

PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of

CERTAIN NETWORK DEVICES,
RELATED SOFTWARE AND
COMPONENTS THEREOF (I)

Investigation No. 337-TA-944

COMMISSION OPINION

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I. INTRODUCTION

On February 2, 2016, the presiding administrative law judge (“ALJ”) issued his final initial determination (“ID”) in this investigation, finding a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 (“section 337”). Specifically, the ID finds a violation with respect to U.S. Patent Nos. 7,162,537 (“the ’537 patent”), 6,741,592 (“the ’592 patent”); and 7,200,145 (“the ’145 patent”). The ID finds no violation with respect to U.S. Patent Nos. 7,290,164 (“the ’164 patent”); and 7,340,597 (“the ’597 patent”). On April 11, 2016, the Commission determined to review the ID in-part. Upon review, the Commission finds a violation of section 337 for the ’537, ’592, and ’145¹ patents and no violation for the ’597 and ’164 patents. The Commission adopts the ID’s findings that are consistent with this opinion.²

II. PROCEDURAL HISTORY

The Commission instituted this investigation on January 27, 2015, based on a complaint filed on behalf of Cisco Systems, Inc. (“Cisco”) of San Jose, California. 80 *Fed. Reg.* 4314-15 (Jan. 27, 2015). The complaint alleges violations of section 337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain network devices, related software and components thereof by reason of infringement of certain claims of the ’537 patent; the ’164 patent; the ’597 patent; the ’592 patent; the ’145

¹ The Commission refers to the ’592 and ’145 patents as the “PVLAN patents.” A “VLAN” is a virtual Local Area Network and a “PVLAN” is a private VLAN.

² The Commission notes that testimonial evidence, upon which the ID relies, accurately reflects the testimony of the expert and fact witnesses at the hearing. However, it appears that the transcript citations used in the ID are not always the same page number in the final transcript appearing on EDIS. Therefore, the Commission cites will include an additional 5 pages before and after each hearing transcript cite in the ID to ensure the testimony relied on by the ID, and to the extent adopted by the Commission is encompassed by the citation.

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patent; and U.S. Patent No. 8,356,296 (“the ’296 patent”), and alleges that an industry in the United States exists as required by subsection (a)(2) of section 337. The complaint named Arista Networks, Inc. (“Arista”) of Santa Clara, California as the respondent. A Commission investigative attorney (“IA”) is participating in the investigation.

On August 20, 2015, Cisco filed an unopposed motion to terminate the investigation with respect to the ’296 patent, and various claims of the ’597 patent, the ’592 patent and the ’145 patent. On August 21, 2015, the ALJ granted the motion. The Commission determined not to review this ID.³

On February 2, 2016, the ALJ issued his final ID finding a violation of section 337. The ID found a violation with respect to the ’537, ’592 and ’145 patents. The ID found no violation with respect to the ’597 and ’164 patents. On February 11, 2016, the ALJ issued his Recommended Determination on Remedy and Bonding (“RD”).

On February 17, 2016, Cisco, and Arista filed petitions for review of the ID.⁴ Cisco did not petition for review of the ID’s finding of no violation with respect to the ’164 patent. On March 3, 2016, the parties, including the IA, filed responses to the opposing petitions for review.⁵

³ Notice of the Commission’s Determination Not to Review an Initial Determination Terminating the Investigation As to Certain Claims. (Sept. 9, 2015).

⁴ Complaint Cisco Systems, Inc.’s Petition for Review (“Cisco Pet.”); and Respondent Arista Networks, Inc.’s Petition for Review of Initial Determination on Violation of Section 337 (“Arista Pet.”).

⁵ Complaint Cisco Systems, Inc.’s Response to Respondent Arista Network, Inc.’s Petition for Review (“Cisco Pet. Reply”); Respondent’s Response in Opposition to Complainant’s Petition for Review-In-Part of the Final Initial Determination (“Arista Pet. Reply”); and Combined

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On April 11, 2016, the Commission determined to review the ID in-part. Specifically, the Commission determined to review the following issues: (1) infringement of the '537, '597, '592 and '145 patents; (2) patentability of the claimed subject matter in the '597, '592, and '145 patents under 35 U.S.C. §101; (3) the construction of the limitation “said router configuration data managed by said database system and derived from configuration commands supplied by a user and executed by a router configuration subsystem before being stored in said database” in claims 1, 10, and 19 of the '537 patent; (4) the construction of the limitation “a change to a configuration” / “a change in configuration” in claims 1, 39, and 71 of the '597 patent; (5) equitable estoppel; (6) laches; (7) the technical prong of domestic industry for the '537, '597, '592 and '145 patents; (8) the economic prong of domestic industry; and (9) importation. The Commission also reviewed any findings for the '164 patent affected by the other issues under review. The Commission requested briefing on the issues under review and for briefing on remedy, bonding, and the public interest. 81 *Fed. Reg.* 22312-14 (April 15, 2016). On April 25, 2016,⁶ and May 2, 2016,⁷ the parties filed briefs in response to the Commission’s notice. Cisco

Response of the Office of Unfair Import Investigations to Complainant Cisco Systems, Inc.’s and Arista Networks, Inc.’s Petitions for Review of Final Initial Determination (“IA Pet. Reply”).

⁶ Complaint Cisco Systems, Inc.’s Written Submission In Response to the Commission’s Determination To Review In-Part A Final Initial Determination of a Violation of Section 337 (“Cisco Br.”); Respondent’s Arista Networks, Inc.’s Response To Request For Writing Submissions Regarding the Issues Under Review (“Arista Br.”); and Office of Unfair Import Investigations’ Responses to the Commission’s April 11, 2016 Questions (“IA Br.”).

⁷ Respondent Arista Networks, Inc.’s Response To Request For Writing Submissions Regarding the Issues Under Review (“Arista Reply Br.”); and Office of Unfair Import Investigations’ Reply to the Responses of the Private Parties to the Commission’s April 11, 2016 Questions (“IA Br.”).

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filed a corrected brief on May 10, 2016.⁸ Arista also submitted numerous letters regarding public interest on behalf of various third parties.

III. JURISDICTION AND IMPORTATION

The ID notes that the Commission has *in rem* jurisdiction over infringing articles imported, sold for importation, or sold within the United States after importation by the owner, importer, or consignee. ID at 3-4. The ID asserts that the importation of a single article could satisfy the importation requirement. *Id.*

Arista argued before the ALJ that a violation cannot be found because of [[

]]⁹[[

]] *Id.* at 4. The ID,

however, finds that the accused devices were imported into the United States [[

]]. *Id.* Therefore, the ID concluded there

was *in rem* jurisdiction over the accused devices.

The ID further notes that the “Commission has *in rem* jurisdiction over ‘articles that . . . infringe’ a United States patent, a set that includes components used in, or are otherwise a part of, contributory and induced infringement.” *Id.* at 4-5 (citing *Suprema, Inc. v. Int’l Trade Comm’n*, 796 F.3d 1338, 1346 (Fed. Cir. 2015) (*en banc*) (“*Suprema II*”) (“‘[I]nfringement’ is a term that encompasses both direct and indirect infringement, including infringement by importation that induces direct infringement of a method claim.”). The ID concludes that the

⁸ Complaint Cisco Systems, Inc.’s Corrected Reply Brief In Response to Written Submission By Respondent and Staff on the Issues Under Review (“Cisco Reply Br.”).

⁹ Extensible Operating System (“EOS”).

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Commission thereby has jurisdiction over articles that contribute to or induce infringement, even when direct infringement occurs after importation. *Id.* at 5.

The ID considers the evidence and determines that in addition to [[

]]. *Id.* The ID determines that “the Commission has *in rem* jurisdiction over the switch hardware, inasmuch as they constitute ‘articles that . . . infringe’ pursuant to section 337 and the Federal Circuit’s *en banc* decision in *Suprema [II]*.” *Id.*

Arista petitioned for review of the ID’s finding that [[

]]. *See, e.g.,* Arista Pet. at 29-31. The Commission determined not to review the ID’s findings on jurisdiction, but to review the ID’s findings on importation.

No party challenges the ID’s finding that [[

]]. *See* ID at 3-4. The Commission affirms this finding. The Commission also affirms the ID’s findings that [[

]]. *Id.* at 5. The Commission does not need to reach [[

]] and therefore, takes no position on this issue. *See, e.g., id.* at 87.

IV. THE ’537 PATENT

A. Overview

The ’537 patent is entitled “Method and System for Externally Managing Router Configuration Data in Conjunction with a Centralized Database” and issued on January 9, 2007. Cisco asserts independent claims 1, 10, and 19, and dependent claims 2, 8, 9, 11, 17, and 18. *See id.* at 11.

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B. Accused Products

The accused '537 products are Arista's 7010, 7048, 7050, 7050X, 7150, 7250X, 7280E, 7300, 7300X, and 7500E series switches. ID at 14. These switches run Arista's EOS. *Id.* At the center of EOS is "Sysdb"¹⁰ is a centralized database that Cisco argues contains the complete state of the system and interfaces with various subsystems called "agents." *Id.*

C. Construction of the Claim Limitation: "said router configuration data managed by said database system and derived from configuration commands supplied by a user and executed by a router configuration subsystem before being stored in said database" (claims 1, 10, and 19)

Complainant Cisco's Proposed Construction	Respondent Arista's Proposed Construction	IA's Proposed Construction
The plain language requires that router configuration data be "stored in said database"	The plain language requires that configuration commands be "stored in said database"	None provided

ID at 64.

The ID notes that both Arista and Cisco address this term in their post-hearing briefs, but did not identify it as a term that needs construction. ID at 64. In analyzing whether these limitations are met for each of the asserted independent claims, however, the ID resolves the claim construction dispute. *See, e.g.*, ID at 72-74. The parties dispute centers on what is stored in the database. Arista argues that the user supplied configuration commands are stored while Cisco asserts that the router configuration data are stored. The ID finds that this limitation requires storage of router configuration data, not commands. *Id.* at 74. Arista petitioned for review of the ID's construction of this term. The Commission determined to review this issue.

¹⁰ The Sysdb is a centralized database for [[]]. The parties use differing capitalization for this term, but the various capitalizations all reference the same thing.

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The ID does not provide a discussion or analysis for its conclusion and construction and simply states that the intrinsic evidence does not support Arista's construction. *See* ID at 74, 64. The Commission finds, consistent with the ID, that the proper construction of this term requires the storage of router configuration data.

