UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PALO ALTO NETWORKS, INC.,
Petitioner,

v.

CENTRIPETAL NETWORKS, INC.,
Patent Owner.

Case IPR2021-01155
U.S. Patent No. 10,567,343

PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 37 C.F.R. § 42.107

TABLE OF CONTENTS

Page

I. INTRODUCTION 1

II. THE BOARD SHOULD DENY THE PETITION UNDER 35 U.S.C. § 314(a) 4

A. The Board Should Deny Institution in View of the Advanced Stage of the Co-Pending Litigation 4

1. Factor 1: The Unlikely Potential for a Stay Weighs in Favor of Denying Institution 5

2. Factor 2: The Early Trial Date Weighs in Favor of Denying Institution 5

3. Factor 3: The Significant Investment in Parallel Proceedings Weighs in Favor of Denying Institution 6

4. Factors 4 & 5: Overlapping Issues and Parties Weigh in Favor of Denying Institution 8

5. Petitioner's Dilatory Conduct Weighs in Favor of Denying Institution 9

B. The Board Should Deny Institution in View of Petitioner's Recurrent Word Count Violations 10

III. THE '343 PATENT 13

A. Overview of the '343 Patent 13

B. Prosecution History of the '343 Patent 14

C. The '343 Patent Claims are Materially Different from the '552 Patent Claims 16

D. Reexamination of the '193 Patent 21

E. Claim Construction 24

IV. OVERVIEW OF *SOURCEFIRE* 24

V. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY THIS PROCEEDING UNDER 35 U.S.C. § 325(d).....25

A. The Petition Presents the Same Art and Arguments Previously Considered by the Office.....25

1. *Sourcefire* Was Expressly Considered During Prosecution of the ’343 Patent.....27

2. *Sourcefire* Was Extensively Considered During Reexamination of the ’343 Patent’s Parent.....30

3. The Patent Office Previously Considered Substantially the Same Art as *Mantripragada* 31

B. Petitioner Does Not Show Material Error by the Patent Office.....33

1. Petitioner Has Failed to Sufficiently Explain How the Examiner Erred in His Evaluation of *Sourcefire*.....35

2. Petitioner Identifies No Additional Evidence or Factors that Warrant Reconsideration of *Sourcefire* 38

VI. THE CHALLENGED CLAIMS ARE NOT OBVIOUS OVER *SOURCEFIRE* AND *MANTRIPRAGADA*.....40

A. Petitioner Has Not Shown that *Sourcefire* Teaches the Exfiltration Operation Limitation.....40

B. The Petition Has Provided No Reason for Why a Skilled Artisan Would Have Been Motivated to or Would Reasonably Expect Success Modifying *Sourcefire* to Prevent Exfiltration 47

C. Petitioner’s Analysis is Tainted by Hindsight Bias 49

D. The Petition Has Failed to Address the Secondary Considerations Recognized in Prior Proceedings.....50

VII. CONCLUSION.....52

TABLE OF AUTHORITIES

Page(s)

Cases

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH,
No. IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020).....*passim*

Amazon.com, Inc., v. M2M Solutions LLC,
No. IPR2019-01204, Paper 43 (P.T.A.B. Jan. 20, 2021) 20

Apple Inc. v. Fintiv, Inc.,
No. IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020).....4, 6, 7, 10

Belden Inc. v. Berk-Tek LLC,
805 F.3d 1064 (Fed. Cir. 2015) 44

Belden Techs. Inc. v. Superior Essex Commc'ns LP,
No. 08-63-SLR, 2010 WL 3522327 (D. Del. Sept. 2, 2010).....10

Bio-Rad Labs., Inc. v. 10X Genomics,
No. IPR2019-00567, Paper 23 (P.T.A.B. Aug. 8, 2019).....8

Biocon Pharma Ltd., v. Novartis Pharm. Corp.,
No. IPR2020-01263, Paper 12 (P.T.A.B. Feb. 16, 2021).....29

Bushnell Hawthorne, LLC v. Cisco Sys., Inc.,
No. 1:18 cv-00760, Dkt. 88 (E.D. Va. Apr. 22, 2019) 5

Centripetal Networks, Inc. v. Palo Alto Networks, Inc.,
No. 2:21-cv-00137-RCY-RJK (E.D. Va. Mar. 12, 2021) 1

Centripetal Networks v. Cisco Sys., Inc.,
No. 20-1635 (Fed. Cir. Mar. 10, 2021).....16

Cisco Sys., Inc. v. C-Cation Techs., LLC,
No. IPR2014-00454, Paper 12 (P.T.A.B. Aug. 29, 2014).....11, 12

Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.,
No. IPR2020-00122, Paper 15 (P.T.A.B. May 15, 2020) 5, 6

Cobalt Boats, LLC v. Sea Ray Boats, Inc.,
No. 2:15-cv-00021, 2015 WL 2454296 (E.D. Va. May 21, 2015) 5

Comair Rotron, Inc. v. Nippon Densan Corp.,
49 F.3d 1535 (Fed. Cir. 1995) 19, 20

Cont'l Auto. Sys., Inc. v. Hamaton Auto. Tech. Co.,
No. 2:16-cv-00226, Dkt. 63 (E.D. Va. Feb. 7, 2017) 7

Cultec, Inc. v. StormTech LLC,
No. IPR2017-00777, Paper 7 (P.T.A.B. Aug. 22, 2017).....30

EHS Lens Philippines, Inc. v. Essilor Int'l.,
No. 3:16-cv-00563-JAG, 2016 WL 11670108
(E.D. Va. Sept. 22, 2016).....5

EMC Corp. v. Intell. Ventures I LLC,
No. IPR2017-00429, Paper 11 (P.T.A.B. July 5, 2017) 11

Garmin Int'l, Inc. v. Logantree, LP,
825 F. App'x 894 (Fed. Cir. 2020) 40

Graham v. John Deere Co.,
383 U.S. 1 (1966).....51

Google Inc. v. Ji-Soo Lee,
No. IPR2016-00022, Paper 25 (P.T.A.B. Nov. 23, 2016).....13

Hengdian Grp. DMEGC Magnetics Co. v. Hitachi Metals, Ltd.,
No. IPR2017-01313, Paper 7 (P.T.A.B. Nov. 6, 2017).....37

Husky Injection Molding Sys.,
No. IPR2020-00428, Paper 24 (P.T.A.B. July 28, 2020) 37

Husky Injection Molding Sys., Ltd. v. Plastipak Packaging, Inc.,
No. IPR2020-00435, Paper 23 (P.T.A.B. July 28, 2020) 28, 29

Innovations4Flooring NV v. Välinge Innovation AB,
No. IPR2017-02130, Paper 8 (P.T.A.B. Feb. 7, 2018).....13

In re Gordon,
733 F.2d 900 (Fed. Cir. 1984) 44

Intel Corp. v. VLSI Tech. LLC,
No. IPR2020-00141, Paper 16 (P.T.A.B. June 4, 2020) 6

Intell. Bio-Sys. Inc. v. Illumina Cambridge Ltd.,
821 F.3d 1359 (Fed. Cir. 2016) 47, 48

Ivantis, Inc. v. Glaukos Corp.,
No. IPR2019-00483, Paper 8 (P.T.A.B. July 8, 2019) 32, 33

Johns Manville Corp. v. Knauf Insulation, Inc.,
No. IPR2018-00827, Paper 9 (P.T.A.B. Oct. 16, 2018) 48

Limelight Networks, Inc. v. Akamai Techs., Inc.,
No. IPR2016-01894, Paper 8 (P.T.A.B. Mar. 8, 2017) 12

KSR Int'l Co. v. Teleflex Inc.,
550 U.S. 398 (2007).....47

Microsoft Corp. v. Parallel Networks Lic., LLC,
No. IPR2015-00486, Paper 10 (P.T.A.B. July 15, 2015) 29

Mintz v. Dietz & Watson, Inc.,
679 F. 3d 1372 (Fed. Cir. 2012) 50

Mylan Pharm., Inc. v. Bayer Intell. Prop. GmbH,
No. IPR2018-01143, Paper 13 (P.T.A.B. Dec. 3, 2018) 8, 9

NHK Spring Co. v. Intri-Plex Tech.,
No. IPR2018 00752, Paper 8 (P.T.A.B. Sept. 12, 2018).....9

NXP USA, Inc. v. Impinj, Inc.,
No. IPR2020-00519, Paper 7 (P.T.A.B. Aug. 17, 2020).....33

Orexo AB v. Actavis Elizabeth LLC,
903 F.3d 1265 (Fed. Cir. 2018) 44

Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.,
520 F.3d 1358 (Fed. Cir. 2008) 50

Panduit Corp. v. Corning Optical Commc'ns LLC,
No. IPR2017-00528, Paper 7 (P.T.A.B. May 30, 2017) 12, 13

Phillips v. AWH Corp.,
415 F.3d 1303 (Fed. Cir. 2005) 19

Regeneron Pharms, Inc. v. Novartis Pharma AG,
No. IPR2020-01317, Paper 15 (P.T.A.B. Jan. 15, 2021) 6, 7

Roku, Inc. v. Universal Elecs., Inc.,
No. IPR2019-01619, Paper 11 (P.T.A.B. Apr. 2, 2020) 37

Sand Revolution II, LLC v. Cont'l Intermodal Grp. — Trucking LLC,
No. IPR2019-01393, Paper 24 (P.T.A.B. June 16, 2020) 7

Sandoz, Inc. v. Genentech, Inc.,
No. IPR2017-02036, Paper 13 (P.T.A.B. Mar. 4, 2018).....38

Segin Sys., Inc. v. Stewart Title Guaranty Co.,
30 F. Supp. 3d 476 (E.D. Va. 2014) 7

TQ Delta, LLC v. Cisco Sys., Inc.,
942 F.3d 1352 (Fed. Cir. 2019) 48

Travelocity.com L.P. v. Cronos Techs., LLC,
No. CBM2014-00082, Paper 12 (P.T.A.B. Oct. 16, 2014) 3, 4

Unified Patents Inc. v. Grecia,
No. IPR2016-00600, Paper 12 (P.T.A.B. Aug. 16, 2016).....12

Unified Patents, Inc. v. Velocity Patent LLC,
No. IPR2017-01723, Paper 10 (P.T.A.B. Jan. 19, 2018) 29

Universal Imaging Indus., LLC v. Lexmark Int'l, Inc.,
No. IPR2019-01383, Paper 7 (P.T.A.B. Feb. 27, 2020).....33

Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.,
200 F.3d 795 (Fed. Cir. 1999) 24

Vizio, Inc. v. Nichia Corp.,
No. IPR2017-00551, Paper 9 (P.T.A.B. July 7, 2017).....29

West Pharm. Servs., Inc. v. Sanofi-Aventis Deutschland GmbH,
No. IPR2018-01162, Paper 7 (P.T.A.B. Dec. 6, 2018) 38

ZTE (USA), Inc. v. Fractus S.A.,
No. IPR2018-01456, Paper 18 (P.T.A.B. Oct. 3, 2019).....30

