UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WEBROOT, INC. and OPEN TEXT, INC., Plaintiffs v. FORCEPOINT LLC, Defendant.	CIVIL ACTION NO. 6:22-CV-00342 **JURY TRIAL DEMANDED**
FORCEPOINT LLC, Counterclaim Plaintiff, v. WEBROOT, INC., OPEN TEXT, INC., and OPEN TEXT CORPORATION Counterclaim-Defendants.	

DEFENDANT FORCEPOINT LLC'S
FINAL INVALIDITY CONTENTIONS

I. INTRODUCTION

Pursuant to the Court's Standing Order Governing Proceedings (OGP 4.1) – Patent Cases, Dkt. No. 13 (the "Order") and the Scheduling Order in this case, Defendant Forcepoint LLC ("Forcepoint" or "Defendant") hereby provides the following Final Invalidity Contentions ("Contentions") to Plaintiffs and Counterclaim Defendants Webroot Inc. ("Webroot"), Open Text, Inc. ("OTI"), and Open Text Corp. ("OTC") (collectively, "Plaintiffs") for asserted U.S. Patent Nos. 10,025,928 (the "'928 Patent"), 8,438,386 (the "'386 Patent"), 10,599,844 (the "'844 Patent"), 8,726,389 (the "'389 Patent"), 9,413,721 (the "'721 Patent"), 8,201,243 (the "'243

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Patent"), 8,719,932 (the "'932 Patent"), and 11,409,869 (the "'869 Patent") (collectively, the "Asserted Patents").[1] Forcepoint reserves the right to supplement or modify these Contentions, consistent with the Order.

Discovery is ongoing, and accordingly, Forcepoint reserves the right to revise or supplement these Contentions in light of party and third-party discovery. While Forcepoint's Contentions take the Court's claim construction into account, Forcepoint's Contentions are based in whole or in part on its present understanding of Plaintiffs' contentions concerning the scope and construction of the claims in their Infringement Contentions and Forcepoint's own understanding of the scope and construction of those claims. Plaintiffs' Infringement Contentions are deficient at least insofar as they fail to articulate how any single accused product or the use of any single accused product infringes any claim, and Forcepoint reserves the right to further amend its Contentions in response to any further supplementation or amendment of Plaintiffs' Infringement Contentions. Forcepoint takes no position on any matter of claim construction in these Contentions with respect to claim term that has not been construed. Any statement herein describing or tending to describe any unconstrued claim element is provided solely for the purpose of understanding the relevant prior art. Forcepoint further reserves the right to amend these Contentions based on any further claim construction orders by the Court.

[1] On October 17, 2023, the same day as the parties' original deadline to serve Final Infringement and Final Invalidity Contentions, and 15 days before the agreed extended deadline, Plaintiffs indicated that they intend to move for leave to supplement their infringement contentions to assert additional claims (i.e., claims 15–29) for the '389 Patent. Forcepoint opposes Plaintiffs' proposed supplement. Due to the prejudice inflicted upon Forcepoint by Plaintiffs' eleventh-hour proposed supplement, and the fact that the Court has not had a chance to address this issue, Forcepoint's Final Invalidity Contentions are hereby included with the express reservation of the right to supplement or modify the same to address these additional claims if and when the Court grants Plaintiffs' motion for leave. Likewise, Forcepoint is investigating the recently served proposed supplemental contentions and reserves all rights with respect to any other new contentions, including but not limited to new infringement theories advancing new or different claim interpretations or claim scope, for which Forcepoint reserves the right to identify and chart additional art and assert additional invalidity grounds under §§ 101, 102, 103, and/or 112.

Forcepoint further reserves the right to interpret these terms differently over the course of the litigation, and does not adopt any interpretations impliedly or expressly put forth in these Contentions. Accordingly, Forcepoint's Contentions, including the attached claim charts, may reflect alternative positions as to claim construction and scope. Nothing in this document or the attached claim charts, however, should be construed as an admission that Forcepoint agrees with Plaintiffs' contentions or that any claim, whether asserted or not, of the Asserted Patents is valid, enforceable, or infringed.

Accompanying claim charts contain specific examples of prior art references, patents, knowledge, inventions, uses, sales, methods, and/or systems that included and/or disclosed, either expressly or inherently, each limitation of certain claims and/or examples of prior art references and systems in view of which a person of ordinary skill in the art would have considered each limitation and the claimed combination of such limitations obvious. Forcepoint has endeavored to identify relevant portions and/or features of the identified prior art. The identified prior art, however, may contain additional descriptions of or alternative support for the claim limitations. Forcepoint may rely upon un-cited portions or features of the identified prior art, other documents, and expert testimony to provide context or to aid them in understanding the identified prior art. Where Forcepoint cites to a particular figure in a reference, the citation should be understood to encompass the caption and description of the figure and any text relating to the figure. Similarly, where Forcepoint cites to particular text referring to a figure, the citation should be understood to include the figure and caption as well.

Forcepoint reserves the right to further amend these disclosures should Plaintiffs later provide any information that they failed to provide in their disclosures under Section II, Paragraph 2 of the Order or should Plaintiffs further amend their disclosures under Section II, Paragraph 2 of

the Order in any way. Moreover, Forcepoint reserves the right to revise their ultimate Contentions concerning the invalidity of the Asserted Claims, which may change in response to any further order by the Court concerning the construction of the Asserted Claims, additional information obtained during the discovery period, any findings as to the priority date of the Asserted Claims, and/or positions that Forcepoint or any expert witnesses may take concerning claim construction, infringement, and/or invalidity issues. Forcepoint hereby provides disclosures and related documents pertaining only to the Asserted Claims as identified by Plaintiffs in their Preliminary Infringement Contentions, served July 12, 2022, and authorized supplements thereto. Forcepoint reserves the right to modify, amend, or supplement these Contentions to address any additional claims that the Court may allow Plaintiffs to later assert.

Forcepoint further intends to rely upon inventor admissions concerning the scope of the Asserted Claims, and prior art relevant to the Asserted Claims, found in: the Asserted Patents, the patent prosecution histories for the Asserted Patents, and related patents and/or patent applications; any deposition testimony of any inventor of the Asserted Patents; any previous trial testimony of any inventor of the Asserted Patents; and any papers filed or any evidence produced or submitted by Plaintiffs or their affiliates in connection with this litigation, or any previous litigation, related to any of the Asserted Patents. In particular, Forcepoint reserves the right to contend that the Asserted Claims are invalid in view of admitted prior art, or under pre-AIA 35 U.S.C. § 102(f) in the event Forcepoint obtains evidence that inventors named in the Asserted Patents did not invent (either alone or in conjunction with others) the subject matter claimed in the Asserted Patents. Should Forcepoint obtain such evidence, they will provide the name of the person(s) from whom and the circumstances under which the claimed invention or any part thereof was derived.

Prior art not included in these Contentions, whether known or not known to Forcepoint, may become relevant. Forcepoint is currently unaware of the extent, if any, to which Plaintiffs will contend that limitations of the Asserted Claims are not disclosed in the prior art identified by Forcepoint. Forcepoint reserves the right to identify additional references that would render obvious the allegedly missing limitation(s) of the disclosed device or method. Discovery is ongoing, and Forcepoint has not yet completed its search for and analysis of relevant prior art. Thus, Forcepoint reserves the right to revise, amend, and/or supplement the information provided herein, including identifying, charting, and relying on additional references, should Forcepoint's further search and analysis yield additional information or references, consistent with the Order and the Federal Rules of Civil Procedure.

Prior art patents or publications included in these Contentions may be related (*e.g.*, as a divisional, continuation, continuation-in-part, parent, child, or other relation or claim of priority) to earlier or later filed patents or publications, may have counterparts filed in other jurisdictions, or may incorporate (or be incorporated by) other patents or publications by reference. The listed patents or publications are intended to be representative of these other patents or publications, to the extent they exist. Accordingly, Forcepoint reserves the right to modify, amend, and/or supplement these Contentions with these related patents or publications, as well as other prior art references, upon further investigation.

Additionally, because third-party discovery is not yet complete, Forcepoint reserves the right to present additional items of prior art under 35 U.S.C. §§ 102(a), (b), (e), and/or (g), and/or § 103 located during the course of such discovery or further investigation, and to assert contentions of invalidity under 35 U.S.C. §§ 102(c), (d), or (f) to the extent that such discovery or investigation

yields information forming the basis for such contentions of invalidity.[2] For example, Forcepoint may issue subpoenas in the course of discovery to third parties believed to have knowledge, documentation, and/or corroborating evidence concerning some of the prior art listed below and/or additional prior art. These third parties may include, without limitation, the authors, inventors, developers, designers, or assignees of the references and systems listed in these disclosures.

In those instances where Forcepoint asserts that the claims are invalid under 35 U.S.C. § 112 (*e.g.*, no written description, not enabled, and/or indefinite), Forcepoint has applied the prior art, in part, in accordance with Forcepoint's assumptions that Plaintiffs: (1) contend those claims are definite; (2) find written description support for those claims; and (3) contend that those claims are enabled. However, Forcepoint's prior art and Invalidity Contentions do not necessarily represent Forcepoint's agreement or view as to the meaning, definiteness, written description support for, or enablement of any claim contained therein. In fact, Forcepoint notes numerous grounds for invalidity on such bases below.

II. BACKGROUND

A. The Asserted Claims

Plaintiffs are asserting the following claims of the Asserted Patents:

Patent	Asserted Claims
'389 Patent	1-14, 30 ("Asserted '389 Patent Claims")
'844 Patent	1-3, 6-12, and 15-20 ("Asserted '844 Patent Claim")
'721 Patent	1, 8, 9, 14, and 15 ("Asserted '721 Patent Claims")
'386 Patent	1-13, 15, 16, and 18 ("Asserted '386 Patent Claims")

[2] Throughout these Contentions, Forcepoint applies post-AIA sections to the '844 and '869 Patents based on their filing date and the equivalent pre-AIA sections to the other Asserted Patents based on their filing dates. All references to 35 U.S.C. throughout these Contentions should be understood to apply the appropriate pre-AIA or post-AIA sections accordingly.

Patent	Asserted Claims
’928 Patent	1-20 (“Asserted ’928 Patent Claims”)
’243 Patent	1-14 (“Asserted ’243 Patent Claims”)
’932 Patent	1-15 (“Asserted ’932 Patent Claims”)
’869 Patent	18-21, 24, 26-35, 38, 40-49, 52, 54-59 (“Asserted ’869 Patent Claims”)

B. Priority Dates of the Asserted Claims

The ’389 Patent

Plaintiffs contend that the ’389 Patent is entitled to a priority date of June 30, 2005, based on the filing of foreign patent application GB 01513375.6. But, as a preliminary matter, GB 01513375.6 and U.S. Patent Application No. 11/477,807 (the first U.S. Patent application filed relating to the ’389 Patent) do not share a common applicant or inventor as required by 35 U.S.C. § 119(a) to claim priority to a foreign application. In addition, Plaintiffs have yet to substantively respond to Forcepoint’s Interrogatory No. 9 (served May 1, 2023), which asked Plaintiffs to set forth the complete basis for each Asserted Claim’s priority date, including claim charts with specific citations within each priority document as to where and how each claim element is described and enabled in accordance with 35 U.S.C. § 112. Therefore, Forcepoint contends that no Asserted Claim of the ’389 Patent is entitled to a priority date earlier than June 30, 2006, though Forcepoint does not concede that the ’389 Patent is necessarily even entitled to that priority date.

The ’844 Patent

Forcepoint contends that no Asserted Claim of the ’844 Patent is entitled to a priority date earlier than May 12, 2015, though Forcepoint does not concede that the ’844 Patent is necessarily even entitled to that priority date.

The '721 Patent

Plaintiffs contend that the '721 Patent is entitled to an earlier priority date based on alleged conception in May 2010 followed by continuous diligence and an actual reduction to practice of the claimed inventions no later than November 30, 2010. Forcepoint disagrees that Plaintiffs' conception and reduction-to-practice allegations and evidence establish that the '721 Patent is entitled to an earlier priority date, including because Plaintiffs have yet to substantively respond to Forcepoint's Interrogatory No. 9 (served May 1, 2023), which asked Plaintiffs to set forth the complete basis for their contentions regarding the named inventors and their specific contribution(s) to the Asserted Claims, and the date, location, circumstances, and any corroborating evidence of the invention's conception, reduction to practice, and any acts of diligence.

Forcepoint contends that no Asserted Claim of the '721 Patent is entitled to a priority date earlier than February 15, 2011, though Forcepoint does not concede that the '721 Patent is necessarily even entitled to that priority date. As previously mentioned, Plaintiffs have not substantively answered Forcepoint's Interrogatory No. 9, which asked Plaintiffs to set forth the complete basis for each Asserted Claim's priority date, including claim charts with specific citations within each priority document as to where and how each claim element is described and enabled in accordance with 35 U.S.C. § 112. Accordingly, Plaintiffs have not established that the '721 Patent is entitled to claim the benefit of even Provisional Application No. 61/443,095.

The '386 Patent

Plaintiffs contend that the '386 Patent is entitled to a priority date of April 21, 2009, based on the filing of Provisional Application No. 61/171,264. While Forcepoint contends that no Asserted Claim of the '386 Patent is entitled to a priority date earlier than April 21, 2009,

Forcepoint does not concede that the ’386 Patent is necessarily even entitled to that priority date. As previously mentioned, Plaintiffs have not substantively answered Forcepoint’s Interrogatory No. 9, which asked Plaintiffs to set forth the complete basis for each Asserted Claim’s priority date, including claim charts with specific citations within each priority document as to where and how each claim element is described and enabled in accordance with 35 U.S.C. § 112. Accordingly, Plaintiffs have not established that the ’386 Patent is entitled to claim the benefit of Provisional Application No. 61/171,264.

The ’928 Patent

Plaintiffs contend that the ’928 Patent is entitled to a priority date of October 3, 2011, based on the filing of Provisional Application No. 61/542,693. While Forcepoint contends that no Asserted Claim of the ’928 Patent is entitled to a priority date earlier than October 3, 2011, Forcepoint does not concede that the ’928 Patent is necessarily even entitled to that priority date. As previously mentioned, Plaintiffs have not substantively answered Forcepoint’s Interrogatory No. 9, which asked Plaintiffs to set forth the complete basis for each Asserted Claim’s priority date, including claim charts with specific citations within each priority document as to where and how each claim element is described and enabled in accordance with 35 U.S.C. § 112. Accordingly, Plaintiffs have not established that the ’928 Patent is entitled to claim the benefit of Provisional Application No. 61/542,693.

The ’243 Patent

Plaintiffs purport that the ’243 Patent is entitled to a priority date of April 20, 2006, based on the purported filing date of the ’243 Patent. Forcepoint contends that no Asserted Claim of the ’243 Patent is entitled to a priority date earlier than April 20, 2006, though Forcepoint does not concede that the ’243 Patent is necessarily even entitled to that priority date.

The '932 Patent

Plaintiffs purport that the '932 Patent is entitled to a priority date of April 20, 2006, corresponding to the purported filing date of U.S. Patent Application No. 11/408,146. Forcepoint contends that no Asserted Claim of the '932 Patent is entitled to a priority date earlier than April 20, 2006, though Forcepoint does not concede that the '932 Patent is necessarily even entitled to that priority date.

The '869 Patent

Plaintiffs purport that the '869 Patent is entitled to a priority date of May 12, 2015, corresponding to the purported filing date of U.S. Patent Application No. 14/709,875. Forcepoint contends that no Asserted Claim of the '869 Patent is entitled to a priority date earlier than May 12, 2015, though Forcepoint does not concede that the '869 Patent is necessarily even entitled to that priority date.

III. INVALIDITY CONTENTIONS FOR THE '389 PATENT

A. General State of the Art at the Time of the Alleged Inventions

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '389 Patent, may provide background and context pertinent to the teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '389 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or

knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 389-A-1 through 389-A-21 identify where each limitation of the Asserted Claims of the '389 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 389-A-1 through 389-A-21, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 389-A-1 through 389-A-21 and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combination in Section III.E, *infra*.

'389 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 389-A-1	U.S. Patent No. 7,865,956 ("Cambridge 956")	U.S.	Jun. 10, 2005	Jan. 4, 2011
Ex. 389-A-2	U.S. Patent No. 7,603,711 ("Scheidell")	U.S.	Oct. 30, 2003	Oct. 13, 2009
Ex. 389-A-3	U.S. Patent No. 8,516,583 ("Thomas")	U.S.	Mar. 31, 2005	Aug. 20, 2013
Ex. 389-A-4	U.S. Patent No. 9,104,871 ("Tuvell 871")	U.S.	Apr. 6, 2007	Aug. 11, 2015
Ex. 389-A-5	U.S. Patent No. 6,973,577 ("Kouznetsov")	U.S.	May 26, 2000	Dec. 6, 2005
Ex. 389-A-6	U.S. Patent No. 7,080,000 ("Cambridge 000")	U.S.	Jul. 23, 2001	Jul. 18, 2006
Ex. 389-A-7	U.S. Patent No. 7,093,239 ("van der Made")	U.S.	Aug. 18, 2000	Aug. 15, 2006
Ex. 389-A-8	U.S. Patent No. 7,152,164 ("Loukas")	U.S.	Nov. 26, 2001	Dec. 19, 2006
Ex. 389-A-9	U.S. Patent No. 7,356,843 ("Kingsford")	U.S.	Oct. 1, 2003	Apr. 8, 2008
Ex. 389-A-10	U.S. Patent No. 7,694,150 ("Kirby")	U.S.	Jun. 22, 2004	Apr. 6, 2010
Ex. 389-A-11	U.S. Patent No. 7,934,103 ("Kidron")	U.S.	Apr. 15, 2003	Apr. 26, 2011
Ex. 389-A-12	U.S. Patent No. 7,434,261 ("Costea")	U.S.	Sep. 27, 2004	Oct. 7, 2008
Ex. 389-A-13	U.S. Patent Publication No. 2002/0078381 A1 ("Farley 381")	U.S.	Jun. 6, 2001	Feb. 26, 2004
Ex. 389-A-14	U.S. Patent Publication No. 2004/0039968 A1 ("Hatonen")	U.S.	Jun. 6, 2001	Feb. 26, 2004
Ex. 389-A-15	U.S. Patent Publication No. 2004/0143753 ("Hernacki")	U.S.	Jan. 21, 2003	Jul. 22, 2004
Ex. 389-A-16	U.S. Patent Publication No. 2004/0111632 A1 ("Halperin")	U.S.	May 5, 2003	Jun. 10, 2004

'389 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 389-A-17	U.S. Patent Publication No. 2005/0210035 ("Kester 035")	U.S.	May 19, 2005	Sep. 22, 2005
Ex. 389-A-18	U.S. Patent Publication No. 2005/0132205 A1 ("Palliyil")	U.S.	Dec. 12, 2004	Jun. 16, 2005
Ex. 389-A-19	U.S. Patent Publication No. 2005/0038818 A1 ("Hooks")	U.S.	Aug. 11, 2004	Feb. 17, 2005

'389 Patent Prior Art Publications				
Ex. No.	**Title**	**Date of Publication**	**Author**	**Publisher**
Ex. 389-A-20	Inoue, H., Forrest, S., Anomaly Intrusion Detection in Dynamic Execution Environments, In: Proc. of the 2002 Workshop on New Security Paradigms (NSPW), pp. 52–60 (2002) ("Inoue")		Haijme Inoue & Stephanie Forrest	University of New Mexico

'389 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 389-A-21	SurfControl Web Filter, Email Filter and URL Database ("SurfControl")
	System and/or product art received pursuant to Forcepoint's subpoena to Trend Micro, Inc. (dated October 27, 2023)
	System and/or product art received pursuant to Forcepoint's subpoena to Sophos Ltd. (dated October 31, 2023)

'389 Patent Additional Prior Art/Background Art
U.S. Patent No. 5,440,723 ("Arnold 723")
U.S. Patent No. 6,195,587 ("Hruska")
U.S. Patent No. 6,842,861 ("Cox")
U.S. Patent No. 6,880,110 ("Largman")

'389 Patent Additional Prior Art/Background Art
U.S. Patent No. 7,089,428 ("Farley 428")
U.S. Patent No. 7,263,616 ("Brackett")
U.S. Patent No. 7,424,609 ("Kwan")
U.S. Patent No. 7,565,550 ("Liang")
U.S. Patent No. 7,594,272 ("Kennedy")
U.S. Patent No. 7,627,898 ("Beck")
U.S. Patent No. 7,634,806 ("Zinda")
U.S. Patent No. 7,900,194 ("Mankins")
U.S. Patent No. 7,913,303 ("Rouland")
U.S. Patent No. 8,458,797 ("Yu 797")
U.S. Patent Application Publication No. US 2003/0172166 ("Judge")
U.S. Patent Application Publication No. US 2004/0123145 ("Baffes")
U.S. Patent Application Publication No. US 2006/0101520 ("Schumaker")
U.S. Patent Application Publication No. US 2006/0293777 ("Breitgand")
U.S. Patent Application Publication No. US 2007/0294768 ("Moskovitch 768")
Australian Patent Publication No. AU 2001/262958 A1 ("Brass")
Barry Nance, *Server-Based Java Security Products Help Guard Your Enterprise Flank*, NETWORK COMPUTING, Dec. 1, 1998, at 86. ("Nance")
Andrew Conry-Murray, *Behavior-Blocking Stops Unknown Malicious Code*, NETWORK MAGAZINE, Jun. 5, 2002. ("Conry-Murray")
SandBox Security's Secure4U, http://www.sandboxsecurity.com/Products/index.htm (last visited Sep. 11, 2022). ("Sandbox Security")
Stacy Bolton, *Global Information Assurance Certification Paper*, SANS INSTITUTE, Aug. 1, 2002. ("Bolton")
PR Newswire, *Finjan Software and F-Secure to Deliver Proactive Content Security For Corporate PCs in New Era of Malicious Code*, PR NEWSWIRE ASSOCIATION LLC, Oct. 30, 2000. ("Finjan")
Kelly Jackson Higgins, *Sandbox the Hackers*, INTERNETWEEK, http://www.internetweek.com/indepth01/indepth041701.htm. ("Higgins")
SurfinGuard Pro 5.7, http://www.finjan.com/Products/HomeUsersSurfinGuardPro/default.asp (last visited September 11, 2022). ("SurfinGuard")
Vincent Berk et al., *Designing a Framework for Active Worm Detection on Global Networks*, IEEE, Mar. 24, 2003. ("Berk")

'389 Patent Additional Prior Art/Background Art
Okena StormWatch, *A New Approach To Intrusion Detection: Intrusion Prevention*, INTRUSION PREVENTION WHITE PAPER, 2002. ("Okena StormWatch")
David Dagon et al., *HoneyStat: Local Worm Detection Using Honeypots*, RECENT ADANCES IN INTRUSION DETECTION, 2004. ("Dagon")
Anton Chuvakin, *Security Event Analysis through Correlation*, 13, INFORMATION SYSTEMS SECURITY, 13, 2004. ("Chuvakin")
Min Cai et al., *Collaborative Internet Worm Containment*, 3, IEEE, June 13, 2005 at 25. ("Cai")
Christopher M. King, *Security Management: Making Sense Of Events*, BUSINESS COMMUNICATIONS REVIEW, Sep. 2001 at 32. ("King")
Linda Leung, *Advanced Technologies Aim to Protect Network Asset*, PROFILING CYBERCRIME: NETWORK THREATS AND DEFENSE STRATEGIES, Nov. 29, 2004 at 56. ("Leung")
neuSecure 3.0, www.guarded.net:80/neusecure3.0.html (last visited Sep. 11, 2022). ("neuSecure")
Open Systems Security Threat Manager, www.open.com:80/products/products.shtml (last visited Sep. 11, 2022) ("Open")

Furthermore, with respect to the '389 Patent, under pre-AIA 35 U.S.C. § 102(f), Forcepoint identifies the activities of entities involved in computer security as referenced in foreign patent application GB 01513375.6, to which Plaintiffs claim priority. *See, e.g.*, GB 01513375.6 at 1-3.

Furthermore, with respect to the '389 Patent, under pre-AIA 35 U.S.C. §§ 102(a), (b), and (g)(2), Forcepoint reserves the right to identify additional prior art systems developed prior to June 30, 2006. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656, at *8-11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery obtained.

D. Anticipation

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs'

apparent infringement theory, Asserted Claims 1-7 and 30 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Scheidell as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-6 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Cambridge 956 as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-5 and 8 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Thomas as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-5, 9-14, and 30 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Tuvell 871 as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-7, 9, 11, 14, and 30 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Halperin and Kirby as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-7, 9, 11-14, and 30 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Hernacki as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-7, 9-11, 13-14, and 30 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Loukas as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1, 14, and 30 of the ’389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by van der Made as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-2 and 4-6 of the ’389 Patent are anticipated, either

expressly or inherently as understood by a person having ordinary skill in the art, by Farley 381 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 5-7, 9, 11, 14, and 30 of the '389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Palliyil as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-2, 6, 9, 11, 14, and 30 of the '389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Inoue as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 6-7, and 9-11 of the '389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Kingsford as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-2, and 4-5 of the '389 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by SurfControl as set forth in the attached claim chart.