The specification supports this reading of the claim limitation. Specifically, the specification states that the focus of the '537 patent is on the storage of configuration data. JX-0001 ('537 patent) at 3:64–4:5 (“sysDB . . . provides a centralized storage and retrieval facility for router configuration *information*. . . . The configuration *information* stored on the sysDB may include, for example, Internet Protocol (IP) addresses. . . . user and password *data* . . . and other router *data* as known in the art.”) (emphasis added); 7:30–32; 7:65–8:3; 8:7–9; 8:50–52. The specification further explains that the commands are executed and it is the router configuration information, which is stored:

The config subsystem **28** carries out configuration commands for a user of the router, ***executing the configuration command*** received from the user and providing configuration information to the user of the router upon request from the user, among other things. As described above, this ***router configuration information is stored*** and managed by the sysDB 26 in the sysDB tree 42.

JX-0001 at 8:46–52. Moreover, the purpose of the invention is to manage router configuration data. JX-0001 at Title, Abstract, 3:13–15, 6:26–28.

Further, the prosecution history, considered as a whole, supports the ID's construction. The portions of the prosecution history relating to the Ciscron reference upon which Arista relies do not constitute clear and unmistakable disclaimer. *See e.g., Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.*, 222 F.3d 951, 956-57 (Fed.Cir.2000). Although the applicant stated “Ciscron fails to disclose . . . executing configuration commands before storing them in a database,” it is clear that the applicant was not distinguishing Ciscron on the basis of commands

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being stored in the database. JX-0007 at CSI-AN 1-00098149.000506. In the subsequent paragraphs in the office action response, the applicant elaborated on its argument and confirmed that (1) there are no commands in Ciscon; and (2) it is the router configuration data, not the commands, that are stored. *Id.* at CSI-AN 1-00098149.000506-07; *see also* CX-0007C at Q/A

156. The applicant argued in its response to the Office Action:

Specifically, Ciscon discloses at column 18, lines 7–11 and 24–27 the description of FIG. 9, a flow diagram of the sequence for comparing properties of an object. . . . ***Applicant submits that structures here are not commands, and can in no way be construed to be equivalent to router configuration commands.***

JX-0007 at CSI-AN 1-00098149.000506-07; *see also id.* at CSI-AN 1-00098149.000507 (“[A]ll that is being performed [in Ciscon] is a comparison of fields with the composite structure, as specifically described in column 18, lines 21–24. This is not equivalent to executing a command that configures a router.”) The applicant then asserted that Ciscon also fails to disclose the execution of user-supplied configuration commands resulting in configuration data that is stored in a database:

Finally, there is no disclosure, teaching, or suggestion in Ciscon that ***execution of user-supplied configuration commands results in configuration data that is stored in a database.*** As the present invention performs this claim limitation to manage router configuration data in conjunction with a centralized database, the novelty here is that this claim limitation provides a way to incorporate a database into managing user-supplied configuration commands, not properties of data structures, to more effectively configure routers deployed in a network. Directing Examiner's attention to the whole of FIG. 9, ***there is no indication that the comparison of properties of a data structure results in any configuration data with respect to routers,*** nor is there any store operation illustrated in Ciscon's FIG. 9 or described in its accompanying detailed description in columns 18 and 19.

Id. at CSI-AN 1-00098149.000507-08 (emphasis added). Therefore, based on the intrinsic record, the Commission finds that the claims require storing of router configuration data, not user-supplied commands. The Commission further finds that Arista did not waive this argument.

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D. Direct Infringement

The Commission determined to review the ID's findings of infringement. While the ID finds that all of the limitations of the asserted claims are met (ID at 64-82), Arista only challenged the ID's direct infringement findings with respect to a few claim limitations. The Commission affirms the ID's findings for the claim limitations not discussed herein. Arista also challenges whether a violation can be found because [[

]]. Arista Pet. at 29-31. As discussed below, the Commission finds that direct infringement has occurred [[
]] and such infringement supports a finding of indirect infringement by Arista. The basis of the Commission's finding of violation for the '537 patents is indirect infringement based on the direct infringement by Arista's [[]] products [[

]]. The Commission does not reach whether Arista is liable for directly infringing the asserted claims.

1. "externally managing router data" (claims 1 and 10) / "externally manage router data" (claim 19) / "external management" (claims 1 and 10) / "management of" (claim 19) limitations

The ID finds that Arista's products satisfy this claim limitation when the agents in the EOS perform external management by [[]].¹¹ ID at 66 (claim 19). The ID explains that when the EOS agent [[]] data in Sysdb, [[]]. *Id.* The ID finds that the evidence confirms that the agents in EOS externally manage data. *Id.* at

¹¹ Dr. Almeroth testified: [[

]] CX-0007C at Q/A 88.

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67-69. The ID further holds that [[]] is “pertinent to management.” *Id.* at 70. The ID referred back to its findings for claim 19 in analyzing independent claims 1 and 10. *See* ID at 75, 76, 77, 90, 95. Arista petitioned for review of these findings.

The Commission finds that the accused products meet this limitation. Cisco alleges that agents in EOS perform external management by [[]] data in Sysdb. When an agent [[]] data in Sysdb, [[]]. *See, e.g.,* Tr. 999 (“[[]].”); JX-0026C 192 (“[[]].”). In addition,

Sysdb cannot [[]]. CX-0007C at Q/A 91, 100, 130, 134; Tr. 999; JX-0026C at 194-195.

The record evidence further confirms Cisco’s position that the EOS agents externally manage data. An Arista internal presentation given by Hugh Holbrook, Arista’s VP of software engineering and [[]], states that [[]]. CX-0459C at ANI-ITC-944 945-1732776; *see also id.* at ANI-ITC-944 945-1732767. The presentation slides contain examples of [[]] that the agents manage, including [[]].

Id.; Tr. 192–193. Dr. Hollingsworth, Arista’s expert, admitted that this presentation describes an agent in EOS that manages [[]]. Tr. 1002-03; JX-0001 at 3:67–4:5.

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Additional documents also evidence that the agents manage various things in EOS. CX-1098C at 2:24-3:16, 32:5-8, 45:1-4. In addition, testimony from Dr. Hollingsworth confirmed that Arista's EOS agents externally manage [[]] by [[]] and that [[]] are router configuration data. Tr. 1003-04.

The fact that an agent will [[]] does not negate the evidence cited above proving this limitation is met. Dr. Hollingsworth admitted that the mere fact that [[]] says *nothing* about whether there is external management. Tr. at 1014.

Arista argues that because the accused products [[]], the products do not infringe. *See* Arista Pet. at 27. However, SysDB 26, described in the '537 patent [[]] performs verifications which are unrelated to external management. *See, e.g.*, CX-0007C at Q/A 136; Tr. 198, 201-201; JX-0001 at Fig. 8. For example, in Figure 8 of the patent, the verifications shown are independent from whether or not there is external management. JX-0001, Fig. 8, 14:6-43; CX-0007C at Q/A 136.

Arista is wrong in asserting that the ID does not link the [[]] with activities that are "external management. The ID states that "[s]pecifically, agents in EOS perform external management [[]] and that "[w]hen an EOS agent [[]] data in Sysdb, [[]] and provides supporting evidence. ID at 66. The ID also states that "[a]dditional evidence establishes that [[]] is pertinent to management" and cites more evidence. ID at 69 (citing CX-1098C (Transcript of Holbrook [[]] Presentation) at 42 ("[[]]."), 45 ("[[]].")

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]].”); CX-0035C at 7; JX-0034C at 98).

The Commission affirms the ID’s finding that this limitation is met and adopts the ID’s findings consistent with this opinion.

2. “said router configuration data managed by said database system and derived from configuration commands supplied by a user and executed by a router configuration subsystem before being stored in said database” (claims 1, 10, and 19) limitations

The ID finds that the accused products store router configuration data as required by the claims. ID at 71-74 (claim 19). However, if the claims are construed to require the storage of user commands, the ID also finds that the accused products store user commands. ID at 74.

Arista petitioned for review of the ID’s findings. The Commission determined to review the ID’s claim construction of this term and therefore, also reviewed the ID’s findings of infringement. The ID found that Arista products infringed under Cisco’s construction, and in the alternative, under Arista’s own construction. Arista’s petition for review was premised on the Commission adopting its construction of this term. *See, e.g.*, Arista Pet. at 14. Therefore, the Commission adopts the ID’s findings on this limitation. However, the Commission takes no position on the ID’s alternative finding that Arista also infringes when [[]]. ID at 74.

E. Indirect Infringement

1. Specific Intent and Knowledge

(a) Importation Practices

The ID finds that Arista changed its importation practices shortly after Cisco filed the complaint in this investigation. ID at 83. The ID finds the change was [[]]

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]] *Id.* The ID explains that [[

]] *Id.* The ID concludes that [[

]] led to the conclusion that Arista

had a specific intent to induce infringement through the importation of the accused products. *Id.*

Arista petitioned for review the ID's findings, and the Commission determined to review them.

On review, the Commission affirms the ID's finding that Arista's [[

]] evinces knowledge and an intent to infringe under the relevant standards for contributory and induced infringement. Arista argues that the Commission should apply the Federal Rule of

Evidence ("FRE") 407.¹² We agree with Arista and the IA that Arista's arguments for applying

FRE 407 is not waived and note that Cisco first identified this issue in its pre-hearing brief.

Thereafter, Arista raised the issue in opposition to a motion in *limine* and raised the issue in its

post-hearing brief. Arista raised this issue at its earliest opportunity in response to the issue

which was raised by Cisco in its pre-hearing submission.

The Commission is not bound to apply the FRE and as such need not apply them here.

Instead, the Commission is bound by the Administrative Procedures Act, 5 U.S.C. § 500-596

("APA"), and can consider all relevant evidence. *See, e.g.*, 5 U.S.C. §556. Moreover, whether

¹² FRE 407 states:

When measures are taken that would have made an earlier injury or harm less likely to occur, evidence of the subsequent measures is not admissible to prove:

- negligence;
- culpable conduct;
- a defect in a product or its design; or
- a need for a warning or instruction.

But the court may admit this evidence for another purpose, such as impeachment or — if disputed — proving ownership, control, or the feasibility of precautionary measures.

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FRE 407 is applicable to patent cases appears to be an unsettled question. *See, e.g., Kowalski v. Anova Food, LLC*, No. CIV. 11-00795HG-RLP, 2015 WL 1119411, at *3 (D. Haw. Feb. 18, 2015); *Mikkelsen Graphic Eng'g Inc. v. Zund Am., Inc.*, No. 07-C-0391, 2011 WL 1330782, at *11 (E.D. Wis. Apr. 7, 2011), *vacated in part on other grounds*, 541 Fed. Appx. 964 (Fed. Cir. 2013). Accordingly, the Commission declines to apply FRE 407 [[]].

At the time of the filing of the complaint in this investigation, Arista imported its switches [[]]. Starting in January 2015, Arista changed its importation practice [[]]. CX-1009C; Tr. at 1156-58. Arista's witnesses did not testify [[]].

[[]]. *See e.g.,* Tr. at 1157-58. This change in importation practice did not [[] and adopts the ID's findings consistent with this opinion.