Statutes

35 U.S.C. § 103 14

35 U.S.C. § 314(a) ..... *passim*

35 U.S.C. § 325(d) ..... *passim*

Other Authorities

37 C.F.R. § 42.5 12

37 C.F.R. § 42.6 12

37 C.F.R. § 42.12(b)(8) 12

Federal Rules of Civil Procedure 26(f) 9

Federal Rules of Civil Procedure 30(b)(6) 6

Manual of Patent Examining Procedure
(9th ed. Rev. 10.2019, June 2020) 23, 50, 51

PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Declaration of Hannah Lee in Support of Plaintiff Centripetal Networks, Inc.'s Opposition to Defendant Palo Alto Networks, Inc.'s Motion to Stay, with Exhibits 1 and 4, *Centripetal Networks, Inc. v. Palo Alto Networks, Inc.*, Case No. 2:21-cv-00137 (RCY), Dkt. No. 86 (E.D. Va. July 23, 2021)
2002	Protective Order, *Centripetal Networks, Inc. v. Palo Alto Networks, Inc.*, Case No. 2:21-cv-00137-RCY-RJK, Dkt. No. 93 (E.D. Va. July 30, 2021) ("Protective Order")
2003	Amended Complaint for Patent Infringement, *Centripetal Networks, Inc. v. Palo Alto Networks, Inc.*, Case No. 2:21-cv-00137-RCY, Dkt. No. 65 (E.D. Va. July 9, 2021) ("Amended Complaint")
2004	Order Regarding Discovery of Electronically Stored Information ("ESI"), *Centripetal Networks, Inc. v. Palo Alto Networks, Inc.*, Case No. 2:21-cv-00137-AWA-RJK, Dkt. No. 155 (E.D. Va. Sept. 13, 2021) ("ESI Order")
2005	Memorandum in Support of Defendant's Motion to Stay Pending Resolution of *Inter Partes* Review Proceedings, *Centripetal Networks, Inc. v. Palo Alto Networks, Inc.*, Case No. 2:21-cv-00137-RCY-RJK, Dkt. No. 68 (E.D. Va. July 9, 2021)
2006	Declaration of James Hannah in Support of Patent Owner's Preliminary Response
2007	Petition for *Inter Partes* Review of U.S. Patent No. 9,124,552, *Cisco Sys., Inc. v. Centripetal Networks, Inc.*, No. IPR2018-01436, Paper 1 (P.T.A.B. Jul. 20, 2018)
2008	U.S. Patent No. 9,686,193 (the "193 Patent")

Exhibit	Description
2009	Petition for *Inter Partes* Review of U.S. Patent No. 9,686,193, *Cisco Sys., Inc. v. Centripetal Networks, Inc.*, No. IPR2018-01559, Paper 1 (P.T.A.B. Aug. 21, 2018)
2010	Excerpts of the File History for U.S. Serial No. 90/014,476 ('193 Patent Re-Examination)
2011	Decision Denying Petitioner's Request for Rehearing of Decision on Institution, *Cisco Sys., Inc. v. Centripetal Networks, Inc.*, No. IPR2018-01559, Paper 9 (P.T.A.B. Sept. 18, 2019)
2012	Excerpts of Comer, Douglas E. "Internetworking with TCP/IP – Principles, Protocols, and Architectures, Vol. 1, Fourth Ed." (2000)
2013	Excerpts of Richardson, W. Clay et al., "Professional Java, JDK." 5th Ed. (2005)
2014	Excerpts of "Microsoft Computer Dictionary" 5th Ed. (2002)
2015	Opinion and Order, *Centripetal Networks, Inc. v. Cisco Systems, Inc.*, Case No. 2:18-cv-00094-HCM-LRL, Dkt. No. 621 (E.D. Va. Oct. 5, 2020)
2016	U.S. Pat. App. Pub. No. 2002/0186683 ("Buck")
2017	Order, *Bushnell Hawthorne LLC v. Cisco Sys., Inc.*, Case No. 1:18-cv00760-TSE-MSN, Dkt. No. 88 (E.D. Va. April 22, 2019)
2018	Memorandum Order, *Cont'l Auto. Sys. Inc. v. Hamaton Auto. Tech. Co.*, Case No. 2:16-cv-00226-RAJ-LRL, Dkt. No. 63 (E.D. Va. Feb. 7, 2017)

I. INTRODUCTION

Palo Alto Networks, Inc., ("Petitioner") petitioned for *inter partes* review (IPR) of U.S. Patent No. 10,567,343 (Ex. 1001, the "'343 Patent"), challenging claims 1–20 ("the Challenged Claims"). The Board should not institute this proceeding.

Petitioner rushed to prepare the petition to bolster its case for a stay in the co-pending litigation (*Centripetal Networks, Inc. v. Palo Alto Networks, Inc.*, No. 2:21-cv-00137-RCY-RJK (E.D. Va. Mar. 12, 2021)). Because that stay is unlikely to be granted under the circumstances, the Board should exercise its discretion under 35 U.S.C. § 314(a) and deny institution. Institution would waste the Board's resources given the parallel litigation in the Eastern District of Virginia's "rocket docket," which is scheduled to begin six months before the Final Written Decision is due in this case.

Petitioner's haste is evident from its lack of due diligence. The USPTO has confirmed the patentability of U.S. Patent No. 9,686,193 (the "'193 Patent"), the parent of the '343 Patent. Most recently, the '193 Patent was confirmed Patentable in an *ex parte* reexamination because *Sourcefire* does not disclose the claimed "operator," and objective indicia of nonobviousness convinced the Examiner that it would not have been obvious to modify *Sourcefire* to reach the '193 Patent's claims. Ex. 2010 at 594–98. Notably, the '343 Patent is even more specific than

the ’193 Patent because it specifies a packet transformation function and an “exfiltration operation.” Whether Petitioner was unaware of the *ex parte* reexamination or whether it concealed the full record from the Board, the Petition must be rejected under 35 U.S.C. § 325(d) under the Board’s precedential decision in *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, No. IPR2019-01469, Paper 6 at 7–9 (P.T.A.B. Feb. 13, 2020) (precedential).

Petitioner’s haste is also apparent from its haphazard chart-style petition and its conclusory collateral estoppel arguments based on a prior IPR proceeding against U.S. Patent No. 9,124,552 (the “’552 Patent”). The Challenged Claims include many features absent from the ’552 Patent, including the very limitation that Examiner recognized to be missing from the art considered during prosecution: “applying…to each packet…at least one packet transformation function configured to prevent an exfiltration operation.” Ignoring this novel aspect of the ’343 Patent, Petitioner mischaracterizes the prosecution history, arguing that “the ’343 patent’s Challenged Claims were apparently allowed because the Examiner concluded that the prior art of record failed to disclose a two-stage packet filtering process.” Petition (Paper 2, “Pet.”) at 23.

On the merits, Petitioner has failed to show that *Sourcefire* teaches “applying…at least one packet transformation function configured to prevent an exfiltration operation” as required by claim 1. This limitation was not at issue in

the ’552 Patent IPR, and during prosecution the Examiner recognized that the claim feature was not found in the prior art, including *Sourcefire*. Ex. 1002 at 1610–14. *Sourcefire’s* 3D Sensors do not prevent exfiltration, but instead focus on passively detecting or preventing intrusion. Ex. 1004 at 33–34 (“Intrusion Prevention System”), 253–54, 259 (describing “intrusion” detection/prevention process).

Unable to contest this fact, Petitioner relies on a series of inferences and conclusory statements to contend that it would have been obvious to prevent exfiltration in *Sourcefire* in the claimed manner. But at no point does Petitioner contend or cite any portion of *Sourcefire* as disclosing exfiltration prevention at all, let alone as claimed. Nor does Petitioner address the objective indicia of nonobviousness that the Examiner found persuasive in the reexamination of the ’193 Patent and which are equally applicable in this case to show that it would not have been obvious to modify *Sourcefire* to address the exfiltration problem.

Although there are a variety of reasons why the ’343 Patent is valid over Petitioner’s asserted prior art reference, this Preliminary Response focuses on only limited reasons why *inter partes* review should not be instituted. *See Travelocity.com L.P. v. Cronos Techs., LLC*, No. CBM2014-00082, Paper 12 at 10 (P.T.A.B. Oct. 16, 2014) (“[N]othing may be gleaned from the Patent Owner’s challenge or failure to challenge the grounds of unpatentability for any particular

reason.”). The deficiencies of the Petition noted herein, however, are sufficient for the Board to find that Petitioner has not met its burden to demonstrate a reasonable likelihood that it would prevail in showing unpatentability of any of the Challenged Claims.

II. THE BOARD SHOULD DENY THE PETITION UNDER 35 U.S.C. § 314(a)

A. The Board Should Deny Institution in View of the Advanced Stage of the Co-Pending Litigation

The *Fintiv* factors weigh in favor of the Board’s exercise of discretionary denial based on the advanced stage of the parallel district court proceeding because: (1) the district court has not granted a stay; (2) the anticipated trial date is before the Board’s projected statutory deadline for the final written decision; (3) the parties have invested significant resources in the parallel proceeding; (4) there is overlap between issues raised in the petition and in the parallel proceeding; (5) the petitioner and the defendant in the parallel proceeding are the same party; and (6) other circumstances, including the merits and a pending motion to disqualify defendant’s IPR counsel, weigh in favor of discretionary denial. *See Apple Inc. v. Fintiv, Inc.*, No. IPR2020-00019, Paper 11 at 5–6 (P.T.A.B. Mar. 20, 2020) (precedential).

1. Factor 1: The Unlikely Potential for a Stay Weighs in Favor of Denying Institution

As is typical of defendants in co-pending district court litigation, Petitioner filed a motion to stay the district court litigation based on its IPRs on July 9, 2021. That motion is pending, and the district court has neither ruled on the motion to stay nor indicated when it may rule or that a stay will even be granted even if this proceeding is instituted. Indeed, in the Eastern District of Virginia, stays requested before institution are routinely denied. *See, e.g.*, *EHS Lens Philippines, Inc. v. Essilor Int'l.*, No. 3:16-cv-00563-JAG, 2016 WL 11670108, at *1 (E.D. Va. Sept. 22, 2016); Ex. 2017 (*Bushnell Hawthorne, LLC v. Cisco Sys., Inc.*, No. 1:18 cv-00760, Dkt. 88 (E.D. Va. Apr. 22, 2019)) at 1; *Cobalt Boats, LLC v. Sea Ray Boats, Inc.*, No. 2:15-cv-00021, 2015 WL 2454296, at *3 (E.D. Va. May 21, 2015).

2. Factor 2: The Early Trial Date Weighs in Favor of Denying Institution

Should trial be instituted, the final written decision in this IPR proceeding would not be issued until January 2023, six months after the anticipated trial date of August 1, 2022. *See* Pet. at 7; *see also* Ex. 2001 (Declaration of Hannah Lee) at 20. Factor 2 thus favors denying institution. *See, e.g.*, *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, No. IPR2020-00122, Paper 15 at 7–8 (P.T.A.B. May 15, 2020) (denying institution with a trial date set approximately 6 months prior to the final

written decision deadline); *Intel Corp. v. VLSI Tech. LLC*, No. IPR2020-00141, Paper 16 at 9–11 (P.T.A.B. June 4, 2020) (same).