E. Obviousness

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '389 Patent are rendered obvious by the references identified in the attached claim charts, either alone or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted '389 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint's anticipation contentions, which shall not be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	In Combination With
Halperin	Cambridge 000
Halperin	Cambridge 956
Halperin	Costea
Halperin	Farley 381
Halperin	Hatonen
Halperin	Hooks
Halperin	Hernacki
Halperin	Inoue
Halperin	Kirby
Halperin	Kester 035
Halperin	Kouznetsov
Halperin	Kingsford
Halperin	Kidron
Halperin	Loukas
Halperin	Palliyil
Halperin	Scheidell
Halperin	Thomas
Halperin	Tuvell 871
Halperin	van der Made
Halperin	SurfControl
Kester 035	Cambridge 956
Kester 035	Cambridge 000
Kester 035	Costea

Primary Reference	In Combination With
Kester 035	Farley 381
Kester 035	Halperin
Kester 035	Hatonen
Kester 035	Hooks
Kester 035	Inoue
Kester 035	Kirby
Kester 035	Kouznetsov
Kester 035	Kingsford
Kester 035	Kidron
Kester 035	Loukas
Kester 035	Palliyil
Kester 035	Scheidell
Kester 035	Thomas
Kester 035	Tuvell 871
Kester 035	van der Made
Kester 035	SurfControl
Hernacki	Cambridge 000
Hernacki	Cambridge 956
Hernacki	Costea
Hernacki	Farley 381
Hernacki	Halperin
Hernacki	Hatonen
Hernacki	Hooks

Primary Reference	In Combination With
Hernacki	Inoue
Hernacki	Kirby
Hernacki	Kester 035
Hernacki	Kingsford
Hernacki	Kidron
Hernacki	Loukas
Hernacki	Palliyil
Hernacki	Scheidell
Hernacki	Thomas
Hernacki	Tuvell 871
Hernacki	van der Made
Hernacki	SurfControl
Palliyil	Cambridge 956
Palliyil	Cambridge 000
Palliyil	Costea
Palliyil	Farley 381
Palliyil	Halperin
Palliyil	Hatonen
Palliyil	Hooks
Palliyil	Hernacki
Palliyil	Inoue
Palliyil	Kirby
Palliyil	Kester 035

Primary Reference	In Combination With
Palliyil	Kouznetsov
Palliyil	Kingsford
Palliyil	Kidron
Palliyil	Loukas
Palliyil	Scheidell
Palliyil	Thomas
Palliyil	Tuvell 871
Palliyil	van der Made
Palliyil	SurfControl
Thomas	Cambridge 000
Thomas	Cambridge 956
Thomas	Costea
Thomas	Farley 381
Thomas	Halperin
Thomas	Hatonen
Thomas	Hooks
Thomas	Hernacki
Thomas	Inoue
Thomas	Kirby
Thomas	Kester 035
Thomas	Kouznetsov
Thomas	Kingsford
Thomas	Kidron

Primary Reference	In Combination With
Thomas	Loukas
Thomas	Palliyil
Thomas	Scheidell
Thomas	Tuvell 871
Thomas	van der Made
Thomas	SurfControl
Kirby	Cambridge 000
Kirby	Cambridge 956
Kirby	Costea
Kirby	Farley 381
Kirby	Halperin
Kirby	Hatonen
Kirby	Hooks
Kirby	Hernacki
Kirby	Inoue
Kirby	Kester 035
Kirby	Kouznetsov
Kirby	Kingsford
Kirby	Kidron
Kirby	Loukas
Kirby	Palliyil
Kirby	Scheidell
Kirby	Thomas

Primary Reference	In Combination With
Kirby	Tuvell 871
Kirby	van der Made
Kirby	SurfControl
Loukas	Cambridge 956
Loukas	Cambridge 000
Loukas	Costea
Loukas	Farley 381
Loukas	Halperin
Loukas	Hatonen
Loukas	Hooks
Loukas	Hernacki
Loukas	Inoue
Loukas	Kirby
Loukas	Kester 035
Loukas	Kouznetsov
Loukas	Kingsford
Loukas	Kidron
Loukas	Palliyil
Loukas	Scheidell
Loukas	Thomas
Loukas	Tuvell 871
Loukas	van der Made
Loukas	SurfControl

Primary Reference	In Combination With
Farley 381	Cambridge 956
Farley 381	Cambridge 000
Farley 381	Costea
Farley 381	Halperin
Farley 381	Hatonen
Farley 381	Hooks
Farley 381	Hernacki
Farley 381	Inoue
Farley 381	Kirby
Farley 381	Kester 035
Farley 381	Kouznetsov
Farley 381	Kingsford
Farley 381	Kidron
Farley 381	Loukas
Farley 381	Palliyil
Farley 381	Scheidell
Farley 381	Thomas
Farley 381	Tuvell 871
Farley 381	van der Made
Farley 381	SurfControl
Kidron	Cambridge 956
Kidron	Cambridge 000
Kidron	Costea

Primary Reference	In Combination With
Kidron	Farley 381
Kidron	Halperin
Kidron	Hatonen
Kidron	Hooks
Kidron	Hernacki
Kidron	Inoue
Kidron	Kirby
Kidron	Kester 035
Kidron	Kouznetsov
Kidron	Kingsford
Kidron	Loukas
Kidron	Palliyil
Kidron	Scheidell
Kidron	Thomas
Kidron	Tuvell 871
Kidron	van der Made
Kidron	SurfControl
Hooks	Cambridge 956
Hooks	Cambridge 000
Hooks	Costea
Hooks	Farley 381
Hooks	Halperin
Hooks	Hatonen

Primary Reference	In Combination With
Hooks	Hernacki
Hooks	Inoue
Hooks	Kirby
Hooks	Kester 035
Hooks	Kouznetsov
Hooks	Kingsford
Hooks	Kidron
Hooks	Loukas
Hooks	Palliyil
Hooks	Scheidell
Hooks	Thomas
Hooks	Tuvell 871
Hooks	van der Made
Hooks	SurfControl
Scheidell	Cambridge 956
Scheidell	Cambridge 000
Scheidell	Costea
Scheidell	Farley 381
Scheidell	Halperin
Scheidell	Hatonen
Scheidell	Hooks
Scheidell	Hernacki
Scheidell	Inoue

Primary Reference	In Combination With
Scheidell	Kirby
Scheidell	Kester 035
Scheidell	Kouznetsov
Scheidell	Kingsford
Scheidell	Kidron
Scheidell	Loukas
Scheidell	Palliyil
Scheidell	Thomas
Scheidell	Tuvell 871
Scheidell	van der Made
Scheidell	SurfControl
Cambridge 956	Cambridge 000
Cambridge 956	Costea
Cambridge 956	Farley 381
Cambridge 956	Halperin
Cambridge 956	Hatonen
Cambridge 956	Hooks
Cambridge 956	Hernacki
Cambridge 956	Inoue
Cambridge 956	Kirby
Cambridge 956	Kester 035
Cambridge 956	Kouznetsov
Cambridge 956	Kingsford

Primary Reference	In Combination With
Cambridge 956	Kidron
Cambridge 956	Loukas
Cambridge 956	Palliyil
Cambridge 956	Scheidell
Cambridge 956	Thomas
Cambridge 956	Tuvell 871
Cambridge 956	van der Made
Cambridge 956	SurfControl
Tuvell 871	Cambridge 000
Tuvell 871	Cambridge 956
Tuvell 871	Costea
Tuvell 871	Farley 381
Tuvell 871	Halperin
Tuvell 871	Hatonen
Tuvell 871	Hooks
Tuvell 871	Hernacki
Tuvell 871	Inoue
Tuvell 871	Kirby
Tuvell 871	Kester 035
Tuvell 871	Kouznetsov
Tuvell 871	Kingsford
Tuvell 871	Kidron
Tuvell 871	Loukas

Primary Reference	In Combination With
Tuvell 871	Palliyil
Tuvell 871	Scheidell
Tuvell 871	Thomas
Tuvell 871	van der Made
Tuvell 871	SurfControl
van der Made	Cambridge 000
van der Made	Cambridge 956
van der Made	Costea
van der Made	Farley 381
van der Made	Halperin
van der Made	Hatonen
van der Made	Hooks
van der Made	Hernacki
van der Made	Inoue
van der Made	Kirby
van der Made	Kester 035
van der Made	Kouznetsov
van der Made	Kingsford
van der Made	Kidron
van der Made	Loukas
van der Made	Palliyil
van der Made	Scheidell
van der Made	Thomas

Primary Reference	In Combination With
van der Made	Tuvell 871
van der Made	SurfControl
Inoue	Cambridge 956
Inoue	Cambridge 000
Inoue	Costea
Inoue	Farley 381
Inoue	Halperin
Inoue	Hatonen
Inoue	Hooks
Inoue	Hernacki
Inoue	Kirby
Inoue	Kester 035
Inoue	Kouznetsov
Inoue	Kingsford
Inoue	Kidron
Inoue	Loukas
Inoue	Palliyil
Inoue	Scheidell
Inoue	Thomas
Inoue	Tuvell 871
Inoue	van der Made
Inoue	SurfControl
Kingsford	Cambridge 956

Primary Reference	In Combination With
Kingsford	Cambridge 000
Kingsford	Costea
Kingsford	Farley 381
Kingsford	Halperin
Kingsford	Hatonen
Kingsford	Hooks
Kingsford	Hernacki
Kingsford	Inoue
Kingsford	Kirby
Kingsford	Kester 035
Kingsford	Kouznetsov
Kingsford	Kidron
Kingsford	Loukas
Kingsford	Palliyil
Kingsford	Scheidell
Kingsford	Thomas
Kingsford	Tuvell 871
Kingsford	van der Made
Kingsford	SurfControl
Halperin	Scheidell + Hooks
Halperin	Scheidell + Palliyil
Halperin	Scheidell + Kidron
Halperin	Scheidell + Kirby

Primary Reference	In Combination With
Halperin	Scheidell + Cambridge 956
Halperin	Scheidell + Thomas
Halperin	Scheidell + Tuvell 871
Halperin	Scheidell + Kester 035
Halperin	Scheidell + Hernacki
Halperin	Scheidell + Loukas
Halperin	Scheidell + van der Made
Halperin	Scheidell + Hatonen
Halperin	Scheidell + Cambridge 000
Halperin	Cambridge 956 + Tuvell 871
Halperin	Cambridge 956 + Kester 035
Halperin	Cambridge 956 + Hernacki
Halperin	Cambridge 956 + Loukas
Halperin	Cambridge 956 + van der Made
Halperin	Cambridge 956 + Hooks
Halperin	Cambridge 956 + Kouznetsov
Halperin	Cambridge 956 + Farley 381
Halperin	Cambridge 956 + Cambridge 000
Halperin	Cambridge 956 + Thomas
Halperin	Thomas + Hernacki
Halperin	Thomas + Tuvell 871
Halperin	Thomas + Loukas
Halperin	Thomas + Kester 035

Primary Reference	In Combination With
Halperin	Tuvell 871 + Loukas
Halperin	Tuvell 871 + Kester 035
Halperin	Tuvell 871 + van der Made
Halperin	Tuvell 871 + Hernacki
Halperin	Tuvell 871 + Hooks
Halperin	Tuvell 871 + Kouznetsov
Halperin	Tuvell 871 + Farley 381
Halperin	Tuvell 871 + Cambridge 000
Halperin	Tuvell 871 + Hatonen
Halperin	Kester 035 + Hernacki
Halperin	Kester 035 + Loukas
Halperin	Kester 035 + van der Made
Halperin	Kester 035 + Hooks
Halperin	Kester 035 + Kouznetsov
Halperin	Kester 035 + Cambridge 000
Halperin	Hernacki + Loukas
Halperin	Hernacki + van der Made
Halperin	Hernacki + Hooks
Halperin	Hernacki + Kouznetsov
Halperin	Hernacki + Loukas
Halperin	Kirby + van der Made
Halperin	Kirby + Hatonen
Halperin	Kirby + Kouznetsov

Primary Reference	In Combination With
Halperin	Kirby + Inoue
Halperin	Loukas + van der Made
Halperin	Loukas + Hooks
Halperin	Loukas + Kouznetsov
Halperin	Loukas + Farley 381
Halperin	Loukas + Cambridge 000
Halperin	Loukas + Kingsford
Halperin	Loukas + Hatonen
Halperin	van der Made + Hooks
Halperin	van der Made + Kouznetsov
Halperin	van der Made + Hatonen
Halperin	van der Made + Inoue
Halperin	van der Made + Cambridge 000
Halperin	Hooks + Palliyil
Halperin	Hooks + Kidron
Halperin	Hooks + Kouznetsov
Halperin	Farley 381 + Cambridge 000
Halperin	Palliyil + Kidron
Halperin	Hatonen + Cambridge 000
Halperin	Hatonen + Inoue
Halperin	Hatonen + Kouznetsov
Halperin	Kouznetsov + Inoue
Kester 035	Cambridge 956 + Thomas

Primary Reference	In Combination With
Kester 035	Cambridge 956 + Hernacki
Kester 035	Cambridge 956 + Hooks
Kester 035	Cambridge 956 + Tuvell 871
Kester 035	Cambridge 956 + Kirby
Kester 035	Cambridge 956 + van der Made
Kester 035	Cambridge 956 + Hatonen
Kester 035	Kirby + van der Made
Kester 035	Kirby + Hatonen
Kester 035	Kirby + Kouznetsov
Kester 035	Kirby + Inoue
Kester 035	Kirby + Hooks
Kester 035	van der Made + Hatonen
Kester 035	van der Made + Kouznetsov
Kester 035	van der Made + Inoue
Kester 035	Hatonen + Kouznetsov
Kester 035	Hatonen + Inoue
Kester 035	Kouznetsov + Inoue
Kester 035	Loukas + Hooks
Kester 035	Loukas + Kingsford
Kester 035	Loukas + Tuvell 871
Kester 035	Loukas + Scheidell
Kester 035	Tuvell 871 + Hooks
Kester 035	Tuvell 871 + Hernacki

Primary Reference	In Combination With
Kester 035	Tuvell 871 + Thomas
Kester 035	Scheidell + Kirby
Kester 035	Scheidell + Hooks
Kester 035	Scheidell + Halperin
Kester 035	Scheidell + Hernacki
Kester 035	Scheidell + Palliyil
Kester 035	Scheidell + Inoue
Kester 035	Scheidell + Kidron
Kester 035	Scheidell + Cambridge 000
Kester 035	Scheidell + Costea
Kester 035	Scheidell + Thomas
Kester 035	Scheidell + Farley 381
Kester 035	Halperin + Hernacki
Kester 035	Halperin + Kirby
Kester 035	Halperin + Loukas
Kester 035	Halperin + Farley 381
Kester 035	Halperin + Palliyil
Kester 035	Halperin + Kidron
Kester 035	Halperin + Kingsford
Kester 035	Halperin + Costea
Kester 035	Halperin + Inoue
Kester 035	Halperin + Cambridge 000
Kester 035	Halperin + Hooks

Primary Reference	In Combination With
Kester 035	Hernacki + Kirby
Kester 035	Hernacki + Loukas
Kester 035	Hernacki + Farley
Kester 035	Hernacki + Palliyil
Kester 035	Hernacki + Kidron
Kester 035	Hernacki + Kingsford
Kester 035	Hernacki + Costea
Kester 035	Kirby + Loukas
Kester 035	Kirby + Farley 381
Kester 035	Kirby + Palliyil
Kester 035	Kirby + Kidron
Kester 035	Kirby + Kingsford
Kester 035	Kirby + Costea
Kester 035	Loukas + Farley 381
Kester 035	Loukas + Palliyil
Kester 035	Loukas + Kidron
Kester 035	Loukas + Inoue
Kester 035	Loukas + Costea
Kester 035	Loukas + Cambridge 000
Kester 035	Farley 381 + Palliyil
Kester 035	Farley 381 + Kidron
Kester 035	Farley 381 + Kingsford
Kester 035	Farley 381 + Costea

Primary Reference	In Combination With
Kester 035	Palliyil + Kidron
Kester 035	Palliyil + Kingsford
Kester 035	Palliyil + Costea
Kester 035	Palliyil + Inoue
Kester 035	Palliyil + Cambridge 000
Kester 035	Kidron + Kingsford
Kester 035	Kidron + Costea
Kester 035	Kidron + Cambridge 000
Kester 035	Kingsford + Costea
Kester 035	Hooks + Palliyil
Kester 035	Hooks + Kidron
Kester 035	Hooks + Palliyil
Kester 035	Hooks + Cambridge 000
Kester 035	Hooks + Costea
Kester 035	Hooks + Inoue
Kester 035	Hooks + Loukas
Thomas	Halperin + Kirby
Thomas	Halperin + Hooks
Thomas	Hernacki + Kirby
Thomas	Hernacki + Hooks
Thomas	Tuvell 871 + Cambridge 956
Thomas	Loukas + Hernacki
Thomas	Loukas + Hooks

Primary Reference	In Combination With
Thomas	Hooks + Tuvell 871
Thomas	Hooks + Cambridge 956
Thomas	Tuvell 871 + Halperin
Thomas	Tuvell 871 + Kester 035
Thomas	Tuvell 871 + Hernacki
Thomas	Tuvell 871 + Loukas
Thomas	Tuvell 871 + Palliyil
Thomas	Tuvell 871 + Kidron
Thomas	Halperin + Kester 035
Thomas	Halperin + Hernacki
Thomas	Halperin + Loukas
Thomas	Halperin + Palliyil
Thomas	Halperin + Kidron
Thomas	Kester 035 + Hernacki
Thomas	Kester 035 + Loukas
Thomas	Kester 035 + Hooks
Thomas	Kester 035 + Palliyil
Thomas	Kester 035 + Kidron
Thomas	Hernacki + Palliyil
Thomas	Hernacki + Kidron
Thomas	Loukas + Palliyil
Thomas	Loukas + Kidron
Thomas	Hooks + Kidron

Primary Reference	In Combination With
Thomas	Hooks + Palliyil
Thomas	Palliyil + Kidron
Hernacki	Kidron + Kirby
Hernacki	Halperin + Kirby
Hernacki	Halperin + Kidron
Hernacki	Kidron + Palliyil
Hernacki	Tuvell 871 + Cambridge 956
Hernacki	Tuvell 871 + Thomas
Hernacki	Thomas + Cambridge 956
Hernacki	Loukas + Thomas
Hernacki	Loukas + Hooks
Hernacki	Hooks + Tuvell 871
Hernacki	Hooks + Thomas
Hernacki	Hooks + Cambridge 956
Kirby	Thomas + Loukas
Kirby	Cambridge 956 + Loukas
Kirby	Loukas + Inoue
Kirby	Loukas + Kouznetsov
Kirby	van der Made + Inoue
Kirby	Thomas + Kingsford
Kirby	Cambridge 956 + Kingsford
Kirby	Kingsford + Inoue
Kirby	Kingsford + Kouznetsov

Primary Reference	In Combination With
Kirby	Scheidell + Costea
Kirby	Tuvell 871 + Cambridge 956
Kirby	Tuvell 871 + Thomas
Kirby	Thomas + Cambridge 956
Kirby	Loukas + Hernacki
Kirby	Loukas + Hooks
Kirby	Hooks + Tuvell 871
Kirby	Hooks + Thomas
Kirby	Hooks + Cambridge 956
Hooks	Tuvell 871 + Cambridge 956
Hooks	Tuvell 871 + Thomas
Hooks	Thomas + Cambridge 956
Hooks	Loukas + Hernacki
Hooks	Loukas + Thomas
Hooks	Kester 035 + Hernacki
Hooks	Kester 035 + Kirby
Hooks	Kester 035 + Loukas
Hooks	Kester 035 + Farley 381
Hooks	Kester 035 + Palliyil
Hooks	Kester 035 + Kidron
Hooks	Kester 035 + Kingsford
Hooks	Kester 035 + Costea
Hooks	Farley 381 + Halperin

Primary Reference	In Combination With
Hooks	Farley 381 + Hernacki
Hooks	Farley 381 + Kirby
Hooks	Farley 381 + Loukas
Hooks	Farley 381 + Palliyil
Hooks	Palliyil + Cambridge 956
Hooks	Hernacki + Palliyil
Hooks	Palliyil + Kidron
Hooks	Palliyil + Hatonen
Hooks	Palliyil + Thomas
Hooks	Hatonen + Loukas
Hooks	Hatonen + Kirby
Hooks	Hatonen + Hernacki
Hooks	Hatonen + Halperin
Hooks	Hatonen + Kingsford
Hooks	Hatonen + Costea
Hooks	Inoue + Cambridge 000
Hooks	Inoue + Loukas
Hooks	Inoue + Kirby
Hooks	Inoue + Hernacki
Hooks	Inoue + Halperin
Hooks	Inoue + Kester 035
Hooks	Kidron + Scheidell
Hooks	Kidron + Thomas

Primary Reference	In Combination With
Hooks	Kidron + Tuvell 871
Hooks	Kidron + Hernacki
Hooks	Kidron + Kirby
Hooks	Kidron + Loukas
Hooks	Kidron + Cambridge 000
Hooks	Kidron + Kingsford
Farley 381	Tuvell 871 + Cambridge 956
Farley 381	Tuvell 871 + Thomas
Farley 381	Thomas + Cambridge 956
Farley 381	Loukas + Hernacki
Farley 381	Loukas + Hooks
Farley 381	Loukas + Thomas
Farley 381	Hooks + Tuvell 871
Farley 381	Hooks + Thomas
Farley 381	Hooks + Cambridge 956
Farley 381	Thomas + Kester 035
Farley 381	Thomas + Hernacki
Farley 381	Thomas + Inoue
Farley 381	Thomas + Cambridge 000
Farley 381	Thomas + Costea
Farley 381	Hernacki + Scheidell
Farley 381	Hernacki + Tuvell 871
Farley 381	Hernacki + Halperin

Primary Reference	In Combination With
Farley 381	Hernacki + Kirby
Farley 381	Hernacki + van der Made
Farley 381	Hernacki + Palliyil
Farley 381	Hernacki + Inoue
Farley 381	Hernacki + Kidron
Farley 381	Hernacki + Costea
Farley 381	Kingsford + Scheidell
Farley 381	Kingsford + Thomas
Farley 381	Kingsford + Tuvell 871
Farley 381	Kingsford + Halperin
Farley 381	Kingsford + Kirby
Farley 381	Kingsford + Loukas
Farley 381	Kingsford + van der Made
Farley 381	Kingsford + Inoue
Farley 381	Kingsford + Palliyil
Farley 381	Kingsford + Kidron
Farley 381	Kingsford + Costea
Farley 381	Inoue + Cambridge 956
Farley 381	Inoue + Palliyil
Farley 381	Tuvell 871 + Halperin
Farley 381	Tuvell 871 + Kester 035
Farley 381	Tuvell 871 + Palliyil
Farley 381	Tuvell 871 + Kidron

Primary Reference	In Combination With
Farley 381	Halperin + Hooks
Farley 381	Halperin + Loukas
Farley 381	Halperin + Kester 035
Farley 381	Halperin + Palliyil
Farley 381	Halperin + Kidron
Farley 381	Kester 035 + Hernacki
Farley 381	Kester 035 + Loukas
Farley 381	Kester 035 + Hooks
Farley 381	Kester 035 + Palliyil
Farley 381	Kester 035 + Kidron
Farley 381	Hernacki + Hooks
Farley 381	Loukas + Palliyil
Farley 381	Loukas + Kidron
Farley 381	Kidron + Palliyil
Palliyil	Tuvell 871 + Cambridge 956
Palliyil	Tuvell 871 + Thomas
Palliyil	Thomas + Cambridge 956
Palliyil	Loukas + Hernacki
Palliyil	Loukas + Hooks
Palliyil	Loukas + Thomas
Palliyil	Hooks + Tuvell 871
Palliyil	Hooks + Thomas
Palliyil	Hooks + Cambridge 956

Primary Reference	In Combination With
Palliyil	Cambridge 956+ Loukas
Palliyil	Cambridge 956 + Kouznetsov
Palliyil	Tuvell 871 + Halperin
Palliyil	Tuvell 871 + Kester 035
Palliyil	Tuvell 871 + Hernacki
Palliyil	Tuvell 871 + Loukas
Palliyil	Tuvell 871 + Kidron
Palliyil	Halperin + Kester 035
Palliyil	Halperin + Hernacki
Palliyil	Halperin + Loukas
Palliyil	Halperin + Hooks
Palliyil	Halperin + Kidron
Palliyil	Kester 035 + Hernacki
Palliyil	Kester 035 + Loukas
Palliyil	Kester 035 + Hooks
Palliyil	Kester 035 + Kidron
Palliyil	Hernacki + Hooks
Palliyil	Hernacki + Kidron
Palliyil	Loukas + Kidron
Palliyil	Hooks + Kidron
Kidron	Thomas + Halperin
Kidron	Thomas + Kester 035
Kidron	Thomas + Hernacki

Primary Reference	In Combination With
Kidron	Thomas + Kirby
Kidron	Thomas + Loukas
Kidron	Thomas + Scheidell
Kidron	Hooks + Thomas
Kidron	Palliyil + Thomas
Kidron	Inoue + Thomas
Kidron	Thomas + Cambridge 956
Kidron	Kingsford + Thomas
Kidron	Thomas + Costea
Kidron	Kester 035 + Farley 381
Kidron	Kester 035 + Palliyil
Kidron	Tuvell 871 + Cambridge 956
Kidron	Tuvell 871 + Thomas
Kidron	Loukas + Hernacki
Kidron	Loukas + Hooks
Kidron	Hooks + Tuvell 871
Kidron	Hooks + Cambridge 956
Kidron	Tuvell 871 + Halperin
Kidron	Tuvell 871 + Kester 035
Kidron	Tuvell 871 + Hernacki
Kidron	Tuvell 871 + Loukas
Kidron	Tuvell 871 + Palliyil
Kidron	Halperin + Kester 035

Primary Reference	In Combination With
Kidron	Halperin + Hernacki
Kidron	Halperin + Loukas
Kidron	Halperin + Hooks
Kidron	Halperin + Palliyil
Kidron	Kester 035 + Hernacki
Kidron	Kester 035 + Loukas
Kidron	Kester 035 + Hooks
Kidron	Loukas + Palliyil
Kidron	Hooks + Palliyil
SurfControl	Kingsford + Costea
SurfControl	Cambridge 000 + Costea
SurfControl	Cambridge 000 + Kingsford
SurfControl	Kidron + Kingsford
SurfControl	Kidron + Cambridge 000
SurfControl	Inoue + Costea
SurfControl	Inoue + Kingsford
SurfControl	Inoue + Kidron
SurfControl	Kouznetsov + Costea
SurfControl	Kouznetsov + Kingsford
SurfControl	Kouznetsov + Kidron
SurfControl	Hatonen + Costea
SurfControl	Hatonen + Kidron
SurfControl	Hatonen + Kingsford

Primary Reference	In Combination With
SurfControl	Hatonen + Cambridge 000
SurfControl	Palliyil + Kidron
SurfControl	Palliyil + Hatonen
SurfControl	Farley + Kingsford
SurfControl	Farley + Cambridge 000
SurfControl	Farley + Palliyil
SurfControl	Hooks + Costea
SurfControl	Hooks + Cambridge 000
SurfControl	Hooks + Kingsford
SurfControl	Hooks + Kidron
SurfControl	Hooks + Inoue
SurfControl	Hooks + Kouznentsov
SurfControl	Hooks + Hatonen
SurfControl	Hooks + Palliyil
SurfControl	Hooks + Farley
SurfControl	van der Made + Hooks
SurfControl	van der Made + Costea
SurfControl	van der Made + Kingsford
SurfControl	van der Made + Kidron
SurfControl	van der Made + Hooks
SurfControl	van der Made + Palliyil
SurfControl	Loukas + Kidron
SurfControl	Loukas + Inoue

Primary Reference	In Combination With
SurfControl	Loukas + Hatonen
SurfControl	Loukas + Farley
SurfControl	Loukas + Hooks
SurfControl	Kirby + Kidron
SurfControl	Kirby + Inoue
SurfControl	Kirby + Hatonen
SurfControl	Kirby + Farley
SurfControl	Hernacki + van der Made
SurfControl	Hernacki + Loukas
SurfControl	Kester 035 + Hernacki
SurfControl	Kester 035 + Cortea
SurfControl	Kester 035 + Kidron
SurfControl	Kester 035 + Palliyil
SurfControl	Kester 035 + Loukas
SurfControl	Kester 035 + Kirby
SurfControl	Halperin + Loukas
SurfControl	Halperin + Kirby
SurfControl	Halperin + Kidron
SurfControl	Halperin + Palliyil
SurfControl	Halperin + Hooks

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have understood that each of these references are in the same field of endeavor, namely methods and

devices relating to computer security. *See, e.g.*, Cambridge 956 at Abstract; Scheidell at Abstract; Thomas at Abstract; Tuvell 871 at Abstract; van der Made at Abstract; Loukas at 1:42-62; Kirby at 2:21-42; Kester 035 at [0003]; Hernacki at [Abstract]; Halperin at Abstract; Cambridge 000 at 5:22-24; Costea at 8:15-26; Hooks at [0094]; Farley 381 at [0016]; Palliyil at [0009]; Hatonen at [0012]; Kouznetsov at 2:32-41; Inoue at [Page 52; Abstract]; Kidron at 1:16-19; Kingsford at 2:8-11; and SurfControl (Exhibit 389-A-21) at 6 (citing 2003 Evaluators' Guide at 6).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving computer security. *See, e.g.*, Cambridge 956 at Abstract; Scheidell at Abstract; Thomas at 3:44-49; Tuvell 871 at 4:29-37; van der Made at 1:15-18; Loukas at 1:42-62; Kirby at 2:56-3:6; Kester 035 at [0003]; Hernacki at [0051]; Halperin at Abstract; Cambridge 000 at 5:22-24; Costea at 8:15-26; Hooks at [0094]; Farley 381 at [0016]; Palliyil at [0009]; Hatonen at [0012]; Kouznetsov at 2:32-41; Inoue at [Page 52; Abstract]; Kidron at 1:16-19; Kingsford at 2:8-11; and SurfControl (Exhibit 389-A-21) at 6 (citing 2006 Web Filter Datasheet at 4).