“The requisite intent to induce infringement may be inferred from all of the circumstances.” *Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 669 (Fed. Cir. 1988). And “[t]he drawing of inferences, particularly in respect of an intent-implicating question ... is peculiarly within the province of the fact finder that observed the witnesses.” *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 700 (Fed. Cir. 2008) (quoting *Rolls-Royce Ltd. v. GTE Valeron Corp.*, 800 F.2d 1101, 1110 (Fed. Cir. 1986)). The ID found that the change in importation practice [[]]. ID at 83. The evidence establishes that [[]

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]], as the ID found, [[]].

See, e.g., RX-3914C at Q/A 63, 66, 69. The Commission finds that [[

]].

Accordingly, the Commission finds that Cisco established Arista's specific intent to infringe.

Arista also argues before the Commission that the evidence does not rise to the level of showing intent because it relied on a good faith basis for non-infringement. The Ground Rules governing this investigation includes Ground Rule 7 addressing the contents of the "Prehearing Brief and Statement." The rule states, in relevant part, that "[a]ny contentions not set forth in detail as required therein shall be deemed abandoned or withdrawn, except for contentions of which a party is not aware and could not be aware in the exercise of reasonable diligence at the time of the prehearing statement." Order No. 2 (Ground Rules) at G.R. 7. In the section of its pre-hearing brief entitled "The Accused Products Do Not Indirectly Infringe the Asserted Claims," Arista did not argue that it had a good-faith basis to believe that it did not infringe the asserted patent; but argued instead that "the evidence is insufficient to show that any of Arista's alleged conduct was done with 'knowledge that the induced acts constitute patent infringement.'" Arista Pre-Hearing Br. at 165-66. Arista also stated that it has "explained that there are numerous reasons it does not infringe the asserted claims." *Id.* at 166. This single sentence does not set forth in detail Arista's claimed contention concerning a good faith belief in non-infringement and the Commission finds that this single sentence is not sufficient to preserve Arista's argument. Therefore, the Commission concludes that Arista's good faith belief argument

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was waived before the ALJ and Arista cannot now rely on a good faith belief to negate the evidence of an intent and knowledge to induce or contribute to infringement of the '537 patent.

(b) Willful Blindness

The ID finds that Arista intentionally and willfully blinded itself to the knowledge of Cisco's patents. ID at 83-84. The ID determines that there was evidence of Arista's subjective belief that it was infringing Cisco's patents, such as [[

]]. *Id.* The ID further finds that [[

]]. *Id.* at 85.

The ID concludes that, based on Arista's knowledge of the patent and its specific intent to infringe, Arista is liable for induced and contributory infringement if direct infringement is shown. *Id.* at 85-86.

Arista petitioned for review of the ID's findings, and the Commission determined to review them. As discussed herein, even if Arista was found not to have a specific intent to infringe, the Commission finds, at the very least, Arista intentionally and willfully blinded itself as to Cisco's patents, including the '537 patent and the PVLAN patents, prior to its knowledge of its alleged infringement.

Willful blindness is sufficient to meet both the knowledge and specific intent requirements for induced infringement. *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 769-771 (2011). A finding of willful blindness requires (1) the subjective belief that there is a high probability that a fact exists; and (2) the taking of deliberate steps to avoid learning of that fact. *Id.* at 769-70.

Mr. Duda, Mr. Holbrook, and Dr. Cheriton, Arista co-founders, were Cisco employees when Sysdb was under development at Cisco. Mr. Holbrook talked with engineers at Cisco

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during his employment about Sysdb and he learned about some of the features of Sysdb. JX-0027C at 70-71, 73-74, 96-97. Mr. Cheriton, Ms. Ullal, Arista's CEO, and Mr. Sadana, a senior vice president of customer engineering, all testified that that they knew Cisco had a large patent portfolio and Ms. Ullal, Mr. Sadana, Mr. Duda testified that [[
]]. JX-22C at 104-05; JX-0042C at 178-179, 40-41; JX-33C at 221; Tr. at 787-88.

In addition to the knowledge of Sysdb and [[

]]. For example, in an internal email related to [[
(which are not at issue in this investigation), an Arista employee stated "[[
]]." CX-0198C. Although Mr. Sadana testified that [[

]]. JX-0033C at 228. In addition, Arista [[

]]. CX-201C. Mr. Sadana further testified that [[

]]. However, he asserted that [[

]]. JX-0033C at 217. He admitted that [[
]]. *Id.* at 221. Ms.

Ullal, Arista's CEO, [[
]]. CX-206C; JX-0042C at 218-19. [[
]].

CX-210C. Arista consulted [[

]]. CX-205C. In addition, Arista [[

]]. CX-209C. Finally, Ms. Ullal testified that [[

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]]. JX-0042C at 58.

While most, if not all, of the evidence relates to the [[

]]. Based

on the totality of the evidence in the record, the Commission finds that the evidence supports the

ID's finding that Arista was willfully blind to the '537 patent, [[

]].

The Commission also finds that Arista was willfully blind to the PLVAN patents, as discussed in more detail below. For example, an Arista internal design document, which is [[

]] CX-0034C. Another internal Arista

email communication notes Arista [[

]]. CX-

0052C. That email admits that Arista's "[[

]].” *Id.* Indeed, Mr. Arneja testified that

[[

]]. *See, e.g.*, JX-0019C at

46 ([[

])). Based on

this evidence and [[

]], the Commission affirms the ID's finding that

Arista was willfully blind to the PLVAN patents.

(c) Knowledge of the Patents

The ID found Arista had knowledge of the asserted patents such that the knowledge requirements for induced and contributory infringement were met. ID at 85-86. No party challenged the ID's findings on this issue and the Commission affirms these findings.

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2. Contributory and Induced Infringement

Arista petitioned for review of the ID's findings on contributory and induced infringement and the Commission determined to review them.

(a) Contributory Infringement

(i) The ID

The ID finds that Arista is liable for contributory infringement and explains that “the components implicated in Arista’s contributory infringement of the ’537 patent are the Accused Products with EOS, which are a material part of the claimed invention with no substantial non-infringing uses.” ID at 88. The ID finds that the fact that [[

]] does not absolve Arista of liability because the hardware components are described in the claims and therefore are material parts of the invention that are necessary to perform the other aspects of the invention. *Id.* at 88-89.

The ID finds [[]] has no substantial non-infringing uses because [[]]. *Id.* at 89. The ID finds that [[

]] contribute to infringement [[

]]. *Id.*

Arista petitioned for review of the ID's findings. The Commission determined to review this issue.

(ii) Analysis

Under 35 U.S.C. § 271(c), a party is liable for infringement if he “offers to sell or sells within the United States or imports into the United States ... a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to

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be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.” In addition, the complainant must show that the accused infringer knew that the component was patented and infringing and that the respondent’s components have no substantial non-infringing uses. 35 U.S.C. § 271(c); see §IV.E.1. Arista does not challenge, in its petition for review, the ID’s finding that there are no non-infringing uses of its switches,¹³ but only challenges that the components are material. Arista Pet. at 39-42. Contrary to Arista’s petition, there is no requirement that the component be directed to the “inventive contribution” of the patent in order to be a material part of the invention under section 271(c). See *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1320 (Fed. Cir. 2009) (finding a component material with no novelty analysis). As the ID found, the fact that the accused products are imported [[

]]¹⁴ does not necessarily negate liability. ID at 88. The various components of the imported accused products are claimed in the asserted apparatus claims, and asserted method claim 1 could not be carried out without the accused products.

The Commission finds that [[]] are a material part of the invention. The [[]] are required for independent claims 10 and 19.

¹³ Accordingly, the Commission finds that this argument was waived. However, for the reasons discussed below in §VI.B.2 for the PVLAN patents, the Commission finds that there are no substantial non-infringing uses [[

]]. See e.g., Tr. at 1162; CX-0007C Q/A 252-273. Any hypothetical non-infringing use is insufficient to support of finding of substantial non-infringing uses. *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1327 (Fed. Cir. 2009).

¹⁴ [[]] See Arista Br. at 4-5.

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Specifically, independent apparatus claims 10 and 19 call for “a plurality of router subsystems” and “a router device having a processor and memory” and could not be infringed without [[]]. In addition, [[]] are a material part of asserted independent method claim 1. Claim 1, requires both hardware, including “a plurality of router subsystems” and “a router device having a processor and memory,” and software to, *inter alia*, request and access “router data.” JX-001 at 15:22-41.

Although Arista argues that each of the [[]] must also be material to the invention, the Commission need not reach this issue. [[]]

[[]]. Accordingly, the Commission affirms the ID’s finding that Cisco established contributory infringement by Arista.

(b) Induced Infringement

(i) The ID

The ID finds that Arista is liable for actively inducing third parties to infringe the ’537 patent. ID at 87. Specifically, the ID finds that Arista knowingly induces infringement by encouraging, instructing, and enabling third parties to use the accused products in a manner that infringes the asserted claims. *Id.* According to the ID, Arista knows and intends that [[]], and that Arista encourages, aids, facilitates, and otherwise causes others to use EOS. *Id.* at 87-88. The ID finds that the evidence of active inducement includes presentations, documents, and manuals. *Id.* at 88. The ID further finds that

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Arista's sales and promotion of switch hardware also induces infringement of the '537 patent because the hardware is designed to run the EOS software which contains Sysdb. *Id.*

Arista petitioned for review of these findings and the Commission determined to review them.

(ii) Analysis

35 U.S.C. § 271(b) provides: "Whoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b). Induced infringement requires that an infringer, with knowledge of the patent and infringement, "actively induce[]" another to infringe the patent with specific intent to encourage infringement. 35 U.S.C. § 271(b); *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1928 (2015).

The Commission finds that Arista's sale and promotion of its accused products, [[
]], constitute acts of induced infringement. As discussed above, the Commission finds that the intent and knowledge requirements are also met. *See* §IV.E.1. [[

]]. JX-0026C at 204, 205 (*e.g.*, "[[
]]"), 212–213; CX-0175; CX-41C at ANI-ITC-944_945-1619604; CX-335.

[[
]]. *E.g.*, Tr. at 1162; CX-0035C; JX-0026C at 204-07, 273–275; CX-0007C Q/A 252–273. Arista promotes the use of EOS through presentations, documents, and manuals, for example. *See e.g.*, CX-0273, CX-0256C at ANI-ITC-944_945-3933367; JX-0026C at 197, 330; CX-0214; CX-0075; CX-0286. Accordingly, the Commission finds induced infringement by Arista.