3. Factor 3: The Significant Investment in Parallel Proceedings Weighs in Favor of Denying Institution

Factor 3 similarly favors denying institution because the parties have already invested substantial time and resources in the litigation. Discovery is underway as both parties have served several sets of discovery requests and responses amounting to 238 requests for production, 20 requests for admission, and 28 interrogatories over the last several months beginning on July 6, 2021, as well as initial disclosures on July 16, 2021 that identified relevant witnesses and categories of documents. Ex. 2001 at 2, ¶¶ 3–4; Ex. 2006 (Declaration of James Hannah), ¶ 2. And, on October 19, 2021, Patent Owner served a Fed. R. Civ. P. 30(b)(6) notice of deposition on Petitioner. Ex. 2006, ¶ 3. The parties negotiated and filed a stipulated Protective Order and ESI Order, both entered by the Court on July 30, 2021 and September 13, 2021 respectively. Ex. 2002; Ex. 2004. The parties agreed to a Markman hearing at the end of March 2022, and substantial fact discovery will be completed by the time the Board would have even determined whether to institute on this petition. Ex. 2001 at 19.

The Board routinely denies institution given this type of significant investment. *See Regeneron Pharms, Inc. v. Novartis Pharma AG*, No. IPR2020-01317, Paper 15 at 15–17 (P.T.A.B. Jan. 15, 2021) (denying institution and finding

Fintiv Factor 3 was in favor of denying institution because the parties had already responded to 365 requests for production, 43 interrogatories, and produced thousands of documents and by the time of institution there would be substantially more exchange of expert and fact discovery causing the ITC considerable resources to date); *see also Sand Revolution II, LLC v. Cont'l Intermodal Grp. — Trucking LLC*, No. IPR2019-01393, Paper 24 at 10–11 (P.T.A.B. June 16, 2020) (The Board found *Fintiv* factor 3 weighed in favor of denying institution because the parties expended significant investment in discovery despite the district court not yet having expended much effort on invalidity).

Moreover, the Eastern District of Virginia routinely denies stays in cases at stages similar to this one, further strengthening both this Factor and Factor 1. *Segin Sys., Inc. v. Stewart Title Guaranty Co.*, 30 F. Supp. 3d 476, 481–82 (E.D. Va. 2014) (denying motion to stay where trial date had been set, discovery had recently begun, Markman hearing had been set, and scheduled trial would occur months before PTAB would finish its review); Ex. 2018 (*Cont'l Auto. Sys., Inc. v. Hamaton Auto. Tech. Co.*, No. 2:16-cv-00226, Dkt. 63 (E.D. Va. Feb. 7, 2017)) at 6 (denying motion to stay where trial date had been set, defendants completed their document production and interrogatory responses, discovery was scheduled to be completed two months before an institution decision was expected).

4. Factors 4 & 5: Overlapping Issues and Parties Weigh in Favor of Denying Institution

The parties are identical between the district court litigation and this IPR proceeding, and Petitioner asserts the same prior art in the Petition as in the litigation. While Petitioner has stated in its pending motion to stay that after a final written decision, it will be estopped from asserting in litigation any ground that it raised or reasonably could have raised during the IPR proceedings, it has not filed a stipulation with the Board.

As Petitioner is well aware, by the time a final written decision issues, the trial will likely have already occurred in the district court litigation, making Petitioner's stipulation moot. There is no reasonable need for the parties and the Board to expend significant resources in this IPR proceeding and the co-pending district court litigation, where the same invalidity defenses, will need to be litigated. The Markman hearing is anticipated to occur in March 2022, and the district court will have issued a claim construction order well before the PTAB issues a final written decision. When there is such overlap with a co-pending validity challenge before another court, the Board has exercised its discretion under § 314(a) to deny institution. *See Bio-Rad Labs., Inc. v. 10X Genomics*, No. IPR2019-00567, Paper 23 at 27–29 (P.T.A.B. Aug. 8, 2019) (denying institution under § 314(a) where a parallel ITC proceeding considered a validity challenge using the same references as in the IPR petition); *Mylan Pharm., Inc. v. Bayer*

Intell. Prop. GmbH, No. IPR2018-01143, Paper 13 at 12–14 (P.T.A.B. Dec. 3, 2018) (denying institution under § 314(a) where petitioner relies on the same references in district court that it relies on in the petition); *NHK Spring Co. v. Intri-Plex Tech.*, No. IPR2018 00752, Paper 8 at 18–20 (P.T.A.B. Sept. 12, 2018) (same). Thus, these factors favor discretionary denial.

5. Petitioner's Dilatory Conduct Weighs in Favor of Denying Institution

Petitioner's dilatory conduct is another factor that weighs in favor of denying institution. Petitioner has repeatedly tried to delay the co-pending litigation to better position itself to argue against a discretionary denial.

Patent Owner served Petitioner with its complaint and amended complaint in March and June 2021, respectively. Rather than answer, Petitioner moved to dismiss and then refused to conduct a Fed. R. Civ. P. 26(f) conference citing its motion as the reason. *See* Ex. 2001 at 9. Following this tactic, Petitioner filed seven IPR petitions over the course of two weeks, stating that it would file more IPRs as to seven additional asserted patents. However, Petitioner delayed these filings until four months after the litigation began despite having prior knowledge of Patent Owner and its patents before the litigation. Ex. 2003, ¶¶ 64–77.

In Exhibit C to the Joint Rule 26(f) Report and Proposed Discovery Plan sent in July 2021, Petitioner proposed later dates for claim construction and discovery in an attempt to avoid discretionary denial of its IPR petitions and to use

those IPRs to stay the litigation. Ex. 2001 at 19, 23–25. But for these dilatory tactics, the litigation would have been even further along than its already advanced stage. *See* Ex. 2005 at 6–9. Petitioner's intentional stalling of the district court proceedings must not be considered a factor in its favor; indeed the Board should infer that Petitioner has been "seeking an inappropriate tactical advantage." *Belden Techs. Inc. v. Superior Essex Commc'ns LP*, No. 08-63-SLR, 2010 WL 3522327, at *2 (D. Del. Sept. 2, 2010) (stay denied).

In addition, Petitioner's counsel is subject to a pending motion to disqualify in this IPR proceeding as well as co-pending district court litigation, calling into question the viability of this Petition in light of the significant conflict of interest. Thus, this factor favors denying institution.

* * *

All six *Fintiv* factors warrant denying institution. The Board should use its discretionary authority under § 314(a) to deny the petition.

B. The Board Should Deny Institution in View of Petitioner's Recurrent Word Count Violations

Petitioner certifies that its petition "contains 13,913 words" yet Patent Owner's word processing software counted 14,067 words,. *See* Pet. at Certificate of Compliance.

Not only did Petitioner exceed the word count, Petitioner did so while improperly truncating citation formats. *See generally* Pet. at iii–vi; *see also*

generally Pet. (citing paragraphs without a space after "¶"); *EMC Corp. v. Intell. Ventures I LLC*, No. IPR2017-00429, Paper 11 at 27–29 (P.T.A.B. July 5, 2017) ("Petitioner's use of atypical citations amounts to formatting tricks designed to avoid the word count limit for petitions set forth in our rules.").

Even with such gamesmanship, Petitioner could not meet the word count limits, and actual intent to circumvent the 14,000 word limit can be inferred from Petitioner's use of improper citation formats, improper incorporation by reference of its expert's declaration, and repeated pattern of violations in this and at least ***twelve other matters*** filed by Petitioner. The Petition should not be considered. *See* Patent Trial and Appeal Board Consolidated Trial Practice Guide, November 2019 at 40 ("Parties should not abuse the process. Excessive words in figures, drawings, or images, deleting spacing between words, or using excessive acronyms or abbreviations for word phrases, in order to circumvent the rules on word count, ***may lead to a party's brief not being considered***.") (citation omitted).

Worse yet, the petition cites more than half of the 148 paragraphs in its expert's declaration (Ex. 1003) without explanation. *See, e.g.*, Pet. at 20–21, 23–26, 34–35, 38–39, 42, 44, 47–51, 53, 54, 57, 58, 62–68, 70–73. Citing "large portions of another document, without sufficient explanation of those portions, amounts to incorporation by reference" which is improper in a petition. *Cisco Sys., Inc. v. C-Cation Techs., LLC*, No. IPR2014-00454, Paper 12 at 8 (P.T.A.B. Aug.

29, 2014) (informative); 37 C.F.R. § 42.6(a)(3). The "practice of citing [a] Declaration to support conclusory statements that are not otherwise supported in the Petition also amounts to incorporation by reference." *Cisco*, No. IPR2014-00454, Paper 12 at 9. The Board does not consider arguments improperly incorporated by reference from a declaration. *Unified Patents Inc. v. Grecia*, No. IPR2016-00600, Paper 12 at 11 (P.T.A.B. Aug. 16, 2016).

Almost every row of Petitioner's claim chart ends with a naked citation to its expert's declaration. *See* Pet. at 34–70 (citing "Akl"). Further, for several dependent claims, Petitioner's claim chart merely cites back to earlier claims and includes a citation to its expert's declaration. *See, e.g.*, *id*. at 64–68, 70. Petitioner has violated the rule against incorporation by reference, and the incorporated material should either not be considered or be considered further evidence of Petitioner's word count violations. *See Limelight Networks, Inc. v. Akamai Techs., Inc.*, No. IPR2016-01894, Paper 8 at 16 (P.T.A.B. Mar. 8, 2017) (declining to consider arguments incorporated by reference into a petition "made only in a supporting document" and indicating that such gamesmanship could also violate the word count rule). .

The Board has the authority and discretion to "dismiss a petition or fashion a less severe remedy" for abuses of the rules and word count. 37 C.F.R. §§ 42.5, 42.12(b)(8); *Panduit Corp. v. Corning Optical Commc'ns LLC*, No.

IPR2017-00528, Paper 7 at 20 n.3 (P.T.A.B. May 30, 2017) ("Parties and their counsel ought to give strict attention to the related rule especially as it requires an attorney certification."); *Innovations4Flooring NV v. Välinge Innovation AB*, No. IPR2017-02130, Paper 8 at 4 (P.T.A.B. Feb. 7, 2018); *Google Inc. v. Ji-Soo Lee*, No. IPR2016-00022, Paper 25 at 5 (P.T.A.B. Nov. 23, 2016). Petitioner's flagrant and repeated violation of the rules spanning over a dozen of its recently-filed petitions warrants discretionary denial to discourage repeated rule violations.

III. THE '343 PATENT

A. Overview of the '343 Patent

The '343 Patent discloses techniques for preventing "[a] category of cyber attack known as exfiltrations (e.g., stealing sensitive data or credentials via the Internet) . . . ." Ex. 1001 at 1:28–31. Exfiltrations are essentially a data heist, in which malicious actors perform exfiltrate sensitive information, steal login credentials (usernames and passwords), and other forms of unauthorized data access. *Id*. at 2:54–58.