Further, the Asserted Claims of the '389 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—*i.e.* the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe a "method of classifying a computer object as malware" *See, e.g.*, Cambridge 956 at Abstract; Scheidell at Abstract; Thomas at Abstract; Tuvell 871 at Abstract; van der Made at Abstract; Loukas at 1:42-62; Kirby at 2:21-42; Kester 035 at [0003]; Hernacki at [Abstract]; Halperin at Abstract; Cambridge 000 at 5:22-24; Costea at 8:15-26; Hooks at [0094]; Farley 381 at [0016]; Palliyil at [0009]; Hatonen at [0012];

Kouznetsov at 2:32-41; Inoue at [Page 52; Abstract]; Kidron at 1:16-19; Kingsford at 2:8-11; and SurfControl (Exhibit 389-A-21) at 6 (citing 2003 Evaluators' Guide at 6).

The prior art references further describe "at a base computer, receiving data about a computer object from a first remote computer on which the computer object or similar computer objects are stored, wherein said data includes information about events initiated or involving the computer object when the computer object is created, configured or runs on the first remote computer, said information including at least an identity of an object initiating the event, the event type, and an identity of an object or other entity on which the event is being performed." *See, e.g.*, Cambridge 956 at 11:45-55; Scheidell at 4:64-5:13; Thomas at 7:36-51; Tuvell 871 at 34:65-35:20; van der Made at 5:16-26; Loukas at Claim 1; Kirby at 9:37-53; Kester 035 at [0076]; Hernacki at [0003]; Halperin at [0061]; Cambridge 000 at 4:4-14; Costea at 3:8-14; Hooks at [0017]; Farley 381 at [0066]; Palliyil at [0013]; Hatonen at [0043]; Kouznetsov at 2:32-41; Inoue at [Page 58; Paragraph 6]; Kidron at 3:27-40; Kingsford at 2:42-45; and SurfControl (Exhibit 389-A-21) at 8 (citing Spyware Factsheet at 2).

The prior art references further describe "at the base computer, receiving data about the computer object from a second remote computer on which the computer object or similar computer objects are stored, wherein said data includes information about events initiated or involving the computer object when the computer object is created, configured, or runs on the second remote computer, said information including at least an identity of an object initiating the event, the event type, and an identity of an object or other entity on which the event is being performed." *See, e.g.*, Cambridge 956 at 11:45-55; Scheidell at 4:64-5:13; Thomas at 7:36-51; Tuvell 871 at 34:65-35:20; van der Made at 5:16-26; Loukas at Claim 1; Kirby at 9:37-53; Kester 035 at [0076]; Hernacki at [0003]; Halperin at [0061]; Cambridge 000 at 4:4-14; Costea at 3:8-14; Hooks at [0017]; Farley

381 at [0066]; Palliyil at [0013]; Hatonen at [0043]; Kouznetsov at 2:32-41; Inoue at [Page 58; Paragraph 6]; Kidron at 3:27-40; Kingsford at 2:42-45; and SurfControl (Exhibit 389-A-21) at 13 (citing 2004 Websense Enterprise Product Overview at 4).

The prior art references further describe "storing, at the base computer, said data received from the first and second remote computers." *See, e.g.*, Cambridge 956 at 6:28-38; Scheidell at 4:64-5:13; Thomas at 9:62-10:7; Tuvell 871 at 15:19-31; van der Made at 3:61-4:3; Loukas at 8:49-61; Kirby at 9:54-10:12; Kester 035 at [0076]; Hernacki at [0003]; Halperin at [0088]; Cambridge 000 at 3:60-67; Costea at 5:52-59; Hooks at [0085]; Farley 381 at [0066]; Palliyil at [0013]; Hatonen at [0043]; Kouznetsov at 4:59-5:3; Inoue at [Page 54; Paragraph 13 – Page 55; Paragraph 1]; Kidron at 8:35-42; Kingsford at 2:32-41; and SurfControl (Exhibit 389-A-21) at 17 (citing 2004 SMTP Guide at 4).

The prior art references further describe "correlating, by the base computer, at least a portion of the data about the computer object received from the first remote computer to at least a portion of the data about the computer object received from the second remote computer." *See, e.g.*, Cambridge 956 at 8:7-8:15; Scheidell 4:3-18; Thomas at 8:46-9:4; Tuvell 871 at 2:64-3:12; van der Made at 3:54-4:7; Loukas at 6:54-61; Kirby at 7:45-62; Kester 035 at [0070]; Hernacki at [0025]; Halperin at [0047]; Cambridge 000 at 8:1-4; Costea at 8:15-26; Hooks at [0134]; Farley 381 at [0019]; Palliyil at [0046]; Hatonen at [0043]; Kouznetsov at 2:32-41; Inoue at [Page 56; Paragraph 6]; Kidron at 3:27-40; Kingsford at 2:53-60; and SurfControl (Exhibit 389-A-21) at 25 (citing 2005 Websense Enterprise Admin Guide at 280).

The prior art references further describe "comparing, by the base computer, the correlated data about the computer object received from the first and second remote computers to other objects or entities to identify relationships between the correlated data and the other objects or

entities." *See, e.g.*, Cambridge 956 at 8:7-8:15; Scheidell 4:3-18; Thomas at 8:46-9:4; Tuvell 871 at 2:64-3:12; van der Made at 3:54-4:7; Loukas at 6:54-61; Kirby at 7:45-62; Kester 035 at [0070]; Hernacki at [0025]; Halperin at [0047]; Cambridge 000 at 3:60-67; Costea at 5:11-14; Hooks at [0093]; Farley 381 at [0155]; Palliyil at [0009]; Hatonen at [0043]; Kouznetsov at 2:32-41; Inoue at [Page 56; Paragraph 6]; Kidron at 3:27-40; Kingsford at 3:19-22; and SurfControl (Exhibit 389-A-21) at 26 (citing Spyware Factsheet at 2).

The prior art references further describe "classifying, by the base computer, the computer object as malware on the basis of said comparison." *See, e.g.*, Cambridge 956 at 9:22-32; Scheidell 4:3-18; Thomas at 8:46-9:4; Tuvell 871 at 2:64-3:12; van der Made at 3:54-4:7; Loukas at 6:54-61; Kirby at 4:17-34; Kester 035 at [0076]; Hernacki at [0021]; Halperin at [0037]; Cambridge 000 at 5:22-24; Costea at 6:47-64; Hooks at [0094]; Farley 381 at [0126]; Palliyil at [0013]; Hatonen at [0043]; Kouznetsov at 2:32-41; Inoue at [Page 54; Paragraph 1]; Kidron at 8:5-15; Kingsford at 3:30-31; and SurfControl (Exhibit 389-A-21) at 29 (citing Spyware Factsheet at 2).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 389-A-1 through 389-A-21. It would have been known and simple to take a prior art for malware detection by comparison with similar objects, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving computer security. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '389 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '389 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the limitations of the '389 Patent that are invalid based on indefiniteness under pre-AIA 35 U.S.C. § 112 ¶ 2, or enablement or written description under pre-AIA 35 U.S.C. § 112 ¶ 1. These Contentions are being proffered without the full benefit of expert disclosure or discovery.

Asserted Claims 1-5, 7-9, 12, 14 of the '389 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). For example, as applied in Plaintiffs' Infringement Contentions, the terms "correlating, by the base computer, at least a portion of the data about the computer object received from the first remote computer to at least a portion of the data about the computer object received from the second remote computer"; "comparing, by the base computer, the correlated data about the computer object received from the first and second remote computers to other objects or entities"; "other entity" / "entities"; "relationships between the correlated data and the other objects or entities"; "on the basis of said comparison"; "similar object" / "similar computer objects"; "Correlating" / "correlated"; "at least a portion"; "the relationship is between objects related directly, or between objects related via other objects"; "monitoring those related objects as a homogenous entity"; "common object"; "monitoring"; "homogenous entity"; "deducing an object to be malware"; "classed as malware"; "process-related objects"; "other objects includes other objects"; "data about the computer object that is sent from

the respective remote computer to the base computer and that is used in the comparison"; "the data"; "said data about said computer object"; "operation"; "monitoring an operation of the computer object on at least one of the first and second remote computers"; "the actual monitored behaviour" / "the monitored behaviour"; "reclassifying the computer object as malware"; "initially classifying a computer object as not malware"; and "acceptable behaviour" are indefinite because each of these phrases not only is subjective but also does not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 1-3, 7-8, 10-11, and 13-14 of the '389 Patent are invalid under § 112 ¶ 1, because the specification as filed does not contain a sufficient written description supporting those claims. For example, the patent disclosure would not lead a person of ordinary skill in the art to understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. For example, Asserted Claims 1-3, 7-8, 10-11, and 13-14 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '389 Patent fails to provide an adequate written description of the phrases "correlating, by the base computer, at least a portion of the data about the computer object received from the first remote computer to at least a portion of the data about the computer object received from the second remote computer"; "comparing, by the base computer, the correlated data about the computer object received from the first and second remote computers to other objects or entities"; "other entity" / "entities"; "relationships between the correlated data and the other objects or entities"; "on the basis of said comparison"; "similar object" / "similar computer objects"; "events initiated or involving"; "at least a portion"; "the relationship is between objects related directly, or between objects related via other objects"; "homogenous entity"; "process-

related objects"; "data about the computer object that is sent from the respective remote computer to the base computer and that is used in the comparison"; "operation"; "monitoring an operation of the computer object on at least one of the first and second remote computers"; "the actual monitored behaviour" / "the monitored behaviour"; "reclassifying the computer object as malware"; and "acceptable behaviour" as applied in Plaintiffs' Infringement Contentions.

The aforementioned claims are invalid because they are not enabled or described by the specification of the '389 Patent. The subject matter of these claims, as described above, are not sufficiently shown in the specification of the '389 Patent. The subject matter of these claims, as described above, are not sufficiently enabled because they do not teach one skilled in the art how to make and use the alleged invention from the specification of the '389 Patent. For example, the '389 Patent fails to enable the following and thus, Asserted Claims 1-3, 7-8, 10-11, and 13-14 of the '389 Patent are invalid: "correlating, by the base computer, at least a portion of the data about the computer object received from the first remote computer to at least a portion of the data about the computer object received from the second remote computer"; "comparing, by the base computer, the correlated data about the computer object received from the first and second remote computers to other objects or entities"; "other entity" / "entities"; "relationships between the correlated data and the other objects or entities"; "on the basis of said comparison"; "similar object" / "similar computer objects"; "events initiated or involving"; "at least a portion"; "the relationship is between objects related directly, or between objects related via other objects"; "homogenous entity"; "process-related objects"; "data about the computer object that is sent from the respective remote computer to the base computer and that is used in the comparison"; "operation"; "monitoring an operation of the computer object on at least one of the first and second remote computers"; "the actual monitored behaviour" / "the monitored behaviour"; "reclassifying

the computer object as malware"; and "acceptable behaviour." The foregoing phrases are not described in such a way that one of ordinary skill in the art could implement it to achieve the results sought by the individual named on the face of the '389 Patent as the inventor. The foregoing phrases are not described in such a way that a person having ordinary skill in the art at the time of the alleged invention would have understood that the individual named as the inventor on the face of the '389 Patent was in possession of the claimed subject matter. The Asserted Claims of the '389 Patent also do not comply with § 112 because they do not set forth what the applicant regards is the invention.

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court's Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the '389 Patent they contend are directed to ineligible subject matter under pre-AIA 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the '389 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the '389 Patent are directed to the abstract idea of data classification based on reference data points, which amounts to receiving information, analyzing information, and outputting a result. *See, e.g.*, '389 Patent, claim 1 ("receiving data about a computer object from a first remote computer . . . wherein said data includes information about events initiated or involving the computer object when the computer object is created, configured or runs on the first remote computer," "receiving data about the computer object from a second remote computer . . . wherein said data includes information about events initiated or involving the computer object when the computer object is created, configured, or runs on the

second remote computer," "correlating . . . at least a portion of the data about the computer object received from the first remote computer to at least a portion of the data about the computer object received from the second remote computer," "comparing . . . the correlated data . . . to other objects or entities to identify relationships," "classifying . . . the computer object as malware on the basis of said comparison"). The specification of the '389 confirms that the Asserted Claims are directed to basic concepts of receiving information, analyzing information, and outputting a result. *See, e.g.*, *id.*, 1:1—17 ("In one aspect, the present invention relates to a method and apparatus for classifying a computer object as malware. . . . In another aspect, the present invention relates to a method and apparatus for classifying a computer object as malware or as safe."); 3:4–13 ("According to a first aspect of the present invention, there is provided a method of classifying a computer object as malware, the method comprising: at a base computer, receiving data about a computer object from each of plural remote computers on which the object or similar objects are stored; comparing in the base computer the data about the computer object received from the plural computers; and, classifying the computer object as malware on the basis of said comparison."); 3:14–19 ("Compared to the prior art that relies solely on signature matching, this aspect allows a comparison to be made between the objects and/or their effects on the different remote computers to determine whether or not a particular object should be classed as good or as malware."); 3:18–19 ("Sophisticated pattern analysis can be carried out."); *see also* 2:13–19 ("Such analysis is typically carried out manually or "semi-manually" by subjecting the file to detailed analysis, for example by emulation or interpretation, which can still take days given the human involvement that is typically required. There is therefore still a considerable period of time before a new file is classified as safe or as malware."); 2:27–33 ("[S]ome limited audit information about the prevalence of the file on other local computers can be sent to a human system administrator

associated with the local computer that is seeking permission to run the file. The human system administrator can therefore make a better informed though still "manual" decision as to whether or not the file is safe to run.").

Second, the Asserted Claims of the '389 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '389 Patent describes performing data classification based on reference data points (receiving information, analyzing information, and outputting a result) using conventional computing devices, computer programs, computer objects, storage media, and networks well-known in the prior art. *See, e.g.*, *id.*, 7:29–45 ("Although the embodiments of the invention described with reference to the drawings comprise computer processes performed in computer apparatus and computer apparatus itself, the invention also extends to computer programs, particularly computer programs on or in a carrier, adapted for putting the invention into practice. The program may be in the form of source code, object code, a code intermediate source and object code such as in partially compiled form, or in any other form suitable for use in the implementation of the processes according to the invention. The carrier be any entity or device capable of carrying the program. For example, the carrier may comprise a storage medium, such as a ROM, for example a CD ROM or a semiconductor ROM, or a magnetic recording medium, for example a floppy disk or hard disk. Further, the carrier may be a transmissible carrier such as an electrical or optical signal which may be conveyed via electrical or optical cable or by radio or other means."); 7:59–62 ("Referring to FIG. 1, a computer network is generally shown as being based around a distributed network such as the Internet 1. The present invention may however be implemented across or use other types of network, such as a LAN."); 7:64–8:1 ("The computers 2 may each be variously a personal computer, a server of any type, a PDA, mobile phone, an

interactive television, or any other device capable of loading and operating computer objects."); 8:1–4 ("An object in this sense may be a computer file, part of a file or a sub-program, macro, web page or any other piece of code to be operated by or on the computer, or any other event whether executed, emulated, simulated or interpreted."). Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of receiving information, analyzing information, and outputting a result. Simply identifying an overarching desirable outcome (such as "rapid determination of the nature of the object") without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic computer components and do not claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '389 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '389 Patent are ineligible because they would preempt the entire field of data classification based on reference data points, that is, receiving information, analyzing information, and outputting a result.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '389 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions. Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs' application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '389 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not. Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

IV. INVALIDITY CONTENTIONS FOR THE '844 PATENT

A. General State of the Art at the Time of the Alleged Inventions

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '844 Patent, may provide background and context pertinent to the teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '844 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 844-B-1 through 844-B-31 identify where each limitation of the Asserted Claims of the '844 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 844-B-1 through 844-

B-31, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 844-B-1 through 844-B-31 and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combination in Section IV.E, *infra*.

'844 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 844-B-1	U.S. Patent No. 9,940,459 ("Saxe")	U.S.	May 19, 2015	Apr. 10, 2018
Ex. 844-B-2	U.S. Patent Publication No. US 2006/0037080 ("Maloof")	U.S.	Aug. 12, 2005	Feb. 16, 2006
Ex. 844-B-3	U.S. Patent Publication No. 2013/0198841 ("Poulson")	U.S.	Jan. 30, 2012	Aug. 1, 2013
Ex. 844-B-4	U.S. Patent Publication No. 2017/0098074 ("Okano 074")	U.S.	Jun. 8, 2015	Apr. 6, 2017
Ex. 844-B-5	European Patent Application EP2182458 ("Moskovitch 458")	Germany	Jan. 10, 2009	May 5, 2010

'844 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 844-B-6	U.S. Patent Publication No. 2014/0090061 ("Avasarala")	U.S.	Sep. 26, 2013	Mar. 27, 2014
Ex. 844-B-7	U.S. Patent Application Publication No. US 2015/0213376 ("Ideses")	U.S.	Jan. 29, 2015	Jul. 30, 2015
Ex. 844-B-8	U.S. Patent No. 8,023,974 ("Diao 974")	U.S.	Feb. 15, 2007	Sep. 20, 2011
Ex. 844-B-9	U.S. Patent No. 7,949,771 ("Chen 771")	U.S.	Sep. 5, 2007	May 24, 2011
Ex. 844-B-10	U.S. Patent No. 7,756,535 ("Diao 535")	U.S.	Jul. 7, 2006	Jul. 13, 2010
Ex. 844-B-11	U.S. Patent No. 7,689,531 ("Diao 531")	U.S.	Sep. 28, 2005	Mar. 30, 2010
Ex. 844-B-12	U.S. Patent Application Publication No. US 2015/0096024 ("Haq")	U.S.	Sep. 30, 2013	Apr. 2, 2015
Ex. 844-B-13	U.S. Patent Application Publication No. US 2009/0254992 ("Schultz 992")	U.S.	Dec. 18, 2008	Oct. 8, 2009
Ex. 844-B-14	U.S. Patent No. 10,666,676 ("Hsu")	U.S.	Aug. 18, 2014	May 26, 2020
Ex. 844-B-15	U.S. Patent No. 8,935,788 ("Diao 788")	U.S.	Oct. 15, 2008	Jan. 13, 2015
Ex. 844-B-16	U.S. Patent No. 8,838,992 ("Zhu")	U.S.	Apr. 28, 2011	Sep. 16, 2014
Ex. 844-B-17	U.S. Patent No. 8,850,570 ("Ramzan")	U.S.	Jun. 30, 2008	Sep. 30, 2014
Ex. 844-B-18	U.S. Patent No. 8,495,144 ("Cheng")	U.S.	Oct. 6, 2004	Jul. 23, 2013
Ex. 844-B-19	U.S. Patent No. 8,161,548 ("Wan")	U.S.	Aug. 15, 2005	Apr. 17, 2012
Ex. 844-B-20	U.S. Patent No. 8,505,094 ("Xuewen")	U.S.	Jan. 13, 2012	Aug. 6, 2013
Ex. 844-B-21	U.S. Patent No. 8,560,466 ("Diao 466")	U.S.	Feb. 26, 2010	Oct. 15, 2013

'844 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 844-B-22	U.S. Patent Application Publication No. US 2003/0065926 ("Schultz 926")	U.S.	Jul. 30, 2002	Apr. 3, 2003
Ex. 844-B-29	U.S. Patent Application Publication No. US 2006/0026675 ("Cai 675")	U.S.	Jul. 28, 2004	Apr. 14, 2009

'844 Patent Prior Art Publications				
Ex. No.	**Title**	**Date of Publication**	**Author**	**Publisher**
Ex. 844-B-23	A Static Malware Detection System Using Data Mining Methods ("Baldangombo")	Jul. 4, 2013	Baldangombo et al.	National University of Mongolia & University of Science and Technology, Taipei, Taiwan
Ex. 844-B-24	Classification of Malware Based on Integrated Static Dynamic Features ("Islam 2012")	Nov. 2, 2012	Islam et al.	Journal of Network and Computer Applications
Ex. 844-B-25	Classification of Malware Based on String and Function Feature Selection ("Islam 2010")	Jul. 20, 2010	Islam et al.	IEEE
Ex. 844-B-26	Data Mining Tools for Malware Detection ("Masud")	2011	Masud et al.	CRC Press
Ex. 844-B-27	Mal-ID: Automatic Malware Detection Using Common Segment Analysis and Meta-Features ("Tahan")	Apr. 2012	Tahan et al.	Journal of Machine Learning

'844 Patent Prior Art Publications				
Ex. No.	**Title**	**Date of Publication**	**Author**	**Publisher**
Ex. 844-B-28	Improving Malware Detection by Applying Multi-Inducer Ensemble ("Menahem")	Feb. 2009	Menahem et al.	Computational Statistics & Data Analysis

'844 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 844-B-30	Websense ThreatSeeker ("ThreatSeeker")
Ex. 844-B-31	Stonesoft StoneGate Next Generation Firewall ("Next Generation Firewall")
	System and/or product art received pursuant to Forcepoint's subpoena to Trend Micro, Inc. (dated October 27, 2023)
	System and/or product art received pursuant to Forcepoint's subpoena to Sophos Ltd. (dated October 31, 2023)

'844 Patent Additional Prior Art/Background Art
U.S. Patent No. 7,711,673 ("Diao 673")
U.S. Patent No. 8,375,450 ("Oliver")
U.S. Patent No. 8,554,907 ("Chen 907")
U.S. Patent No. 8,584,241 ("Jenks")
U.S. Patent No. 9,189,750 ("Narsky")
U.S. Patent No. 10,268,820 ("Okano 820")
JP 2012-27710 A ("Mori")
U.S. Patent Application Publication No. US 2007/0240220 ("Tuvell 220")
U.S. Patent Application Publication No. US 2010/0150448 ("Lecerf")
U.S. Patent Application Publication No. US 2011/0145920 ("Mahaffey")
U.S. Patent Application Publication No. US 2014/0090064 ("Pistoia")
U.S. Patent Application Publication No. US 2016/0277423 ("Apostolescu")
International Patent Application Publication No. WO 2014/107439 ("Fawaz")

'844 Patent Additional Prior Art/Background Art
Tony Abou-Assaleh, *N-gram-based Detection of New Malicious Code*, IEEE, Sep. 30, 2004. ("Abou-Assaleh")
William Arnold & Gerald Tesauro, *Automatically Generated Win32 Heuristic Virus Detection*, VIRUS BULLETIN CONFERENCE, Sep. 2000 at 52. ("Arnold 2000")
A.M. Aswini & P. Vinod, *Towards the Detection of Android Malware using Ensemble Features*, Aswini, 9, JOURNAL OF INFORMATION ASSURANCE AND SECURITY, 2014 at 375. ("Aswini")
Zane Markel & Michael Bilzor, *Building a Machine Learning Classifier for Malware Detection*, IEEE, Oct. 23, 2014. ("Markel")
Corinna Cortes & Vladimir Vapnik, *Support-Vector Networks*, 20, MACHINE LEARNING, Sep. 1995 at 273. ("Cortes")
Konstantinos Demertzis & Lazardos Illiadis, *Evolving Computational Intelligence System for Malware Detection*, 178, LNBIP, Jun. 20, 2014 at 322. ("Demertzis")
Ivan Firdausi et al., *Analysis of Machine Learning Techniques Used in Behavior-Based Malware Detection*, IEEE, Dec. 3, 2010 at 201. ("Firdausi")
Qingshan Jiang et al.*, A Feature Selection Method for Malware Detection*, IEEE, Jun. 8, 2011 at 890. ("Jiang")
Feliz Leder et al., *Classification and Detection of Metamorphic Malware using Value Set Analysis*, IEEE, Oct. 14 2009 at 39. ("Leder")
Chatchai Liangboonprakong & Ohm Sornil, *Classification of Malware Families Based on N-grams Sequential Pattern Features*, IEEE, Jun. 21, 2013 at 777. ("Liangboonprakong")
Karthik Raman, *Selecting Features to Classify Malware*, ADOBE SYSTEMs, INC., 2012. ("Raman")
Ronghua Tian, An Integrated Malware Detection and Classification System (Feb. 27, 2012) (P.h.D. thesis, Deakin University) (on file with the Deakin University Library system). ("Tian")

Furthermore, with respect to the '844 Patent, under 35 U.S.C. §§ 102(a) and (b), Forcepoint reserves the right to identify additional prior art systems developed prior to May 12, 2015. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656,

at *8–11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery.

D. Anticipation

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 6-12, 15-20 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 535, Tahan, Cai 675, Hsu, Diao 788, Zhu, Ramzan, Cheng, Wan, Diao 466, Ideses, Masud, Schultz 926, Avasarala, and ThreatSeeker as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 17-20 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Haq and Schultz 992 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 6-7, 9-12, 17, and 19 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Maloof and Okano 074 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 6-7, 9-12, and 15-20 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Moskovitch 458 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 6-12, and 15-16 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 974 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 6, 8-12, 15, 17, and 19 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Chen 771 as set forth in the attached

claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 6, 8-12, 15, 17, and 19-20 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 531 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 8-12, and 17-20 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Menahem as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-3, 9-12, 17, and 19 of the '844 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Xuewen as set forth in the attached claim chart.

