

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Palo Alto Networks, Inc.,
Fortinet, Inc. and
WatchGuard Technologies, Inc.
Petitioners,

v.

Selective Signals, LLC
Patent Owner

IPR2018-00594
PATENT 8,111,629

**PATENT OWNER'S REPLY TO PETITIONERS' OPPOSITION TO
PATENT OWNER'S MOTION TO AMEND**

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I. SUBSTITUTE CLAIMS DO NOT INTRODUCE NEW MATTER

Patent Owner's substitute claims do not introduce new matter. Petitioners challenge substitute Claims 25–29 (Claim 25 is independent; Claims 26–29 depend from Claim 25. Petitioners' analysis focuses only on independent Claim 25). IPR2018-00594, Petitioner's Opposition to Patent Owner's Contingent Motion to Amend, Paper No. 26 (Feb. 21, 2019) ("Opp.") at 3–7.

For Claim 25, Petitioners argue against Patent Owner's addition to original Claim 17 of a clarified definition of "traffic packet characteristics." Specifically, Petitioners object to the addition of the clause "wherein the traffic packet characteristics comprise parameters associated with a traffic packet, the parameters including more than packet header information." Opp. At 5. Petitioners argue this amendment is improper because (1) the '510 Application is not "an exhibit and therefore it is not part of the record;" (2) Patent Owner "fails to identify support in the original disclosure for all limitations;" and (3) Patent Owner's citations do "describe traffic packet characteristics as requiring packet header information and something more than packet header information." *Id.* at 5–6. Each of Petitioners' arguments fails.

First, the fact that the '510 Application was not an exhibit prior to the filing of this Reply is irrelevant. Petitioners filed with the Petition Exhibit 1002, "select portions of prosecution history of the '629 Patent." This exhibit demonstrates

Petitioners had access to the '510 Application, which was part of the file history of the '629 Patent. Petitioners' access is further illustrated by Petitioners' further arguments regarding the substance of Patent Owner's citations to the '510 Application. Additionally, the '510 Application is part of the public record of the '629 Patent at the Patent & Trademark Office, access to which is equally available to Petitioners, Patent Owner, the Board, and the public. Should it deem it necessary to do so, the Board may take official notice of the '510 Application. *See* 37 C.F.R. § 41.152 (“[T]he Federal Rules of evidence shall apply to contested cases. . . . Judicial notice means official notice.”); *Versata Software, Inc. v. Callidus Software, Inc.*, 771 F.3d 1368, 1372 (Fed. Cir. 2014), vacated on other grounds, 780 F.3d 1134 (Fed. Cir. 2015) (taking judicial notice of “the fact that the PTAB has made a decision instituting CBM review). In any event, Patent Owner has submitted the entire file history of the '629 Patent, including the '510 Application, as Exhibit 2015.

Petitioners next argue that because Patent Owner only provided citations supporting the newly-introduced limitations, the Board should dismiss Patent Owner's Contingent Motion to Amend. Opp. At 6. To the extent any amended claim includes subject matter recited in an originally-filed application, that subject matter provides its own written description support. While Patent Owner disagrees with Petitioners' characterization, Patent Owner provides as an appendix to this Reply

additional citations for all limitations of the amended claims.

Finally, Petitioners argue that Patent Owner made “no attempt to explain how these citations support the added limitations” or “submit the testimony of a POSA to identify how the original disclosure supports the Substitute Claims.” Opp. at 6. Petitioners provide no authority whatsoever that either is required. Petitioners argue is is “not sufficient that the original disclosure discloses that traffic packet characteristics can include header information and non-header information. The original disclosure must support the claimed invention, including that header and non-header information is used in each of the ‘obtaining,’ ‘comparing,’ and ‘grouping’ limitations.” *Id.* at 6–7. Petitioners cite *Lockwood v. Am. Airlines* for the proposition that it is insufficient to disclose only enough that “one skill in the art *might* be able to construct he patentee’s device from the teachings of the disclosure.” *Id.* (citing *Lockwood*, 107 F.3d 1565, 1572 (Fed. Cir. 1997)). Yet Petitioners have not alleged—and cannot show—that Patent Owner’s citations do not meet this standard. The burden of showing unpatentability *does not lie with the Patent Owner. Aqua Prods., Inc. v. Matal*, 872 F.3d 1290, 1324 (Fed. Cir. 2017). Petitioners have provided ***no reason*** why Patent Owner’s citations would leave one of ordinary skill in the art wondering how the citations support the “obtaining,” “comparing,” and “grouping” limitations.