The inventors of the '343 Patent recognized that exfiltrations had "proven to be especially difficult for conventional cyber defense systems to prevent." *Id*. at 1:28–31. For example, because exfiltrations are often performed on internal networks, such exfiltrations appear as normal network traffic to observers, such as conventional cyber defense systems. *Id.* at 1:31–36. Because users often "engage

in network activities that are vulnerable to attack" and "typical network trust models…interpret exfiltrations as trusted operations," conventional cyber security systems would allow exfiltration traffic to exit the network without any remedial action being taken. *Id.* at 1:36–40. This is because prior attempts to thwart exfiltrations by simply blocking communications to compromised computers resulted in all network traffic being blocked or restrictions that would impede a user's ability to access the internet and effectively conduct business on behalf of a company. *Id.* at 7:29–35. The '343 Patent addresses these problems and allows users to surf websites and conduct ordinary company business while preventing exfiltrations, among other cyber attacks. *Id.* at 7:35–40.

B. Prosecution History of the '343 Patent

The '343 Patent issued from U.S. Patent Application No. 15/614,956 ("the '956 Application") filed on June 6, 2017. Ex. 1002 at 226–35.

The '343 Patent was subject to a comprehensive and substantive examination by the Office. In a September 27, 2018 non-final office action, the Examiner rejected independent claims 1, 8, and 15 as being obvious under 35 U.S.C. § 103 over *Ahn* in view of *Freimuth*. *Id.* at 1334–42. Also, dependent claims 7, 14, and 20 were rejected as obvious over *Ahn* in view of *Freimuth* and *Buck*. *Id.* at 1348–49. In response to the Office Action, Applicant amended the independent claims to specify that the "at least one packet transformation function"

is "configured to prevent an exfiltration operation." *Id.* at 1424, 1426–27, 1429. On June 3, 2019, the Examiner issued a final Office Action, again rejecting independent claims 1, 8, and 15, but replacing the secondary reference *Freimuth* with *Stolfo*. *Id*. at 1554–61.

On November 4, 2019, Applicant filed a Request for Continued Examination ("RCE") with an accompanying response. *Id.* at 1602–14. The accompanying response amended the independent claims to recite that "the at least one packet transformation function indicates whether each packet in the second portion of packets is allowed to continue toward its destination." *Id.* at 1603, 1605–08. Applicant explained how the prior art did not teach "apply[ing], to each packet in the second portion of packets that match the second criterion, at least one packet transformation function configured to prevent an exfiltration operation, wherein the at least one packet transformation function indicates whether each packet in the second portion of packets is allowed to continue toward its destination." *Id.* at 1610–14.

On December 12, 2019, the Examiner issued a Notice of Allowance. *Id*. at 1638–40. In the allowance, the Examiner remarked that they "believe[] that the record of the prosecution as a whole does make clear the reasons for allowing claims 1–20" and to "[p]lease refer to record of prosecution." *Id*. at 1639. The '343 Patent then issued on February 18, 2020. Ex. 1001; Ex. 1002 at 1663.

During prosecution, the Applicant filed Information Disclosure Statements ("IDS") that disclosed material documents from parallel IPR proceedings of related patents, including IPR2018-01436 ('552 Patent) and IPR2018-01559 ('193 Patent). Applicant disclosed the IPR petitions, the petitioner's expert declarations in support of those petitions, and key references from both proceedings (including *Sourcefire*) as well as the Board's institution decision from IPR2018-01436. Ex. 1002 at 1311–22 (IDS filed August 8, 2018), 1432–41 (IDS filed March 27, 2019). The Examiner indicated on record that the disclosed IPR petitions and documents (including *Sourcefire*) were considered, prior to issuing the Notice of Allowance. *Id*. at 1404–10, 1576–85.

C. The '343 Patent Claims are Materially Different from the '552 Patent Claims

The '343 Patent is a continuation in a chain of patents that includes the '552 Patent and the '193 Patent. These grandparent and parent patents, respectively, were the subject of two petitions for *inter partes* review: IPR2018-01436[1] (the

[1] Claims 1–21 of the '552 Patent were found unpatentable over *Sourcefire* in IPR2018-01436. *See* Ex. 1042 (*affirmed* in *Centripetal Networks v. Cisco Sys., Inc.*, No. 20-1635 (Fed. Cir. Mar. 10, 2021)).

’552 Patent) and IPR2018-01559[2] (the ’193 Patent). Those petitions also relied on the same reference that Petitioner now asserts in this proceeding: *Sourcefire*. Ex. 1042 at 11; Ex. 1045 at 4.

The Petition leans heavily on the ’552 Patent Final Written Decision, going so far as to allege that Patent Owner is “collaterally estopped from relitigating” every limitation of the independent claims. *See* Pet. at 1–2, 8, 23, 34–35, 38–39, 44, 47, 51, 54–55. Petitioner is wrong because the Challenged Claims recite claim limitations not found in the claims of the ’552 Patent. *See* Ex. 1044 at 2; Ex. 1040. One such limitation is the very limitation that the Examiner found to be patentable over *Sourcefire*, highlighted below:

Related ’552 Patent, Claim 1	**’343 Patent, Claim 1**
1. A method, comprising: … responsive to a determination by the at least one processor that one or more packets, of the at least a portion of the	1. A method comprising: … responsive to determining the second portion of packets that comprises data corresponding to the

[2] The Board denied institution in IPR2018-01559. *See* Ex. 1045 at 8–12 (determining that the petitioner did not show that *Sourcefire* discloses a “first operator”); *see also* Ex. 2011 at 2–6 (denying Petitioner’s request for rehearing of Decision on Institution).

plurality of HTTPS packets, have one or more application-header-field values corresponding to one or more TLS-version values of the one or more TLS-version values for which packets should be blocked from continuing toward their respective destinations, **applying**, by the at least one processor, at least one packet-transformation function specified by the operator to the one or more packets to block each packet of the one or more packets from continuing toward its respective destination.	second criterion specified by one or more operators specified by the at least one matching packet-filtering rule, **applying**, by the computing system and to each packet in the second portion of packets that match the second criterion, at least one packet transformation function configured to prevent an exfiltration operation, wherein the at least one packet transformation function indicates whether each packet in the second portion of packets is allowed to continue toward its destination.

Ex. 1040 at 11:5–35; Ex. 1001 at 11:28–61 (emphasis added). Given this key difference between the claims of the ’552 and ’343 Patents, the Board’s findings in IPR2018-01436 that it would have been obvious to modify *Sourcefire* to arrive at the limitations of the ’552 Patent’s claims are inapposite. *See* Ex. 1042 at 66. Notably, the Board instituted trial in IPR2018-01436 explicitly because it was not convinced that the ’552 Patent’s claims “require protecting against exfiltrations.” Ex. 1041 at 31 (“On the current record, we are not persuaded that the claims must be read to require protection against exfiltrations.”). This additional limitation, a “packet transformation function configured to prevent an exfiltration operation,”

directly addresses the Board's reason for instituting IPR of the '552 Patent, and as discussed in detail below, *Sourcefire* makes no mention of the problem of exfiltrations or any packet filtering rules that prevent exfiltration operations. *See* § VI.A, *infra*.

Given the foregoing, collateral estoppel cannot bar Centripetal's arguments. The standard for finding collateral estoppel is strict and requires the ***identical issues*** to be decided in the first action:

> [1] that in the prior action the party against whom estoppel is sought had a full and fair opportunity to litigate the issue; [2] the issue was actually litigated; [3] the controlling facts and applicable legal rules were the same in both actions; [4] resolution of the particular issue was essential to the final judgment in the first action; and [5] the identical issue was decided in the first action.

Comair Rotron, Inc. v. Nippon Densan Corp., 49 F.3d 1535, 1537 (Fed. Cir. 1995) (citations omitted). Because the '552 Patent does not recite "at least one packet transformation function configured to prevent an exfiltration operation," the issue of whether *Sourcefire* discloses preventing exfiltration operations was not (and could not have been) litigated in IPR2018-01436. The applicable legal rules are also not the same because the Board applied the broadest reasonable interpretation ("BRI") standard in IPR2018-01436 whereas it applies the *Phillips* standard here. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

The Board should, therefore, reject Petitioner's allegation that collateral estoppel applies to *any* single element of the Challenged Claims and to the "exfiltration operation" element in particular, which was not litigated in IPR2018-01436. The fact that the '343 Patent is related to the '552 Patent and has some similar claim elements does not reach the threshold for collateral estoppel. *See Comair Rotron*, 49 F.3d at 1539 ("[S]eparate patents describe 'separate and distinct [inventions],' and it cannot be presumed that related patents rise and fall together.") (citation omitted). Here, the Challenged Claims of the '343 Patent recite limitations not present in the '552 Patent, including the limitation that the Examiner found to distinguish the art of record, which included *Sourcefire*.

Amazon.com, Inc., v. M2M Solutions LLC, No. IPR2019-01204, Paper 43 (P.T.A.B. Jan. 20, 2021) is inapposite. *See* Pet. at 5–6, n.4. In *Amazon*, both parties agreed that the instant IPR proceeding and the previous one "involve different patents albeit with materially similar issues, including the same prior art, materially similar claims, and materially similar arguments." *Amazon*, Paper 43 at 11. Here, in contrast, there are additional claim limitations that materially alter the claim scope of the '343 Patent, and there is no agreement that the two proceedings "involve…materially similar issues, …materially similar claims, [or] materially similar arguments." *Id.*

In sum, the differences in claim scope between the ’343 and ’552 Patents preclude a finding that collateral estoppel bars Centripetal’s arguments set forth herein.

D. Reexamination of the ’193 Patent

Far more relevant to this case are the Office’s prior considerations of the ’193 Patent, which was deemed patentable in two earlier post-issuance proceedings and in a prior district court case. Ex. 1045 (denying institution of *inter partes* review); Ex. 2011 at 2–6 (denying request for rehearing of decision denying institution of *inter partes* review); Ex. 2010 at 592–98 (Notice of Intent to Issue Ex Parte Reexamination Certificate); Ex. 2015 at 22–23 (finding the ’193 Patent “valid and directly infringed.”). Like the ’343 Patent, the ’193 Patent is directed to preventing exfiltrations. *See* Ex. 2010 at 544 (“[T]he ’193 Patent’s claims recite filtering packets received from one network and destined for two other networks, illustrating that the claims are directed to the exfiltration scenario [described in the specification]”).

The Board denied first IPR of the ’193 Patent in IPR2018-01559 (Ex. 1045), finding that the petitioner in that case, Cisco Systems, Inc. (“Cisco”), did not establish that *Sourcefire* teaches the claimed “operator.” *See* Ex. 1045 at 8–12. Notably, the institution decision in IPR2018-01559 issued *after* the Board instituted trial in IPR2018-01436, demonstrating that the Board found the ’193

Patent patentably distinct from the ’552 Patent. Following the decision to deny institution, Cisco filed a request for *ex parte* reexamination of claims 18 and 19 of the ’193 Patent, once again alleging obviousness over *Sourcefire*. Ex. 2010 at 4–100; *see also id*. at 42–43. Much like Petitioner does in this proceeding, the reexamination request relied heavily upon the Board’s Final Written Decision in IPR2018-01436, involving the ’552 Patent. *Compare* Pet. at 35, 49, 52–54, 58 *with* Ex. 2010 at 58–59.