E. Obviousness

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '844 Patent are rendered obvious by the references identified in the attached claim charts, either alone or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted '844 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint's anticipation contentions, which shall not be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	In Combination With
Maloof	Chen 771
Maloof	Diao 974

Primary Reference	In Combination With
Maloof	Tahan
Maloof	Okano 074
Maloof	Moskovitch 458
Maloof	Haq
Maloof	Schultz 992
Maloof	Ramzan
Maloof	Cheng
Maloof	Masud
Maloof	Menahem
Maloof	Cai 675
Maloof	Hsu
Maloof	Ramzan
Maloof	Cheng
Maloof	Diao 486
Maloof	Schultz 926
Maloof	Avasarala
Maloof	Haq
Maloof	Xuewen
Maloof	Zhu
Maloof	Islam 2010
Maloof	Islam 2012
Maloof	Baldangombo
Maloof	Diao 535

Primary Reference	In Combination With
Maloof	Diao 531
Maloof	Stonesoft StoneGate Next Generation Firewall
Maloof	Websense ThreatSeeker
Maloof	Saxe
Maloof	Poulson
Maloof	Wan
ThreatSeeker	Ideses
Maloof	Tahan + Haq
Maloof	Tahan + Schultz 926
Maloof	Tahan + Ramzan
Maloof	Tahan + Cheng
Maloof	Tahan + Masud
Maloof	Tahan + ThreatSeeker
Okano 074	Chen 771
Okano 074	Diao 974
Okano 074	Menahem
Okano 074	Schultz 992
Okano 074	Cai 675
Okano 074	Diao 486
Okano 074	Haq
Okano 074	Zhu
Okano 074	Moskovitch 458
Okano 074	Diao 535

Primary Reference	In Combination With
Okano 074	Stonesoft StoneGate Next Generation Firewall
Okano 074	Websense ThreatSeeker
Okano 074	Tahan + ThreatSeeker
Moskovitch 458	Chen 771
Moskovitch 458	Diao 974
Moskovitch 458	Tahan
Moskovitch 458	Menahem
Moskovitch 458	Schultz 992
Moskovitch 458	Cai 675
Moskovitch 458	Hsu
Moskovitch 458	Ramzan
Moskovitch 458	Cheng
Moskovitch 458	Diao 486
Moskovitch 458	Schultz 926
Moskovitch 458	Avasarala
Moskovitch 458	Zhu
Moskovitch 458	Haq
Moskovitch 458	Stonesoft StoneGate Next Generation Firewall
Moskovitch 458	Websense ThreatSeeker
Moskovitch 458	Xuewen
Moskovitch 458	Tahan + Haq
Moskovitch 458	Tahan + Schultz 926

Primary Reference	In Combination With
Moskovitch 458	Tahan + Ramzan
Moskovitch 458	Tahan + Cheng
Moskovitch 458	Tahan + Masud
Moskovitch 458	Tahan + ThreatSeeker
Baldangombo	Chen 771
Baldangombo	Tahan
Baldangombo	Menahem
Baldangombo	Schultz 992
Baldangombo	Hsu
Baldangombo	Ramzan
Baldangombo	Haq
Baldangombo	Diao 486
Baldangombo	Schultz 926
Baldangombo	Avasarala
Baldangombo	Xuewen
Baldangombo	Moskovitch 458
Baldangombo	Islam 2010
Baldangombo	Islam 2012
Baldangombo	Stonesoft StoneGate Next Generation Firewall
Baldangombo	Websense ThreatSeeker
Baldangombo	Tahan + Haq
Baldangombo	Tahan + Schultz 926
Baldangombo	Tahan + Ramzan

Primary Reference	In Combination With
Baldangombo	Tahan + Cheng
Baldangombo	Tahan + Masud
Baldangombo	Tahan + ThreatSeeker
Islam 2010	Chen 771
Islam 2010	Tahan
Islam 2010	Menahem
Islam 2010	Schultz 992
Islam 2010	Ramzan
Islam 2010	Cheng
Islam 2010	Avasarala
Islam 2010	Haq
Islam 2010	Diao 531
Islam 2010	Stonesoft StoneGate Next Generation Firewall
Islam 2010	Websense ThreatSeeker
Islam 2010	Tahan + Haq
Islam 2010	Tahan + Schultz 926
Islam 2010	Tahan + Ramzan
Islam 2010	Tahan + Cheng
Islam 2010	Tahan + Masud
Islam 2010	Tahan + ThreatSeeker
Tahan	Chen 771
Tahan	Ramzan
Tahan	Cheng

Primary Reference	In Combination With
Tahan	Schultz 926
Tahan	Moskovitch 458
Tahan	Diao 535
Tahan	Diao 531
Tahan	Diao 974
Tahan	Stonesoft StoneGate Next Generation Firewall
Tahan	Websense ThreatSeeker
Menahem	Tahan
Menahem	Schultz 992
Menahem	Ramzan
Menahem	Cheng
Menahem	Diao 486
Menahem	Moskovitch 458
Menahem	Diao 535
Menahem	Diao 531
Menahem	Stonesoft StoneGate Next Generation Firewall
Menahem	Websense ThreatSeeker
Menahem	Tahan + Haq
Menahem	Tahan + Schultz 926
Menahem	Tahan + Ramzan
Menahem	Tahan + Cheng
Menahem	Tahan + Masud

Primary Reference	In Combination With
Menahem	Tahan + ThreatSeeker
Menahem	Haq
Menahem	Diao 974
Haq	Tahan
Haq	Menahem
Haq	Schultz 992
Haq	Ramzan
Haq	Moskovitch 458
Haq	Diao 535
Haq	Diao 531
Haq	Stonesoft StoneGate Next Generation Firewall
Haq	Websense ThreatSeeker
Haq	Tahan + Haq
Haq	Tahan + Schultz 926
Haq	Tahan + Ramzan
Haq	Tahan + Cheng
Haq	Tahan + Masud
Haq	Tahan + ThreatSeeker
Haq	Okano 074
Haq	Islam 2010
Haq	Islam 2012
Haq	Diao 974
Schultz 992	Haq

Primary Reference	In Combination With
Schultz 992	Zhu
Schultz 992	Tahan
Schultz 992	Menahem
Schultz 992	Cai 675
Schultz 992	Hsu
Schultz 992	Ramzan
Schultz 992	Cheng 771
Schultz 992	Diao 486
Schultz 992	Schultz 926
Schultz 992	Avasarala
Schultz 992	Xuewen
Schultz 992	Moskovitch 458
Schultz 992	Diao 535
Schultz 992	Diao 531
Schultz 992	Stonesoft StoneGate Next Generation Firewall
Schultz 992	Websense ThreatSeeker
Schultz 992	Tahan + Haq
Schultz 992	Tahan + Schultz 926
Schultz 992	Tahan + Ramzan
Schultz 992	Tahan + Cheng
Schultz 992	Tahan + Masud
Schultz 992	Tahan + ThreatSeeker
Schultz 992	Okano 074

Primary Reference	In Combination With
Schultz 992	Maloof
Schultz 992	Islam 2010
Schultz 992	Islam 2012
Schultz 992	Diao 974
Cai 675	Tahan
Cai 675	Menahem
Cai 675	Ramzan
Cai 675	Cheng
Cai 675	Diao 486
Cai 675	Moskovitch 458
Cai 675	Diao 535
Cai 675	Diao 531
Cai 675	Stonesoft StoneGate Next Generation Firewall
Cai 675	Websense ThreatSeeker
Cai 675	Tahan + Haq
Cai 675	Tahan + Schultz 926
Cai 675	Tahan + Ramzan
Cai 675	Tahan + Cheng
Cai 675	Tahan + Masud
Cai 675	Tahan + ThreatSeeker
Cai 675	Diao 974
Zhu	Schultz 992
Zhu	Haq

Primary Reference	In Combination With
Zhu	Tahan
Zhu	Ramzan
Zhu	Cheng
Zhu	Schultz 926
Zhu	Xuewen
Zhu	Moskovitch 458
Zhu	Diao 535
Zhu	Diao 531
Zhu	Stonesoft StoneGate Next Generation Firewall
Zhu	Websense ThreatSeeker
Zhu	Tahan + Haq
Zhu	Tahan + Schultz 926
Zhu	Tahan + Ramzan
Zhu	Tahan + Cheng
Zhu	Tahan + Masud
Zhu	Tahan + ThreatSeeker
Ramzan	Hsu
Ramzan	Tahan
Ramzan	Menahem
Ramzan	Xuewen
Ramzan	Moskovitch 458
Ramzan	Diao 531

Primary Reference	In Combination With
Ramzan	Stonesoft StoneGate Next Generation Firewall
Ramzan	Websense ThreatSeeker
Ramzan	Tahan + Haq
Ramzan	Tahan + Schultz 926
Ramzan	Tahan + Ramzan
Ramzan	Tahan + Masud
Ramzan	Tahan + ThreatSeeker
ThreatSeeker	Masud
ThreatSeeker	Schultz 992
ThreatSeeker	Avasarala
ThreatSeeker	Cheng
ThreatSeeker	Diao 974
ThreatSeeker	Diao 486
ThreatSeeker	Diao 535
ThreatSeeker	Diao 531
ThreatSeeker	Chen 771
ThreatSeeker	Islam 2012
ThreatSeeker	Hsu 676
ThreatSeeker	Xuewen
ThreatSeeker	Saxe
ThreatSeeker	Poulson
ThreatSeeker	Wan
ThreatSeeker	Ideses

Primary Reference	In Combination With
ThreatSeeker	Tahan + Haq
ThreatSeeker	Tahan + Schultz 926
ThreatSeeker	Tahan + Ramzan
ThreatSeeker	Tahan + Cheng
ThreatSeeker	Tahan + Masud

Forcepoint reserves the right to amend these Contentions and prior art combinations in light of new information that may arise from third parties related to additional malware detection and containment systems. The following list of references are also evidence of the knowledge of POSITA at the time of the alleged invention: Fawaz, Apostolescu, Pistoia, Mahaffey, Lecerf, Tuvell, Mori, Okano 820, Jenks, Chen 907, Oliver, Diao 673, Abou-Assaleh, Arnold 2000, Aswini, Markel, Cortes, Demertzis, Firdausi, Lai, Leder, Raman, Liangboonprakong, and Tian.

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have understood that each of these references are in the same field of endeavor, namely methods and devices relating to malware detection and containment. *See, e.g.*, Saxe at Abstract; Maloof at Abstract; Poulson at Abstract; Okano 074 at Abstract; Moskovitch 458 at 57; Avasarala at Abstract; Ideses at [0063]; Diao 974 at 2:21-33, 3:21-26; Chen 771 at 2:30-45; Diao 535 at 3:14-39; Diao 531 at 3:6-23; Haq at [0042]; Schultz 992 at [0021]; Hsu at 2:22-39, 3:30-42; Diao 788 at 7:33-38; Zhu at 3:44-4:7, 5:1-7; Ramzan at 2:56-65, Fig. 1; Cheng at 2:19-31; Wan at Fig. 1, 4:34-40; Xuewen at 9:42-10:43; Diao 466 at 2:34-36; Schultz 926 at Abstract; Baldangombo at Abstract; Islam 2012 at Abstract; Islam 2010 at 2; Masud at 114, 211; Tahan at 949-962; Menahem at 1483-1487; Cai 675 at [0012]; ThreatSeeker (Exhibit 844-B-30) at 26–27 (citing The Websense

ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 6, 9)); Next Generation Firewall (Exhibit 844-B-31) at 4 (citing StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 9)).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving malware detection and containment. *See, e.g.*, Saxe at Abstract; Maloof at Abstract; Poulson at Abstract; Okano 074 at Abstract; Moskovitch 458 at 57; Avasarala at Abstract; Ideses at [0063]; Diao 974 at 2:21-33, 3:21-26; Chen 771 at 2:30-45; Diao 535 at 3:14-39; Diao 531 at 3:6-23; Haq at [0042]; Schultz 992 at [0021]; Hsu at 2:22-39, 3:30-42; Diao 788 at 7:33-38; Zhu at 3:44-4:7, 5:1-7; Ramzan at 2:56-65, Fig. 1; Cheng at 2:19-31; Wan at Fig. 1, 4:34-40; Xuewen at 9:42-10:43; Diao 466 at 2:34-36; Schultz 926 at Abstract; Baldangombo at Abstract; Islam 2012 at Abstract; Islam 2010 at 2; Masud at 114, 211; Tahan at 949-962; Menahem at 1483-1487; Cai 675 at [0012]; ThreatSeeker (Exhibit 844-B-30) at 26–27 (citing The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 6, 9); Next Generation Firewall (Exhibit 844-B-31) at 4 (citing StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 9).

Further, the Asserted Claims of the ’844 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—*i.e.* the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe “computer implemented method comprising extracting a plurality of static data points from an executable file.” *See, e.g.*, Saxe at Abstract; Maloof at Abstract; Poulson at Abstract; Okano 074 at Abstract; Moskovitch 458 at 57; Avasarala at Abstract; Ideses at [0063]; Diao 974 at 2:21-33, 3:21-26; Chen 771 at 2:30-45; Diao 535 at 3:14-39; Diao 531 at 3:6-23; Haq at [0042]; Schultz 992 at [0021]; Hsu at 2:22-39, 3:30-

42; Diao 788 at 7:33-38; Zhu at 3:44-4:7, 5:1-7; Ramzan at 2:56-65, Fig. 1; Cheng at 2:19-31; Wan at Fig. 1, 4:34-40; Xuewen at 9:42-10:43; Diao 466 at 2:34-36; Schultz 926 at Abstract; Baldangombo at Abstract; Islam 2012 at Abstract; Islam 2010 at 2; Masud at 114, 211; Tahan at 949-962; Menahem at 1483-1487; Cai 675 at [0012]; ThreatSeeker (Exhibit 844-B-30) at 5–7 (citing The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 2, 9; The Web Isn't Fun Anymore: How Websense Technology Protects Against Internet-Based Threats (Aug. 1, 2007) at 4; Websense Product Overview (Jan. 10, 2007) at 4; Websense Email Security Suite: DataSheet (Sept. 16, 2008) at 2; Websense Enterprise V6.2 and Web Security Suites "Aries" Requirements Document (May 01, 2005) at 6); Next Generation Firewall (Exhibit 844-B-31) at 5–6 (citing StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 10; StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 20; The Evolution to the Next Generation Firewall: Meeting Today's Critical Enterprise Network Demands (Feb. 22, 2010) at 10). The prior art references further describe "generating a feature vector from the plurality of static data points using a classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files, and known unwanted executable files." *See, e.g.*, Saxe at 5:20-44; Maloof at [0054]-[0055]; Poulson at [0024]; Okano 074 at [0090]-[0091]; Moskovitch 458 at [0021]; Avasarala at [0050]; Ideses at [0044]; Diao 974 at 4:8-14; Chen 771 at 3:31-43; Diao 535 at 3:14-39; Diao 531 at 4:1-24; Haq at [0086]; Schultz 992 at [0042]; Hsu at 3:30-42, 3:30-42; Diao 788 at 9:33-37; Zhu at 4:24-48; Ramzan at 9:25-30; Cheng at 4:60-5:6; Wan at 5:27-45; Xuewen at 5:15-19; Diao 466 at 4:44-54; Schultz 926 at [0039]; Baldangombo at 11-12; Islam 2012 at Abstract; Islam 2010 at 6-7; Masud at 206; Tahan at 951; Menahem at 1483; Cai 675 at [0018]; ThreatSeeker (Exhibit 844-B-30) at 8–10 (citing The Websense ThreatSeeker Network:

Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 8, 10–11; The Web Isn't Fun Anymore: How Websense Technology Protects Against Internet-Based Threats (Aug. 1, 2007) at 3; Websense Product Overview (Jan. 10, 2007) at 3); Next Generation Firewall (Exhibit 844-B-31) at 6–7 (citing StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 112; StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 17, 21). The prior art references further describe "wherein the collection of data comprises at least a portion of the plurality of static data points". *See, e.g.,* Saxe at 10:4-16; Maloof at [0040]; Poulson at [0043]-[0047]; Okano 074 at [0092]-[0094]; Moskovitch 458 at [0043]; Avasarala at [0050]; Ideses at [0080]-[0085]; Diao 974 at 4:8-14; Chen 771 at 3:31-43; Diao 535 at 4:34-41; Diao 531 at 3:24-34; Haq at [0024]; Schultz 992 at [0020]; Hsu at 3:30-42; Diao 788 at 5:26-35; Zhu at 5:1-7; Ramzan at 9:25-30; Cheng at 3:45-67; Wan at 4:34-40; Xuewen at 5:49-65; Diao 466 at 6:22-24; Schultz 926 at [0042]; Baldangombo at 5; Islam 2012 at Abstract; Islam 2010 at 4-5; Masud at 206; Tahan at 955; Menahem at 1484; Cai 675 at [0012]; ThreatSeeker (Exhibit 844-B-30) at 3–7 (citing Websense Express (June 28, 2007) at 2; Websense Product Overview (Jan. 10, 2007) at 2; Websense Enterprise V6.2 and Web Security Suites "Aries" Requirements Document (May 01, 2005) at 6; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 9); Next Generation Firewall (Exhibit 844-B-31) at 3–5 (citing StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 20, 26; The Evolution to the Next Generation Firewall: Meeting Today's Critical Enterprise Network Demands (Feb. 22, 2010) at 10).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 844-B-1 through 844-B-31. It would have been known and simple to take a prior art for malware detection and neutralization by analyzing feature vectors to determine whether a file is

harmful, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving malware detection and containment. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '844 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the limitations of the '844 Patent that are invalid based on indefiniteness under 35 U.S.C. § 112(b), or enablement or written description under 35 U.S.C. § 112(a). These Contentions are being proffered without the full benefit of expert disclosure or discovery.

Asserted Claims 1-3, 6-12, and 15-20 of the '844 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). For example, as applied in Plaintiffs' Infringement Contentions, the terms "at least a portion of the plurality"; "features . . . selectively turned on or off"; "support vector processing"; "type of data"; "encoding the extracted static data points" / "encoding the extracted plurality of predefined character strings"; "selectively setting features of the classifier"; "determined probability value" / "probability value"; "predetermined false positive range data"; "exceeds a threshold value"; "generating a feature vector from the plurality of static data points using a classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files[,] and known unwanted executable files" / "generating a feature vector from the plurality of predefined character strings using a classifier trained to classify the plurality of

predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files"; "classifier" / "classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files[,] and known unwanted executable files" / "classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files"; "one or more features of the feature vector are selectively turned on or off based on whether a value of one or more static data points from the plurality of extracted static data points is within a predetermined range"; "static data points" which "represent predefined character strings in the executable file"; "harmful"; "threshold value"; "predetermined false positive range"; "machine learning technique"; "plurality of static data points is extracted using a machine learning technique"; and "at least one processor operatively connected with the memory and configured to perform operation of: extracting a plurality of predefined character strings from an executable file without decrypting or unpacking the executable file; generating a feature vector from the plurality of predefined character strings using a classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files, wherein the collection of data comprises at least a portion of one or more of the plurality of predefined character strings, and wherein one or more features of the feature vector are selectively turned on or off based on whether a value of one or more predefined character strings from the plurality of predefined character strings is within a predetermined range; and evaluating the feature vector using support vector processing to determine whether the executable file is harmful" are indefinite because each of these phrases not only is subjective but also does

not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 1-3, 6-12, and 15-20 of the '844 Patent are invalid under § 112(a), because the specification as filed does not contain a sufficient written description supporting those claims. In particular, the patent disclosure would not lead a person of ordinary skill in the art to understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. For example, Asserted Claims 1-3, 6-12, and 15-20 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '844 Patent fails to provide an adequate written description of the phrases "extracting a plurality"; "at least a portion of the plurality"; "features . . . selectively turned on or off"; "predetermined range" / "predetermined false positive range"; "support vector processing"; "selectively setting features of the classifier"; "determined probability value" / "probability value"; "predetermined false positive range data"; "extracting a plurality of static data points" where "the plurality of static data points represent predefined character strings in the executable file"; "predefined character strings"; "generating a feature vector from the plurality of static data points using a classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files[,] and known unwanted executable files" / "generating a feature vector from the plurality of predefined character strings using a classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files"; "classifier" / "classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files[,] and known unwanted executable files" / "classifier trained to

classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files"; "one or more features of the feature vector are selectively turned on or off based on whether a value of one or more static data points from the plurality of extracted static data points is within a predetermined range"; "determine[ing] whether the executable file is harmful" or "a determination of whether the executable file is harmful"; "encoding the extracted static data points for the classifier based on the classification"; "wherein the plurality of static data points is extracted using a machine learning technique"; "plurality of static data points is extracted using a machine learning technique"; and "at least one processor operatively connected with the memory and configured to perform operation of: extracting a plurality of predefined character strings from an executable file without decrypting or unpacking the executable file; generating a feature vector from the plurality of predefined character strings using a classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files, wherein the collection of data comprises at least a portion of one or more of the plurality of predefined character strings, and wherein one or more features of the feature vector are selectively turned on or off based on whether a value of one or more predefined character strings from the plurality of predefined character strings is within a predetermined range; and evaluating the feature vector using support vector processing to determine whether the executable file is harmful" as applied in Plaintiffs' Infringement Contentions.

The aforementioned claims are invalid because they are not enabled or described by the specification of the '844 Patent. The subject matter of these claims, as described above, are not sufficiently shown in the specification of the '844 Patent. The subject matter of these claims, as

described above, are not sufficiently enabled because they do not teach one skilled in the art how to make and use the alleged invention from the specification of the '844 Patent. For example, the '844 Patent fails to enable the following and thus, Asserted Claims 1-3, 6-12, and 15-20 of the '844 Patent are invalid: "extracting a plurality"; "at least a portion of the plurality"; "features . . . selectively turned on or off"; "predetermined range" / "predetermined false positive range"; "support vector processing"; "selectively setting features of the classifier"; "determined probability value" / "probability value"; "predetermined false positive range data"; "extracting a plurality of static data points" where "the plurality of static data points represent predefined character strings in the executable file"; "predefined character strings"; "generating a feature vector from the plurality of static data points using a classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files[,] and known unwanted executable files" / "generating a feature vector from the plurality of predefined character strings using a classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files"; "classifier" / "classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files[,] and known unwanted executable files" / "classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files"; "one or more features of the feature vector are selectively turned on or off based on whether a value of one or more static data points from the plurality of extracted static data points is within a predetermined range"; "determine[ing] whether the executable file is harmful" or "a determination of whether the executable file is harmful";

"encoding the extracted static data points for the classifier based on the classification"; "wherein the plurality of static data points is extracted using a machine learning technique"; "plurality of static data points is extracted using a machine learning technique"; and "at least one processor operatively connected with the memory and configured to perform operation of: extracting a plurality of predefined character strings from an executable file without decrypting or unpacking the executable file; generating a feature vector from the plurality of predefined character strings using a classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files, wherein the collection of data comprises at least a portion of one or more of the plurality of predefined character strings, and wherein one or more features of the feature vector are selectively turned on or off based on whether a value of one or more predefined character strings from the plurality of predefined character strings is within a predetermined range; and evaluating the feature vector using support vector processing to determine whether the executable file is harmful." The foregoing phrases are not described in such a way that one of ordinary skill in the art could implement it to achieve the results sought by the individual named on the face of the '844 Patent as the inventor. The foregoing phrases are not described in such a way that a person having ordinary skill in the art at the time of the alleged invention would have understood that the individual named as the inventor on the face of the '844 Patent was in possession of the claimed subject matter. The Asserted Claims of the '844 Patent also do not comply with § 112 because they do not set forth what the applicant regards is the invention.

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court's Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the '844 Patent they contend are directed to ineligible subject matter under 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the '844 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the '844 Patent are directed to the abstract idea of mathematical classification using machine learning. *See, e.g.*, '844 Patent, claim 1 ("generating a feature vector from the plurality of static data points using a classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files, and known unwanted executable files," "features of the feature vector are selectively turned on or off based on whether a value of one or more static data points . . . is within a predetermined range," "evaluating the feature vector using support vector processing to determine whether the executable file is harmful"); claim 10 ("generating a feature vector from the plurality of static data points using a classifier trained to classify the plurality of static data points based on a collection of data comprising known malicious executable files, known benign executable files and known unwanted executable files," "features of the feature vector are selectively turned on or off based on whether one or more values of one or more static data points . . . is within a predetermined range," "evaluating the feature vector using support vector processing to determine whether the executable file is harmful"); claim 17 ("generating a feature vector from the plurality of predefined character strings using a classifier trained to classify the plurality of predefined character strings based on a collection of data comprising known

malicious executable files, known benign executable files and known unwanted executable files," "features of the feature vector are selectively turned on or off based on whether a value of one or more predefined character strings . . . is within a predetermined range," "evaluating the feature vector using support vector processing to determine whether the executable file is harmful"). The specification of the '844 confirms that the Asserted Claims are directed to basic concepts of mathematical classification using machine learning. *See, e.g.*, *id.*, 1:20–34 ("Aspects of the present disclosure relate to threat detection of executable files. . . . Analyzing of the executable file comprises applying a classifier to the plurality of static data points extracted from the executable file. The classifier is trained from data comprising known malicious executable files, known benign executable files and potentially unwanted executable files. Based upon the analysis of the executable file, a determination is made as to whether the executable file is harmful. In some examples, execution of the executable file is prevented when a determined probability value that the executable file is harmful exceeds a threshold value."); 2:4–14 ("The present disclosure is able to detect whether an executable file is harmful or benign before the executable file is actually executed on a processing device. In examples, machine learning processing applies a classifier to evaluate an executable file based on static points data collected from the executable file. The classifier is trained from a collection of data comprising known malicious files, potentially unwanted files and benign files. The classifier is designed and trained such that it can handle encrypted and/or compressed files without decrypting and/or decompressing the files."); 2:28–45 ("The determination of unknown files is achieved by evaluating static data points extracted from an executable file using a trained classification system that is able to identify potential threats without analyzing executable behavior of a file. The present disclosure also provides for the creation of a training set that adaptively learns what static data points may indicate the existence

of malicious code using training data that contains a statistically significant number of both encrypted and non-encrypted examples of malicious or unwanted executable files, among other information. By collecting a large set of training examples as they appear as publicly available and distributed over network connection (e.g., "in the wild"), the present disclosure ensures that its adaptive learning processing is robust enough to comprise sufficient representation of features (and distributions) from files that may be encrypted, not-encrypted, compressed, and uncompressed, among other examples."); 2:51-52 ("ability to adapt over time").