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F. Laches

The ID notes that laches has not previously been available as a defense in 337 investigations, ID at 270,¹⁵ but that after the hearing in this investigation the Federal Circuit, sitting *en banc*, issued its opinion in *SCA Hygiene Products v. First Quality Baby Prod.*, 807 F.3d 1311 (Fed. Cir. 2015) (*en banc*), which held that laches may be considered in injunctive relief cases. ID at 270-71 n. 45. The ID explains that *SCA Hygiene* limits the district courts' consideration of laches to bar injunctive relief in patent cases to the confines of *eBay v. MercExchange, L.L.C.*, 547 U.S. 388 (2006) and the decision is silent as to whether laches is a defense in section 337 investigations. *Id.* The ID finds that Arista has not shown that departing from prior Commission precedent is warranted in this investigation. *Id.* at 270.

Nonetheless, the ID holds that Cisco did not delay in bringing suit for an “unreasonable and inexcusable” length of time. *Id.* at 271. The ID finds that Cisco did not become aware of Arista's infringement of Cisco's patents until May 2014 and therefore, the delay until filing on December 19, 2014 was not unreasonable. *Id.* The ID finds that the evidence relied upon by Arista fails to show that Cisco should have known of Arista's infringement earlier. *Id.* at 271-72. The ID further finds that Arista failed to prove that it was prejudiced by any delay. *Id.* at 272.

Arista petitioned for review of the ID's findings and the Commission determined to review them. Prior to *SCA Hygiene*, the Commission had determined that laches did not apply to the Commission based on *Aukerman*. Arista argues that the holding in *A.C. Aukerman Co. v.*

¹⁵ See, e.g., *Certain Sortation Systems, Parts Thereof, and Products Containing Same*, Inv. No. 337-TA-460, Initial Determination, at 266, n.20 (Oct. 22, 2002) (the Commission does not recognize laches as a defense under section 337) (reviewed on other grounds); *Certain Personal Watercraft and Components Thereof*, Inv. No. 337-TA-452, Order No. 54 (Sept. 19, 2001) (precluding the affirmative defense of laches) (unreviewed).

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R.L. Chaides Const. Co., 960 F.2d 1020 (Fed. Cir. 1992) (*en banc*) that laches could not bar prospective relief was rejected by the Court in *SCA Hygiene*. Arista Br. at 66; *see also SCA Hygiene*, 807 F.3d at 1332. After the Commission asked the parties to brief whether laches is an available defense at the Commission, the Supreme Court granted *certiorari* to address the question of whether laches is available as a defense in patent infringement actions. The Commission declines to reach the legal issue of whether laches is available as a defense at the Commission given the uncertainty of the law and finds that regardless of whether laches is available as a defense at the Commission, Arista's evidence does not satisfy its burden to prove laches for the '537 patent.

In order to find laches, Arista must prove that Cisco delayed in bringing suit for an unreasonable and inexcusable length of time from when Cisco knew or reasonably should have known of Arista's infringement and that the delay caused material prejudice to Arista. *Aukerman*, 960 F.2d at 1028 (overruled on other grounds). Under *Aukerman*, a delay of six years causes a presumption of laches to arise. If the presumption applies, the burden shifts to Cisco to dispute the reasonableness of the delay. *Id.* at 1027.

The issue of whether Arista has proven laches on the merits requires an examination of the facts and law. Arista argues that Cisco had a duty to investigate whether Arista's products were infringing. The Federal Circuit has held, in *Wanlass v. General Elec. Co.*, 148 F.3d 1334, 1338 (1998), that:

Although laches will not bar a patentee whose ignorance is justifiable, ignorance will not insulate him from constructive knowledge of infringement in appropriate circumstances. *See Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 988 F.2d 1157, 1162, 26 U.S.P.Q.2d 1038, 1042 (Fed.Cir.1993) ("Absent actual knowledge, the facts must support a duty of inquiry."); *see also Wetzel v. Minnesota Ry. Transfer Co.*, 169 U.S. 237, 241, 18 S.Ct. 307, 42 L.Ed. 730 (1898) ("The interests of public order and tranquillity demand that parties shall

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acquaint themselves with their rights within a reasonable time, and, although this time may be extended by their actual ignorance, or want of means, it is by no means illimitable.”); *Potash Co. of Am. v. International Minerals & Chem. Corp.*, 213 F.2d 153, 155, 101 U.S.P.Q. 264, 265 (10th Cir.1954) (In patent cases, like others, “[l]aches will not be imputed to one who has been justifiably ignorant of facts which create his right or cause of action. But ignorance will not of itself excuse delay. The party must be diligent and make such inquiry and investigation as the circumstances reasonably suggest, and the means of knowledge are generally equivalent to actual knowledge.”) (citations omitted).

These circumstances include “pervasive, open, and notorious activities” that a reasonable patentee would suspect were infringing. See *Hall v. Aqua Queen Mfg., Inc.*, 93 F.3d 1548, 1553, 39 U.S.P.Q.2d 1925, 1928 (Fed.Cir.1996). For example, sales, marketing, publication, or public use of a product similar to or embodying technology similar to the patented invention, or published descriptions of the defendant’s potentially infringing activities, give rise to a duty to investigate whether there is infringement. See *id.* (constructive knowledge where defendant sold and marketed allegedly infringing products through print advertisements and trade shows); *Pearson v. Central Ill. Light Co.*, 210 F.2d 352, 356, 100 U.S.P.Q. 285, 288 (7th Cir.1954) (constructive knowledge where defendant published a product brochure, which it distributed to the trade); *A.R. Mosler & Co. v. Lurie*, 209 F. 364, 371 (2d Cir.1913) (barring infringement suit “[w]here owners have remained ... supine for many years, shutting their eyes to what was going on in the art to which the patent belonged”). See generally Jean F. Rydstrom, Annotation, *Laches as defense in patent infringement suit*, 35 A.L.R. Fed. 551, 577–79 (1977) (examining cases in which constructive knowledge was imputed to the patentee).

Various district courts have stated the following standard:

If a patentee knows of the existence of a product or device that (i) embodies technology similar to that for which he holds a patent and (ii) uses that similar technology to accomplish a similar objective, he has a duty to examine the product or device more closely to ascertain whether it infringes his patent. If he shirks this duty, he does so on peril of triggering the laches period and perhaps ultimately losing his right to recover damages for the infringement.

I/P Engine, 915 F. Supp. 2d 736, 741-42 (E.D. Va. 2012) (quoting *Odetics, Inc. v. Storage Tech. Corp.*, 919 F.Supp. 911, 918 (E.D.Va.1996), *on remand*, 14 F.Supp.2d 800 (E.D.Va.1998), *aff’d in part, rev’d in part*, 185 F.3d 1259 (Fed.Cir.1999); see also *Crown Packaging Tech., Inc. v. Rexam Bev. Can Co.*, 679 F. Supp. 2d 512, 520 n.42 (quoting same); *St. Clair Intellectual*

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Property Consultants, Inc. v. Acer, Inc., 2013 WL 3367319, at *3 (D.Del. Jul.2, 2013); *see also Wanlass v. Fedders Corp.*, 145 F.3d 1461, 1466-67 (Fed. Cir. 1998) (“*Fedders*”).

Cisco admits that it knew of the 7124 and 7148 switches in the fall of 2008 and that they included Arista’s Sysdb. RX-3879C at Q/A 32-33; RX-21C. Around that period, Cisco also performed a competitive analysis of these products. This competitive analysis was for sales purposes and included identifying how to distinguish Arista’s products. *See, e.g.*, CX-1221C at Q/A 53-58; JX-0062C at 57, 152-53. This competitive analysis process was captured in various slide presentations. RX-3120C is one such presentation and it includes information regarding EOS software. In particular, this slide presentation describes EOS as having a modular operating system and Linux OS kernel that runs independently from system processes, but it does not mention Sysdb. *See* RX-3120C at CSI-ANI-00056464.000044-45. This presentation does not contain any detailed information on the operation of the software or provide any indication that there is also external management. There is no information in this presentation regarding infringement of Cisco’s patents.

Arista also relies on several documents dated in 2009 that contain Arista confidential information to allege that Cisco should have known of Cisco’s infringement. *See, e.g.*, RX-2964C and RX-4007C. Arista’s position rests on Cisco possessing these documents in 2009. The documents were produced by Cisco in this investigation, but there is no evidence to show when or how Cisco came into possession of these documents. Moreover, these documents are dated fewer than six years before Cisco’s filing of the ITC complaint in 2014 such that they do not create a presumption of laches. These documents are similar to RX-3120C in that they do not contain any information to suggest external management. While these documents do include a hub and spoke representation, showing a system managed through Sysdb, these documents do

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not provide any indication that there is external management of the agents and do not evince that Cisco knew or should have known of Arista's infringement. Arista has failed to show that Cisco knew of these documents or that these documents demonstrate that Cisco knew of Arista's infringement.

Similarly, the 2009 blog post, CX-0479, also does not demonstrate that Cisco knew or should have known that Arista was infringing the '537 patent. This blog post does not contain any information on Sysdb that would indicate external management and there is no evidence of when Cisco became aware of this document.

Arista argues that Cisco had a duty to investigate whether Arista's products infringed. As discussed above, courts have found that, in some circumstances a patentee has a duty of inquiry. Courts have held that when the "patentee knows of the existence of a product or device that (i) embodies technology similar to that for which he holds a patent and (ii) uses that similar technology to accomplish a similar objective, he has a duty to examine the product or device more closely to ascertain whether it infringes his patent." In *Johnston v. Standard Mining Co.*, 148 U.S. 360, 370 (1893), the Court held that a plaintiff is only chargeable "with such knowledge as he might have obtained upon inquiry, *provided the facts already known by him* were such to put upon a man of ordinary intelligence the duty of inquiry." The Federal Circuit has been reluctant to impose a duty of inquiry in cases where the infringement is "difficult to discern" or not apparent." See *Fedders*, 145 F.3d at 1467. In *Wanless*, the Federal Circuit imposed a duty to investigate where there was an open and notorious sale of easily testable products, the plaintiff offered a license, and the defendant indicated that it intended to continue using various infringing features. *Wanless*, 148 F.3d at 1139-40. Here, Arista's infringement is not open and notorious because it would take significant investigation to determine whether the

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accused products use external management of the '537 patent. *See generally* CX-7C (Almeroth WS) (containing over 200 questions and citing over 75 documents to show infringement.).

In addition, Cisco has an extensive patent portfolio of over 12,000 patents and requiring Cisco to perform infringement analyses for every feature that a sales team is aware of, is unreasonable. *See Fedders*, 145 F.3d at 1465. In addition to all of this evidence, Mr. Lang, Cisco's Vice President, Intellectual Property and Deputy General Counsel, testified that Cisco did not become aware of Arista's infringement of the '537 patent until July 2014 (five months before filing suit). CX-1221 at Q/A 59.

Therefore, for the above reasons, the Commission finds that there was no unreasonable delay in this case. The Commission does not reach the issue of material prejudice. The Commission adopts the ID's findings on this issue that are consistent with this opinion.