The Office ordered reexamination of the ’193 Patent on May 1, 2020, and issued on Office Action on September 23, 2020, rejecting claims 1–20 of the ’193 Patent as being obvious over *Sourcefire*. *See* Ex. 2010 at 180–91; *see id*. at 203–31. On January 25, 2021, Patent Owner filed a Response to the Office Action. *Id*. at 538–75. The response argued that *Sourcefire* does not disclose the claimed “operator.” *Id*. at 539, 549–52.

Patent Owner also argued that objective indicia of non-obviousness demonstrated that the challenged claims were patentable over *Sourcefire*. *Id*. at 539, 559–67. For one, Patent Owner apprised the Office of the district court’s determination that Cisco’s copying of the ’193 Patent “provides compelling evidence of nonobviousness.” *Id.* at 562, 565.

Patent Owner also argued that there was a long-felt but unresolved need that others failed to solve, namely how to prevent exfiltrations. *Id*. at 560–62.

Blocking all traffic associated a compromised computer was simply not feasible. *Id*. The inventor resolved the issue and prevented malicious exfiltrations by applying an operator that would block communications between a first and second network, but allowing traffic to a third network. *Id*. at 561. This solution overcame prior attempts to solve the exfiltration problem, which were too coarse or overbroad, and "greatly curtailed the risk of data exfiltration by detecting the threat earlier and acting in response while still preserving the flow of normal network traffic without disruption." *Id*.

On February 24, 2021, Patent Owner conducted an Examiner interview, during which the Examiner and Patent Owner discussed the differences between the claims of the '193 Patent and the '552 Patent in front of the review panel of three examiners. *Id*. at 580–87; Manual of Patent Examining Procedure ("MPEP") § 2281 (9th ed. Rev. 10.2019, June 2020). Patent Owner distinguished the '193 Patent from the '552 Patent, explaining that "the '193 Patent is directed to preventing data exfiltration, targeting communications leaving a first network and bound for different (second and third) networks." Ex. 2010 at 580–87.

On April 7, 2021, the Office issued a Notice of Intent to Issue an *Ex Parte* Reexamination Certificate, confirming claims 1–20. *Id*. at 592–98. In the remarks, the Office found that *Sourcefire* "fails to disclose or render obvious a system which include a series of filtering steps recited in the claim." *Id*. at 595. Moreover, the

Examiner agreed to withdraw the obviousness rejection of claims 1–20 over *Sourcefire* "[i]n view of the objective indicia of non-obviousness presented in the record." *Id*. at 596.

E. Claim Construction

Petitioner has proposed that the Board adopt a construction of "operator." Pet. at 24–25. At this preliminary stage, no express construction of any term is required to resolve any controversy in this proceeding. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) ("[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.") (citation omitted). Centripetal does not waive any rights to assert constructions should trial be instituted.

IV. OVERVIEW OF *SOURCEFIRE*

Sourcefire (Ex. 1004) is a user manual titled "Sourcefire 3D System User Guide" for Version 4.10 of a Sourcefire 3D network security product. *Sourcefire* describes packet–filtering devices (3D Sensors) of the Sourcefire 3D System that a user may deploy in a network to passively or "inline" monitor network traffic. *Id.* at 33. Each deployed 3D Sensor is capable of running an Intrusion Protection System (IPS) software component. *Id.* at 33–34. Each deployed 3D Sensor with IPS analyzes network traffic and generates intrusion events, which are records of

the traffic that violate the intrusion policy applied to a detection engine on the sensor that is monitoring a specific network segment. *Id*. at 256.

Sourcefire explains that the IPS allows a user to write their own custom intrusion rules tuned to the user's specific network environment. *Id*. at 256–60, 428–30, 761–70. *Sourcefire* was cited to and considered by the Examiner during prosecution of the '343 Patent. Ex. 1002 at 1313 (*Sourcefire* disclosed to Examiner in IDS filed August 8, 2018); *id*. at 1406 (Examiner indicating *Sourcefire* was considered).

V. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY THIS PROCEEDING UNDER 35 U.S.C. § 325(d)

A. The Petition Presents the Same Art and Arguments Previously Considered by the Office

The Board should deny institution under 35 U.S.C. § 325(d) because the Petition re-uses the same art and arguments that were previously presented to the Patent Office. 35 U.S.C. § 325(d) ("In determining whether to institute or order a proceeding…the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.").

The Board applies a two-part framework in evaluating the prior consideration of the same or substantially the same prior art or arguments. *Advanced Bionics*, No. IPR2019-01469, Paper 6 at 7–9 (describing a two-part

framework that demonstrates "a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown"). First, the Board considers whether the same or substantially the same prior art or arguments previously were presented to the Patent Office. *Id.* at 7–8. If this condition is satisfied, the Board then considers whether the petitioner has demonstrated a material error by the Patent Office in the patentability of the Challenged Claims. *Id*. at 8–9.

The first prong of *Advanced Bionics* is satisfied because the Patent Office issued the '343 Patent over *Sourcefire*, which is the primary reference asserted in the Petition, as well as the Board's institution decision in IPR2018-01436 ('552 Patent), which included the Board's application of *Sourcefire* to a similar set of claims. *See* Ex. 1002 at 1638–40; Pet. at 6. The Patent Office also considered and dismissed nearly identical arguments levied against the related '193 Patent in an IPR Petition and a later-filed *ex parte* reexamination request. Because Petitioner has not demonstrated any material error in the Office's extensive prior considerations of *Sourcefire*, it has not satisfied the second prong of *Advanced Bionics* either. The Board should exercise its discretion under § 325(d) to deny this Petition.

1. *Sourcefire* Was Expressly Considered During Prosecution of the ’343 Patent

The fact that the Patent Office already found the ’343 Patent patentable over *Sourcefire* is fatal to Petitioner’s case. The face of the ’343 Patent lists *Sourcefire* as a cited reference. Ex. 1001, code (56) (listing *Sourcefire* on page 5). Petitioner admits that *Sourcefire* is not a new reference to the Patent Office, which had it before them in connection with the IDS dated August 8, 2018. Ex. 1002 at 1313; *id*. at 1406-08 (indicating by Examiner’s signature that *Sourcefire* was considered); Pet. at 9 (admitting “Sourcefire and IPR papers addressing the related ’552 and ’193 patents based on Sourcefire were cited in an IDS…”) (citations omitted).

The Patent Office not only considered the same art during prosecution of the ’343 Patent, it also considered substantially similar arguments to those raised in the Petition. Indeed, all of the prior analysis of *Sourcefire* that formed the basis of the petition for the ’552 Patent is contained within the Petition here. That is, the present Petition cites to all but four (4) of the *Sourcefire* pages cited in the petition for the ’552 Patent. *Compare* Pet. at 34–57 *with* Ex. 2007 at 32–44. During prosecution, the Examiner had access to detailed treatments of *Sourcefire* from at least the petition, expert declaration, and institution decision from IPR2018-01436, which explained the Board’s application of *Sourcefire* to claim elements of the related ’552 Patent. Ex. 1002 at 1314 (IDS filed August 8, 2018 disclosing the petition and expert declaration); *id.* at 1439 (IDS filed March 27, 2019 disclosing

the institution decision); *id.* at 1407, 1583 (Examiner indicating these materials were considered).

The Examiner also considered the petition and expert declaration from IPR2018-01559, which mapped the teachings of *Sourcefire* to claim elements of the related ’193 Patent. *Id*. at 1438 (IDS filed March 27, 2019 disclosing the IPR2018-01559 petition and expert declaration); *id*. at 1582–83 (Examiner indicating these materials were considered). Thus, the Examiner reviewed the relevant art and arguments made in IPR2018-01436 and IPR2018-01559, acknowledged the differences with the ’343 Patent’s pending claims, and determined them to be patentable over *Sourcefire*.

Petitioner’s argument that *Sourcefire* “[was] not substantively discussed or applied in a rejection during prosecution” has no bearing on whether the first *Advanced Bionics* prong is met. Pet. at 9. *Advanced Bionics* is clear: “Previously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.” *Advanced Bionics*, Paper 6 at 7–8. Post *Advanced Bionics*, the Board has held that consideration in an IDS is sufficient reason to deny institution. *See Husky Injection Molding Sys., Ltd. v. Plastipak Packaging, Inc.*, No. IPR2020-00435, Paper 23 at 13 (P.T.A.B. July 28, 2020) (denying institution under § 325(d) where the Examiner annotated the IDS

with the line "[a]ll references considered except where lined through."); *Biocon Pharma Ltd., v. Novartis Pharm. Corp.*, No. IPR2020-01263, Paper 12 at 8–9, 17 (P.T.A.B. Feb. 16, 2021) (denying institution under § 325(d) where the "record shows that the Examiner signed an IDS listing…" the petition's prior art references and where the "IDS also states that the Examiner considered both prior-art references"); *Unified Patents, Inc. v. Velocity Patent LLC*, No. IPR2017-01723, Paper 10 at 21–22, 24 (P.T.A.B. Jan. 19, 2018) (denying institution under § 325(d) where one of the references was cited in a reexamination IDS, notwithstanding Examiner's caveat that only a "cursory" evaluation of disclosed references had been performed).

The only cases Petitioner cites in support of its position that the Examiner's non-issuance of a rejection over *Sourcefire* is relevant to the § 325(d) inquiry, *Vizio, Inc. v. Nichia Corp*. and *Microsoft Corp. v. Parallel Networks*, were decided long before *Advanced Bionics* was designated precedential. Pet. at 9 (citing *Vizio, Inc. v. Nichia Corp.*, No. IPR2017-00551, Paper 9 at 7–8 (P.T.A.B. July 7, 2017); *Microsoft Corp. v. Parallel Networks Lic., LLC*, No. IPR2015-00486, Paper 10 at 14–15 (P.T.A.B. July 15, 2015)). Indeed, Petitioner fails to explain why the Examiner should have "substantively discussed or applied [*Sourcefire*] in a rejection during prosecution" if the Examiner believed that the claims were allowable over Sourcefire. *Id.*

And, unlike here, neither of Petitioner's cited cases involved a situation where the Examiner had access to detailed treatments of *Sourcefire* from prior IPR proceedings on related patents citing and discussing the exact same material. Unsurprisingly, the Board has denied institution based on IDS disclosure when submitted alongside other material like office actions discussing the reference substantively. *Cultec, Inc. v. StormTech LLC*, No. IPR2017-00777, Paper 7 at 9–10, 13 (P.T.A.B. Aug. 22, 2017) (informative); *see also, e.g.*, *ZTE (USA), Inc. v. Fractus S.A.*, No. IPR2018-01456, Paper 18 at 4 (P.T.A.B. Oct. 3, 2019) (rejecting argument that "presentation to the Office should be discounted because those references 'were buried in an extremely long IDS, and were never called out for attention by the Patent Owner or the…examiner[,]'" and denying institution based on § 325(d)).