Second, the Asserted Claims of the '844 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '844 Patent describes performing mathematical classification using machine learning using conventional hardware and software components, computing devices, servers, storage components, and networks. *See, e.g.*, *id.*, 2:58–3:3 ("Components of the systems may be hardware components or software implemented on and/or executed by hardware components of the systems. In examples, system 100 may include any of hardware components (e.g., used to execute/run operating system (OS)), and software components (e.g., applications, application programming interfaces, modules, virtual machines, runtime libraries, etc.) running on hardware."); 3:9–14 ("For instance, threat detection operations (e.g., application, instructions, modules, etc.) may be run on a processing device such as a computer, a client device (e.g., mobile processing device, laptop, smartphone/phone, tablet, etc.) and/or any other electronic devices, where the components of the system may be executed on the processing device."); 3:15–22 ("[F]iles to be evaluated may be present on a client device and information may be processed or accessed from other devices in a network such as, for example, one or more server devices that may be used to perform threat detection processing and/or evaluation a file before execution of the

file by the client device."); 3:46–52 ("Knowledge component 102 described herein may collect data for use in building, training and/or re-training a learning classifier to evaluate executable files. The knowledge component 102 is one or more storages, memories, and/or modules that continuously collects and manages data that may be used to detect threats in files such as executable files."); 14:1–13 ("FIG. 4 illustrates one example of a suitable operating environment 400 in which one or more of the present embodiments may be implemented. This is only one example of a suitable operating environment and is not intended to suggest any limitation as to the scope of use or functionality. Other well-known computing systems, environments, and/or configurations that may be suitable for use include, but are not limited to, personal computers, server computers, hand-held or laptop devices, multiprocessor systems, microprocessor-based systems, programmable consumer electronics such as smart phones, network PCs, minicomputers, mainframe computers, distributed computing environments that include any of the above systems or devices, and the like."). Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of mathematical classification using machine learning. Simply identifying an overarching desirable outcome (such as "high and accurate classification rates" or "enhanced security protection") without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic computer components and do not

claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '844 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '844 Patent are ineligible because they would preempt the entire field of mathematical classification using machine learning.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '844 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions. Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs' application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '844 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not. Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

V. INVALIDITY CONTENTIONS FOR THE '721 PATENT

A. General State of the Art at the Time of the Alleged Inventions

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '721 Patent, may provide background and context pertinent to the teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '721 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or

knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 721-C-1 through 721-C-20 identify where each limitation of the Asserted Claims of the '721 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 721-C-1 through 721-C-20, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 721-C-1 through 721-C-20 and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combination in Section V.E, *infra*.

'721 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 721-C-1	U.S. Patent No. 6,772,346 ("Chess")	U.S.	Jul. 16, 1999	Aug. 3, 2004
Ex. 721-C-2	U.S. Patent No. 7,055,008 ("Niles")	U.S.	Jan. 22, 2003	May 30, 2006
Ex. 721-C-3	U.S. Patent No. 8,286,239 ("Sutton")	U.S.	Jul. 24, 2008	Oct. 9, 2012
Ex. 721-C-4	U.S. Patent No. 8,607,066 ("Kailash 066")	U.S.	Aug. 4, 2008	Dec. 10, 2013
Ex. 721-C-5	U.S. Patent No. 9,152,789 ("Natarajan")	U.S.	Mar. 26, 2014	Oct. 6, 2015
Ex. 721-C-6	U.S. Patent No. 10,262,136 ("Kailash 136")	U.S.	Aug. 4, 2008	Apr. 16, 2019
Ex. 721-C-7	U.S. Patent No. 8,881,283 ("Tuvell 283")	U.S.	Oct. 9, 2007	Apr. 10, 2008
Ex. 721-C-8	U.S. Patent Publication No. 2007/0022315 ("Comegys")	U.S.	Jun. 22, 2006	Jan. 25, 2007
Ex. 721-C-9	U.S. Patent Publication No. 2005/0262560 ("Gassoway")	U.S.	May 5, 2004	Nov. 24, 2005
Ex. 721-C-10	U.S. Patent Publication No. 2008/0010368 ("Hubbard 368")	U.S.	July 10, 2006	Jan. 10, 2008
Ex. 721-C-11	U.S. Patent Publication No. 2005/0223001 ("Kester 001")	U.S.	Jun. 1, 2005	Oct. 5, 2005
Ex. 721-C-12	U.S. Patent Publication No. 2006/0075504 ("Liu")	U.S.	Sept. 22, 2005	Apr. 6, 2006
Ex. 721-C-13	U.S. Patent Publication No. 2013/0091570 ("McCorkendale")	U.S.	Sept. 15, 2009	Apr. 10, 2013
Ex. 721-C-14	U.S. Patent No. 8,429,180 ("Sobel")	U.S.	Mar. 31, 2008	Apr. 23, 2013
Ex. 721-C-15	U.S. Patent No. 8,650,648 ("Fraser")	U.S.	Mar. 26, 2008	Feb. 11, 2014
Ex. 721-C-16	U.S. Patent No. 7,774,845 ("Shipman")	U.S.	Nov. 6, 2002	Aug. 10, 2010

’721 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 721-C-17	U.S. Patent No. 8,365,286 (“Poston”)	U.S.	Mar. 30, 2009	Jan. 29, 2013

’721 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 721-C-18	Websense Email and Web Security
Ex. 721-C-19	Websense ThreatSeeker (“ThreatSeeker”)
Ex. 721-C-20	Stonesoft StoneGate Next Generation Firewall (“Next Generation Firewall”)
	System and/or product art received pursuant to Forcepoint’s subpoena to Sophos Ltd. (dated October 31, 2023)

’721 Patent Additional Prior Art/Background Art
U.S. Patent No. 6,944,772 B2 (“Dozortsev”)
U.S. Patent No. 7,093,239 B1 (“van der Made”)
U.S. Patent No. 7,310,817 B2 (“Hinchliffe”)
U.S. Patent No. 7,694,150 B1 (“Kirby”)
U.S. Patent No. 7,899,849 B2 (“Chaudhry”)
U.S. Patent No. 8,220,050 B2 (“Sarathy”)
U.S. Patent No. 8,230,506 B1 (“Forristal”)
U.S. Patent No. 8,468,602 B2 (“McDougal”)
U.S. Patent No. 8,549,581 B1 (“Kailash 581”)
U.S. Patent No. 8,584,240 B1 (“Yang”)
U.S. Patent No. 8,645,340 B2 (“Kester 340”)
U.S. Patent No. 8,646,038 B2 (“Blumfield”)
U.S. Patent No. 8,925,101 B2 (“Bhargava”)
U.S. Patent Publication No. 2004/0083384 A1 (“Hypponen”)
U.S. Patent Publication No. 2010/0169972 A1 (“Kuo”)
U.S. Patent Publication No. 2010/0031361 A1 (“Shukla”)
AU Patent No. 701,007 B2 (“Ferrand”)
WO 2007/015266 A2 (“Madhok 266 A2”)
WO 2007/015266 A3 (“Madhok 266 A3”)
WO 2007/104988 A1 (“Curnyn”)
Nick Del Grosso, *It’s Time to Rethink your Corporate Malware Strategy*, SANS INSTITUTE, Feb. 24, 2002. (“Del Grosso”)
Ajith Abraham et al., *D-SCIDS: Distributed soft computing intrusion detection system*, 30, JOURNAL OF NETWORK AND COMPUTER APPLICATIONS, 2007 at 81. (“Abraham”)

'721 Patent Additional Prior Art/Background Art
Joel Scanlan et al., *Intrusion Detection by Intelligent analysis of data across multiple gateways in real-time*, School of Computing, University of Tasmania. ("Scanlan")
Xiao Jiang et al,, *A Malware Sample Capturing and Tracking System*, IEEE, Dec. 19, 2010 at 69. ("Jiang")
Brijesh Kumar & Constantine Katsinis, *A Network Based Approach to Malware Detection in Large IT Infrastructures*, IEEE, Jul. 17, 2010 at 188. ("Kumar")
Shuaifu Dai et al., *Behavior-Based Malware Detection on Mobile Phone*, IEEE, Sep. 25, 2010 at 1. ("Dai")

Furthermore, with respect to the '721 Patent, under pre-AIA 35 U.S.C. § 102(f), Forcepoint identifies the activities of entities involved in computer security as referenced in Provisional Application No. 61/443,095, to which Plaintiffs claim priority. *See, e.g.*, Provisional Application No. 61/443,095 at [0002]-[0006].

Furthermore, with respect to the '721 Patent, under pre-AIA 35 U.S.C. §§ 102(a), (b), and (g)(2), Forcepoint reserves the right to identify additional prior art systems developed prior to February 15, 2011. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656, at *8-11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery.

D. Anticipation

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '721 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1, 8, 9, 14, and 15 of the '721 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Niles, Sutton, Kailash 066, and Natarajan as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1, 9, 14, and 15 of the '721 Patent are anticipated,

either expressly or inherently as understood by a person having ordinary skill in the art, by Gassoway as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1, 8, and 9 of the '721 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Kester 001 and Shipman as set forth in the attached claim chart.

E. Obviousness

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '721 Patent are rendered obvious by the references identified in the attached claim charts, either alone or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted '721 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint's anticipation contentions, which shall not be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	In Combination With
Niles	Sutton
Niles	Kailash 066
Niles	Tuvell 283
Niles	Natarajan
Niles	Comegys
Niles	Kailash 136

Primary Reference	In Combination With
Niles	Jiang
Niles	Del Grosso
Niles	Scanlan
Niles	Kumar
Niles	Gassoway
Niles	Hubbard 368
Niles	Kester 001
Niles	Liu
Niles	McCorkendale
Niles	Sobel
Niles	Poston
Niles	Shipman
Niles	Fraser
Niles	Websense Email and Web Security
Niles	ThreatSeeker
Niles	Next Generation Firewall
Sutton	Chess
Sutton	Niles
Sutton	Kailash 066
Sutton	Tuvell 283
Sutton	Natarajan
Sutton	Kailash 136
Sutton	Comegys

Primary Reference	In Combination With
Sutton	Jiang
Sutton	Del Grosso
Sutton	Scanlan
Sutton	Kumar
Sutton	Gassoway
Sutton	Hubbard 368
Sutton	Kester 001
Sutton	Liu
Sutton	McCorkendale
Sutton	Sobel
Sutton	Shipman
Sutton	Fraser
Sutton	Poston
Sutton	Websense Email and Web Security
Sutton	ThreatSeeker
Sutton	Next Generation Firewall
Kailash 066	Chess
Kailash 066	Niles
Kailash 066	Sutton
Kailash 066	Tuvell 283
Kailash 066	Natarajan
Kailash 066	Kailash 136
Kailash 066	Comegys

Primary Reference	In Combination With
Kailash 066	Jiang
Kailash 066	Scanlan
Kailash 066	Kumar
Kailash 066	Gassoway
Kailash 066	Hubbard 368
Kailash 066	Kester 001
Kailash 066	Liu
Kailash 066	McCorkendale
Kailash 066	Sobel
Kailash 066	Shipman
Kailash 066	Fraser
Kailash 066	Poston
Kailash 066	Websense Email and Web Security
Kailash 066	ThreatSeeker
Kailash 066	Next Generation Firewall
Chess	Kailash 066
Chess	Natarajan
Chess	Niles
Chess	Sutton
Chess	Tuvell 283
Chess	Kailash 136
Chess	Comegys
Chess	Jiang

Primary Reference	In Combination With
Chess	Kumar
Chess	Scanlan
Chess	Del Grosso
Chess	Gassoway
Chess	Hubbard 368
Chess	Kester 001
Chess	Liu
Chess	McCorkendale
Chess	Sobel
Chess	Shipman
Chess	Fraser
Chess	Poston
Chess	Websense Email and Web Security
Chess	ThreatSeeker
Chess	Next Generation Firewall
Kester 001	Chess
Kester 001	Niles
Kester 001	Sutton
Kester 001	Kailash 066
Kester 001	Tuvell 283
Kester 001	Natarajan
Kester 001	Kailash 136
Kester 001	Comegys

Primary Reference	In Combination With
Kester 001	Jiang
Kester 001	Kumar
Kester 001	Scanlan
Kester 001	Del Gross
Kester 001	Gassoway
Kester 001	Hubbard 368
Kester 001	Liu
Kester 001	McCorkendale
Kester 001	Sobel
Kester 001	Shipman
Kester 001	Fraser
Kester 001	Poston
Kester 001	Websense Email and Web Security
Kester 001	ThreatSeeker
Kester 001	Next Generation Firewall
Liu	Chess
Liu	Niles
Liu	Sutton
Liu	Kailash 066
Liu	Tuvell 283
Liu	Natarajan
Liu	Kailash 136
Liu	Comegys

Primary Reference	In Combination With
Liu	Jiang
Liu	Kumar
Liu	Scanlan
Liu	Del Grosso
Liu	Gassoway
Liu	Kester 001
Liu	Hubbard 368
Liu	McCorkendale
Liu	Sobel
Liu	Shipman
Liu	Fraser
Liu	Poston
Liu	Websense Email and Web Security
Liu	ThreatSeeker
Liu	Next Generation Firewall
Sobel	Chess
Sobel	Niles
Sobel	Sutton
Sobel	Kailash 066
Sobel	Tuvell 283
Sobel	Natarajan
Sobel	Kailash 136
Sobel	Comegys

Primary Reference	In Combination With
Sobel	Jiang
Sobel	Kumar
Sobel	Scanlan
Sobel	Del Gross
Sobel	Gassoway
Sobel	Hubbard 368
Sobel	Liu
Sobel	McCorkendale
Sobel	Kester 001
Sobel	Poston
Sobel	Shipman
Sobel	Fraser
Sobel	Websense Email and Web Security
Sobel	ThreatSeeker
Sobel	Next Generation Firewall
Shipman	Chess
Shipman	Niles
Shipman	Sutton
Shipman	Kailash 066
Shipman	Tuvell 283
Shipman	Natarajan
Shipman	Kailash 136
Shipman	Comegys

Primary Reference	In Combination With
Shipman	Jiang
Shipman	Kumar
Shipman	Scanlan
Shipman	Del Gross
Shipman	Gassoway
Shipman	Hubbard 368
Shipman	Kester 001
Shipman	Liu
Shipman	McCorkendale
Shipman	Sobel
Shipman	Poston
Shipman	Fraser
Shipman	Websense Email and Web Security
Shipman	ThreatSeeker
Shipman	Next Generation Firewall
Websense Email and Web Security	Natarajan
ThreatSeeker	Natarajan
Next Generation Firewall	Natarajan
Websense Email and Web Security	Kailash 136
ThreatSeeker	Kailash 136
Next Generation Firewall	Kailash 136
Websense Email and Web Security	Tuvell 283
ThreatSeeker	Tuvell 283

Primary Reference	In Combination With
Next Generation Firewall	Tuvell 283
Websense Email and Web Security	Comegys
ThreatSeeker	Comegys
Next Generation Firewall	Comegys
Websense Email and Web Security	Gassoway
ThreatSeeker	Gassoway
Next Generation Firewall	Gassoway
Websense Email and Web Security	Hubbard 368
ThreatSeeker	Hubbard 368
Next Generation Firewall	Hubbard 368
Websense Email and Web Security	McCorkendale
ThreatSeeker	McCorkendale
Next Generation Firewall	McCorkendale
Websense Email and Web Security	Fraser
ThreatSeeker	Fraser
Next Generation Firewall	Fraser
Websense Email and Web Security	Poston
ThreatSeeker	Poston
Next Generation Firewall	Poston
Liu	Hubbard 368 + Kester 001
Liu	Gassoway + Kailash 066
Liu	Gassoway + Natarajan
Liu	Gassoway + Sutton

Primary Reference	In Combination With
Liu	Gassoway + Niles
Liu	Gassoway + Chess
Liu	Kailash 066 + Scanlan
Liu	Natarajan + Scanlan
Liu	Sutton + Scanlan
Liu	Niles + Scanlan
Liu	Chess + Scanlan
Liu	Natarajan + Comegys
Liu	Comegys + Kailash 066
Liu	Comegys + Sutton
Liu	Comegys + Niles
Liu	Comegys + Chess
Liu	Kailash 066 + Sutton
Liu	Sutton + Niles
Liu	Niles + Kailash 066
Liu	Kailash 066 + Jiang
Liu	Sobel + Scanlan
Liu	Sobel + Kumar
Liu	Tuvell 283 + Hubbard 368
Liu	Tuvell 283 + McCorkendale
Liu	Tuvell 238 + Sobel
Liu	Tuvell 283 + Natarajan
Liu	Tuvell 283 + Kailash 066

Primary Reference	In Combination With
Liu	Tuvell 283 + Niles
Liu	Tuvell 283 + Sutton
Liu	Shipman + Poston
Liu	Fraser + McCorkendale
Liu	Fraser + Tuvell 283
Liu	Fraser + Gassoway
Liu	Fraser + Comegys
Liu	Fraser + Shipman
Liu	Poston + Niles
Liu	Poston + Comegys
Kester 001	Chess + Sobel
Kester 001	Chess + Gassoway
Kester 001	Chess + Kumar
Kester 001	Sutton + Sobel
Kester 001	Sutton + Gassoway
Kester 001	Sutton + Kumar
Kester 001	Kailash 066 + Sobel
Kester 001	Kailash 066 + Gassoway
Kester 001	Kailash 066 + Kumar
Kester 001	Niles + Kumar
Kester 001	Niles + Gassoway
Kester 001	Niles + Scanlan
Kester 001	Sobel + Gassoway

Primary Reference	In Combination With
Kester 001	Sobel + McCorkendale
Kester 001	Sobel+ Kumar
Kester 001	Sobel + Scanlan
Kester 001	Sobel +Niles
Kester 001	Shipman + Chess
Kester 001	Poston + Niles
Kester 001	Shipman + Sutton
Kester 001	Fraser + Sutton
Kester 001	Fraser + Chess
Kester 001	Fraser + Kailash 066
Sobel	Hubbard 368 + Scanlan
Sobel	Hubbard 368 + Comegys
Sobel	Hubbard 368 + Tuvell 283
Sobel	Hubbard 368 + Niles
Sobel	Hubbard 368 + Kailash 066
Sobel	Hubbard 368 + Sutton
Sobel	Natarajan + Scanlan
Sobel	Natarajan + Comegys
Sobel	Natarajan + Kailash 066
Sobel	Natarajan + Sutton
Sobel	Natarajan + Tuvell 283
Sobel	Natarajan + Niles
Sobel	Kailash 066 + Scanlan

Primary Reference	In Combination With
Sobel	Kailash 066 + Comegys
Sobel	Kailash 066 + Tuvell 283
Sobel	Kailash 066 + Niles
Sobel	Kailash 066 + Sutton
Sobel	Sutton + Scanlan
Sobel	Sutton + Comegys
Sobel	Sutton + Tuvell 283
Sobel	Sutton + Niles
Sobel	Liu + Scanlan
Sobel	Liu + Comegys
Sobel	Liu + Tuvell 283
Sobel	Liu + Niles
Sobel	Liu + Kailash 066
Sobel	Liu + Sutton
Sobel	Kester 001 + Liu
Sobel	Kester 001 + Chess
Sobel	Kester 001 + Niles
Sobel	Kester 001 + Sutton
Sobel	Kester 001 + Natarajan
Sobel	Kester 001 + Kailash 136
Sobel	Chess + Scanlan
Sobel	Chess + Comegys
Sobel	Chess + Tuvell 283

Primary Reference	In Combination With
Sobel	Niles + Scanlan
Sobel	Niles + Comegys
Sobel	Niles + Tuvell 283
Sobel	Kailash 136 + Scanlan
Sobel	Kailash 136 + Comegys
Sobel	Kailash + Tuvell 283
Sobel	Poston + Fraser
Sobel	Fraser + Scanlan
Sobel	Fraser + Comegys
Sobel	Fraser + Tuvell 283
Sobel	Fraser + Sutton
Sobel	Fraser + Kailash 066
Sutton	Kailash 066 + Niles
Sutton	Kailash 066 + Tuvell 283
Sutton	Kailash 066 + Natarajan
Sutton	Kailash 066 + Comegys
Sutton	Kailash 066 + Chess
Sutton	Chess + Comegys
Sutton	Chess + Tuvell 283
Sutton	Tuvell 283 + Comegys
Sutton	Niles + Tuvell 283
Sutton	Niles + Comegys
Sutton	Niles + Natarajan

Primary Reference	In Combination With
Sutton	Shipman + Poston
Sutton	Shipman + Gassoway
Sutton	Shipman + Natarajan
Sutton	Shipman + Kailash 066
Sutton	Poston + Tuvell 283
Sutton	Fraser + Tuvell 283
Sutton	Shipman + Scanlan
Sutton	Shipman + Chess
Sutton	Niles + Poston
Chess	Niles + Tuvell 283
Chess	Niles + Natarajan
Chess	Niles + Comegys
Chess	Niles + Sutton
Chess	Niles + Kailash 066
Chess	Sutton + Kailash 066
Chess	Sutton + Natarajan
Chess	Sutton + Tuvell 283
Chess	Sutton + Comegys
Chess	Kailash 066 + Tuvell 283
Chess	Kailash 066 + Comegys
Chess	Kailash 066 + Natarajan
Chess	Tuvell 283 + Comegys
Chess	Shipman + Poston

Primary Reference	In Combination With
Chess	Shipman + Kailash 136
Chess	Poston + Comegys
Chess	Poston + Tuvell 283
Chess	Poston + Niles
Chess	Shipman + Kester 001
Chess	Shipman + Fraser
Chess	Fraser + Kailash 066
Chess	Fraser + Jiang
Chess	Shipman + Jiang
Chess	Shipman + Scanlan
Chess	Shipman + Niles
Kailash 066	Sutton + Niles
Kailash 066	Sutton + Chess
Kailash 066	Sutton + Tuvell 283
Kailash 066	Sutton + Comegys
Kailash 066	Sutton + Natarajan
Kailash 066	Chess + Tuvell 283
Kailash 066	Chess + Comegys
Kailash 066	Chess + Natarajan
Kailash 066	Niles + Comegys
Kailash 066	Niles + Tuvell 283
Kailash 066	Niles + Natarajan
Kailash 066	Fraser + Niles

Primary Reference	In Combination With
Kailash 066	Fraser + Sutton
Kailash 066	Shipman + Scanlan
Kailash 066	Shipman + Niles
Kailash 066	Shipman + Sutton
Kailash 066	Shipman + Liu
Kailash 066	Poston + Niles
Niles	Sutton + Kailash 066
Niles	Sutton + Tuvell 283
Niles	Sutton + Natarajan
Niles	Sutton + Comegys
Niles	Chess + Sutton
Niles	Chess + Kailash 066
Niles	Chess + Tuvell 283
Niles	Chess + Comegys
Niles	Kailash 066 + Comegys
Niles	Kailash 066 + Tuvell 283
Niles	Tuvell 283 + Comegys
Niles	Fraser + Gassoway
Niles	Fraser + Tuvell 283
Niles	Shipman + Fraser
Shipman	Poston + Sobel
Shipman	Poston + Niles
Shipman	Sobel + Gassoway

Primary Reference	In Combination With
Shipman	Sobel + Scanlan
Shipman	Sobel + Kumar
Shipman	Sobel + Niles
Shipman	Chess + Scanlan
Shipman	Chess + Kester 001
Shipman	Poston + Liu
Shipman	Poston + McCorkendale
Shipman	Poston + Comegys
Shipman	Poston + Kailash 136
Shipman	Poston + Natarajan
Shipman	Poston + Sutton
Shipman	Chess + Natarajan
Shipman	Chess + Sutton
Shipman	Chess + Sobel
Shipman	Chess + Gassoway
Shipman	Chess + Kailash 066
Shipman	Niles + Natarajan
Shipman	Niles + Sutton
Shipman	Niles + Gassoway
Shipman	Niles + Kailash 066
Shipman	Liu + Natarajan
Shipman	Liu + Sutton
Shipman	Liu + Sobel

Primary Reference	In Combination With
Shipman	Liu + Gassoway
Shipman	Liu + Kailash 066
Shipman	Comegys + Natarajan
Shipman	Comegys + Sutton
Shipman	Comegys + Sobel
Shipman	Comegys + Gassoway
Shipman	Comegys + Kailash 066
Shipman	Kailash 136 + Kailash 066
Shipman	Kailash 136 + Gassoway
Shipman	Kailash 136 + Sobel
Shipman	Kailash 136 + Sutton
Shipman	Kailash 136 + Natarajan
Shipman	Tuvell 283 + Natarajan
Shipman	Tuvell 283 + Chess
Shipman	Tuvell 283 + Sutton
Shipman	Tuvell 283 + Kailash 066
Shipman	Natarajan + Kumar
Shipman	Natarajan + Hubbard 368
Shipman	Natarajan + Del Grosso
Shipman	Chess + Kumar
Shipman	Chess + Hubbard 368
Shipman	Chess + Del Grosso
Shipman	Sutton + Kumar

Primary Reference	In Combination With
Shipman	Sutton + Del Grosso
Shipman	Sutton + Hubbard 368
Shipman	Kailash 066 + Kumar
Shipman	Kailash 066 + Hubbard 368
Shipman	Kailash 066 + Del Grosso
Shipman	Gassoway + Sutton
Shipman	Gassoway + Natarajan
Shipman	Gassoway + Kailash 066
Websense Email and Web Security	Kailash 066 + Sutton
Websense Email and Web Security	Kailash 066 + Tuvell 283
Websense Email and Web Security	Kailash 066 + Comegys
Websense Email and Web Security	Kailash 066 + Scanlan
Websense Email and Web Security	Kailash 066 + Kester 001
Websense Email and Web Security	Chess + Tuvell 283
Websense Email and Web Security	Chess + Comegys
Websense Email and Web Security	Chess + Scanlan
Websense Email and Web Security	Chess + Kester 001
Websense Email and Web Security	Niles + Tuvell 283
Websense Email and Web Security	Niles + Comegys
Websense Email and Web Security	Niles + Scanlan
Websense Email and Web Security	Niles+ Kester 001
Websense Email and Web Security	Sutton + Tuvell 283
Websense Email and Web Security	Sutton + Comegys

Primary Reference	In Combination With
Websense Email and Web Security	Sutton + Scanlan
Websense Email and Web Security	Sutton + Kester 001
Websense Email and Web Security	Natarajan + Tuvell 283
Websense Email and Web Security	Natarajan + Comegys
Websense Email and Web Security	Natarajan + Scanlan
Websense Email and Web Security	Natarajan + Kester 001
Websense Email and Web Security	Kailash 136 + Tuvell 283
Websense Email and Web Security	Kailash 136+ Comegys
Websense Email and Web Security	Kailash 136 + Scanlan
Websense Email and Web Security	Kailash 136 + Kester 001
Websense Email and Web Security	Liu + Kester 001
Websense Email and Web Security	Liu + Scanlan
Websense Email and Web Security	Liu + Comegys
Websense Email and Web Security	Liu + Tuvell 283
Websense Email and Web Security	Tuvell 283 + Natarajan
Websense Email and Web Security	Tuvell 283 + Gassoway
Websense Email and Web Security	Tuvell 283 + Hubbard 368
Websense Email and Web Security	Tuvell 283 + Kester 001
Websense Email and Web Security	Tuvell 283 + Liu
Websense Email and Web Security	Tuvell 283 + McCorkendale
Websense Email and Web Security	Tuvell 283 + Sobel
Websense Email and Web Security	Tuvell 283 + Next Generation Firewall
Websense Email and Web Security	Comegys + Gassoway

Primary Reference	In Combination With
Websense Email and Web Security	Comegys + Hubbard 368
Websense Email and Web Security	Comegys + Kester 001
Websense Email and Web Security	Comegys + Liu
Websense Email and Web Security	Comegys + McCorkendale
Websense Email and Web Security	Comegys + Next Generation Firewall
Websense Email and Web Security	Scanlan + Gassoway
Websense Email and Web Security	Scanlan + Hubbard 368
Websense Email and Web Security	Scanlan + Kester 001
Websense Email and Web Security	Scanlan + Liu
Websense Email and Web Security	Scanlan + McCorkendale
Websense Email and Web Security	Scanlan + Next Generation Firewall
Websense Email and Web Security	Natarajan + Jiang
Websense Email and Web Security	Jiang + Comegys
ThreatSeeker	Niles + Kailash 066
ThreatSeeker	Niles + Natarajan
ThreatSeeker	Niles + Gassoway
ThreatSeeker	Niles + Kester 001
ThreatSeeker	Niles + Sutton
ThreatSeeker	Sutton + Kailash 066
ThreatSeeker	Sutton + Tuvell 283
ThreatSeeker	Sutton + Comegys
ThreatSeeker	Sutton + Scanlan
ThreatSeeker	Sutton+ Kester 001