II. SUBSTITUTE CLAIMS ARE NOT INDEFINITE UNDER 35 U.S.C. § 112

Petitioners argue that the “addition of the wherein clause in the Substitute Claims leads to an ambiguous and undefined scope which does not satisfy the requirements of 35 U.S.C. § 112.” Opp. at 8. First, Petitioners do not use the correct standard for definiteness under 35 U.S.C. § 112. The correct standard is whether one of ordinary skill in the art would not have reasonable certainty regarding Claim 25’s scope. *See* MPEP § 2173; *Nautilus, Inc. v. Biosig Instruments, Inc.*, 527 U.S. 898, 910–11 (2014). Petitioners never allege that Patent Owner’s amendments do not meet this standard. Rather, Petitioners argue “it is unclear” whether “‘more than header information’ is to be used in each of the ‘obtaining,’ ‘comparing’ and ‘grouping’ limitations.” Opp. at 8. Petitioners’ argument ignores the language of the amended claim.

Amended Claim 25 recites “obtaining traffic packet characteristics,” “comparing . . . using respectively obtained traffic packet characteristics,” and “grouping together those packets having similar values of said traffic packet characteristics.” Amended Claim 25 recites “traffic packet characteristics comprise parameters including more than packet header information.” Thus, each of the “comparing,” “grouping,” and “obtaining” steps use “more than packet header information.” Petitioners’ objection that this is somehow unclear, much less so unclear as to give rise to indefiniteness, is puzzling and should be dismissed.

III. SUBSTITUTE CLAIMS 25–29 ARE PATENTABLE

A. Petitioners’ Reliance on *Duffield* Is Misplaced

Petitioners’ argument relies on the addition of *Duffield* to their currently-proposed combination of *Pappu* and *Peleg* to disclose each and every limitation of the amended claims. Opp. at 10–25. Petitioners argue *Pappu* and *Peleg* disclose grouping packets using more than packet header information. In support, Petitioners repeat their arguments made in the Petition, asserting that the “express disclosures of *Pappu* and *Peleg*” disclose using more than header information. *Id.* at 10–11. Petitioners’ argue *Pappu* and *Peleg* “are not limited to traffic packet characteristics in the form of header information.” *Id.* at 11. Yet the only portions to which Petitioners cite are recitations of data that *Pappu* never actually uses. As detailed in Patent Owner’s Response, *Pappu* only sufficiently discloses the use of a five-tuple, which is header-only information.

Petitioners do cite to Claim 1 of *Pappu*, which recites “said flow being incapable of being identified by header information alone.” *Id.* As Patent Owner noted in its sur-reply to Petitioner’s Reply to Patent Owner’s Response, Petitioners’ failed to tie this language from *Pappu* to any specific claim language in the ’629 Patent. Additionally, Patent Owner believes that this element is not supported by the specification of *Pappu*. As detailed throughout Patent Owner’s Response, *Pappu* only discloses the use of the five-tuple in flow analysis. E.g., Resp. at 17–18. This

element of Claim 1 was added after four years of prosecution, two Requests for Continued Examination, and with no substantive comment from the Applicant. See Select Portions of the File History of Pappu, attached hereto as EX2008 at 6–15. The Examiner made no note of this limitation in the Notice of Allowance. *Id.* at 1–5. A reference is enabling as prior art only if the reference describes the claimed invention in sufficient detail to enable a person of ordinary skill in the art to carry out the claimed invention. MPEP § 2121. Petitioners have not pointed to any portion of *Pappu* that would enable a person of ordinary skill in the art to actually identify a flow that is “incapable of being identified by header information alone.”

Petitioners also repeat their arguments regarding the “state of the art” and *Duffield*, relying on various references to “packet length” (a header parameter within the context of *Duffield*), “5-tuple packet header information” (header parameters), and “inter-arrival times between packets” (non-header information that Petitioners provide no evidence is ever actually used). *Opp.* at 12 (citing EX1005 at 1:7–14, 6:28–47). While Petitioners do cite *Duffield*’s description of inter-arrival time “as a measure of burstiness,” *Opp.* at 13 (citing EX1005 at 7:20–24), this section of *Duffield* describes analysis of a flow after the flow has already been identified. The cited *Duffield* description is not relevant to the amended claims. Petitioners’ attempt to tie the cited *Duffield* description to the language of the amended claims, *see* Section III.B.5 *infra*, is misplaced and should be rejected.