2. *Sourcefire* Was Extensively Considered During Reexamination of the '343 Patent's Parent

Petitioner does not even acknowledge that the Office considered *Sourcefire* in a recent reexamination of the related '193 Patent. *See generally* Ex. 2010 at 4–605; *see also* § III.D, *supra*. Yet as discussed in detail above (*see* § III.D, *supra*), the Office already determined that (1) the claims of the '193 Patent were patentably distinct from those of the '552 Patent, including because the '193 Patent is directed to preventing exfiltration (Ex. 2010 at 582, 583–87); (2) Sourcefire does not disclose applying the claimed "operators," (*id*. at 595), which were referred to

during the reexamination as preventing "exfiltration" (*id.* at 586); and (3) objective indicia of non-obviousness, such as long-felt need and copying, demonstrated that it would not have been obvious to modify *Sourcefire* in order to prevent exfiltrations. *Id*. at 596.

Similar to the claims of the '193 Patent, the Challenged Claims are directed to preventing "exfiltration operations." *See* '343 Patent, Claim 1. Accordingly, the Office already determined that (1) *Sourcefire* does not disclose preventing exfiltrations and (2) it would not have been obvious to modify *Sourcefire* to prevent exfiltrations "in view of the objective indicia of nonobviousness presented in the record." Ex. 2010 at 596. On this second point, the Examiner specifically found *Sourcefire* does not disclose preventing exfiltration, and a POSITA would not have been motivated to modify *Sourcefire* to perform the invention, particularly in light of the objective indicia of nonobviousness. *See id.* at 595–96.

3. The Patent Office Previously Considered Substantially the Same Art as *Mantripragada*

Mantripragada, Petitioner's secondary reference in Ground 2, represents substantially the same art as *Buck* (U.S. Patent Pub. No. 2002/0186683, Ex. 2016), which was previously considered during examination of dependent Challenged Claims 7, 14, and 20. Thus, discretionary denial remains warranted.

Advanced Bionics established that even when a specific reference was not considered during prosecution, when such a reference "disclos[es] substantially the

same information already considered by the Office," it represents "substantially the same art" as that already considered, thus making discretionary denial under § 325(d) appropriate. *Advanced Bionics*, Paper 6 at 15, 17–18. Where, as is the case here, Petitioner "relies on [a reference] in the same manner" as the reference previously presented to the Office during prosecution, discretionary denial is appropriate. *Id.* at 19.

Petitioner relies on *Mantripragada* (Pet. at 70–71) for its alleged disclosure of "monitoring Real-Time Transport Protocol (RTP) streams to ensure that various RTP values are not tampered with while the RTP session is active" and "rejecting" non-compliant media streams. Pet. at 70 (citing Ex. 1007 at [0069]–[0070]). Petition's reliance on *Mantripragada* closely resembles *Buck*, which the Examiner expressly considered and cited for disclosing "that all UDP (or RTP) packet transfers are blocked by the firewall 20)." Ex. 1002 at 1348–49, 1569–70 (citing to Ex. 2016, ¶¶ [0009], [0050], [0056]). As such, *Mantripragada* is cumulative to *Buck*, which the Examiner ultimately considered did not render the claimed invention obvious.

The Board has found prior art to be cumulative of previously considered art in similar circumstances. *See Ivantis, Inc. v. Glaukos Corp.*, No. IPR2019-00483, Paper 8 at 18–19 (P.T.A.B. July 8, 2019) (patent cumulative of different patents discussed during prosecution where disclosures relied on in the petition are similar

to those of the references cited the prosecution); *see also NXP USA, Inc. v. Impinj, Inc.*, No. IPR2020-00519, Paper 7 at 7–12 (P.T.A.B. Aug. 17, 2020) (patent substantially the same as another patent combined with a prior art thesis where Petitioner did not "identify any specific information…that is 'additional' to or 'different' than" previously considered prior art) (citation omitted); *Universal Imaging Indus., LLC v. Lexmark Int'l, Inc.*, No. IPR2019-01383, Paper 7 at 16 (P.T.A.B. Feb. 27, 2020) (a reference is cumulative to art involved in prosecution where "there is no material difference" between the two).

Therefore, the first prong of the *Advanced Bionics* framework is satisfied because the same reference (*Sourcefire*), substantially similar art (*Buck*), and substantially similar arguments (Petitioner's arguments related to *Sourcefire*) were previously presented to the Patent Office during the examination of the '343 Patent.

B. Petitioner Does Not Show Material Error by the Patent Office

"If a condition in the first part of the framework is satisfied and the petitioner fails to make a showing of material error, the Director generally will exercise discretion not to institute…" *Advanced Bionics*, Paper 6 at 8–9. The Board should decline to institute IPR in this case because Petitioner has not made the requisite showing.

The Board looks at three, non-exclusive factors in determining whether a Petitioner has sufficiently alleged material error: (1) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection; (2) whether petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and (3) the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments.

Under the first material-error factor, *Sourcefire* has been considered extensively. First, the Board already considered and rejected nearly identical arguments regarding *Sourcefire*'s applicability to preventing exfiltrations operations in the reexamination of the '193 Patent. *See* § V.A.2, *supra*. Petitioner does not even acknowledge the existence of this reexamination, let alone attempt to establish any error in the Office's findings. And while *Sourcefire* was not applied in a rejection during prosecution, the Examiner indisputably considered *Sourcefire* alongside the detailed analysis presented in the petitions, expert declarations, and institution decision from the prior IPR proceedings. *See* § V.A.1, *supra*.

As discussed below, the Petitioner has completely failed to meaningfully address the other two factors for a finding of material error: identification of error and additional evidence or factors warranting reconsideration. Accordingly,

Petitioner has not shown material error by the Examiner, and the petition warrants discretionary denial under 35 U.S.C. § 325(d).

1. Petitioner Has Failed to Sufficiently Explain How the Examiner Erred in His Evaluation of *Sourcefire*

Despite the overwhelming evidence that the petition presents the same art and arguments already presented and considered during prosecution and during reexamination of the ’193 Patent, Petitioner alleges that Examiner erred by “failing to understand *Sourcefire*” and “apply it in a rejection” or “sufficiently consider [] the Board’s analysis of *Sourcefire* [(referring to the Board’s institution decision in Exhibit 1041)], which explained how multiple limitations….” are met. Pet. at 10 (citing Ex. 1041 at 20–34). Beyond broad generalizations that all claims of the ’552 patent were found to be unpatentable (*id*. at 10–12), Petitioner never explains how these determinations map to the currently challenged claims to support its claim of material error, and it wholly ignores the recent confirmation of the patentability of similar claims in the reexamination of the ’193 Patent.

Petitioner asserts that “it is difficult, if not impossible, to explain ‘why the Examiner allowed the claims’ or ‘how the Examiner might have considered the arguments presented in the Petition,’” yet the petition acknowledges “the examiner pointed to Applicant’s November 4, 2019 arguments with respect to independent claims 1, 8, and 15 as a reason for allowance,” where the prior art was distinguished for not teaching the “apply[ing]” step to prevent exfiltration

operations. Pet. at 9, 23 (citations omitted); *see also* Ex. 1002 at 1602–14, 1636–40. Petitioner does not address this limitation or the reexamination of the ’193 Patent in its cursory material error discussion despite this limitation not being present in the ’552 Patent.

Rather than address the Examiner’s reasons for allowing the ’343 Patent, Petitioner baselessly asserts that “the Examiner concluded that the prior art of record failed to disclose a two-stage packet filtering process.” Pet. at 23. That assertion is contrary to the record. In the Reasons for Allowance, the Examiner stated that arguments “filed November 4, 2019 with respect to independent claims 1, 8 and 15 have been considered and they are persuasive.” Ex. 1002 at 1639. Those arguments clearly and unambiguously focused on the limitation that Petitioner now downplays, namely “apply[ing], to each packet in the second portion of packets that match the second criterion, at least one packet transformation function configured <u>to prevent an exfiltration operation</u>.” *Id*. at 1614. Nor can any error have been “confirmed” by the Board’s Final Written Decision and later affirmance in IPR2018-01436 regarding the ’552 Patent given that the ’552 Patent does not include this limitation or any similar variation thereof. *See* Pet. at 11–12.

Petitioner’s attempts to manufacture a parallel between the ’552 and ’343 Patents by reducing the Challenged Claims to a single clause (“applying an

operator in two-stage packet filtering") and by arguing that the '343 Patent claims are broader than the '552 Patent's claims because they are not limited to HTTPS packets must be rejected. *Id*. These gross oversimplifications ignore the limitations of the claims identified by the Examiner as allowable subject matter, not to mention the similarities between the '343 and '193 Patents, which the Office found patentable in two post grant proceedings. Ex. 1002 at 1639–40; Ex. 1045 at 2; Ex. 2010 at 592–98. Petitioner does not acknowledge, let alone address the distinguishing limitations in its Section 325(d) analysis.

Petitioner has also not specifically identified how the Examiner erred, and Petitioner's misleading arguments, which entirely ignore the relevant limitations and do not address the arguments that the Examiner found persuasive during prosecution, simply cannot show material error. *See Husky Injection Molding Sys. Ltd.*, No. IPR2020-00428, Paper 24 at 8, 19–20 (P.T.A.B. July 28, 2020) (denying institution under § 325(d) because Petitioner failed "to provide a sufficient explanation"); *Roku, Inc. v. Universal Elecs., Inc*., No. IPR2019-01619, Paper 11 at 18–20 (P.T.A.B. Apr. 2, 2020) (denying institution under § 325(d) because of petitioner's conclusory assertions); *Hengdian Grp. DMEGC Magnetics Co. v. Hitachi Metals, Ltd*., No. IPR2017-01313, Paper 7 at 15–16 (P.T.A.B. Nov. 6, 2017) (discretionarily denying institution because petitioner failed to provide "any arguments distinguishing the Examiner's prior consideration of [the prior art], or

any compelling reason why [the Board] should re-evaluate substantially the same prior art as that presented during prosecution and considered by the Examiner."); *Sandoz, Inc. v. Genentech, Inc*., No. IPR2017-02036, Paper 13 at 6–7 (P.T.A.B. Mar. 4, 2018) (denying institution pursuant to § 325(d); "[t]o the extent that any such differences exist, Petitioner has not explained or even alleged that the prior art and the arguments presented in the Petition are not *substantially the same* as those considered and abandoned by the Examiner during prosecution, and as those presented and considered previously by the Board"); *West Pharm. Servs., Inc. v. Sanofi-Aventis Deutschland GmbH*, No. IPR2018-01162, Paper 7 at 13 (P.T.A.B. Dec. 6, 2018) (denying institution even when petitioner "set[] forth different arguments and additional evidence…not raised by, or available to," Examiner because Examiner had rejected one of the claims based on the same combination of references pursuant to the same statutory authority).