Primary Reference	In Combination With
ThreatSeeker	Kailash 066 + Tuvell 283
ThreatSeeker	Kailash 066 + Comegys
ThreatSeeker	Kailash 066 + Scanlan
ThreatSeeker	Kailash 066 + Kester 001
ThreatSeeker	Natarajan + Comegys
ThreatSeeker	Natarajan + Scanlan
ThreatSeeker	Natarajan + Kester 001
ThreatSeeker	Hubbard 368 + Gassoway
ThreatSeeker	Hubbard 368 + Kester 001
ThreatSeeker	Hubbard 368 + Liu
ThreatSeeker	Hubbard 368 + Scanlan
ThreatSeeker	Hubbard 368 + Comegys
ThreatSeeker	Hubbard 368 + Tuvell 283
ThreatSeeker	Hubbard 368 + Kailash 066
ThreatSeeker	Hubbard 368 + Sutton
ThreatSeeker	Hubbard 368 + Niles
ThreatSeeker	Kester 001 + Liu
ThreatSeeker	Liu + Kailash 066
ThreatSeeker	Liu + Sutton
ThreatSeeker	Liu + Niles
ThreatSeeker	Sobel + Kester 001
ThreatSeeker	Sobel + Scanlan
ThreatSeeker	Sobel + Comegys

Primary Reference	In Combination With
ThreatSeeker	Sobel + Tuvell 283
ThreatSeeker	Sobel + Niles
ThreatSeeker	Sobel + Sutton
ThreastSeeker	Chess + Niles
ThreatSeeker	Niles + Scanlan
Next Generation Firewall	Niles + Sutton
Next Generation Firewall	Niles + Kailash 066
Next Generation Firewall	Niles + Tuvell 283
Next Generation Firewall	Niles + Natarajan
Next Generation Firewall	Niles + Comegys
Next Generation Firewall	Niles + Scanlan
Next Generation Firewall	Niles + Kester 001
Next Generation Firewall	Sutton + Kailash 066
Next Generation Firewall	Sutton + Tuvell 283
Next Generation Firewall	Sutton + Comegys
Next Generation Firewall	Sutton + Kester 001
Next Generation Firewall	Kailash 066 + Tuvell 283
Next Generation Firewall	Kailash 066 + Comegys
Next Generation Firewall	Kailash 066 + Scanlan
Next Generation Firewall	Kailash 066 + Kester 001
Next Generation Firewall	Tuvell 283 + Natarajan
Next Generation Firewall	Tuvell 283 + Kailash 136
Next Generation Firewall	Tuvell 283 + Kester 001

Primary Reference	In Combination With
Next Generation Firewall	Tuvell 283 + Liu
Next Generation Firewall	Tuvell 283 + McCorkendale
Next Generation Firewall	Tuvell 283 + Sobel
Next Generation Firewall	Tuvell 283 + Websense Email and Web Security
Next Generation Firewall	Natarajan + Comegys
Next Generation Firewall	Natarajan + Scanlan
Next Generation Firewall	Natarajan + Kester 001
Next Generation Firewall	Natarajan + Websense Email and Web Security
Next Generation Firewall	Kailash 136 + Kester 001
Next Generation Firewall	Kailash 136 + Comegys
Next Generation Firewall	Comegys + Kester 001
Next Generation Firewall	Comegys + Hubbard 368
Next Generation Firewall	Comegys + Gassoway
Next Generation Firewall	Comegys + Sobel
Next Generation Firewall	Comegys + Websense Email and Web Security
Next Generation Firewall	Scanlan + Kester 001
Next Generation Firewall	Scanlan + Liu
Next Generation Firewall	Scanlan + Sobel
Next Generation Firewall	Liu + Niles
Next Generation Firewall	Liu + Sutton
Next Generation Firewall	Liu + Kailash 066
Next Generation Firewall	Liu + Kester 001

Primary Reference	In Combination With
Next Generation Firewall	Liu + Comegys

Forcepoint reserves the right to amend these Contentions and prior art combinations in light of new information that may arise from third parties related to additional computer security systems. The following list of references are also evidence of the knowledge of POSITA at the time of the alleged invention: Dozortsey, van der Made, Hinchliffe, Kirby, Chaudhry, Sarathy, Forristal, McDougal, Kailash 581, Yang, Kester 340, Blumfield, Bhargava, Hypponen, Kuo, Shukla, Ferrand, Madhok 266 A2, Madhok 266 A3, Curnyn, Del Gross, Abraham, Scanlan, Jiang, Kumar, and Dai.

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have understood that each of these references are in the same field of endeavor, namely methods and devices relating to computer security. *See, e.g.*, Chess at 5:57-62; Comegys at [0008]; Kailash 066 at 2:32-38; Kailash 136 at 10:61-64; Natarajan at 3:26-29; Niles at 3:56-4:11; Sutton at 1:46-49; Tuvell 283 at 2:27-32; Gassoway at Abstract; Hubbard 368 at Abstract; Kester 001 at Claim 1; Liu at Abstract; McCorkendale at [0002]; Sobel at 1:6-10; Shipman at Abstract; Fraser at 6:17-46; Poston at 2:40-44; and Websense Email and Web Security (Exhibit 721-C-18) at 11 (citing Websense Unveils TRITON Architecture Unifying Web, Data and Email Security at 1); ThreatSeeker (Exhibit 721-C-19) at 3 (citing Datasheet - Websense Web Security Suite 2007.pdf at 1); and Next Generation Firewall (Exhibit 721-C-20) at 5 (citing Brochure_2001.pdf at 4).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving computer security. *See, e.g.*, Chess at 5:57-62; Comegys at [0008]; Kailash 066 at 2:32-38; Kailash 136 at 10:61-64; Natarajan at 3:26-29;

Niles at 3:56-4:11; Sutton at 1:46-49; Tuvell 283 at 2:27-32; Gassoway at Abstract; Hubbard 368 at Abstract; Kester 001 at Claim 1; Liu at Abstract; McCorkendale at Abstract; Sobel at Abstract, Shipman at Abstract; Fraser at 6:17-46; Poston at 2:40-44; and Websense Email and Web Security (Exhibit 721-C-18) at 11 (citing Websense Unveils TRITON Architecture Unifying Web, Data and Email Security at 1); ThreatSeeker (Exhibit 721-C-19) at 3 (citing Datasheet - Websense Web Security Suite 2007.pdf at 1); and Next Generation Firewall (Exhibit 721-C-20) at 5 (citing Brochure_2001.pdf at 4).

Further, the Asserted Claims of the '721 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—*i.e.* the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe a "method of classifying a computer object as malware." *See, e.g.*, Chess at 5:57-62; Comegys at [0008]; Kailash 066 at 2:54-56; Kailash 136 at 10:61-64; Natarajan at 3:26-29; Niles at 3:56-4:11; Sutton at claim 12; Tuvell 283 at 2:27-32; Gassoway at Abstract; Hubbard 368 at Abstract; Kester 001 at Claim 1; Liu at Abstract; McCorkendale at Abstract; Sobel at Abstract; Shipman at Abstract; Fraser at 6:17-46; Poston at 8:24-29; and Websense Email and Web Security (Exhibit 721-C-18) at 11 (citing Websense Unveils TRITON Architecture Unifying Web, Data and Email Security at 1); ThreatSeeker (Exhibit 721-C-19) at 3 (citing Datasheet - Websense Web Security Suite 2007.pdf at 1); and Next Generation Firewall (Exhibit 721-C-20) at 5 (citing Brochure_2001.pdf at 4).

The prior art references further describe a "system for classifying a computer object as malware." *See, e.g.*, Chess at 5:57-62; Comegys at [0008]; Kailash 066 at 2:32-38; Kailash 136 at 10:61-64; Natarajan at 3:26-29; Niles at 9:23-38; Sutton at 1:22-28; Tuvell 283 at 2:27-32; Gassoway at Abstract; Hubbard 368 at Abstract; Kester 001 at Claim 1; Liu at Abstract;

McCorkendale at Abstract; Sobel at Abstract; Shipman at Abstract; Fraser at 6:17-46; Poston at 2:40-44; and Websense Email and Web Security (Exhibit 721-C-18) at 103 (citing Websense Unveils TRITON Architecture Unifying Web, Data and Email Security at 1); ThreatSeeker (Exhibit 721-C-19) at 48 (citing Computer security blanket Websense _s ThreatSeeker technology aimed at sniffing out malicious sites.pdf at 1); and Next Generation Firewall (Exhibit 721-C-20) at 113 (citing Brochure_2001.pdf at 4).

The prior art references further describe "receiving, at a first threat server, details of a first computer object from a first remote computer, wherein the details of the first computer object include data uniquely identifying the first computer object." *See, e.g.*, Chess at 4:66-5:17; Comegys at [0029]; Kailash 066 at 15:37-46; Kailash 136 at 3:45-51; Natarajan at 5:44-48; Niles at 5:30-42; Sutton at 3:12-21; Tuvell 283 at 5:56-62; Gassoway at [0030]; Hubbard 368 at [0037]; Kester 001 at [0048]-[0049]; Liu at [0083]; McCorkendale at [0025]; Sobel at 4:4-21; Shipman at 6:41-61; Fraser at 11:47-12:10; Poston at 4:55-5:9; and Websense Email and Web Security (Exhibit 721-C-18) at 18-20 (citing mass-spam-url-classification-project.doc at 6 and 9); ThreatSeeker (Exhibit 721-C-19) at 5-6 (citing White Paper - Websense Threatseeker Network 2008.pdf at 6); and Next Generation Firewall (Exhibit 721-C-20) at 13 (citing Stonesoft StoneGate NextGen Firewall - whitepaper 2010.pdf at 10).

The prior art references further describe "a first threat server arranged to receive details of a computer object from a first remote computer, wherein the details of the first computer object include data uniquely identifying the first computer object." *See, e.g.*, Chess at 4:66-5:17; Comegys at [0029]; Kailash 066 at 15:37-46; Kailash 136 at 3:45-51; Natarajan at 5:44-48; Niles at 5:30-42; Sutton at 3:12-21; Tuvell 283 at 5:56-62; Gassoway at [0030]; Hubbard 368 at [0037]; Kester 001 at [0048]-[0049]; Liu at [0083]; McCorkendale at [0025]; Sobel at 4:4-21; Shipman at

6:41-61; Fraser at 11:47-12:10; Poston at 4:55-5:9; and Websense Email and Web Security (Exhibit 721-C-18) at 107-108 (citing mass-spam-url-classification-project.doc at 6 and 9); ThreatSeeker (Exhibit 721-C-19) at 50 (citing White Paper - Websense Threatseeker Network 2008.pdf at 6); and Next Generation Firewall (Exhibit 721-C-20) at 119 (citing Datasheet_appliance_2004.pdf at 1).

The prior art references further describe "determining, by the first threat server, whether the first computer object has been previously seen by comparing the data uniquely identifying the first computer object to a plurality of data uniquely identifying plural computer objects in a first database associated with the first threat server." *See, e.g.*, Chess at claim 20; Comegys at [0041]-[0043]; Kailash 066 at 6:23-39; Kailash 136 at 4:55-64; Natarajan at 16:52-67; Niles at 2:55-59; Sutton at 6:50-54; Tuvell 283 at 16:5-8; Gassoway at [0045]-[0046]; Hubbard 368 at [0052]-[0053]; Kester 001 at [0048]-[0050]; Liu at [0073]; McCorkendale at [0036]-[0037]; Sobel at 6:26-7:8; Shipman at 8:31-45; Fraser at 11:47-12:10; Poston at 5:63-6:6; and Websense Email and Web Security (Exhibit 721-C-18) at 29-31 (citing mass-spam-url-classification-project.doc at 6 and 9); ThreatSeeker (Exhibit 721-C-19) at 7 (citing Websense Threatseeker - White Paper 2007.pdf at 3); and Next Generation Firewall (Exhibit 721-C-20) at 18 (citing Stonesoft StoneGate NextGen Firewall v4.2.2 - security target report Jan 2009 at 19).

The prior art references further describe "the first threat server is further arranged to receive the details of the computer object from the first remote computer and determine whether the first computer object has been previously seen by comparing the data uniquely identifying the first computer object to a plurality of data uniquely identifying plural computer objects in a first database associate with the first threat server." *See, e.g.*, Chess at claim 20; Comegys at [0041]-[0043]; Kailash 066 at 6:23-39; Kailash 136 at 4:55-64; Natarajan at 16:52-67; Niles at 2:55-59;

Sutton at 6:50-54; Tuvell 283 at 16:5-8; Gassoway at [0045]-[0046]; Hubbard 368 at [0052]-[0053]; Kester 001 at [0048]-[0050]; Liu at [0073]; McCorkendale at [0036]-[0037]; Sobel at 6:26-7:8; Shipman at 8:31-45; Fraser at 11:47-12:10; Poston at 5:63-6:6; and Websense Email and Web Security (Exhibit 721-C-18) at 121-123 (citing mass-spam-url-classification-project.doc at 6 and 9); ThreatSeeker (Exhibit 721-C-19) at 53-54 (citing Websense Threatseeker - White Paper 2007.pdf at 3); and Next Generation Firewall (Exhibit 721-C-20) at 140 (citing Stonesoft StoneGate NextGen Firewall v5.1 - reference guide 2010.pdf at 96).

The prior art references further describe "receiving additional information about the first computer object from the first remote computer when the first computer object has not been previously seen." *See, e.g.*, Chess at 6:29-34; Comegys at [0051]; Kailash 066 at 6:23-39; Kailash 136 at 3:66-4:2; Natarajan at 10:6-15; Niles at 8:55-58; Sutton at 6:45-49; Tuvell 283 at 11:44-57; Gassoway at [0045]-[0046]; Hubbard 368 at [0074]-[0075]; Kester 001 at [0042]-[0045]; Liu at [0084]-[0086]; McCorkendale at [0036]-[0037]; Sobel at 6:26-49; Shipman at 8:50-62; Fraser at 21:21-22:27; Poston at 6:7-47; and Websense Email and Web Security (Exhibit 721-C-18) at 35-36 (citing mass-spam-url-classification-project.doc at 6 and 9); ThreatSeeker (Exhibit 721-C-19) at 12 (citing White Paper - Websense Threatseeker Network 2008.pdf at 7); and Next Generation Firewall (Exhibit 721-C-20) at 30-31 (citing Stonesoft StoneGate NextGen Firewall v5.1 - reference guide 2010.pdf at 102).

The prior art references further describe a "first threat server [] further arranged to receive additional information about the first computer object from the first remote computer when the first computer object has not been previously seen." *See, e.g.*, Chess at 6:29-34; Comegys at [0051]; Kailash 066 at 6:23-39; Kailash 136 at 3:66-4:2; Natarajan at 10:6-15; Niles at 8:55-58; Sutton at 6:45-49; Tuvell 283 at 11:44-57; Gassoway at [0045]-[0046]; Hubbard 368 at [0074]-

[0075]; Kester 001 at [0042]-[0045]; Liu at [0084]-[0086]; McCorkendale at [0036]-[0037]; Sobel at 6:26-49; Shipman at 8:50-62; Fraser at 21:21-22:27; Poston at 6:7-47; and Websense Email and Web Security (Exhibit 721-C-18) at 127-128 (citing mass-spam-url-classification-project.doc at 6 and 9); ThreatSeeker (Exhibit 721-C-19) at 58 (citing White Paper - Websense Threatseeker Network 2008.pdf at 7); and Next Generation Firewall (Exhibit 721-C-20) at 144-145 (citing Stonesoft StoneGate NextGen Firewall v5.1 - reference guide 2010.pdf at 102).

The prior art references further describe "stor[ing] the details of the first computer object and the received additional information about the first computer object in a second database associated with the first threat server when the first computer object has not been previously seen." *See, e.g.*, Chess at 6:57-7; Comegys at [0026]; Kailash 066 at 6:41-62; Kailash 136 at 4:42-54; Natarajan at 17:18-23; Niles at 2:59-3:6; Sutton at 9:21-32; Gassoway at [0048]-[0049]; Hubbard 368 at [0074]-[0075]; Kester 001 at [0052]; Liu at [0086]; McCorkendale at [0036]-[0038]; Sobel at 5:53-6:4; Shipman at 9:1-42; Fraser at 21:21-21:39; Poston at 6:48-7:5; and Websense Email and Web Security (Exhibit 721-C-18) at 40 (citing mass-spam-url-classification-project.doc at 9); ThreatSeeker (Exhibit 721-C-19) at 14 (citing Websense Threatseeker - White Paper 2007.pdf at 4); and Next Generation Firewall (Exhibit 721-C-20) at 40 (citing Stonesoft StoneGate NextGen Firewall v5.1 - reference guide 2010.pdf at 118).

The prior art references further describe "provid[ing] contents of the second database to at least one database associated with a central server, wherein the contents comprise a signature of the first computer object, behavior information about the first computer object, and information about the first remote computer." *See, e.g.*, Comegys at FIG. 5; Comegys at [0077]; Kailash 066 at 6:41-62; Kailash 136 at 6:46-53; Natarajan at 16:52-67; Niles at 6:56-61; Sutton at 21:48-22:5; Gassoway at [0051]; Hubbard 368 at [0074]-[0075]; Kester 001 at [0054]; Liu at [0086];

McCorkendale at [0045]-[0046]; Sobel at 7:9-17; Shipman at 9:1-42; Fraser at 9:52-10:14; Poston at 6:48-7:5; and Websense Email and Web Security (Exhibit 721-C-18) at 44 (citing mass-spam-url-classification-project.doc at 8); ThreatSeeker (Exhibit 721-C-19) at 16 (citing White Paper - Websense Threatseeker Network 2008.pdf at 5); and Next Generation Firewall (Exhibit 721-C-20) at 44 (citing Stonesoft StoneGate Firewall - technical specs 2006.pdf at 2).

The prior art references further describe "increas[ing] a count associated with a number of times that the first computer object has been seen, and providing the increased count associated with the number of times that the first computer object has been seen to the central server." *See, e.g.*, Comegys at [0055]; Kailash 066 at 16:18-27; Niles at 7:18-27; Sutton at 13:15-21; Tuvell 283 at 16:38-40; Gassoway at [0051]; Hubbard 368 at [0070]-[0072]; Kester 001 at[0060]-[0061]; Liu at [0086]; McCorkendale at [0045]-[0046]; Sobel at 7:56-8:23; Shipman at 9:1-46; Fraser at 9:14-28; Poston at 16:1-29; and Websense Email and Web Security (Exhibit 721-C-18) at 54-55 (citing mass-spam-url-classification-project.doc at 6 and 9); and Next Generation Firewall (Exhibit 721-C-20) at 52-53 (citing Stonesoft StoneGate v5.0 - administrators guide 2009.pdf at 644).

The prior art references further describe "the central server arranged to receive the increased count associated with the number of times that the first computer object has been seen." *See, e.g.*, Comegys at [0055]; Kailash 066 at 16:18-27; Niles at 7:18-27; Sutton at 13:15-21; Tuvell 283 at 16:38-40; Gassoway at [0051]; Hubbard 368 at [0070]-[0072]; Kester 001 at[0060]-[0061]; Liu at [0086]; McCorkendale at [0045]-[0046]; Sobel at 7:56-8:23; Shipman at 9:1-46; Fraser at 9:14-28; Poston at 16:1-29; and Websense Email and Web Security (Exhibit 721-C-18) at 147-148 (citing mass-spam-url-classification-project.doc at 6 and 9); and Next Generation Firewall (Exhibit 721-C-20) at 170-171 (citing Stonesoft StoneGate v5.0 - administrators guide 2009.pdf at 644).

The prior art references further describe "receiv[ing], at a second threat server, at least a portion of the contents of the at least one database associated with the central server, wherein the at least a portion of the contents of the at least one database associated with the central server include a subset of the details of the first computer object stored in the second database." *See, e.g.*, Chess at 8:33-41; Kailash 066 at 6:41-62; Kailash 136 at 6:46-53; Natarajan at 10:15-26; Niles at 3:17-29; Sutton at 9:21-32; Tuvell 283 at FIG. 11; Gassoway at [0042]-[0043]; Hubbard 368 at [0054]-[0056]; Kester 001 at [0069]-[0070]; Liu at [0086]; McCorkendale at [0050]-[0051]; Sobel at 7:56-8:23; Shipman at 9:62-10:10; Fraser at 9:52-10:14; Poston at 12:5-24; and Websense Email and Web Security (Exhibit 721-C-18) at 58 (citing Websense Web Security Datasheet 2006 at 2); ThreatSeeker (Exhibit 721-C-19) at 24 (citing Websense Threatseeker - White Paper 2007.pdf at 4); and Next Generation Firewall (Exhibit 721-C-20) at 64 (citing Stonesoft StoneGate v5.0 - administrators guide 2009.pdf at 128).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 721-C-1 through 721-C-20. It would have been known and simple to take a prior art for malware detection by comparison with similar objects, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving computer security. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '721 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Defendant provides an identification of the limitations of the '721 Patent that are invalid based on indefiniteness under pre-AIA 35 U.S.C.

§ 112 ¶ 2, or enablement or written description under pre-AIA 35 U.S.C. § 112 ¶ 1. These Contentions are being proffered without the benefit of expert disclosure or discovery.

Asserted Claims 1, 8, 9, and 14 of the '721 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). For example, as applied in Plaintiffs' Infringement Contentions, the terms "previously seen" / "not been previously seen"; "to at least one database"; "information about the first remote computer"; "at least a portion of the contents of the at least one database associated with the central server"; "a subset of the details"; "behavior information"; "details of a first computer object" / "details of a computer object from a first remote computer"; "additional information about the first computer object"; "details of a second computer object" / "details of a computer object from a second remote computer"; and "object database" / "behavior database" / "computer-object database" are indefinite because each of these phrases not only is subjective but also does not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 1, 8, 9, and 14 of the '721 Patent are invalid under § 112 ¶ 1, because the specification as filed does not contain a sufficient written description supporting those claims. In particular, the patent disclosure would not lead a person of ordinary skill in the art to understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. For example, Asserted Claims 1, 8, 9, and 14 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '721 Patent fails to provide an adequate written description of the phrases "receiving

additional information about the first computer object" / "receive additional information about the first computer object"; "information about the first remote computer"; "at least a portion of the contents of the at least one database associated with the central server"; "a subset of the details"; "behavior information"; "details of a first computer object" / "details of a computer object from a first remote computer"; "providing the increased count associated with the number of times that the first computer object has been seen to the central server"; "details of a second computer object" / "details of a computer object from a second remote computer"; "the central server arranged to receive the increased count associated with the number of times that the first computer object has been seen"; and "object database" / "behavior database" / "computer-object database" as applied in Plaintiffs' Infringement Contentions.

The aforementioned claims are invalid because they are not enabled or described by the specification of the '721 Patent. The subject matter of these claims, as described above, are not sufficiently shown in the specification of the '721 Patent. The subject matter of these claims, as described above, are not sufficiently enabled because they do not teach one skilled in the art how to make and use the alleged invention from the specification of the '721 Patent. For example, For example, the '721 Patent fails to enable the following and thus, Asserted Claims 1, 8, 9, and 14 of the '721 Patent are invalid: "receiving additional information about the first computer object" / "receive additional information about the first computer object"; "information about the first remote computer"; "at least a portion of the contents of the at least one database associated with the central server"; "a subset of the details"; "behavior information"; "details of a first computer object" / "details of a computer object from a first remote computer"; "providing the increased count associated with the number of times that the first computer object has been seen to the central server"; "details of a second computer object" / "details of a computer object from a second remote

computer"; "the central server arranged to receive the increased count associated with the number of times that the first computer object has been seen"; and "object database" / "behavior database" / "computer-object database." The foregoing phrases are not described in such a way that one of ordinary skill in the art could implement it to achieve the results sought by the individual named on the face of the '721 Patent as the inventor. The foregoing phrases are not described in such a way that a person having ordinary skill in the art at the time of the alleged invention would have understood that the individual named as the inventor on the face of the '721 Patent was in possession of the claimed subject matter. The Asserted Claims of the '721 Patent also do not comply with § 112 because they do not set forth what the applicant regards is the invention.

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court's Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the '721 Patent they contend are directed to ineligible subject matter under pre-AIA 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the '721 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the '721 Patent are directed to the abstract idea of, for example, receiving, analyzing, and storing information. *See, e.g.*, '721 Patent at claim 1 ("receiving . . . details of a first computer object," "determining . . . whether the first computer object has been previously seen," "comparing the data uniquely identifying the first computer object to a plurality of data uniquely identifying plural computer objects," "receiving additional information about the first computer object," "storing the details of the first computer object and the received additional information," "providing contents of the second database to at least one

database associated with a central server," "increasing a count," and "receiving . . . at least a portion of the contents of the at least one database"); claim 8 ("receiving . . . details of a second computer object," "determining . . . whether the second computer object has been previously seen," "comparing the data uniquely identifying the second computer object to a plurality of data uniquely identifying plural computer objects," "determining that the second computer object has been seen before," "increasing a count associated with a number of times that the second computer object has been seen," and "receiving . . . a count associated with the number of times that the second computer object has been seen"); claim 9 ("receive details of a computer object," "receive the details of the computer object from the first remote computer," "determine whether the first computer object has been previously seen," "comparing the data uniquely identifying the first computer object to a plurality of data uniquely identifying plural computer objects," "receive additional information about the first computer object," "store the details of the first computer object and the received additional information about the first computer object," "provide contents of the second database to at least one database associated with a central server," "increase a count associated with a number of times that the first computer object has been seen," "receive the increased count," and "receive at least a portion of the contents of the at least one database associated with the central server"); claim 14 ("storing object signatures and metadata about objects," "storing object behavior information," and "storing information about what objects are present on what remote computers"). The specification of the '721 confirms that the Asserted Claims are directed to basic concepts of receiving, analyzing, and storing information. *See, e.g.*, *id.*, 2:19–28 ("[V]arious new and advantageous cloud-based strategies for fighting malware are disclosed. In particular a cloud-based approach is outlined where the central server receives information about objects and their behaviour on remote computers throughout the community

and builds a picture of objects and their behaviour seen throughout the community. This information is used to make comparisons with this data across the community in developing and applying various heuristics and or rules to determine whether a newly seen object is malevolent or not."); 2:29–31 ("This approach to fighting malware involves communicating, storing and managing vast amounts of data at the central server . . . ."); 2:36–38 ("It is also desirable to improve the processes for analysing the data to make the best use of the time and specialised skills of the human malware analysts."); 2:46–3:16; *see also* 1:56–62 ("More recently, so-called 'cloud' based techniques have been developed for fighting malware/viruses. In these techniques, protection is provided by signatures that are stored in the cloud, i.e. in a central server to which the remote computers are connected. Thus, a remote computer can be given protection as soon as a new malware object is spotted and its signature stored in the central server . . . .)); 1:65–2:7 ("This technique can also give the advantage of moving the processing burden from the remote computer to the central server. However, this technique is limited by sending only signature information or very basic information about an object to the central server. Therefore, in order to analyse whether or not an unknown object is malware, a copy of that object is normally sent to the central server where it is investigated by a human analyst. This is a time consuming and laborious task introducing considerable delay in classifying malware as safe or unsafe."); 2:7–10 ("Also, given the considerable volume of new objects that can be seen daily across a community, it is unrealistic to have a skilled human analyst investigate each new object thoroughly.").