G. Technical Prong of the Domestic Industry Requirement

The ID finds that the domestic industry products asserted for the '537 patent, running Cisco's IOS XR operating system, practice 1, 2, 8, 10-11, 17 and 19. ID at 89-100. No party petitioned for review of these findings, but the Commission determined to review these findings because it determined to review a claim construction. On review, the Commission affirms the ID's findings.

V. THE '597 PATENT

A. Overview

The '597 patent is entitled "Method and Apparatus for Securing a Communications Device Using a Logging Module" and issued on March 4, 2008. Cisco asserts independent

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claims 1, 39, and 71, and dependent claims 14, 15, 29, 63, 64,¹⁶ 72, and 73 of the '597 patent. ID at 17.

B. Accused Products

Cisco accuses Arista's 7010, 7048, 7050, 7050X, 7150, 7250X, 7280E, 7300, 7300X, and 7500E series network switches of infringing the '597 patent. ID at 19. Cisco asserts that these communication devices comprise a subsystem and a logging module named Process Manager ("ProcMgr"). *Id.*

C. Construction of the Claim Limitation: "a change to a configuration" (claim 1) / "a change in a configuration" (claims 39 and 71)

Complainant Cisco's Proposed Construction	Respondent Arista's Proposed Construction	The IA's Proposed Construction
No construction necessary. If construction is necessary, "a change to the state of the device"	a change to the settings of the subsystem specified by the user	No construction necessary. The IA's original proposed construction, if construction is necessary, was "a change to the state of the device." The IA's revised construction is "a change to the settings of the subsystem"

The parties dispute the meaning of "a change to a configuration" in the claim phrase of claim 1 "a logging module, coupled to said subsystem, and configured to detect *a change to a configuration* of said subsystem of said communications device." Similarly, the parties also dispute the meaning of "a change in a configuration of a subsystem" as recited in claim 39 and 71. The ID construes the terms "a change to a configuration" and "a change in configuration" in claims 1, 39, and 71 to mean "a change to the state of the device." ID at 112. The ID finds that Cisco's expert Dr. Wicker testified that the patent's detected configuration changes relate to

¹⁶ Claims 63 and 64 depend from unasserted claim 40, which depends from asserted claim 39.

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“any compromise’ of the device.” *Id.* The ID explains that the patent describes the logging module detecting software modification, anomalous conditions, hardware resets, user interaction through the command line interface, and changes made by the device itself. *Id.* at 112-113. The ID finds that the specification uses “state” and “configuration” interchangeably such that “configuration” includes the state of the device. *Id.* at 113.

The ID further finds that the intrinsic record does not support the construction proposed by Arista. *Id.* Specifically, the ID explains that “settings” is not used in the specification, and the specification discloses embodiments where configuration changes are made by the network device, instead of the user. *Id.* at 113-14.

Arista petitioned for review the ID’s construction. The Commission reviewed the construction and on review modifies the ID’s construction of this term. The ID’s construction, which adopted Cisco’s proposed construction, renders the term “subsystem” ambiguous. Under the ID’s construction, the claim limitation of claim 1 reads: “a logging module, coupled to said subsystem, and configured to detect **a change to the state of the device of said subsystem** of said communications device.” Similarly, under the ID, the claim limitation of claims 39 and 71 read: “[detecting/detect] **a change to the state of the device of the subsystem.**” The parties agree that the changes are made to the subsystem even if “of the device” is included in the construction. However, this construction on its face is ambiguous and confusing. The specification and prosecution history support a finding that the change is to the subsystem.

Arista’s proposed construction recites “a change to the settings of the subsystem specified by the user.” The term “settings” only appears in the specification for one embodiment. Arista asserts that the ID’s construction is too broad in that it encompasses all types of changes while “setting” limits the types of actions within the scope of the patent. Arista relies on the file

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history to support its argument, but the file history appears instead to distinguish the Brown prior art on the basis that the logging module coupled to a subsystem are both encompassed in the communications device. *See* JX-0010 at CSI-ANI-00097276.000109-111. In its office action response, Cisco repeatedly describes the changes in “status” in Brown, but its focus is on distinguishing Brown based on the arrangement of elements, not whether the changes were to configuration versus a status. *Id.*

In discussing the scope of configuration changes that are encompassed within claims 1, 39, and 71, the ID includes a broad statement that “‘configuration’ encompasses all types of changes to different aspects of the device” which would extend the claims beyond the specification. ID at 113. However, the specification teaches that configuration changes embrace software modifications, anomalous conditions, hardware resets, user interaction through the command line interface, and changes made by the device itself, such as a device setting its own source IP and MAC address. JX-0004 at 1:30-33, 14:52-54, 4:35-38, 9:18-21, 5:33-36. The Commission therefore finds that the ID’s statement is too broad and the changes should be limited to the types of configuration changes described in the ’537 patent, not *all* changes to the subsystem as suggested in the ID’s statement. Accordingly, consistent with the specification, the Commission construes the terms “a change to a configuration” and “a change in configuration” to mean “a change to the state” (*e.g.*, software modifications, anomalous conditions, hardware resets, user interaction through the command line interface, and changes made by the device itself, such as a device setting its own source IP and MAC address).

D. Direct Infringement

The ID found that the accused products do not infringe the asserted claims of the ’597 patent. The ID analyzed the “a change to a configuration” (claim 1) / “a change in a

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configuration” (claims 39 and 71) / “determine the configuration” (claim 72) claim limitation of independent claims 1, 39, and 71 and dependent claim 72, found it was not met, and did not analyze any additional limitations of the claims or rule on indirect infringement. The Commission determined to review the ID’s infringement findings. As discussed below, the Commission also finds that the asserted independent claims are not infringed based on these limitations and does not reach the other claim limitations.

1. The ID

(a) **Claims 1, 39, and 71: “detect a change to a configuration of said subsystem”/ “detect/[ing] a change in a configuration of a subsystem” limitations**

The ID determines that asserted claim 1 requires that the logging module “detect a change to a configuration of said subsystem” and claims 39 and 71 require “detect/[ing] a change in a configuration of a subsystem.” ID at 118. The ID notes that these terms were construed to mean “a change to the state of the device.” *Id.*

The ID explains that Cisco relies on three mechanisms within Arista’s ProcMgr to satisfy the limitation of detecting a change in configuration including: [[
]]. The ID reproduces an illustration of these three mechanisms based on Dr. Wicker’s testimony:

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[[

]]

Id. at 118-119 (reproducing RDX-1001C (adding circled numerals)). The ID finds that none of these mechanisms detect a change in a configuration. *Id.* at 119. The ID explains that ProcMgr

[[
]]. *Id.* Specifically, the ID explains [[

]]. *Id.* Indeed, ProcMgr [[
]]. *Id.* The ID finds that ProcMgr [[

]]. *Id.* [[
]]. *Id.* In
addition, [[
]].

Id. The ID also finds that ProcMgr [[

]]. *Id.* at 119-120.

(i) [[
Do Not “Detec[t] a Change in a Configuration”]]

The ID notes that Dr. Wicker testified that the [[
]] are
related and together monitor agent failures. *Id.* at 120. The ID finds that each [[

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]]. *Id.* The ID finds that [[

]]. *Id.* [[

]]. *Id.*

The ID concludes that ProcMgr's [[

]] does not constitute detecting whether the [[]] configuration

has changed as required by the claims. *Id.* The ID finds instead that ProcMgr [[

]]. *Id.*

(ii) [[]] **Does Not Detect a Change to a Configuration of a Subsystem**

The ID finds that ProcMgr does not satisfy the “detect a change to a configuration of said subsystem”/ “detect/[ing] a change in a configuration of a subsystem” limitations when it determines [[

]]. *Id.* at 120-21. The ID finds that

the [[

]], as confirmed by Cisco's expert, Dr. Wicker. *Id.* at 121.

The ID finds that the evidence shows that the [[

]] and that [[

]]. *Id.* For example, the ID explains that [[

]] and

that this [[

]] *Id.* Therefore, the ID concludes that [[

]]. *Id.*

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(b) Claim 72

The ID finds that the accused products do not infringe claim 72 because ProcMgr does not determine the configuration of the identified subsystems (*i.e.*, agents). *Id.* at 121-122. The ID finds that [[]] and [[]]. *Id.* at 122. The ID finds that the [[]]. *Id.* Therefore, the ID concludes that these functionalities do not determine a change in configuration of the agent. *Id.*

2. Analysis

(a) Claims 1, 39, and 71: “detect a change to a configuration of said subsystem”/ “detect/[ing] a change in a configuration of a subsystem” limitations

(i) [[]]

In the Arista system, ProcMgr [[]]. [[]] has a [[]]

]]. *See, e.g.*, RX-3912C at Q/A 43. If [[]]

]]. *See, e.g.*, RX-3912C at Q/A 51. ProcMgr will then [[]]

]]. However, ProcMgr [[]]

]].

See, e.g., RX-3912C at Q/A 43; CX-245C at ANI-ITC-944_945-015219. ProcMgr is [[]]

]]. *See, e.g.*, RX-3912C at Q/A 49-51; CX-614C at ANI-ITC-944_945-0152198.

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The patent describes the covered changes to a configuration to include software modifications, anomalous conditions, hardware resets, user interaction through the command line interface, and the changes made by the device itself, such as a device setting its own source IP and MAC address. JX-0004 at 1:30-33; 14:52-54; 4:35-38; 9:18-21; 5:33-36. The '597 patent describes an anomalous condition as one where there is a potential compromise of security. *See, e.g.* JX-0004 at 14:52-54, 14:59-63, 15:4-5. We find that ProcMgr's determination that [[
]] does not constitute a change to a configuration of the subsystem as described in the '537 patent. Instead, ProcMgr is [[
]].
See, e.g., RX-3912C at Q/A 51.

(ii) [[
]]
ProcMgr [[
]]. Indeed, ProcMgr [[
]].

For these reasons, at most ProcMgr, may [[
]].

ProcMgr also [[
]]. *See, e.g.,* CX-001C at Q/A 125, 143. These files contain information on
[[
]]. RX-3909C at Q/A 245; CX-1C at Q/A 128; *see also* Tr. at 1283-84; RX-3912C at Q/A
43. The files stored [[
]] as Cisco
contends. Cisco Pet. at 19. [[

]]. Tr. at 1283-84.

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The [[]]. This file includes
[[]]. For example, it includes the [[
]]. See, e.g., CX-245C at
ANI-ITC-944945-0150224.

[[]].
]]. *Id.* at ANI-ITC-944945-0150221. The process includes: (1)
determining [[]], (2) determining [[
]], and (3) [[
]]. *Id.* at ANI-ITC-944_945-0150222. Cisco asserts process step (2) is the [[
]].

Cisco asserts that the ID does not address the second half of its [[]]
argument and when the whole process is considered, there must be a finding of infringement.
However, contrary to Cisco's assertion, in order to determine what [[

]]. *Id.* If the [[
]]. *Id.* [[]].