2. Petitioner Identifies No Additional Evidence or Factors that Warrant Reconsideration of *Sourcefire*

Petitioner also alleges that the prior IPR of the '552 and subsequent affirmance "confirm[]" the Examiner's purported error. Pet. at 11. But Petitioner never explains how these determinations differ from the detailed analysis in the already considered petitions, expert declarations, and institution decision from those proceedings and the reexamination of the '193 Patent. Ex. 1002 at 1313–14, 1406, 1438–39, 1527, 1582–83; *see also generally* Ex. 2010 at 4–605. And while

Petitioner also makes a cursory allegation (under *Advanced Bionics* step 1) that the Examiner did not consider its own expert's testimony, Petitioner never explains how the testimony is material to any specific issue or limitation or how it demonstrates that the Examiner erred in his consideration of *Sourcefire*. *See* Pet. at 8–9.

Finally, Petitioner's efficiency argument for institution is plainly backwards. *Id*. at 12. Efficiency is best served by denying institution on discretionary grounds, not by forcing the parties through the burden and expense of more than a year of litigation over a deeply flawed petition that provides no reason to second guess the Office's prior analysis of this same art. The Office has already considered this art and these arguments during prosecution of the '343 Patent and reexamination of the '193 Patent. Ex. 1002 at 1313–14, 1406, 1438–39, 1527, 1582–83; *see also generally* Ex. 2010 at 4–605. Petitioner has not shown any reason, let alone material error, that warrants revisiting those well-reasoned determinations.

At best, the petition alleges that the Examiner erred "by failing to identify or discuss, let alone sufficiently consider, the Board's analysis of Sourcefire." Pet. at 10. However, as noted above, the Examiner had at least two petitions, two expert declarations, and an institution decision analyzing *Sourcefire* in detail on two related patents, each of which were expressly considered by the Examiner, prior to issuing the Notice of Allowance. Ex. 1002 at 1313–14, 1406, 1438–39, 1527,

1582–83, 1634–40. Furthermore, the Office confirmed claims 1–20 over *Sourcefire* in the reexamination of the ’193 Patent, which unlike the ’552 Patent actually focuses on preventing exfiltrations.

* * *

Nothing in the record indicates that the Examiner or the Office otherwise has failed to fully evaluate the considered art or that additional evidence or facts warrant reconsideration. To the contrary, everything suggests the Examiner did fully evaluate the considered art and no new evidence or facts warrant reconsideration. The Board should exercise its discretion and deny institution.

VI. THE CHALLENGED CLAIMS ARE NOT OBVIOUS OVER *SOURCEFIRE* AND *MANTRIPRAGADA*

A. Petitioner Has Not Shown that *Sourcefire* Teaches the Exfiltration Operation Limitation

“[A] petitioner in an *inter partes* review has the burden of demonstrating unpatentability by a preponderance of the evidence; bare assertion through implication that a reference discloses a claim limitation, without more, is not enough to meet this burden.” *Garmin Int’l, Inc. v. Logantree, LP*, 825 F. App’x 894, 898–899 (Fed. Cir. 2020) (non-precedential).

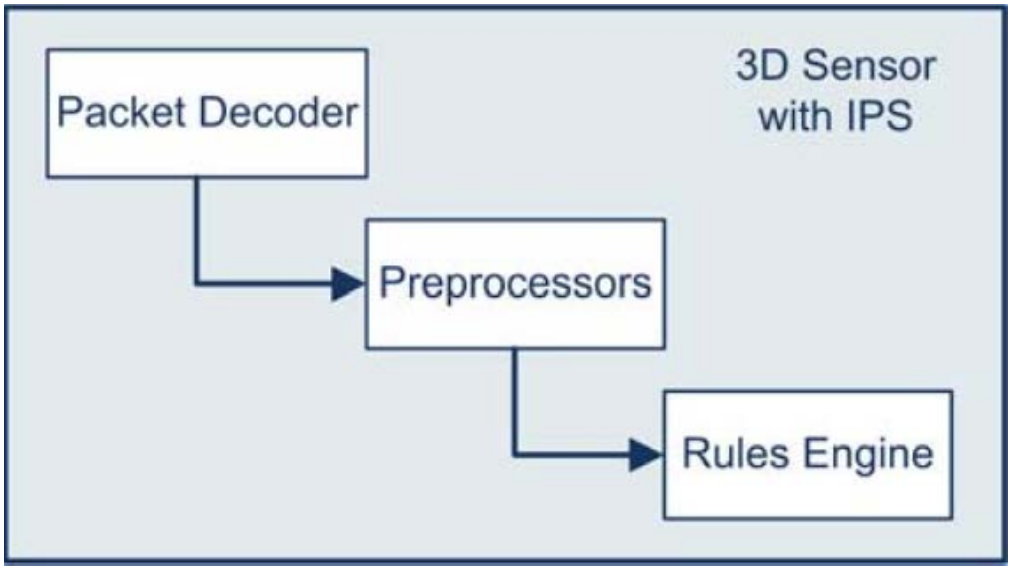
Sourcefire does not disclose rules for preventing an exfiltration operation. Exfiltration refers to cybersecurity attacks that hijack a computer on a network in an attempt to send information to hackers. Ex. 1001 at 1:28–31, 2:54–58. On the

other hand, *Sourcefire* prevents "intrusion"—"[a] security breach, attack, or exploit that occurs on your network." Ex. 1004 at 2084. Specifically, *Sourcefire*'s 3D Sensors focus on preventing intrusion using the Intrusion Prevention System (IPS). Ex. 1004 at 33–34 (IPS monitors the network for attacks). *Sourcefire*'s 3D Sensors are configurable both for intrusion detection ("passively analyzing network traffic for potential intrusions and storing attack data for security analysis") and for intrusion prevention ("block[ing] or alter[ing] malicious traffic as it travels across your network" after intrusion detection). *Id.* at 253–54.

In *Sourcefire*, "[f]irst, packet decoders and preprocessors detect anomalous traffic that might signal an intrusion attempt and, when you have enabled accompanying decoder and preprocessor rules, report on detected anomalies." *Id.* at 254. "Next, the detection engine uses intrusion rules to examine the decoded packets for attacks based on patterns." *Id.*[3] The combination of packet decoders,

[3] An "intrusion rule" is described as "[a] set of keywords and arguments that, when applied to captured network traffic, identify potential intrusions, policy violations, and security breaches. IPS compares packets against the conditions specified in each rule and, if the packet data matches all the conditions specified in the rule, the rule triggers and generates an intrusion event. Intrusion rules include alert rules, drop rules, and pass rules." *Id.* at 2084.

preprocessors, and intrusion rules represents a three-stage intrusion detection/prevention process, where each stage may trigger logging an intrusion event:



Id. at 259; *see also id.* at 254 ("[a]n *intrusion event*" is "a record indicating the date, time, the type of exploit, and contextual information about the source of the attack and its target."). "[T]he detection engine can block possible intrusions or replace harmful content in a packet." *Id.* Alternatively, "[f]or packet-based events, a copy of the packet or packets that triggered the event is also recorded." *Id.* Indeed, throughout its disclosure, *Sourcefire* uses "intrusion," or some variation, but never once uses the term "exfiltration." In fact, *Sourcefire* brands itself as "provid[ing] best-in-class intrusion detection and prevention," but says nothing about preventing exfiltration. *Id.* at 33.

The Office recognized that a key distinction over *Sourcefire* was its failure to disclose "any techniques for preventing a class of network threats known as 'exfiltrations.'" Ex. 2010 at 541 (noting that the '193 Patent claims are "explicitly directed to preventing exfiltrations rather than intrusions"); *see also id.* at 583–86 (noting that "Sourcefire does not identify exfiltration as a problem and does not disclose or suggest Centripetal's claimed solution to this problem."); *id.* at 592–98. As the Patent Owner explained, the '343 Patent, like the '193 Patent and unlike the '552 Patent, prevents exfiltration, and *Sourcefire* does not teach preventing exfiltration. *Id.* at 560–62, 580–87. In response, the Office agreed that the claims of the '193 Patent were different from the claims of the '552 Patent and confirmed the patentability of the '193 Patent claims over *Sourcefire*. *Id.* at 592–98; *see also* § III.C *supra*. Indeed, the claims of the '343 Patent are even more specific than the claims of the '193 Patent by requiring a packet transformation function that prevents "an exfiltration operation," further distinguishing from *Sourcefire*'s intrusion detection techniques.

Tacitly recognizing *Sourcefire* does not disclose "exfiltration," Petitioner tries to fill this gap based on two inferences. First, Petitioner cites *Sourcefire*'s alleged disclosure that intrusion rules ***could*** be written to detect potential exfiltrations using HTTP methods like PUT, POST, and CONNECT and SSL/TLS versions. *See, e.g.*, Pet. at 55 (citing Ex. 1004 at 568, 768; referring to element

1.d). Such an allegation is facially insufficient to support an obviousness case. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) ("[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.") (emphasis original); *see also Orexo AB v. Actavis Elizabeth LLC*, 903 F.3d 1265, 1272–73 (Fed. Cir. 2018) ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.") (quoting *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). Indeed, the Examiner explicitly rejected this argument in the reexamination of the '193 Patent. Ex. 2010 at 596 (finding that *Sourcefire* does not teach the exfiltration elements, particularly "[i]n view of the objective indicia of non-obviousness); *id.* at 586 (arguing that "[w]ith respect to the exfiltration elements, the parties discussed that the Office Action's focus on whether *Sourcefire* ***could be*** modified to reach the claims is contrary to the law.").

Even granting Petitioner's argument, already dismissed by the Office, Petitioner only alleges that a skilled artisan would have been motivated to write ***intrusion*** rules, not rules that prevent exfiltration. Pet. at 50 ("[A] POSITA would have been motivated and found it obvious to write an intrusion rule in which the HTTP Method option is specifically included in a rule in order to detect packets

containing certain HTTP methods, such as POST, PUT, or CONNECT") (citation omitted); *id.* at 53 ("[A] POSITA would have been motivated and found it obvious to write an intrusion rule in which the ssl_version keyword is specifically included as a rule in order to detect and drop packets containing certain SSL/TLS versions.") (citation omitted).

Still further, while Petitioner alleges that collateral estoppel applies from the '552 Patent IPR, the Board did not reach a conclusion as to whether exfiltration rules would have been obvious. *Id*. at 51, 54 (citing Ex. 1042 at 56, 63). Belying Petitioner's assertion, the Board explicitly declined to interpret the claims to "require protection against exfiltrations" in the '552 Patent Institution Decision. Ex. 1041 at 31 ("On the current record, we are not persuaded that the claims must be read to require protection against exfiltrations."). As the issue is not identical, collateral estoppel does not apply to the issue of applying a transformation function to prevent exfiltration. *See* § III.C, *supra.*

To attempt to meet the claims as written, Petitioner must then make a second inferential leap, alleging that these same "certain HTTP methods" and "certain SSL/TLS" versions" had "known vulnerabilities" and "could be used for exfiltration." Pet. at 55; *see also id.* at 53. Petitioner then concludes, without analysis or any support, that "it would have been obvious to create rules using the corresponding keywords to identify and drop such packets." *Id*. at 55–56. But this

says nothing about preventing exfiltration and is a concession that *Sourcefire* does not disclose "applying…at least one transformation function configured to prevent an exfiltration operation." And, again, Petitioner has not cited anything in *Sourcefire* supporting transformation functions "configured to prevent an exfiltration operation" as the claim requires.

