rec. S. 1795 (Feb. 4, 1987) (statement of Sen. Lautenberg); 132 Cong. Rec. H. 1784 (April 10, 1986) (statement of Rep. Kastenmeier). Today, all of these actors would fall within the broad category of "non-practicing entities," a term which, along with "patent assertion entity" or "patent troll," was not in usage at the time. Under the statutory interpretation that the Commission has consistently followed since 1988 and which I follow in this investigation, all of the types of non-practicing entities singled out by Congress as deserving of protection from infringing imports under section 337 can, upon an appropriate evidentiary showing, satisfy the domestic industry requirement. If, however, section 337 is interpreted to impose an "articles" requirement on complainants seeking to establish a domestic industry under subsection (C), the likely effect is to advantage speedy infringers and well-financed patent assertion entities, at the expense of inventors, small businesses, and start-ups. In the statutory of the statut

In the "ideal" production-driven licensing model, an inventor receives a patent for his innovation. The inventor then needs to either raise funds to develop his patented technology into a marketable product or products, or to license his patent to another entity more capable of doing so. After appropriate licensing or funding, additional work is needed to develop a product that practices the invention and bring that product to market. All of this takes time. During this time, which can vary widely depending on the technology and market conditions, the inventor or start-up has not yet produced an "article" covered by its patent and therefore, under the Commission's analysis, cannot satisfy the domestic industry requirement. Meanwhile, a speedy infringer, which gets its infringing product to market in the United States before the inventor or start-up succeeds in doing the same, can now import with impunity under section 337, making it less likely that the inventor's product will ever make it to the market and trigger the right to seek relief under the statute. See Intellectual Property Rights: Hearings before the Subcomm. on

This demonstrates why it is important not to equate the ability to prove the existence of "articles" with a production-driven licensing scenario and the absence of such articles with a revenue-driven licensing scenario. While that may be the case, it is not always true.

A complainant seeking to establish a domestic industry based on its investments in licensing must establish that its investments relate to exploitation of the asserted intellectual property right, that its investments relate to licensing, and that its investments occurred in the United States. See Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op., at 7-13 (Aug. 8, 2011).

One could argue that the term "article" in section 337 is not necessarily limited to an article in full commercial production, but could be interpreted by the Commission in some future hypothetical case to include a

Int'l Trade of the S. Finance Comm., 99th Cong. 188 (1986) (statement of Richard C. Witte, Vice President, Intellectual Property Owners, Inc.) ("Some industries built on new technologies may never be established if patent owners cannot fend off foreign free riders.").

By contrast, a well-financed patent assertion entity with a large portfolio of revenuedriven licenses could meet the domestic industry requirement by relying on the "articles" produced by one or more of its licensees either in the United States (under subsection (A)) or outside the United States (under subsection (C) coupled with proof of its own substantial licensing activities).

Because I do not believe that Congress intended to leave this gap in section 337's availability as a remedy to the very entities the 1988 amendments were designed to help, I dissent from the Commission's finding that TPL was required to establish the "technical prong" of the domestic industry requirement in order to show a domestic industry based on licensing activities under section 337(a)(3)(C).

product at some earlier stage in the development process – e.g., a test model, prototype, or computer design. Until this question of statutory interpretation has been presented to the Commission for decision and to the Federal Circuit for review in some future case, it is speculative to assume that a factual showing of less than commercial production could satisfy the asserted "articles" requirement. Moreover, while such a broad interpretation of "articles," if adopted, could narrow the window between when an inventor receives a patent and embarks upon a production-driven licensing course, and when it has proceeded far enough along that course to satisfy the domestic industry requirement, it would not eliminate the gap entirely, because even getting to the stage of having a prototype takes time and money.

One could also argue that start-ups or inventors who cannot demonstrate the existence of a domestic industry may nonetheless be able to show an industry "in the process of being established." Such a showing would again depend upon both the Commission and its reviewing courts accepting evidence of prototypes or other preproduction activities as proof that the inventor or his licensee is "actively engaged in steps leading to the exploitation of the intellectual property" such that the domestic industry requirement will be satisfied "within a reasonable period of time." H. Rep. 100-40, Pt.1, at 157-158; see also Certain Stringed Musical Instruments and Components Thereof, Inv. No. 337-TA-586, Comm'n Op., at 13 (May 16, 2008). Again, even under the interpretation most favorable to the inventor, there is likely to be some time period during which the inventor is investing in the exploitation of its IP right, but has not yet crossed a threshold that entitles it to the protections of section 337.

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **COMMISSION OPINION** has been served upon the following parties as indicated on **January 9, 2014**.

Lisa R. Barton, Acting Secretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, DC 20436

On Behalf of Complainant Technology Properties Limited LLC: Anthony G. Simon, Esq.) Via Hand Delivery Nia Express Delivery THE SIMON LAW FIRM PC) Via First Class Mail 800 Market St., Ste. 1700 St. Louis, MO 63101) Other: On Behalf of Respondent Hewlett-Packard Company: Via Hand Delivery Marcia H. Sundeen, Esq. Via Express Delivery KENYON & KENYON LLP) Via First Class Mail 1500 K Street, NW Washington, DC 20005) Other: On Behalf of Respondent HiTi Digital Inc.:) Via Hand Delivery Jenny W. Chen, Esq. (V) Via Express Delivery c/o Darrin A. Auito, Esq.) Via First Class Mail WESTERMAN HATTORI DANIELS & ADRIAN LLP 1250 Connecticut Avenue, NW, Suite 700) Other: Washington, DC 20036 On Behalf of Respondent Acer Inc.: Wia Hand Delivery Eric C. Rusnak, Esq. Via Express Delivery K&L GATES LLP) Via First Class Mail 1601 K Street, NW) Other: Washington, DC 20006-1600

) Other:

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

Certificate of Service - Page 2

Irvine, CA 92618

On Behalf of Respondent Seiko Epson Corporation:	
Louis S. Mastriani, Esq.	() Via Hand Delivery
ADDUCI, MASTRIANI & SCHAUMBERG LLP	(Via Express Delivery
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On Behalf of Respondent Canon Inc.:	
David M. Maiorana, Esq.	()Via Hand Delivery
JONES DAY	(√) Via Express Delivery
901 Lakeside Avenue	() Via First Class Mail
Cleveland, OH 44114	() Other:
On Behalf of Respondent Kingston Technology Company	4
Inc.:	
Christine Yang, Esq.	() Via Hand Delivery
LAW OFFICES OF S.J. CHRISTINE YANG	(Via Express Delivery
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Fountain Valley, CA 92708	() Other:
On Behalf of Respondents Newegg Inc. and Rosewill Inc.	
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THE WEBB LAW FIRM	(√) Via Express Delivery
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Pittsburgh, PA 15222	() Other:
On Behalf of Respondent Dane Memory, S.A. (a/k/a Dane	e-Elec
Memory):	
Jeffrey G. Jacobs, Esq.	() Nia Hand Delivery
THE LAW OFFICE OF JEFFREY G. JACOBS PC	() Via Express Delivery
15770 Laguna Canyon Road, Suite 100	() Via First Class Mail
	() () ()