B. Petitioners’ Proferred Combinations Do Not Disclose Each and Every Limitation of the Amended Claims

Petitioners’ arguments in their Opposition rely on the same arguments Petitioners made in their Petition and Reply that (1) *Pappu* recites the “session” limitations (Opp. at 15–16, 24–25), and (2) *Pappu* recites “traffic packet characteristics” that include more than header information. Petitioners’ arguments are identical to those made in the Petition and Reply. *See, e.g.*, Opp. at 25 (analyzing elements of amended independent Claim 25 only by citation to the Petition). Patent Owner therefore also incorporates Patent Owner’s counterarguments found in Patent Owner’s Preliminary Response, Response, and Sur-Reply.

1. *A method of identifying session type*

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 15 (citing Pet. at 38–39, EX1011 ¶ 21). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 20–27, Sur-Reply at 11–18.

2. *Obtaining passing packets of respectively unknown session and unknown session types*

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 15 (citing Pet. at 39–40, EX1011 ¶ 22). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 20–27, Sur-Reply at 11–18.

3. *Obtaining traffic packet characteristics of said passing packets of respectively unknown session types*

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 16 (citing Pet. at 31–33, 40, EX1011 ¶ 23). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 16–19, 20–27; Sur-Reply at 11–18.

4. *Comparing said obtained packets with each other using respectively obtained traffic packet characteristics*

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 15 (citing Pet. at 28–29, 32–33, 41–42; EX1011 ¶¶ 24–28). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 16–19, 20–27; Sur-Reply at 11–18.

5. *Grouping together those packets having similar values of said traffic packet characteristics into a presumed session*

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 15 (citing Pet. at 39–40, 43–45; EX1011 ¶¶ 29–39). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 16–19, 20–27; Sur-Reply at 11–18. To the extent Petitioners make new arguments concerning *Pappu*, see also Section III *supra*.

Petitioners’ new argument concerning the combination of *Pappu*, *Peleg*, and *Duffield* relies on “grouping arriving packets based on [developed] attributes into different classes of service.” Opp. at 23 (citing EX1005 at 5:7–14, FIG. 1; EX1011

¶ 37). Petitioners’ cited portion of *Duffield* discloses assigning incoming packets to a “class” *after that class has already been determined based on the developed attributes*. EX1005 at 5:7–14. Even assuming *Duffield*’s “attributes” could be equated with the ’629 Patent’s “traffic packet characteristics,” nothing in the cited portion of *Duffield* teaches or suggests grouping packets into a *presumed session*. There is no presumption. There is no session. Further, Petitioners have not identified any reason *why* one of ordinary skill in the art would seek to combine *Pappu* and *Duffield*. According to Petitioners, *Pappu* teaches the use of “more than header information” in grouping packets. Opp. at 21–22. It is unclear what problem with *Pappu* Petitioners seek to solve with *Duffield*.

Even if the combination of *Pappu* and *Duffield* were proper, however, such a combination would still not disclose grouping packets into a “presumed session.” As Patent Owner has noted repeatedly, *Pappu* does not disclose anything related to sessions. *Duffield* does not remedy this deficiency. *Duffield* is concerned with managing traffic at the flow level, and specifically at the network and transport layers.

6. Analyzing said grouped packets of said presumed session for session characteristics

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 24 (citing Pet. at 46–48; EX1011 ¶¶ 40). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 16–19, 20–27,

31–32; Sur-Reply at 11–18.

7. *Using said session characteristics to identify a session type of said presumed session*

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 15 (citing Pet. at 48–49; EX1011 ¶ 41). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 16–19, 20–27, 31–32; Sur-Reply at 11–18.

8. *Wherein the traffic packet characteristics comprise parameters associated with a traffic packet, the parameters including more than packet header information*

Petitioners rely on their arguments from the supplementary declaration of their expert. Opp. at 25 (citing EX1011 ¶ 42). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 7–11, 11–15, 16–26; Sur-Reply at 3–7, 11–18.

9. *Wherein said identifying a session type is followed by at least one of the group comprising: providing provisioning and providing control actions to the presumed session*

Petitioners rely on their arguments from the Petition and the supplementary declaration of their expert. Opp. at 25 (citing Pet. at 49–51; EX1011 ¶ 43). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 7–28; Sur-Reply at 11–18.