Accordingly, the Commission finds that these claim limitations are not met by the accused
products. The Commission adopts the ID's findings consistent with this opinion.

(b) Claim 72

The ID's findings for claim 72 are closely related to its findings for claims 1, 39, and 71.
For the same reasons discussed above, the Commission finds all of the elements of claim 72 are

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not met by the accused products. The Commission affirms ID's finding and adopts the ID's findings consistent with this opinion.

E. Indirect Infringement

The Commission does not reach any issues related to indirect infringement for the '597 patent. Because the claims are not directly infringed, there can also be no finding of indirect infringement.

F. Validity: Patentability Under 35 U.S.C. § 101¹⁷

The Commission determined not to review the ID's findings that assignor estoppel applies to Arista. 81 *Fed. Reg.* 22312-14 (April 15, 2016). This determination prevents Arista from making any challenges to the validity of the '597 patent, including § 101 challenges. Accordingly, the Commission need not reach this issue and takes no position on the ID's findings for this issue.

G. Technical Prong of Domestic Industry

The ID finds that domestic industry products asserted for the '597 patent practice claims 1, 14-15, 39, and 71-72. ID at 122-131. While the Commission modifies the ID's construction of "a change to a configuration" (claim 1) / "a change in a configuration" (claims 39 and 71), this change does not alter the ID's determination on the technical prong of the domestic industry requirement. The Commission affirms the ID's findings. ID at 122-131.

¹⁷ Section 101 limits patent-eligible subject matter to "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. §101. The inquiry involves determining whether the claims "transform [an] abstract idea into a patent-eligible invention", and require an "inventive concept" or "additional features" to ensure the patent does not seek simply to monopolize the abstract idea." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l.*, 134 S. Ct. 2347, 2352-57 (2014).

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VI. THE '592 AND '145 PATENTS (PVLAN)

A. Overview

1. The '592 Patent

The '592 patent is entitled "Private VLANs" and issued on May 25, 2004. Cisco asserts independent claims 6, 20, and 21, as well as dependent claim 7. ID at 23.

2. The '145 Patent

The '145 patent is entitled "Private VLANs" and issued on April 3, 2007. The '145 patent is a continuation of the '592 patent and the two patents share the same specification. Cisco asserts independent claims 5, 7, 45, and 46.

3. Accused Products

Cisco contends that Arista's 7010, 7050, 7050X, 7150, 7250X, 7300, and 7300X series network switches that run Arista's EOS software, which in turn supports the PVLAN feature, infringe the asserted claims of the PVLAN patents (the "Arista VLAN products"). ID at 27.

B. Infringement

1. Direct Infringement

The Commission determined to review the ID's findings of infringement. While the ID finds that all of the limitations of the asserted claims are met, Arista only challenged the ID's direct infringement findings based on its argument that the PVLAN patents are conceptual. Arista Pet. at 61-66. Arista also challenges the ID's findings because [[

]]. *Id.* at 67 n.41. As discussed below, the Commission finds that direct infringement has occurred by the fully assembled and operational products as used by Arista's customers and such infringement supports a finding of indirect infringement by Arista. The basis of the Commission's finding of violation for the PLVAN

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patents is indirect infringement based on the direct infringement [[
]]. The Commission does not reach whether
Arista is liable for directly infringing the asserted claims.

(a) The ID

The ID finds that the Arista VLAN products infringe all of the asserted claims of the PVLAN patents. ID at 172. The ID finds that Cisco's expert, Dr. Jeffay, testified that the Arista VLAN products infringe and the testimony of Arista's fact witness Gagan Arneja and expert witness, Mr. Moisand, supports the infringement finding. *Id.* The ID analyzes each of the limitations of the asserted claims and finds that they are met by the Arista VLAN products. *Id.* at 173-95.

The ID notes that Arista's non-infringement position is based on its argument that VLANs abstract and therefore cannot process packets as required by the claims. *Id.* at 196. The ID finds that Arista's arguments that VLANs are an abstract concept are contradicted by Arista's pre-litigation documents and record evidence. *Id.* at 196-98. The ID explains that Arista's EOS User Manual specifically defines VLANs as "layer 2 structures" and refers to Arista's PVLANS as a "network structure." *Id.* (citing CX-0075 at 761, 762). The ID further finds that the "802.1Q-1998 standard itself defines a VLAN as '[a] subset of the active topology of a Bridged Local Area Network' where the 'active topology' is 'the set of communication paths formed by interconnecting the LANs and Bridges by the forwarding Ports.'" *Id.* (citing RX-0186 at 9, 30; CX-1220C at Q/A 19). The ID explains that the VLANs are specific structures enabled through the use of hardware and software. *Id.* at 196-197 (discussing the Arista User Manual and testimony from Mr. Moisand and Mr. Arneja).

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The ID also rejects Arista's arguments that its VLANs are not one-way connections (ID at 198-199), its isolated ports do not prevent the exchange of packets (ID at 199), and that Cisco merely relies on a naming convention (ID at 199-200). The Commission determined to review the ID's findings.

(b) Analysis

The Commission finds that VLANs are not conceptual and adopts the ID's findings that are consistent with the discussion herein. The Commission finds that on balance that the evidence supports the ID's infringement determination.

Arista's first argument is that VLANs are a conceptual association that occur through the implementation of IEEE 802.1Q compliant tagging and therefore, do not process packets. Arista asserts that the ID ignored Cisco's expert testimony that shows the Arista VLAN products do not infringe. Arista Pet. at 62. Arista contends that in accepting Dr. Jeffay's assertion that the 802.1Q standard defines the virtual LAN as a subset or part of the LAN, Dr. Jeffay omitted a key portion of the definition. *Id.* Specifically, Arista argues that the standard defines "*an active topology of a Bridged Local Area Network*" and Dr. Jeffay admitted that the active topology does not transfer, receive, or reject packets. *Id.* Dr. Jeffay, Cisco's expert, testified that the definition of VLAN taken from the 802.1Q standard was fine but he also stated that there are "multiple views you can have [for a] LAN." Tr. at 493-495. However, Dr. Jeffay did not limit his definition to the 802.1Q standard or provide a restrictive definition of "active topology." *See, e.g.,* Tr. 493-95, 497; CX-1220 Q/A19-20. Dr. Jeffay testified that a VLAN is a segment of a physical LAN (*i.e.*, a LAN within a LAN). CX-0003C at Q/A 32. Inventor Edsall confirmed this definition. Tr. at 891. Dr. Jeffay also testified that the "active topology" as "acted on by the hardware" makes up the VLAN and is implemented such that it can receive, transfer and reject

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packets. Tr. at 497. Dr. Jeffay explicitly rejected Arista's argument that the VLANs are conceptual and explained that it is the hardware and the software together that make up a VLAN. CX-1220 at Q/A 19.

Arista further asserts that the ID misinterprets Arista documents and testimony that support finding that [[]]. Arista Pet. at 63. However, Arista's witness testified during his deposition [[

]]. JX-0019C at 48; Tr. 1126-1128. It is understandable that documents describing the [[]] chip sets do not discuss VLANs because the documents describe only the hardware while VLAN are a combination of software and hardware. Additionally, the statements regarding [[]] does not change anything regarding the VLANs. Dr. Jeffay's testimony does not contradict his opinion that a VLAN is a structure that is realized in hardware and software. CX-1220C at Q/A 22-23.

Arista's EOS User Manual specifically defines VLANs as "*layer 2 structures*" and refers to Arista's PVLANS as a "*network structure.*" CX-0075 at 761, 762. The manual further describes that "[i]solated VLAN ports *carry unidirectional traffic*" and that "[c]ommunity VLAN ports *carry traffic.*" CX-0075 at 763. And Arista's [[

]]. CX-0031C at ANI-ITC-944_945-0772168-70. Arista points out that its witnesses stated that the Arista documents were describing [[]].

Last, Arista argues that the Cisco inventor testimony (Mr. Foschiano and Mr. Edsall) defining VLANs supports finding non-infringement. Arista Pet. at 65-66. Arista argues that

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VLANs are conceptual because they are “numbers on a wire.” Mr. Foschiano testified that VLANs are implemented using hardware components but he also explained that the “number on a wire” refers to a VLAN ID in a packet that identifies a specific structure, namely a VLAN, that the packet is associated with. JX-0051C 147-48. Inventor Edsall explained that saying a VLAN “may be carried in the packet” is the way that those skilled in the art refer to the fact that the VLAN ID is carried in the packet (*i.e.*, the packet has an identifier that associates it with a VLAN). Tr. 392. In addition, the VLAN patents teach using a VLAN Assignment number. *See, e.g.*, JX-0005 (’592) at 6:8–22. Therefore, the Commission finds that the VLANs are not abstract concepts, affirming the ID, and finds the asserted claims are directly infringed by the fully assembled accused products (including an operational version of EOS).

2. Indirect Infringement

The ID further finds that Arista is liable for induced infringement by encouraging, instructing, sell, promoting, and enabling third parties to use the Arista VLAN products that infringe the asserted patents. ID at 201. The ID also determines that Arista is liable for contributory infringement. *Id.* at 202-03. The ID finds that all of the claims require the imported switch hardware, including all of the components thereof. The ID finds that these were material components. *Id.* at 202. The ID further determines that the switch hardware has no substantial non-infringing uses because [[
]]. *Id.* at 202-03.

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The Commission determined to review the ID's findings. The Commission finds, as discussed above, that the intent and knowledge requirements for indirect infringement were met for the PVLAN patents. *See* §IV.E.1.

Arista challenges the ID's finding that [[]] have no substantial non-infringing uses. Arista Pet. at 67. Arista asserts that the ID's finding is based on the fact that [[]]. *Id.*

Arista asserts that [[]]

]]. *Id.* at 67-68. Arista also contends that [[]]

]]. *Id.* at

68.

As the Commission discussed in *Certain Television Sets, Television Receivers, Television Tuners, and Components Thereof*, Inv. No. 337-TA-910, Comm'n Op. at 44 (USITC Oct. 30, 2015) ("*Certain Television Sets*"), the proper test for determining whether there are substantial non-infringing uses is set forth in *Ricoh Co. Ltd. v. Quanta Computer Inc.*, 550 F.3d 1325 (Fed. Cir. 2008). In that case, the Federal Circuit held that if a subcomponent (in that case, a microcontroller) contributes to infringement, the fact that the subcomponent is part of a larger component does not negate contributory liability solely on the ground that the larger component is capable of substantial non-infringing uses. *Id.* at 1337-38. Thus, in considering substantial non-infringing uses in this case, we focus on the components accused of contributory infringement, [[]]

]]. *See e.g.*, Tr. at 1162; CX-0075.