Simply blocking all traffic as Petitioner suggests does not adequately address the exfiltration problem. For example, HTTP is "[t]he protocol used for communications between a browser and a Web server or between intermediate machines and Web servers." Ex. 2012 at 530. HTTP GET is the "command to request a Web page from a server." *Id.* at 531. The "server responds by sending the requested item." *Id.* HTTP POST "[s]ends data to the HTTP server and retrieves the content found at the URL specified," while HTTP PUT "[a]sks the HTTP server to store the data sent with the request to the URL specified." Ex. 2013 at 489. Thus, HTTP is "[t]he protocol used to carry requests from a browser to a Web server and to transport pages from Web servers back to the requesting browser." Ex. 2014 at 259. Blocking all Internet traffic as Petitioner suggests would have resulted in curtailing productivity which is the problem identified in the '343 Patent. Ex. 1001 at 7:26–40.

At bottom, Petitioner has not shown that *Sourcefire* discloses "at least one packet transformation function configured to prevent an exfiltration operation." As

previously discussed, this limitation was specifically added to overcome prior art, and the Examiner recognized the art did not disclose this limitation in allowing the claims even with the benefit of *Sourcefire* and numerous documents illustrating how the teachings of *Sourcefire* was applied to patents related to the ’343 Patent. *See* §§ V, III.B, *supra*. As this limitation appears in every independent claim, Petitioner has failed to establish a reasonable likelihood that it will prevail on any claim. Institution should be denied.

B. The Petition Has Provided No Reason for Why a Skilled Artisan Would Have Been Motivated to or Would Reasonably Expect Success Modifying *Sourcefire* to Prevent Exfiltration

Petitioner ends its analysis of the Exfiltration Operation limitation with a conclusory statement: “it would have been obvious to create rules using the corresponding keywords to identify and drop such packets.” Pet. at 55–56. This is a concession that the cited portions of *Sourcefire* say nothing about preventing exfiltration or dropping packets in the claimed manner. Petitioner must understandably resort to obviousness, but Petitioner’s conclusory statement of obviousness cannot fill this gap.

Obviousness requires “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Int’l Co. v. Teleflex Inc*., 550 U.S. 398, 418 (2007). Petitioner must demonstrate “that a skilled artisan would have been motivated to

combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." *Intell. Bio-Sys. Inc. v. Illumina Cambridge Ltd*., 821 F.3d 1359, 1367–68 (Fed. Cir. 2016) (affirming that petitioner failed to demonstrate that a skilled artisan would have been motivated to combine the prior art teachings, and that the skilled artisan would have had a reasonable expectation of success). Conclusory "assertion[s] that it would have been so" and "unsupported statement[s]" that the combinations are '"within the skill"' of a skilled artisan and '"well-known and predictable' does not meet Petitioner's burden." *Johns Manville Corp. v. Knauf Insulation, Inc.*, No. IPR2018-00827, Paper 9 at 13–14 (P.T.A.B. Oct. 16, 2018) (informative) (citation omitted).

Here, Petitioner's obviousness ground attempting to fill the exfiltration gap is legally insufficient as it completely fails to allege a motivation to modify *Sourcefire* to prevent exfiltration or a reasonable expectation of expectation of success in doing so. The Federal Circuit and the Board have repeatedly rejected obviousness findings based on conclusory allegations even when they contain more detail. *Intell. Bio-Sys.*, 821 F.3d at 1367–68; *see also TQ Delta, LLC v. Cisco Sys., Inc.*, 942 F.3d 1352, 1359 (Fed. Cir. 2019) ('"[A] conclusory assertion with no explanation is inadequate to support a…a motivation to combine."') (citation omitted).

As acknowledged by the Petitioner and disclosed in the ’343 Patent, exfiltration operations may appear as normal network traffic and known network trust models would interpret exfiltration operations as trusted operations. Pet. at 12; Ex. 1001 at 1:28–40. Prior attempts to prevent exfiltration operations “block[] access to most of the Internet” and “restrict … employees’ ability to conduct business.” Ex. 1001 at 7:29–35. The Petition completely fails to address why or how a skilled artisan would modify *Sourcefire* to prevent exfiltration operations without blocking most Internet traffic and restricting employees’ ability to conduct business or how a skilled artisan would be able to prevent an exfiltrations. For good reason, this is the exact problem solved by the ’343 Patent, which the Examiner found novel and nonobvious over *Sourcefire* during prosecution of the ’343 Patent and during reexamination of the ’193 Patent.

C. Petitioner’s Analysis is Tainted by Hindsight Bias

Petitioner’s analysis is also tainted by hindsight bias because they reveal that they used the ’343 Patent itself as a roadmap for inferring it was known that HTTP methods were well-known methods of network exfiltration. In footnotes, Petitioner argues “[t]hat these HTTPS methods were known exfiltration methods is confirmed by the ’343 Patent.” Pet. at 50, n.9; *see also id*. at 56, n.11 (remarking their position is “consistent with the ’343 Patent,” which allegedly “recognized that HTTP methods such as PUT and POST correspond to an exfiltration method.”)

(citation omitted). This statement of the problem represents a form of prohibited reliance on hindsight. *Mintz v. Dietz & Watson, Inc.*, 679 F. 3d 1372, 1377–78 (Fed. Cir. 2012) (rejecting the use of "the invention to define the problem that the invention solves" because "[o]ften the inventive contribution lies in defining the problem in a new revelatory way."); *see also Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1364 (Fed. Cir. 2008) (discounting an expert's testimony as "simply retrac[ing] the path of the inventor with hindsight" as "always inappropriate for an obviousness test…"). Yet *even if* it was well-known in the art that certain "HTTPS methods were known exfiltration methods," Petitioner fails to establish that *Sourcefire* instructs a POSITA how to deal with the fact that simply blocking all Internet traffic would have stymied legitimate web traffic, as discussed above.

Because Petitioner's purported showing of obviousness is unsupported by any knowledge that was within the level of ordinary skill at the time the claimed invention was made, and instead relies on knowledge gleaned only from the '343 Patent's disclosure, Petitioner's analysis is impermissibly tainted by hindsight bias and should be rejected.

D. The Petition Has Failed to Address the Secondary Considerations Recognized in Prior Proceedings

Petitioner has failed to recognize the objective evidence that demonstrates that the claims are not obvious in view of *Sourcefire*. "Objective evidence relevant

to the issue of obviousness must be evaluated by Office personnel." MPEP § 2141(II) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)). "Such evidence, sometimes referred to as 'secondary considerations,' may include evidence of commercial success, long-felt but unsolved needs, failure of others, and unexpected results." *Id.*

During the litigation and reexamination of the '193 Patent, a significant record of objective evidence was produced, including long-felt need, industry praise, commercial success, and competitor copying. Ex. 2010 at 560–67, 411–37, 396–405. The '193 Patent, like the '343 Patent, solved the long-standing problem of how to prevent exfiltrations attacks. *Id.* at 562, 436–37. Patent Owner's success lead to both industry praise and others deliberately copying Patent Owner's work. *Id.* at 562–67, 390–94, 396–405. The nexus between the Patent Owner's products and the claims of the '193 Patent caused the Office to withdraw the obviousness rejection of claims 1–20 over *Sourcefire* in the reexamination of the '193 Patent, as noted in Section III.D, *supra*. *Id.* at 567, 596.

Despite being on notice of these objective indicia of nonobviousness, Petitioner has not addressed them or attempted to show that the claims are obvious despite the wealth of evidence. The Board should deny institution.

VII. CONCLUSION

For all of these reasons, Patent Owner accordingly requests that the Board deny institution of *inter partes* review of the Challenged Claims of the ’343 Patent.

Respectfully submitted,

Dated: October 25, 2021

/James Hannah/

James Hannah (Reg. No. 56,369)
Kramer Levin Naftalis & Frankel LLP
990 Marsh Road
Menlo Park, CA 94025
Tel: 650.752.1700 Fax: 650.752.1800

Jeffrey H. Price (Reg. No. 69,141)
Kramer Levin Naftalis & Frankel LLP
1177 Avenue of the Americas
New York, NY 10036
Tel: 212.715.7502 Fax: 212.715.8302

Scott M. Kelly (Reg. No. 65,121)
Blair A. Silver (Reg. No. 68,003)
Bradley C. Wright (Reg. No. 38,061)
BANNER & WITCOFF, LTD.
1100 13th Street, NW, Suite 1200
Washington, DC 20005
Tel: (202) 824-3000 Fax: (202) 824-3001

(Case No. IPR2021-01155) *Attorneys for Patent Owner*

CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. § 42.24

The undersigned hereby certifies that the portions of the above-captioned **PATENT OWNER'S PRELIMINARY RESPONSE** specified in 37 C.F.R. § 42.24 has 11,675 words in compliance with the 14,000 word limit set forth in C.F.R. § 42.24(b)(1). This word count was prepared using the Microsoft Word word-processing system used to prepare this paper.

Dated: October 25, 2021 By: /James Hannah/

James Hannah (Reg. No. 56,369)
Jeffrey H. Price (Reg. No. 69,141)
KRAMER LEVIN NAFTALIS & FRANKEL LLP
990 Marsh Road
Menlo Park, CA 94025
Tel: (650) 752-1700
Email: jhannah@kramerlevin.com
Email: jprice@kramerlevin.com

Scott M. Kelly (Reg. No. 65,121)
Blair A. Silver (Reg. No. 68,003)
Bradley C. Wright (Reg. No. 38,061)
BANNER & WITCOFF, LTD.
1100 13th Street, NW, Suite 1200
Washington, DC 20005
Tel: (202) 824-3000
Email: skelly@bannerwitcoff.com
Email: bsilver@bannerwitcoff.com
Email: bwright@bannerwitcoff.com

Attorneys for Patent Owner
Centripetal Networks, Inc.

CERTIFICATE OF SERVICE

The undersigned certifies that on October 25, 2021, a copy of **PATENT OWNER'S PRELIMINARY RESPONSE** was served on the Petitioner by emailing a copy to the following:

Scott A. McKeown
ROPES & GRAY LLP
2099 Pennsylvania Avenue, NW
Washington, D.C. 20006-6807
Phone: 202-508-4740
Fax: 617-235-9492
scott.mckeown@ropesgray.com

Mark D. Rowland
James Batchelder (*pro hac vice*)
Andrew Radsch (*pro hac vice*)
Christopher M. Bonny
ROPES & GRAY LLP
1900 University Ave., 6th Floor
East Palo Alto, CA 94303-2284
Phone: 650-617-4000
Fax: 617-235-9492
mark.rowland@ropesgray.com
james.batchelder@ropesgray.com
andrew.radsch@ropesgray.com
christopher.bonny@ropesgray.com

By: /James Hannah/
James Hannah (Reg. No. 56,369)

Attorney for Patent Owner
Centripetal Networks, Inc.