10. *Dependent Substitute Claims 26–29*

Petitioners rely on their arguments from the Petition and the supplementary

declaration of their expert. Opp. at 25 (citing Pet. at 51–55; EX1011 ¶ 44). Patent Owner’s Response and Sur-Reply address these arguments. Resp. at 7–28; Sur-Reply at 11–18.

IV. CONCLUSION

For at least these reasons, Petitioners have failed to show Patent Owner’s amended claims are unpatentable or that Patent Owner’s Contingent Motion to Amend should be denied. Patent Owner therefore requests the Board approve Patent Owner’s Contingent Motion to Amend should the Board find that a preponderance of the evidence establishes that Claims 15 and 17–22 are unpatentable.

Date: March 11, 2019

Respectfully submitted,

By: /Benjamin R. Johnson/

Benjamin R. Johnson

Reg. No. 64,483

Toler Law Group, PC

8500 Bluffstone Cove

Suite A201

Austin, Texas 78759

Timothy Devlin

Reg. No. 41,706

Devlin Law Firm LLC

1306 North Broom Street

1st Floor

Wilmington, DE 19806

Attorneys for Patent Owner

APPENDIX—ADDITIONAL CLAIM SUPPORT

Claim Number	Element	Support in '510 App
25	A method of identifying session type, comprising:	Page 1, lines 6–10; page 4, lines 9–23; page 8 line 29 to page 9, line 6
	obtaining passing packets of respectively unknown sessions and unknown session types;	Page 4, lines 27–29, page 9, lines 23–30, page 10, lines 13–18, page 18, lines 1–5
	obtaining traffic packet characteristics of said passing packets of respectively unknown session types;	Page 4, lines 10–24; page 5, lines 1–7; page 5, lines 21–24; page 7, lines 1–2; page 7, lines 5–11; page 9, lines 3–5; page 9, lines 22–30
	comparing said obtained packets with each other using respectively obtained traffic packet characteristics;	Page 12, lines 23–25; page 7, lines 5–11; page 9, lines 22–30; page 11, lines 22–28
	grouping together those packets having similar values of said traffic packet characteristics into a presumed session;	Page 11, lines 29–33; page 16, lines 3–7
	analyzing said grouped packets of said presumed session for session characteristics; and	Page 16, lines 8–17; page 7, lines 1–11; page 9, lines 13–21; page 10, lines 13–18
	using said session characteristics to identify a session type of said presumed session,	Page 10, lines 13–18
	wherein the traffic packet characteristics comprise parameters associated with a traffic packet, the parameters including more than packet header information, and	page 2, lines 12–17; page 5, lines 15–16; page 5, line 27 to page 6, line 27; page 8, line 29 to page 9, line 6; page 9, lines 22–30; page 10, lines 25–26; and page 11, lines 16–28
	wherein said identifying a session type is followed by at least one of the group comprising: providing provisioning and providing control actions to the presumed session.	Page 9, lines 13–21

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), we certify that this Reply to Petitioners' Opposition to Motion to Amend complies with the type-volume limitation of 37 C.F.R. § 42.24(c) because it contains no more than the limit of 12 pages, as determined by the word-processing program used to prepare the brief, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a)(1).

Date: March 11, 2019

Respectfully submitted,

By: /Benjamin R. Johnson/

Benjamin R. Johnson

Reg. No. 64,483

CERTIFICATE OF SERVICE

I certify that the foregoing PATENT OWNER'S REPLY TO
PETITIONERS' OPPOSITION TO MOTION TO AMEND was served on the
Petitioner counselors of record by electronic notification, as consented to by the
petitioner:

Patrick D. McPherson, Reg. No. 46,255; PDMcPherson@duanemorris.com
Patrick Craig Muldoon, Reg. No. 47,343; PCMuldoon@duanemorris.com
David C. Dotson, Reg. No. 59,427, DCDotson@duanemorris.com
James H. Hall, Reg. No. 66,317, JHall@blankrome.com

Dated: March 11, 2019

Respectfully submitted,

/Angie K. Blazek/
Angie K. Blazek
TOLER LAW GROUP, PC
8500 Bluffstone Cove, Suite A201
Austin, Texas 78759
Telephone: (512) 327-5515
Facsimile: (512) 327-5575