Second, the Asserted Claims of the '721 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '721 Patent describes receiving, analyzing, and storing information using, for example, networks, computing devices, and storage components well-known in the prior

art, including the Internet, a LAN, personal computers, servers "of any type," PDAs, mobile phones, televisions, or "any other device capable of loading and operating computer objects." *See, e.g.*, *id.*, 2:59–3:1. In addition, the '721 Patent makes clear that its use of "computer objects" is well-known and conventional: "[a]n object in this sense may be a computer file, part of a file or a sub-program, macro, web page or any other piece of code to be operated by or on the computer, or any other event whether executed, emulated, simulated or interpreted." *Id.*, 4:2–5. The '721 Patent also describes using well-known storage methods and components, including computer RAM, hard disk drives, removable storage such as a USB pen drive, an email attachment, etc. *See, e.g.*, *id.*, 4:8–11. Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of receiving, analyzing, and storing information. Simply identifying an overarching desirable outcome (such as "more accurately and more efficiently detecting malware" or "improv[ing] the processes for analysing the data to make the best use of the time and specialised skills of the human malware analysts") without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic computer components and do not claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer

security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '721 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '721 Patent are ineligible because they would preempt the entire field of receiving, analyzing, and storing information.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '721 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions. Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs' application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '721 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or

infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not. Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

VI. INVALIDITY CONTENTIONS FOR THE '386 PATENT

A. General State of the Art at the Time of the Alleged Inventions

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '386 Patent, may provide background and context pertinent to the teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '386 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 386-D-1 through 386-D-8 identify where each limitation of the Asserted Claims of the '386 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 386-D-1 through 386-D-8, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 386-D-1 through 386-D-8 and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combination in Section VI.E, *infra*.

'386 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 386-D-1	U.S. Patent No. 9,654,495 ("Hubbard 495")	U.S.	Feb. 28, 2007	May 16, 2017

'386 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 386-D-2	U.S. Patent Publication No. 2008/0175266 ("Alperovitch")	U.S.	Jan. 24, 2007	July 24, 2008
Ex. 386-D-3	U.S. Patent No. 8,561,182 ("Lee")	U.S.	Jan. 29, 2009	Oct. 15, 2013
Ex. 386-D-4	U.S. Patent Publication No. 2008/0028100 ("Adelman 2008")	U.S.	Oct. 3, 2007	Jan. 31, 2008
Ex. 386-D-5	U.S. Patent No. 7,809,796 ("Bloch 2007")	U.S.	Apr. 5, 2007	Oct. 5, 2010

'386 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 386-D-6	McAfee SiteAdvisor Plus
Ex. 386-D-7	IronPort Web Reputation
Ex. 386-D-8	Websense ThreatSeeker ("ThreatSeeker")

'386 Patent Additional Prior Art/Background Art
U.S. Patent No. 8,069,213 ("Bloch 2010")
U.S. Patent No. 8,015,174 ("Hubbard 174")
U.S. Patent Publication No. 2009/0248623 ("Adelman 2009")
U.S. Patent Publication No. 2010/0256977 ("Yu 977")
Building Reputations for Internet Clients, Wei et al., Electronic Notes in Theoretical Computer Science 179 (2007) 17–30 ("Wei")
Generative Prior Knowledge for Discriminative Classification, Epshteyn et al., Journal of Artificial Intelligence Research 27 (2006) 25-53 ("Epshteyn")
A Small World Overlay P2P Transfer System with Role-Based and Reputation-Based Access Control Policies, Xia et al., 2008 International Conference on Internet Computing in Science and Engineering ("Xia")
A Multilevel Reputation System for Peer-to-Peer Networks, Xu et al., Sixth International Conference on Grid and Cooperative Computing (GCC 2007) ("Xu")

Furthermore, with respect to the '386 Patent, under pre-AIA 35 U.S.C. § 102(f), Forcepoint identifies the activities of entities involved in computer security as referenced in Provisional

Application Nos. 61/171,264 and 61/241,389, to which Plaintiffs claim priority. *See, e.g.*, Provisional Application No. 61/171,264 at [0002]-[0035]; Provisional Application No. 61/241,389 at [0002]-[0035].

Furthermore, with respect to the '386 Patent, under pre-AIA 35 U.S.C. §§ 102(a), (b), and (g)(2), Forcepoint reserves the right to identify additional prior art systems developed prior to April 21, 2009. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656, at *8-11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery obtained.

D. Anticipation

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '386 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-13, 15, 16, and 18 of the '386 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Hubbard 495, Ironport Web Reputation, and Alperovitch as set forth in the attached claim chart.

E. Obviousness

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '386 Patent are rendered obvious by the references identified in the attached claim charts, either alone or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted '386 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint's anticipation contentions, which shall not be construed

to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	In Combination With
Hubbard 495	Alperovitch
Hubbard 495	Lee
Hubbard 495	Adelman 2008
Hubbard 495	Bloch 2007
Hubbard 495	ThreatSeeker
Hubbard 495	IronPort Web Reputation
Hubbard 495	McAfee SiteAdvisor Plus
Alperovitch	Lee
Alperovitch	Adelman 2008
Alperovitch	Bloch 2007
Alperovitch	Hubbard 495
Alperovitch	ThreatSeeker
Alperovitch	IronPort Web Reputation
Alperovitch	McAfee SiteAdvisor Plus
Lee	Adelman 2008
Lee	Bloch 2007
Lee	Hubbard 495
Lee	ThreatSeeker
Lee	IronPort Web Reputation
Lee	McAfee SiteAdvisor Plus

Primary Reference	In Combination With
Adelman 2008	Bloch 2007
Adelman 2008	Hubbard 495
Adelman 2008	ThreatSeeker
Adelman 2008	IronPort Web Reputation
Adelman 2008	McAfee SiteAdvisor Plus
ThreatSeeker	IronPort Web Reputation
ThreatSeeker	McAfee SiteAdvisor Plus
IronPort Web Reputation	McAfee SiteAdvisor Plus
Hubbard 495	Alperovitch + Lee
Hubbard 495	Alperovitch + Adelman 2008
Hubbard 495	Alperovitch + Bloch 2007
Hubbard 495	Lee + Adelman 2008
Hubbard 495	Lee + Bloch 2007
Hubbard 495	Adelman 2008 + Bloch 2007
Hubbard 495	Alperovitch + Ironport Web Reputation
Hubbard 495	Lee + Ironport Web Reputation
Hubbard 495	Adelman 2008 + Ironport Web Reputation
Hubbard 495	Bloch 2007 + IronPort Web Reputation
Hubbard 495	Alperovitch + ThreatSeeker
Hubbard 495	Lee + ThreatSeeker
Hubbard 495	Adelman 2008 + ThreatSeeker
Hubbard 495	Bloch 2007 + ThreatSeeker

Primary Reference	In Combination With
Hubbard 495	Alperovitch + McAfee Site Advisor Plus
Hubbard 495	Lee + McAfee Site Advisor Plus
Hubbard 495	Adelman 2008 + McAfee Site Advisor Plus
Hubbard 495	Bloch 2007 + McAfee Site Advisor Plus
Hubbard 495	ThreatSeeker + Ironport Web Reputation
Hubbard 495	ThreatSeeker + McAfee SiteAdvisor Plus
Hubbard 495	Ironport Web Reputation + McAfee SiteAdvisor Plus
Alperovitch	Lee + Adelman 2008
Alperovitch	Lee + Bloch 2007
Alperovitch	Adelman 2008 + Bloch 2007
Lee	Bloch 2007 + IronPort Web Reputation
Lee	Bloch 2007 + ThreatSeeker
Lee	Bloch 2007 + McAfee SiteAdvisor Plus
Lee	Adelman 2008 + IronPort Web Reputation
Lee	Adelman 2008 + ThreatSeeker
Lee	Adelman 2008 + McAfee SiteAdvisor Plus
IronPort Web Reputation	ThreatSeeker + McAfee SiteAdvisor Plus

Forcepoint reserves the right to amend these Contentions and prior art combinations in light of new information that may arise from third parties related to additional computer security systems. The following list of references are also evidence of the knowledge of POSITA at the time of the alleged invention: U.S. Patent No. 8,069,213 ("Bloch 2010"); U.S. Patent No. 8,015,174 ("Hubbard 174"); U.S. Patent Publication No. 2009/0248623 ("Adelman 2009"); U.S. Patent Publication No. 2010/0256977 ("Yu 977"); Building Reputations for Internet Clients ("Wei"); Generative Prior Knowledge for Discriminative Classification ("Epshteyn"); A Small World Overlay P2P Transfer System with Role-Based and Reputation-Based Access Control Policies ("Xia"); A Multilevel Reputation System for Peer-to-Peer Networks ("Xu"). *See also* Section VI.C., '386 Patent Additional Prior Art/Background Art Table, *supra*.

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have understood that each of these references are in the same field of endeavor, namely methods and devices relating to computer security. *See, e.g.*, Hubbard 495 at 5:35-57, 6:53-7:7, 20:65-21:10; Alperovitch at [0034], [0071], [0072]; Lee at Abstract, 2:6-24, 2:60-3:17; Adelman 2008 at [0082], [0085], [0086]; Bloch 2007 at 3:52-4:3, 4:39-49, 10:40-61; ThreatSeeker (Exhibit 386-D-8) at 3–4 (citing Websense Product Overview (Jan. 10, 2007) at 2; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 6); McAfee SiteAdvisor Plus (Exhibit 386-D-6) at 2–7 (citing 2009 McAfee Product Guide at 5–6, 14–15, 17, 21–26; 2009 McAfee DataSheet at 1); IronPort Web Reputation (Exhibit 386-D-7) at 3–4 (citing 2009 IronPort Report at 7; 2008 IronPort Web Reputation White Paper at 1, 3, 7).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving computer security. *See, e.g.*, Hubbard 495

at 6:60-63 ("For example, the gateway server module 120 may be configured to disallow URL requests that are categorized as being 'Malicious' or 'Spyware.'"); Alperovitch at [0034] ("Examples include the process of filtering malicious communications in an email, instant messaging, VoIP, SMS or other communication protocol system using analysis of the reputation of sender and content."); Lee at 2:64-67 ("For example, if the resource is a website, then the system may send the URL to a trusted URL reputation service and receive a response that indicates a reputation score for the resource."); Adelman 2008 at [0085] ("Based on the domain name related reputation data the Requester decides (determines) whether the Requester should visit the URL (Step 430)."); Bloch 2007 at 10:56-61 ("Alternatively, if a URL is not found in sender database 530 at step 607, then HTTP proxy 120 can consult other information sources, such as a URL whitelist, URL blacklist, or other information about the trustworthiness or "reputation" of the Web site associated with the URL."); ThreatSeeker (Exhibit 386-D-8) at 3–4 (citing Websense Product Overview (Jan. 10, 2007) at 2; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 6); McAfee SiteAdvisor Plus (Exhibit 386-D-6) at 2–7 (citing 2009 McAfee Product Guide at 5–6, 14–15, 17, 21–26; 2009 McAfee DataSheet at 1); IronPort Web Reputation (Exhibit 386-D-7) at 3–4 (citing 2009 IronPort Report at 7; 2008 IronPort Web Reputation White Paper at 1, 3, 7).

Further, the Asserted Claims of the '386 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—*i.e.* the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe "determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network." *See, e.g.*, Hubbard 495 at 10:64-11:2, 11:26-40, 18:53-19:22; Alperovitch at [0045],

[0058]; Lee at 2:48-59, 2:60-3:17, 3:66-4:7; Adelman 2008 at [0057], [0058], [0086]; Bloch 2007 at 1:41-48, 3:52-4:3, 6:35-51; ThreatSeeker (Exhibit 386-D-8) at 9–12 (citing The Web Isn't Fun Anymore: How Websense Technology Protects Against Internet-Based Threats (Aug. 1, 2007) at 3, 7; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 8–9); McAfee SiteAdvisor Plus (Exhibit 386-D-6) at 15–22 (citing 2009 McAfee Product Guide at 5–6, 9–10, 12, 22); IronPort Web Reputation (Exhibit 386-D-7) at 10–13 (citing 2009 IronPort Report at 8, 30; 2008 IronPort Web Reputation White Paper at 3–4, 7).

The prior art references further describe "the reputation vector comprising a plurality of factors for the Internet resource." *See, e.g.*, Hubbard 495 at 10:19-26, 18:53-19:22, 20:4-41; Alperovitch at [0038], [0048], [0094]; Lee at 3:66-4:23, 4:49-64; Adelman 2008 at Abstract, [0051], [0058], [0059]; Bloch 2007 at 9:3-21, 9:44-61, 10:28-38. The prior art references further describe "a security appliance, the security appliance controlling access to the Internet." *See, e.g.*, Hubbard 495 at 6:53-7:7, 9:25-33; Alperovitch at [0030], [0050], [0073]; Lee at 2:60-3:17, 7:1-13; Adelman 2008 at [0082], [0085], [0086]; Bloch 2007 at 10:9-18, 11:39-58. The prior art references further describe "storing the reputation index for the Internet resource at the data collection site." *See, e.g.*, Hubbard 495 at 9:43-65, 11:41-12:3, 13:59-14:17; Alperovitch at [0009], [0060]; Lee at 5:28-38, 7:1-13, 7:27-38; Adelman 2008 at [0057], [0090]; Bloch 2007 at 6:52-63, 10:62-67, 11:39-51; ThreatSeeker (Exhibit 386-D-8) at 12–15 (citing Websense: IP based Spam blocking (2008) at 4; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 8–9, 13); McAfee SiteAdvisor Plus (Exhibit 386-D-6) at 22–27 (citing 2009 McAfee Product Guide at 5–6, 9–10); IronPort Web Reputation (Exhibit 386-D-7) at 14–17 (citing 2008 IronPort Web Reputation White Paper at 3–5; 2009 IronPort Report at 30; 2006 Reputation Score Datasheet at 1).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 386-D-1 through 386-D-8. It would have been known and simple to take a prior art for improving computer security by controlling access to requested web content based on its "reputation" and arrive at the alleged invention, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving computer security. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '386 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the limitations of the '386 Patent that are invalid based on indefiniteness under pre-AIA 35 U.S.C. § 112 ¶ 2, or enablement or written description under pre-AIA 35 U.S.C. § 112 ¶ 1. These Contentions are being proffered without the full benefit of expert disclosure or discovery.

Asserted Claims 1, 3, 6-7, 9, 11, 13, 15, and 16 of the '386 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). Furthermore, as applied in Plaintiffs' Infringement Contentions, "threshold value"; "behavior" / "behaviors"; "associations"; "popularity rank"; "decision transmission"; "remote reputation generating site"; "service engine"; "collecting a plurality of factors" / "obtaining the plurality of factors"; "populate a reputation vector"; "perform reputation analysis"; "reputation classifier"; "two or more of age of: a domain registration, popularity rank . . ." and "linked Internet resources" are indefinite because each of

these phrases not only is subjective but also does not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 1-7, 9, 11-13, 15-16, and 18 of the '386 Patent are invalid under § 112 ¶ 1, because the specification as filed does not contain a sufficient written description supporting those claims. In particular, the patent disclosure would not lead a person of ordinary skill in the art to understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. Asserted Claims 1-7, 9, 11-13, 15-16, and 18 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '386 Patent fails to provide an adequate written description of the phrases "reputation index"; "threshold value"; "popularity rank"; "remote reputation generating site"; "service engine"; "collecting a plurality of factors" / "obtaining the plurality of factors"; "populate a reputation vector"; "perform reputation analysis"; and "linked Internet resources" as applied in Plaintiffs' Infringement Contentions.

The aforementioned claims are invalid because they are not enabled or described by the specification of the '386 Patent. The subject matter of these claims, as described above, are not sufficiently shown in the specification of the '386 Patent. The subject matter of these claims, as described above, are not sufficiently enabled because they do not teach one skilled in the art how to make and use the alleged invention from the specification of the '386 Patent. For example, the '386 Patent fails to enable the following and thus, Asserted Claims 1-7, 9, 11-13, 15-16, and 18 of the '386 Patent are invalid: "reputation index"; "threshold value"; "popularity rank"; "remote reputation generating site"; "service engine"; "collecting a plurality of factors" / "obtaining the plurality of factors"; "populate a reputation vector"; "perform reputation analysis"; and "linked

Internet resources." The foregoing phrases are not described in such a way that one of ordinary skill in the art could implement it to achieve the results sought by the individual named on the face of the '386 Patent as the inventor. The foregoing phrases are not described in such a way that a person having ordinary skill in the art at the time of the alleged invention would have understood that the individual named as the inventor on the face of the '386 Patent was in possession of the claimed subject matter. The Asserted Claims of the '386 Patent also do not comply with § 112 because they do not set forth what the applicant regards is the invention.

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court's Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the '386 Patent they contend are directed to ineligible subject matter under pre-AIA 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the '386 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the '386 Patent are directed to the abstract idea of reputation and risk assessment. *See, e.g.*, '386 Patent, claim 1 ("determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network," "the reputation index generated from a reputation vector for the Internet resource, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location," "transmitting a decision transmission to the Internet-enabled client application of the client-side device, the decision transmission allowing or denying access to the Internet resource"); claim 7 ("analyzing a reputation vector for the Web site and generating a reputation index for the Web site from the reputation vector," "the reputation

vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location," "wherein access to the Internet resource by any of the plurality of client-side devices is determined based on the reputation index exceeding a threshold value established for the local area network"); claim 11 ("accessing a reputation index for the Internet resource, the reputation index based on a reputation vector for the Internet resource comprising security history, legitimacy, behavior, associations and location," "determining if the reputation index for the Internet resource is at or above a threshold value established for the local area network," "transmitting a decision transmission to the Web browser of the client-side device, the decision transmission allowing or denying access to the Internet resource"); claim 13 ("A method for building a reputation database for Internet resources, the method comprising:," "collecting a plurality of factors for an Internet resource site to populate a reputation vector for the Internet resource to perform reputation analysis of the Internet resource," "constructing a reputation vector for the Internet resource at the data collection site, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location," "analyzing the reputation vector to generate a reputation index for the Internet resource based on the analysis of the plurality of factors and the reputation classifier"). The specification of the '386 confirms that the Asserted Claims are directed to basic concepts of reputation and risk assessment. *See, e.g.*, *id.*, 1:23–28 ("The present invention is related to assessing risk profiles of Internet resources. More specifically, the present invention is related to a system and method for developing a risk profile for an Internet resource by generating a reputation index, based on attributes of the resource collectively referred to as the reputation vector of the resource."); 1:51–58 ("A possible analogy to the reputation of an Internet resource is the credit score of an individual. A Web user would want to be informed of the reputation of a

Web site before visiting it, just as a lender would want to know the reputation, the financial reputation at least, of a borrower of the lender's money. A credit score is based on a variety of fairly tightly related factors, such as existing debt, available credit lines, on-time payments, existing credit balances, etc."); 1:65–2:3 ("There are different methods of calculating credit scores. The best known one, FICO, is a credit score developed by the Fair Isaac Corporation. FICO is used by many mortgage lenders that use a risk-based system to determine the possibility that the borrower may default on financial obligations to the mortgage lender."); 2:8-14 ("That FICO® score is calculated by a mathematical equation that evaluates many types of information from the borrower's credit report at that agency. In order for a FICO® score to be calculated on the borrower's credit report, the report must contain sufficient information—and sufficient recent information—on which to base a score."); 2:19–21 ("FICO scores provide a reliable guide to future risk based solely on credit report data. FICO® scores have a 300-850® score range. The higher the score, the lower the risk."); 2:26–29 ("Although FICO won't reveal exactly how it determines a credit score, it considers the following factors: payment history (35%); outstanding debt (30%); length of credit history (15%); types of credit (10%); and new credit (10%)."); 2:30–34 ("Returning to Internet resources, attackers have been using the Internet to attack the computers and other devices of users of the Internet. Attackers continue to take advantage of flaws in traditional security measures and bypass reputation-based systems to increase attack effectiveness."); 4:36–48 ("The present invention focuses on the reputation of a Web site, or any Internet-based service or resource. The reputation incorporates many factors that are relevant to the overall safety of visiting a site. The reputation assesses the over-time track record of the site and the provider that operates the web site, the current characteristics of the pages and related files composing the site, and reputations of sites linked to the site and of referrers to the site. The overall

assessment is expressed as a score, not unlike a FICO score, that predicts the potential risk of visiting the site which can be used to protect users from inadvertently visiting or utilizing higher-risk sites or services within the Internet."); 4:49–53 ("There are many components of reputation available within the Internet. Much like other scoring mechanisms, such as credit scoring, the factors to be considered must be decided upon, and the weight that each factor will have in the overall 'score' must be determined."); 4:54–55 ("The present invention provides a system and method for defining a reputation of an Internet service such as a Web site."); 4:60–5:3 ("Preferred steps of the invention are: evaluation of the important features to be included in the collection of reputation-relevant features referred to as the reputation vector; collection of the reputation vectors for a large sample of Internet resource; training of a classifier based on training sets of known high and low reputation services/sites; testing of a model against a wide variety of random samples; run-time evaluation of requests for the Internet resource using the developed classifier and responding to reputation index information requests from clients which enforce network security policy."); 13:28–32 ("This embodiment is preferred since classifying a large percentage of existing Web sites into reputation risk assessments quickly and efficiently requires an automated process because the number of humans required is too large to be practical or economical.").

Second, the Asserted Claims of the '386 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '386 Patent describes performing reputation and risk assessment using local area networks, Internet resources, devices, servers, risk scores, and factors well-known in the prior art . *See, e.g.*, *id.*, 1:30–50, 1:51–2:29, 2:30–35, 2:62–64, 2:65–3:32, 3:44–48, 4:6–19, 9:53–67. Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of reputation and risk assessment. Simply identifying an overarching

desirable outcome (such as "measur[ing] the security risk associated with accessing an Internet resource in a more predictive way") without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic computer components and do not claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '386 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '386 Patent are ineligible because they would preempt the entire field of reputation and risk assessment.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '386 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions.

Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs' application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '386 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not. Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

VII. INVALIDITY CONTENTIONS FOR THE '928 PATENT

A. General State of the Art at the Time of the Alleged Inventions

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '928 Patent, may provide background and context pertinent to the

teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '928 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 928-E-1 through 928-E-9 identify where each limitation of the Asserted Claims of the '928 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 928-E-1 through 928-E-9, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 928-E-1 through 928-E-9 and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combination in Section VII.E, *infra*.

'928 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 928-E-1	U.S. Patent No. 8,370,938 ("Daswani")	U.S.	Apr. 15, 2010	Feb. 5, 2013
Ex. 928-E-2	U.S. Patent No. 7,621,613 ("McClintock")	U.S.	May 26, 2009	Dec. 31, 2013
Ex. 928-E-3	U.S. Patent Application Publication No. US 2009/0070873 ("McAfee")	U.S.	Sep. 11, 2007	Mar. 12, 2009
Ex. 928-E-4	U.S. Patent Application Publication No. US 2012/0047581 ("Banerjee")	U.S.	Aug. 12, 2011	Feb. 23, 2012
Ex. 928-E-5	U.S. Patent Application Publication No. US 2013/0007870 ("Devarajan")	U.S.	Sep. 29, 2011	Jan 3, 2013

'928 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 928-E-6	Websense Data Loss Prevention Authority ("DLP Authority")
Ex. 928-E-7	Stonesoft StoneGate Next Generation Firewall ("Next Generation Firewall")
Ex. 928-E-8	Websense ThreatSeeker ("ThreatSeeker")
Ex. 928-E-9	Websense Email and Web Security

'928 Patent Additional Prior Art/Background Art
Abstracting Application-Level Web Security, Scott (2002) ("Scott")
ADSandbox: Sandboxing JavaScript to fight Malicious Websites, Dewald, University of Mannheim & Technical University of Vienna (2010) ("Dewald")
Identification of Potential Malicious Web Pages, Le, Ninth Australian Information Security Conference (2011) ("Le")
Prophiler: A Fast for the Large-Scale Detection of Malicious Web Pages, Canali, WWW Session: Web Security (2011) ("Canali")
WebPatrol: Automated Collection and Replay of Web-based Malware Scenarios, Chen, ASIACCS (2011) ("Chen 2011")
Toward automatic discovery of malware signature for anti-virus cloud computing. Yan et. al. International Conference on Complex Sciences. Springer, Berlin, Heidelberg (2009) ("Yan")
Malware detection based on cloud computing integrating intrusion ontology representation. Martínez et. al. IEEE Latin-American Conference on Communications, IEEE (2010) ("Martinez")
A Three-Phases Scheduling in a Hierarchical Cloud Computing Network, Wang et. al., 2011 Third International Conference on Communications and Mobile Computing pp. 114-117, (2011) ("Wang")

Furthermore, with respect to the '928 Patent, under pre-AIA 35 U.S.C. §§ 102(a), (b), and (g)(2), Forcepoint reserves the right to identify additional prior art systems developed prior to October 3, 2011. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656, at *8-11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery.

D. Anticipation

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '928 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs'

apparent infringement theory, Asserted Claims 1-20 of the ’928 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Daswani and Devarajan as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-4, 6, and 8-20 of the ’928 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by McAfee as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-20 of the ’928 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by DLP Authority, Next Generation Firewall, ThreatSeeker, and Websense Email and Web Security as set forth in the attached claim charts.