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The “bundling” of non-infringing components with infringing components does not create substantial non-infringing uses. *See, e.g., Ricoh*, 550 F.3d at 1336–40 (*e.g.*, “While selling a potentially infringing product where each component part thereof has a substantial lawful use may well be ‘equivocal’ . . . , it is entirely appropriate to presume that one who sells a product containing a component that has no substantial noninfringing use in that product does so with the intent that the component will be used to infringe.”). Further, turning off infringing features does not create substantial non-infringing uses. *Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1331 (Fed. Cir. 2010) (“Netgear argues that because a user can turn off the infringing features, then there are substantial noninfringing uses [However,] [w]hether a user activates fragmentation [the infringing feature] is relevant to the extent of direct infringement, but does not establish substantial noninfringing uses.”). Therefore, the Commission finds that [[]] have no substantial non-infringing uses and adopts the ID’s findings that are consistent with this opinion.

With respect to induced infringement, Arista’s sale and promotion of the Arista VLAN products [[]] are found to constitute acts of inducement [[]]

]]. JX-0026C at 204, 205 (*e.g.*, “[]”), 212–213; CX-0175 at 731; CX-41C at ANI-ITC-944_945-1619604; CX-335. And [[]]. *E.g.*, Tr. at 1162; CX-0035C; JX-0026C at 204-07, 273–275; CX-0007C Q/A 252–273. Arista promotes the use of EOS through, for example, documents, manuals, and customer guidance. *See e.g.*, CX-0076, CX-0075 at CSI-ANI-00128383.000760-771, CX-0041C; CX-0043C, CX-0673. As discussed above in §IV.E.1, the knowledge and intent requirements for induced infringement have been

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met. Accordingly, the Commission finds that Arista has induced infringement of the asserted claims.

C. Validity: Patentability Under 35 U.S.C. § 101¹⁸

The ID notes Arista's argument that the claims of the PLVAN patents are directed to the idea of abstract VLANs and in particular the exchange or handling of packets by use of VLANs. ID at 234. The ID finds that the PVLAN patents are directed to a specific device (*i.e.*, a router or switch) configured in a specific way to have new types of ports and VLANs to isolate a user's traffic. *Id.* The ID finds that the physical devices are the opposite of an abstract idea. *Id.* The ID explains that the patent claims do not claim an algorithm or a computerized approach that was implemented manually in the prior art. *Id.* at 234-35.

The ID further finds that the patents cover an inventive concept. *Id.* at 235. The ID explains that the PVLAN patents solved problems in the prior art. *Id.* The ID determines that all of the asserted claims require special purpose devices, and do not require routine or conventional structures. *Id.* at 235-36.

Arista petitioned for review of the ID's findings on this issue and the Commission determined to review. On review, Arista's argument regarding unpatentability hinges on its position that VLANs are abstract. The Commission finds that VLANs are not abstract.

The Supreme Court laid out a two-part test for determining unpatentable subject matter in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l.*, 134 S. Ct. 2347 (2014). This test requires a determination as to (1) whether a patent's claims are directed to a patent-ineligible abstract idea,

¹⁸ Arista does not make assignor estoppel arguments for the PVLAN patents.

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and if so, (2) whether its claims contain an inventive concept ensuring that the patent amounts to significantly more than a patent upon the abstract idea itself. *Alice*, 134 S. Ct. at 2355.

As discussed above in detail with respect to direct infringement, the Commission finds that the claims are not directed to an abstract idea. The claims of the PVLAN patents are directed to a specific device, namely a switch or a router, configured to have new types of ports and new types of VLANs in order to isolate users' traffic. ID at 234; CX-1220C at Q/A 227. The claims all recite a switch or router comprising a VLAN—a definite structure. ID at 234; CX-1220C at Q/A 228. In addition, the claims are not directed to an algorithm, or merely computerize an approach that was implemented manually in the prior art, but to a device that solves a problem that existed in the networking field in the prior art. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (“the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”).

Even if the claims are found to be directed to an abstract idea, they contain an inventive concept ensuring that the patent claims amount to significantly more than a patent upon the abstract idea itself. The claims are to a switch or router configured in a particular manner with VLAN type ports to create new types of functionality that did not previously exist. CX-1220C at Q/A 32–37. The PVLAN patents solved the problem in the prior art of separating users' traffic on a LAN by inventing a mechanism for isolating user traffic with specific configurations of new types of VLANs and new types of ports, that can be implemented and stored in assignment tables, memory, switching chips and other hardware or software components. CX-1220C at Q/A233–238. Therefore, the claims require a special purpose device with defined structures that transform the networking device into a special purpose machine. *See id.* at Q/A 238.

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Accordingly, the Commission finds that the asserted claims are not invalid under § 101 and adopts the ID's findings consistent with this opinion.

D. Equitable Defenses

1. Equitable Estoppel

The Commission affirms the ID's determination that Arista did not meet its burden to establish that (1) Cisco, through misleading conduct, led Arista to reasonably believe that Cisco did not intend to enforce its patents against Arista; and (2) Arista relied on that conduct. ID at 263-267. The Commission does not reach or adopt the ID's findings on whether Arista was materially prejudiced.

2. Laches

The ID provides only a single laches discussion applicable to all of the asserted patents. We summarized the ID's findings above in discussing Arista's laches defense for the '537 patent. *See infra* § IV.F

The Commission finds that Arista has likewise not established laches for the PVLAN patents, regardless of whether or not laches is an available defense at the Commission. *See infra* § IV.F

Arista raised various issues regarding the PVLAN patents related RFC 5517 that were not addressed above for the '537 patent. *See* Arista Pet. at 81-83. Arista first offered its PVLAN functionality in 2012 and asserts that Cisco should have known that Arista infringed from this time. *Id.* Cisco filed the complaint in this investigation in December 2014. This delay of less than two years does not result in a presumption of laches. *Aukerman*, 960 F.2d at 1027. Arista relies on various cases that find laches after only three or four year delays where the parties were already litigating infringement or the infringement was "open and continuous." Arista Pet. at 81-

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82. The facts of these cases are distinguishable because here Arista was not already in litigation with Cisco over these patents and infringement of these patents is not open and notorious. Arista cites no cases where laches was found where the delay was as short as two years. Arista also makes a strained argument with respect to Cisco's submission to the Internet Engineering Task Force ("IETF") of an Inter Partes Review disclosure ("IPR") from the U.S. Patent and Trademark Office, which linked the PVLAN patents to RFC 5517. *Id.* at 82; *see also* RX-3852. However, the IPR submission does not relate to infringement by Arista. In addition, contrary to Arista's assertion, the mere fact that other companies implement VLAN features does not mean that those companies infringe the PVLAN patents (and Arista has offered no proof that they do) or that because other companies implemented PVLAN that Cisco should have known that Arista infringed. Accordingly, the Commission finds that Arista has not met its burden in proving laches for the PVLAN patents.

E. Technical Prong of Domestic Industry

The Commission affirms the ID's findings that the domestic industry products asserted for the '592 and '145 patents practice the asserted domestic industry claims consistent with the constructions herein. *See* ID at 203-224.

VII. THE '164 PATENT

The ID finds that the '164 patent is not infringed and that the technical prong of the domestic industry was not met. ID at 250-255. Cisco did not petition for review of these findings. The Commission affirms these findings and takes no position on other issues related to the '164 patent (*e.g.*, laches).

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VIII. ECONOMIC PRONG OF DOMESTIC INDUSTRY

No party petitioned for review the ID's determination on the economic prong of domestic industry but the Commission determined on its own motion to review the ID's findings on the economic prong of domestic industry. 19 C.F.R. § 210.44.

In order to establish a domestic industry, pursuant to section 337(a)(2) and (3), Cisco must establish "(A) significant investment in plant and equipment; (B) significant employment of labor or capital; or (C) substantial investment in [the patent's] exploitation, including engineering, research and development, or licensing." 19 U.S.C. § 1337(a)(2), (3). The Commission affirms the ID's finding that Cisco has established substantial investment in the exploitation of the patents under section 337(a)(3)(C) and takes no position on the other categories.

IX. REMEDY, BONDING AND PUBLIC INTEREST

Where a violation of section 337 has been found, the Commission must consider the issues of remedy, the public interest, and bonding. Section 337(d)(1) provides that "[i]f the Commission determines, as a result of an investigation under this section, that there is a violation of this section, it shall direct that the articles concerned, imported by any person violating the provision of this section, be excluded from entry into the United States ..." 19 U.S.C. § 1337 (d)(1).

A. Limited Exclusion Order ("LEO")

Cisco is seeking a limited exclusion order covering the accused products found in violation of section 337. Cisco Br. at 84-88. More specifically, the RD explains that Cisco seeks an LEO covering:

Arista's imported network equipment, and also components and software therein, such as switches and their components, operating systems and/or

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other software, and “all products covered by the patent claims as to which a violation has been found,” not just specific models accused of infringement.

RD at 3.

The RD recommends that the Commission issue an LEO covering products and components thereof that infringe the asserted claims. *Id.* at 5. The RD further recommends that the LEO include a standard certification provision. *Id.*

The Commission has “broad discretion in selecting the form, scope, and extent of the remedy.” *Viscofan, S.A. v. U.S. Int’l Trade Comm’n*, 787 F.2d 544, 548 (Fed. Cir. 1986). The Commission may issue an exclusion order excluding the goods of the person(s) found in violation (a limited exclusion order) or, if certain criteria are met, against all infringing goods regardless of the source (a general exclusion order). As the ALJ recommended, the Commission finds that the appropriate remedy in this investigation is an LEO and a CDO. With respect to the LEO, the Commission includes both the standard¹⁹ certification provision and an exemption for warranty and repair of existing products Arista has already sold to customers for which Arista is obligated to provide warranty, repair services, or software update services. With respect to the warranty/service provision, Cisco contends, if the Commission opts to include such a provision, that it should be limited to six-months from the time the LEO issues arguing that it will cover most of Arista’s warranty/service obligations. Warranty and repair exemptions are common in Commission orders but they are usually not time limited. [[

¹⁹ The standard provision does not allow an importer to simply certify that it is not violating the exclusion order as Arista suggests. CBP only accepts a certification that the goods have been previously determined by CBP or the Commission not to violate the exclusion order.

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]]. Therefore, the Commission finds that a time limit is not appropriate.

The Commission declines to adopt Cisco's proposal that the Commission require Arista to seek modification of the Commission's orders or an advisory opinion for any redesign. The Commission has recently included such provisions in investigations, which involved spoliation of evidence. *Certain Opaque Polymers*, Inv. No. 337-TA-883, Comm'n Op. at 23-24 (Apr. 30, 2015); *Certain Stainless Steel Products, Certain Processes for Manufacturing or Relating to Same, and Certain Products Containing Same*, Inv. No. 337-TA-933, Comm'n Op. at 32 (June 9, 2016). No such circumstances exist here. Cisco has not provided sufficient reasons for the Commission to depart from CBP's and the Commission's normal practice.

B. Cease and Desist Order ("CDO")

Cisco seeks a cease and desist order directed against Arista. Cisco Br. at 89. The RD notes that the Commission generally issues a CDO with respect to the imported infringing products, when a respondent maintains a commercially significant inventory of the infringing products within the United States. RD at 5-6. The RD notes that Arista did not specifically address the appropriateness of a CDO in its post-hearing briefing. *Id.* at 7. The RD finds that the evidence demonstrates that Arista maintains a commercially significant inventory of the accused products. *Id.* Cisco presented evidence that Arista has maintained, on average, a total of [[]] units of inventory of its networking products at [[]] in [[]] between [[]]. *Id.* at 6. Therefore, the RD recommends that the Commission issue a CDO. *Id.* at 7.

Section 337(f)(1) provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a cease and desist order as a remedy for a violation of section

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337. 19 U.S.C. § 1337(f)(1). Cease and desist orders are generally issued when, with respect to the imported infringing products, respondents maintain commercially significant inventories in the United States or have significant domestic operations that could undercut the remedy provided by an exclusion order. *See, e.g., Certain Protective Cases and Components Thereof*, Inv. No. 337-TA-780, USITC Pub. No. 4405 (July 2013), Comm'n Op. at 28 (Nov. 19, 2012) (citing *Certain Laser Bar Code Scanners and Scan Engines, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-551, Comm'n Op. at 22 (June 14, 2007)); *Certain Agricultural Tractors, Lawn Tractors, Riding Lawnmowers, And Components Thereof* ("Agricultural Tractors"), Inv. No. 337-TA-486, USITC Pub. No. 3625, Comm'n Op. at 17 (August 14, 2003)). A complainant seeking a cease and desist order must demonstrate, based on the record, that this remedy is necessary to address the violation found in the investigation so as to not undercut the relief provided by the exclusion order. *Certain Integrated Repeaters, Switches, Transceivers, and Products Containing Same*, Inv. No. 337-TA-435, USITC Pub. No. 3547 (Oct. 2002), Comm'n Op. at 27 (Aug. 16, 2002) ("[C]omplainants bear the burden of proving that respondent has such an inventory. Because complainants failed to sustain their burden, we have determined not to issue a cease and desist order."); see also H.R. Rep. No. 100-40, at 160 (1987) ("When the Commission determines that both remedies [i.e., an exclusion order and cease and desist order] are necessary, it should be without legal question that the Commission has authority to order such relief.").

Arista does not present any arguments why a CDO should not issue. In this investigation, the record evidence demonstrates that there is a commercially significant U.S. inventory. CX-0010C at Q/A 238–242 (testifying to Arista's amount of inventory and concluding that it is

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commercially significant). Accordingly, the Commission determines that a CDO is appropriate.²⁰

C. Bonding

Cisco is seeking imposition of a 100 percent bond. Cisco Br. at 89-91. The RD rejected Cisco's proposal for a 100 percent bond rate. RD at 11-12. In particular, the RD finds that Cisco failed to demonstrate that a price differential was not an appropriate method for calculating the bond, or that a reasonable royalty rate could not be calculated. *Id.* Therefore, the RD concludes that no bond should be required during the Presidential review period. *Id.* at 12.

²⁰ Commissioner Schmidlein supports issuance of the cease and desist order in this investigation. She agrees with the Commission that Arista's domestic inventory provides a basis for issuing the order. She, however, finds it unnecessary to confirm the existence of a "commercially significant" inventory because a commercially significant domestic inventory is not a statutory requirement. *See* 19 U.S.C. § 1337(f)(1). Indeed, the statutory language leaves it to the discretion of the Commission and does not establish any particular test or standard for issuing a cease and desist order aside from consideration of the public interest factors. *See Gamut Trading Co. v. Int'l Trade Comm'n*, 200 F.3d 775, 784 (Fed. Cir. 1999) (explaining that the Commission has broad discretion in selecting a remedy). From a practical standpoint, Commissioner Schmidlein fails to see the value gained by requiring parties and the Commission to expend time and resources addressing the extent of domestic inventory levels as a predicate to issuing cease and desist orders. In her view, such a requirement unnecessarily carries risk for the complainant since even the presence of one infringing product in domestic inventory can undercut the exclusion order and prevent complete relief to the complainant. Thus, Commissioner Schmidlein finds that the presence of some domestic inventory, regardless of the commercial significance, provides a basis to issue the cease and desist order.

Commissioner Schmidlein does not join the Commission's statement that a complainant seeking a cease and desist order must demonstrate that the remedy is "necessary" to address the violation found in the investigation. It is unclear what the Commission intends to convey by the statement, but on its face it appears to limit the broad discretion granted to the Commission under section 337(f)(1). In Commissioner Schmidlein's view, the House committee report cited by the Commission as support does not address the standard for determining whether a cease and desist order should issue. *See* H.R. Rep. No. 100-40, at 160 (1987). Instead, the committee report simply explains that the amendments to section 337(f)(1) under the Omnibus Trade and Competitiveness Act of 1988 authorize the Commission to issue both a cease and desist order and an exclusion order to remedy the same unfair act. *See id.* at 22, 159.

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During the 60-day period of Presidential review, imported articles otherwise subject to remedial orders are entitled to conditional entry under bond. 19 U.S.C. § 1337(j)(3). The amount of the bond is specified by the Commission and must be an amount sufficient to protect the complainant from any injury. *Id.*; 19 C.F.R. § 210.50(a)(3). The Commission frequently sets the bond by calculating the difference in sales prices between the patented domestic product and the infringing product or based upon a reasonable royalty. *Certain Microsphere Adhesives, Process For Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes*, Inv. No. 337-TA-366, Comm'n Op. at 24, USITC Pub. No. 2949 (Jan. 1996). In cases where the record does not contain sufficient evidence upon which to base a determination of the appropriate amount of the bond despite a complainant's effort to adduce such evidence, the Commission has set a 100 percent bond. *See Certain Sortation Systems, Parts Thereof, and Products Containing Same*, Inv. No. 337-TA-460, Comm'n Op. at 21 (Mar. 2003). Complainants bear the burden of establishing the need for a bond amount in the first place. *Certain Rubber Antidegradants, Components Thereof, and Prods. Containing Same*, Inv. No. 337-TA-533, Comm'n Op. at 39-40 (July 21, 2006).

The Commission adopts the ALJ's recommendation and sets the bond at zero percent. The burden in proving that a bond is necessary falls on Cisco. Here, Mr. Leonard, Cisco's expert, offered conclusory testimony to assert that neither a reasonable royalty or price differential could be calculated. CX-0010C at Q/A 247-60. In addition, Cisco argues for the first time in its briefing before the Commission that, in the alternative, a five percent bond should be set. The evidence presented to the Commission on whether a five percent bond is appropriate was not well developed and there was no evidence in the RD to consider due to Cisco's failure to

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provide support for its request for a bond before the ALJ. Accordingly, the Commission sets the bond at zero percent.

D. Public Interest

Sections 337(d) and (f) of the Tariff Act of 1930, as amended, direct the Commission to consider certain public interest factors before issuing a remedy. These public interest factors include the effect of any remedial order on “the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers.” 19 U.S.C. §§ 1337(d) and (f).

The Commission finds that the public interest does not preclude the issuance of a remedy in this investigation. Cisco asserts that there are no public interest concerns that prevent the issuance of a remedy in this investigation. Cisco Br. at 91-94. We agree with Cisco that (1) there are numerous alternative networking technologies, including those supplied by Cisco and others in the industry, (2) Cisco has the resources and supply chain to scale production to meet any increase in demand, and (3) there would be no harm to competitive conditions if Arista’s products were excluded. *Id.*

The only public interest issue Arista raises is its assertion that the PVLAN patents are the subject of a *de facto* standard, thereby precluding issuance of a remedy for those patents. *See* Respondent Arista’s Public Interest Submission Under 210.50(a) (March 17, 2016); Arista Br. at 84-108.²¹ Arista admits that RFC 5517 is not a *de jure* standard. Arista Br. at 95-96. Instead,

²¹ Arista submitted letters from various third-parties on this issue, including [[

]]. The Commission has considered these submissions.

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Arista argues that based on Cisco's actions that RFC 5517 should be found to be a *de facto* standard and that the PVLAN patents are essential.

Arista relies on Mr. HomChaudhuri's Linked-In page to argue that RFC 5517 is a *de facto* standard because it states that he helped develop *de facto* standard RFC 5517. Mr. HomChaudhuri's testified, however, that the statement on his Linked-In page was [[]] and explains that the intent of RFC 5517 was not to have others adopt PVLAN, but if they did, that they could see how the technology should behave. RX-53C at 76; *see also* JX-0051C at 248-49; CX-1222C at Q/A 57-61.

Arista also argues that Cisco promoted PVLAN within the industry such that it became a standard. Arista Br. at 86-88. Although other Cisco competitors have PVLAN functionality available, Arista cites no evidence that they adopted or relied on RFC 5517 or the PVLAN patents. Indeed, competitors are not required to practice the PVLAN patents or RFC 5517 because they are not part of a formal standard. Arista admits that [[

]]. The mere fact that others in the industry offer PVLAN functionality, without more, does not demonstrate that they practice RFC 5517, the PVLAN patents, or that PVLAN is a *de facto* standard.

Arista also asserts that the PVLAN patents are essential based on Cisco's actions, including Cisco's filing of RFC 5517, tying of RFC 5517 to the PVLAN patents, and relying on Arista's implementation of RFC to show infringement. Arista Br. at 89-91. Cisco's submission to IETF, however, states that RFC 5517 is not a standard and *if* IETF adopts RFC 5517 as a standard *and* any claims of Cisco patents are necessary for practicing the standard, Cisco will offer its technology for licensing under FRAND terms. *See* RX-3852. Arista admits that these conditions have not been met. Arista Br. at 95. Without further action by Cisco to encourage

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others to adopt RFC 5517 or evidence that the industry has adopted RFC 5517 as a standard, the Commission finds that RFC 5517 is not a *de facto* standard. Arista also asserts that patent hold-up has occurred. *See, e.g.*, Arista Br. at 91-97. Here, however, there is no record evidence to support a finding that patent hold-up has occurred or is likely to occur. In particular, there is nothing on the record demonstrating the existence of an industry standard or that Cisco had an obligation to offer licenses with respect to the PLVAN patents on a fair, reasonable, and non-discriminatory basis. Consequently, there are no public interest concerns barring the issuance of a remedy in this investigation.

X. CONCLUSION

For the forgoing reasons, the Commission finds that a violation of section 337 has occurred.

By order of the Commission.



Lisa R. Barton
Secretary to the Commission

Issued: July 26, 2016

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **COMMISSION OPINION** has been served by hand upon the Commission Investigative Attorney, Andrew Beverina, Esq., and the following parties as indicated, on **July 26, 2016**.



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