E. Obviousness

At least under Plaintiffs’ apparent infringement theory, the Asserted Claims of the ’928 Patent are rendered obvious by the references identified in the attached claim charts, either alone or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted ’928 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint’s anticipation contentions, which shall not be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	In Combination With
McClintock	McAfee
McClintock	Daswani

Primary Reference	In Combination With
McClintock	Banerjee
McClintock	Devarajan
McAfee	McClintock
McAfee	Daswani
McAfee	Banerjee
McAfee	Devarajan
Daswani	McClintock
Daswani	McAfee
Daswani	Banerjee
Daswani	Devarajan
Banerjee	McClintock
Banerjee	McAfee
Banerjee	Daswani
Banerjee	Devarajan
Devarajan	McClintock
Devarajan	McAfee
Devarajan	Daswani
Devarajan	Banerjee
McAfee	Daswani + Devarajan
Daswani	McAfee + Devarajan
Devarajan	McAfee + Daswani
McAfee	McClintock + Daswani
McAfee	McClintock + Devarajan

Primary Reference	In Combination With
Daswani	McClintock + McAfee
Daswani	McClintock + Devarajan
Devarajan	McClintock + McAfee
Devarajan	McClintock + Daswani
McAfee	Banerjee + Daswani
McAfee	Banerjee + Devarajan
Daswani	Banerjee + McAfee
Daswani	Banerjee + Devarajan
Devarajan	Banerjee + McAfee
Devarajan	Banerjee + Daswani
DLP Authority	McAfee
DLP Authority	Banerjee
DLP Authority	Devarajan
DLP Authority	McClintock
DLP Authority	McAfee
DLP Authority	Daswani
DLP Authority	Threatseeker
DLP Authority	Websense Email and Web Security
DLP Authority	Next Generation Firewall
Threatseeker	DLP Authority
Threatseeker	McAfee
Threatseeker	Banerjee
Threatseeker	Devarajan

Primary Reference	In Combination With
Threatseeker	McClintock
Threatseeker	McAfee
Threatseeker	Daswani
Threatseeker	Websense Email and Web Security
Threatseeker	Next Generation Firewall
Websense Email and Web Security	Threatseeker
Websense Email and Web Security	DLP Authority
Websense Email and Web Security	McAfee
Websense Email and Web Security	Banerjee
Websense Email and Web Security	Devarajan
Websense Email and Web Security	McClintock
Websense Email and Web Security	McAfee
Websense Email and Web Security	Daswani
Websense Email and Web Security	Next Generation Firewall
Next Generation Firewall	Websense Email and Web Security
Next Generation Firewall	Threatseeker
Next Generation Firewall	DLP Authority
Next Generation Firewall	McAfee
Next Generation Firewall	Banerjee
Next Generation Firewall	Devarajan
Next Generation Firewall	McClintock
Next Generation Firewall	McAfee
Next Generation Firewall	Daswani

Primary Reference	In Combination With
DLP Authority	Daswani + Devarajan
DLP Authority	Devarajan + McAfee
DLP Authority	Devarajan + McClintok
DLP Authority	Daswani + McAfee
Next Generation Firewall	Daswani + Devarajan
Next Generation Firewall	Devarajan + McAfee
Next Generation Firewall	Devarajan + McClintok
Next Generation Firewall	Daswani + McAfee
Websense Email and Web Security	Daswani + Devarajan
Websense Email and Web Security	Devarajan + McAfee
Websense Email and Web Security	Devarajan + McClintok
Websense Email and Web Security	Daswani + McAfee
Threatseeker	Daswani + Devarajan
Threatseeker	Devarajan + McAfee
Threatseeker	Devarajan + McClintok
Threatseeker	Daswani + McAfee

Forcepoint reserves the right to amend these Contentions and prior art combinations in light of new information that may arise from third parties related to additional malware detection and neutralization systems. The following list of references are also evidence of the knowledge of POSITA at the time of the alleged invention: Scott, Dewald, Le, Canali, Yan, Martinez, Wang, and Chen 2011.

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have

understood that each of these references are in the same field of endeavor, namely methods and devices relating to malware detection and neutralization computer security. *See, e.g.*, Daswani at 3:22-30; McClintock at Abstract; McAfee at Abstract; Banerjee at [0004]; Devarajan at [0001]; DLP Authority (Exhibit 928-E-6) at 4-5 (citing Websense Content Protection Suite – User Guide at 7); Next Generation Firewall (Exhibit 928-E-7) at 4 (citing Stonesoft StoneGate NextGen Firewall – Whitepaper 2010 at 10); ThreatSeeker (Exhibit 928-E-8) at 5-6 (citing Product Overview – Websense 2007 at 2-3); Websense Email and Web Security (Exhibit 928-E-9) at 11 (citing Websense Unveils TRITON Architecture Unifying Web, Data and Email Security at 1).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving malware detection and neutralization. *See, e.g.*, Daswani at 3:22-30; McClintock at Abstract; McAfee at Abstract; Banerjee at [0004]; Devarajan at [0001]; DLP Authority (Exhibit 928-E-6) at 4-5 (citing Websense Content Protection Suite – User Guide at 7); Next Generation Firewall (Exhibit 928-E-7) at 4 (citing Stonesoft StoneGate NextGen Firewall – Whitepaper 2010 at 10); ThreatSeeker (Exhibit 928-E-8) at 5-6 (citing Product Overview – Websense 2007 at 2-3); Websense Email and Web Security (Exhibit 928-E-9) at 11 (citing Websense Unveils TRITON Architecture Unifying Web, Data and Email Security at 1).

Further, the Asserted Claims of the ’928 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—i.e. the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe “[a] content analysis and malware prevention method comprising.” *See, e.g.*, Daswani at 3:22-30; McClintock at Abstract; McAfee at Abstract; Banerjee at [0004]; Devarajan at [0001]; DLP Authority (Exhibit 928-E-6) at

4-5 (citing Websense Content Protection Suite – User Guide at 7); Next Generation Firewall (Exhibit 928-E-7) at 4 (citing Stonesoft StoneGate NextGen Firewall – Whitepaper 2010 at 10); ThreatSeeker (Exhibit 928-E-8) at 5-6 (citing Product Overview – Websense 2007 at 2-3); Websense Email and Web Security (Exhibit 928-E-9) at 11 (citing Websense Unveils TRITON Architecture Unifying Web, Data and Email Security at 1). The prior art references further describe "intercepting, by a protection agent, a request from a web browser." *See, e.g.*, Daswani at 4:27-38; McClintock at 4:59-5-3; McAfee at [0070]; Banerjee at [0036]; Devarajan at [0089]; DLP Authority (Exhibit 928-E-6) at 12 (citing Websense Content Protection Suite – User Guide at 8); Next Generation Firewall (Exhibit 928-E-7) at 6 (citing Stonesoft StoneGate NextGen Firewall v5.3 – Reference Guide at 35); ThreatSeeker (Exhibit 928-E-8) at 9 (citing Websense Threatseeker Network 2008 - Whitepaper at 7); Websense Email and Web Security (Exhibit 928-E-9) at 24 (citing Websense Web Security Datasheet 2005 at 4)). The prior art references further describe "determining, by the protection agent, whether the request is associated with known malicious content." *See, e.g.*, Daswani at 6:37-46; McClintock at 3:34-41; McAfee at [0036]; Banerjee at [0060]; Devarajan at [0111]-[0112]; DLP Authority (Exhibit 928-E-6) at 15 (citing Websense Content Protection Suite – User Guide at 10); Next Generation Firewall (Exhibit 928-E-7) at 11 (citing Stonesoft StoneGate NextGen Firewall v5.3 – Reference Guide at 21); ThreatSeeker (Exhibit 928-E-8) at 15 (citing Websense Threatseeker Network 2008 - Whitepaper at 9); Websense Email and Web Security (Exhibit 928-E-9) at 26 (citing Websense Web Security Datasheet 2008 at 5). The prior art references further describe "when the request is associated with known malicious content, blocking, by the protection agent, the request]." *See, e.g.*, Daswani at 9:54-61; McClintock at 6:38-60; McAfee at [0082]; Banerjee at [0066]; Devarajan at [0101]; DLP Authority (Exhibit 928-E-6) at 17 (citing Websense Content Protection Suite – User Guide

at 7); Next Generation Firewall (Exhibit 928-E-7) at 14 (citing Stonesoft StoneGate NextGen Firewall v5.1 – Reference Guide at 29); ThreatSeeker (Exhibit 928-E-8) at 20 (citing Websense Threatseeker Network 2008 - Whitepaper at 9); Websense Email and Web Security (Exhibit 928-E-9) at 34 (citing Websense Web Security Datasheet 2008 at 5).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 928-E-1 through 928-E-9. It would have been known and simple to take a prior art for detecting and neutralizing web-based malware by analyzing associations of requested webpages with known malware to arrive at the alleged invention, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving malware detection and neutralization. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '928 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the limitations of the '928 Patent that are invalid based on indefiniteness under pre-AIA 35 U.S.C. § 112 ¶ 2, or enablement or written description under pre-AIA 35 U.S.C. § 112 ¶ 1. These Contentions are being proffered without the full benefit of expert disclosure or discovery.

Asserted Claims 1-3, 5-7, 9-11, 13-14, and 16-20 of the '928 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). Furthermore, as applied in Plaintiffs' Infringement Contentions, "content analysis"; "associated with known malicious

content"; "malware threat"; "supplementing . . . the web content with indicators"; "vulnerability" / "vulnerabilities"; "pre-process data encryption"; "sending the request to one or more web servers comprises iteratively sending a plurality of requests to the one or more web servers"; and "processing the web content prior to identifying the malware threat within the web content" are indefinite because each of these phrases not only is subjective but also does not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 1-3, 5-7, 9-11, 13-14, 16-17, and 19 of the '928 Patent are invalid under § 112 ¶ 1, because the specification as filed does not contain a sufficient written description supporting those claims. In particular, the patent disclosure would not lead a person of ordinary skill in the art to understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. Asserted Claims 1-3, 5-7, 9-11, 13-14, 16-17, and 19 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '928 Patent fails to provide an adequate written description of the phrases "malware threat"; "supplementing . . . the web content with indicators"; "vulnerability" / "vulnerabilities"; "image analysis"; "pre-process data encryption"; "de-chunking"; and "based on an aggregation of the analyses" as applied in Plaintiffs' Infringement Contentions.

The aforementioned claims are invalid because they are not enabled or described by the specification of the '928 Patent. The subject matter of these claims, as described above, are not sufficiently shown in the specification of the '928 Patent. The subject matter of these claims, as described above, are not sufficiently enabled because they do not teach one skilled in the art how to make and use the alleged invention from the specification of the '928 Patent. For example, the

’928 Patent fails to enable the following and thus, Asserted Claims 1-3, 5-7, 9-11, 13-14, 16-17, and 19 of the ’928 Patent are invalid: “malware threat”; “supplementing . . . the web content with indicators”; “vulnerability” / “vulnerabilities”; “image analysis”; “pre-process data encryption”; “de-chunking”; and “based on an aggregation of the analyses.” The foregoing phrases are not described in such a way that one of ordinary skill in the art could implement it to achieve the results sought by the individual named on the face of the ’928 Patent as the inventor. The foregoing phrases are not described in such a way that a person having ordinary skill in the art at the time of the alleged invention would have understood that the individual named as the inventor on the face of the ’928 Patent was in possession of the claimed subject matter. The Asserted Claims of the ’928 Patent also do not comply with § 112 because they do not set forth what the applicant regards is the invention.

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court’s Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the ’928 Patent they contend are directed to ineligible subject matter under pre-AIA 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the ’928 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the ’928 Patent are directed to the abstract idea of filtering web content and data by reassembling a web page without malware threats. *See, e.g.*, ’928 Patent, claim 1 (“receiving, at the protection agent on a remote computer, web content from the one or more web servers, wherein web content comprises data for assembling a web page,” “identifying, by the protection agent, a malware threat within the web content,” “in response to

identifying the malware threat, modifying, by the protection agent, the web content, wherein modifying the web content comprises modifying the web content at protocol level to remove the malware threat from the web content," "assembling, by the protection agent, a modified version of the web page, wherein the modified web page is assembled using the modified web content, and wherein the modified version of the web page does not comprise the malware threat"); claim 9 ("receiving web content from one or more web servers, wherein web content comprises data for assembling a web page," "identifying a malware threat within the web content," "in response to identifying the malware threat, modifying the web content, wherein modifying the web content comprises modifying the web at protocol level to remove the malware threat from the web content," "assembling a modified version of the web page, wherein the modified web page is assembled using the modified web content, and wherein the modified version of the web page does not comprise the malware threat"). The specification of the '928 confirms that the Asserted Claims are directed to basic concepts of filtering web content and data by reassembling a web page without malware threats. *See, e.g.*, *id.*, 1:43–54 ("In accordance with an exemplary aspect, a protection module operates to analyze threats, at the protocol level (e.g., at the HTML level), by intercepting all requests that a browser engine resident in a computing device sends and receives, and the protection agent completes the requests without the help of the browser engine. And then the protection module analyzes and/or modifies the completed data before the browser engine has access to it, to, for example, display it. After performing all of its processing, removing, and/or adding any code as needed, the protection module provides the HTML content to the browser engine . . . ."); 1:58–63 ("This allows the protection module to have control over what a browser engine "sees," providing means to remove any exploits, malware, and other threats dynamically. This also enables the protection module to add content into the browser stream at the HTML level,

before receipt by the browser."); 2:9–19 ("The differences between the disclosed protocol-level analysis approach compared to other prior anti-malware approaches are significant. In the context of search result annotation for example, the data (e.g., a web page of search results) is first analyzed and modified by an analysis engine of the protection module, which has control over every element of a web page before the web page is operated on by the browser engine. This is in contrast to prior approaches that just make high-level modifications to the content after the content has been rendered and displayed through a Browser Helper Object.").

Second, the Asserted Claims of the '928 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '928 Patent describes filtering web content and data by reassembling a web page without malware threats using conventional hardware and software components, computers, web servers, and networks that are well-known in the prior art. *See, e.g.*, *id.*, 3:4–20; 8:58–10:38. Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of filtering web content and data by reassembling a web page without malware threats. Simply identifying an overarching desirable outcome (such as "providing means to remove any exploits, malware, and other threats dynamically") without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic

computer components and do not claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '928 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '928 Patent are ineligible because they would preempt the entire field of filtering web content and data by reassembling a web page without malware threats.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '928 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions. Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs' application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '928 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not. Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

VIII. INVALIDITY CONTENTIONS FOR THE '243 PATENT

A. General State of the Art at the Time of the Alleged Invention

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '243 Patent, may provide background and context pertinent to the teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '243 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or

knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 243-F-1 through 243-F-29 identify where each limitation of the Asserted Claims of the '243 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 243-F-1 through 243-F-29, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 243-F-1 through 243-F-29 and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combinations in Section III.E, *infra*.

'243 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 243-F-1	U.S. Patent No. 8,321,910 ("English")	U.S.	Jan. 20, 2006	Nov. 27, 2012
Ex. 243-F-2	U.S. Patent Application Publication No. 2003/0084349 ("Friedrichs")	U.S.	Aug. 9, 2002	May 1, 2003
Ex. 243-F-3	U.S. Patent Publication No. 2006/0179484 ("Scrimsher")	U.S.	Feb. 9, 2005	Aug. 10, 2006
Ex. 243-F-4	U.S. Patent No. 7,093,292 ("Pantuso")	U.S.	Feb. 8, 2002	Aug. 15, 2006
Ex. 243-F-5	U.S. Patent No. 7,558,796 ("Bromwich")	U.S.	May 19, 2005	Jul. 7, 2009
Ex. 243-F-6	PCT Application No. 60/762,359 ("Kronenberg")	U.S.	Jan. 25, 2006	
Ex. 243-F-7	U.S. Patent No. 7,784,098 ("Fan")	U.S.	Jul. 14, 2005	Aug. 24, 2010
Ex. 243-F-8	U.S. Patent Application Publication No. 2006/0206937 ("Repasi")	U.S.	Feb. 24, 2006	Sep. 14, 2006
Ex. 243-F-9	U.S. Patent Application Publication 2004/0225877 ("Huang")	U.S.	Mar. 3, 2004	Nov. 11, 2004
Ex. 243-F-10	U.S. Patent No. 7,756,834 ("Masters")	U.S.	Nov. 3, 2005	Jul. 13, 2010
Ex. 243-F-11	U.S. Patent No. 7,979,889 ("Gladstone")	U.S.	Jan. 7, 2005	Jul. 12, 2011
Ex. 243-F-12	U.S. Patent Application Publication No. 2009/0144826 ("Piccard 826")	U.S.	Jun. 30, 2005	Jun. 4, 2009
Ex. 243-F-13	U.S. Patent Application Publication No. 2007/0150957 ("Hartrell 957")	U.S.	Dec. 28, 2005	Jun. 28, 2007
Ex. 243-F-14	WO 2001/016709 ("Moran")	U.S.	Aug. 30, 2000	Mar. 8, 2001

’243 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 243-F-15	JP 2004-086241 (EPO Patent Translate translation) (“Sekiguchi”)	Japan	Aug. 22, 2002	Mar. 18, 2004
Ex. 243-F-16	U.S. Patent No. 8,117,659 (“Hartrell 659”)	U.S.	Dec. 28, 2005	Feb. 14, 2012
Ex. 243-F-19	U.S. Publication No. 2007/0016951 (“Piccard 951”)	U.S.	Jul. 13, 2005	Jan. 18, 2007
Ex. 243-F-20	U.S. Patent No. 8,627,458 B2 (“Muttik”)	U.S.	Jan. 13, 2004	Jan. 7, 2014
Ex. 243-F-21	U.S. Patent No. 7,568,233 B1 (“Szor”)	U.S.	Apr. 1, 2005	Jul. 28, 2009
Ex. 243-F-22	U.S. Patent No. 9,171,157 B2 (“Flores”)	U.S.	Mar. 28, 2006	Oct. 27, 2015
Ex. 243-F-23	US Patent Publication No. 2006/0070130 (“Costea”)	U.S.	Sep. 27, 2004	Mar. 30, 2006
Ex. 243-F-24	U.S. Patent No. 7,231,667 (“Jordan”)	U.S.	May 29, 2003	Jun. 12, 2007
Ex. 243-F-25	U.S. Patent No. 7,571,482 (“Polyakov 482”)	U.S.	Jun. 28, 2005	Aug. 4, 2009
Ex. 243-F-26	U.S. Patent No. 7,647,636 (“Polyakov 636”)	U.S.	Aug. 24, 2005	Jan. 12, 2010
Ex. 243-F-27	U.S. Patent No. 9,129,111 (“Rothwell”)	U.S.	Jan. 18, 2006	Sep. 8, 2015
Ex. 243-F-28	U.S. Patent No. 8,516,583 (“Thomas”)	U.S.	Mar. 31, 2005	Aug. 20, 2013

’243 Patent Prior Art Publications				
Ex. No.	**Title**	**Date of Publication**	**Author**	**Publisher**
Ex. 243-F-17	Li, et al., UCLog: A Unified, Correlated Logging Architecture for Intrusion Detection¸Int’l Conf. on Telecomm. Sys.-Modelling & Analysis (2004) (“Li”)	2004	Li, Z., Taylor, J., Partridge, E., Zhou, Y., Yurcik, W., Abad, C., Barlow, J. & Rosendale, J.	12th International Conference on Telecommunication Systems-Modeling and Analysis (ICTSM)
Ex. 243-F-18	Salvador Mandujano Vergara, A multiagent approach to outbound intrusion detection (2004) (Ph.D. Thesis, Instituto Tecnológico y de Estudios Superires de Monterrey) (“Mandujano”)	2004	Salvador Mandujano Vergara	Instituto Tecnológico y de Estudios Superires de Monterrey

’243 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 243-F-29	SurfControl Web Filter and Email Filter (“SurfControl”)
	System and/or product art received pursuant to Forcepoint’s subpoena to Trend Micro, Inc. (dated October 27, 2023)
	System and/or product art received pursuant to Forcepoint’s subpoena to Sophos Ltd. (dated October 31, 2023)

’243 Patent Additional Prior Art/Background Art
U.S. Patent No. 7,673,341 (“Kramer 341”)
U.S. Patent No. 7,818,800 (“Lemley”)
U.S. Patent No. 8,495,743 (“Kraemer”)
U.S. Patent No. 8,205,261 (“Andruss 261”)
U.S. Patent No. 7,854,006 (“Andruss 006”)
U.S. Patent No. 7,765,592 (“Wang”)

’243 Patent Additional Prior Art/Background Art
U.S. Patent No. 7,448,084 (“Apap”)
U.S. Patent No. 6,973,577 (“Kouznetsov”)
U.S. Patent No. 8,090,816 (“Deshmukh”)
U.S. Patent Application Publication No. 2007/0240212 (“Matalytski”)
U.S. Patent Application Publication No. 2005/0108562 (“Khazan”)
U.S. Patent Application Publication No. 2007/0006304 (“Kramer 304”)
Rabek, Jesse C., et al. “Detection of injected, dynamically generated, and obfuscated malicious code.” *Proceedings of the 2003 ACM workshop on Rapid malcode*. 2003. (“Rabek”)
Moffie, Micha, and David Kaeli. “ASM: application security monitor.” *ACM SIGARCH Computer Architecture News* 33.5 (2005): 21-26. (“Moffie”)
Chari, Suresh N., and Pau-Chen Cheng. “BlueBox: A policy-driven, host-based intrusion detection system.” *ACM Transactions on Information and System Security (TISSEC)* 6.2 (2003): 173-200. (“Chari”)
Vasudevan, Amit, and Ramesh Yerraballi. “Spike: engineering malware analysis tools using unobtrusive binary-instrumentation.” *Proceedings of the 29th Australasian Computer Science Conference-Volume 48*. 2006. (“Vasudevan”)

Furthermore, with respect to the ’243 Patent, under pre-AIA 35 U.S.C. §§ 102(a), (b), and (g)(2), Forcepoint reserves the right to identify additional prior art systems developed prior to April 20, 2006. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656, at *8-11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery obtained.

D. Anticipation

At least under Plaintiffs’ apparent infringement theory, the Asserted Claims of the ’243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-14 of the ’243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Muttik as set

forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Szor as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Costea as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Jordan as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Polyakov 482 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Polyakov 636 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by English as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Thomas as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Rothwell as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as

understood by a person having ordinary skill in the art, by Hartrell 957 as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Fan as set forth in the attached claim chart. At least under Plaintiffs' apparent infringement theory, Asserted Claims 1-14 of the '243 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Mandujano as set forth in the attached claim chart.

E. Obviousness

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '243 Patent are rendered obvious by the references identified in the attached claim charts, either alone or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted '243 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint's anticipation contentions, which shall not be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	In Combination With
English	Friedrichs
English	Scrimsher
English	Pantuso
English	Bromwich

Primary Reference	In Combination With
English	Kronenberg
English	Fan
English	Repasi
English	Huang
English	Masters
English	Gladstone
English	Piccard 826
English	Hartrell 957
English	Moran
English	Sekiguchi
English	Hartrell 659
English	Piccard 951
English	Muttik
English	Szor
English	Flores
English	Costea
English	Jordan
English	Polyakov 482
English	Polyakov 636
English	Rothwell
English	Thomas
English	Li
English	Mandujano

Primary Reference	In Combination With
English	SurfControl
Friedrichs	English
Friedrichs	Scrimsher
Friedrichs	Pantuso
Friedrichs	Bromwich
Friedrichs	Kronenberg
Friedrichs	Fan
Friedrichs	Repasi
Friedrichs	Huang
Friedrichs	Masters
Friedrichs	Gladstone
Friedrichs	Piccard 826
Friedrichs	Hartrell 957
Friedrichs	Moran
Friedrichs	Sekiguchi
Friedrichs	Hartrell 659
Friedrichs	Piccard 951
Friedrichs	Muttik
Friedrichs	Szor
Friedrichs	Flores
Friedrichs	Costea
Friedrichs	Jordan
Friedrichs	Polyakov 482

Primary Reference	In Combination With
Friedrichs	Polyakov 636
Friedrichs	Rothwell
Friedrichs	Thomas
Friedrichs	Li
Friedrichs	Mandujano
Friedrichs	SurfControl
Scrimsher	English
Scrimsher	Friedrichs
Scrimsher	Pantuso
Scrimsher	Bromwich
Scrimsher	Kronenberg
Scrimsher	Fan
Scrimsher	Repasi
Scrimsher	Huang
Scrimsher	Masters
Scrimsher	Gladstone
Scrimsher	Piccard 826
Scrimsher	Hartrell 957
Scrimsher	Moran
Scrimsher	Sekiguchi
Scrimsher	Hartrell 659
Scrimsher	Piccard 951
Scrimsher	Muttik

Primary Reference	In Combination With
Scrimsher	Szor
Scrimsher	Flores
Scrimsher	Costea
Scrimsher	Jordan
Scrimsher	Polyakov 482
Scrimsher	Polyakov 636
Scrimsher	Rothwell
Scrimsher	Thomas
Scrimsher	Li
Scrimsher	Mandujano
Scrimsher	SurfControl
Pantuso	English
Pantuso	Friedrichs
Pantuso	Scrimsher
Pantuso	Bromwich
Pantuso	Kronenberg
Pantuso	Fan
Pantuso	Repasi
Pantuso	Huang
Pantuso	Masters
Pantuso	Gladstone
Pantuso	Piccard 826
Pantuso	Hartrell 957

Primary Reference	In Combination With
Pantuso	Moran
Pantuso	Sekiguchi
Pantuso	Hartrell 659
Pantuso	Piccard 951
Pantuso	Muttik
Pantuso	Szor
Pantuso	Flores
Pantuso	Costea
Pantuso	Jordan
Pantuso	Polyakov 482
Pantuso	Polyakov 636
Pantuso	Rothwell
Pantuso	Thomas
Pantuso	Li
Pantuso	Mandujano
Pantuso	SurfControl
Bromwich	English
Bromwich	Friedrichs
Bromwich	Scrimsher
Bromwich	Pantuso
Bromwich	Kronenberg
Bromwich	Fan
Bromwich	Repasi

Primary Reference	In Combination With
Bromwich	Huang
Bromwich	Masters
Bromwich	Gladstone
Bromwich	Piccard 826
Bromwich	Hartrell 957
Bromwich	Moran
Bromwich	Sekiguchi
Bromwich	Hartrell 659
Bromwich	Piccard 951
Bromwich	Muttik
Bromwich	Szor
Bromwich	Flores
Bromwich	Costea
Bromwich	Jordan
Bromwich	Polyakov 482
Bromwich	Polyakov 636
Bromwich	Rothwell
Bromwich	Thomas
Bromwich	Li
Bromwich	Mandujano
Bromwich	SurfControl
Kronenberg	English
Kronenberg	Friedrichs

Primary Reference	In Combination With
Kronenberg	Scrimsher
Kronenberg	Pantuso
Kronenberg	Bromwich
Kronenberg	Fan
Kronenberg	Repasi
Kronenberg	Huang
Kronenberg	Masters
Kronenberg	Gladstone
Kronenberg	Piccard 826
Kronenberg	Hartrell 957
Kronenberg	Moran
Kronenberg	Sekiguchi
Kronenberg	Hartrell 659
Kronenberg	Piccard 951
Kronenberg	Muttik
Kronenberg	Szor
Kronenberg	Flores
Kronenberg	Costea
Kronenberg	Jordan
Kronenberg	Polyakov 482
Kronenberg	Polyakov 636
Kronenberg	Rothwell
Kronenberg	Thomas

Primary Reference	In Combination With
Kronenberg	Li
Kronenberg	Mandujano
Kronenberg	SurfControl
Fan	English
Fan	Friedrichs
Fan	Scrimsher
Fan	Pantuso
Fan	Bromwich
Fan	Kronenberg
Fan	Repasi
Fan	Huang
Fan	Masters
Fan	Gladstone
Fan	Piccard 826
Fan	Hartrell 957
Fan	Moran
Fan	Sekiguchi
Fan	Hartrell 659
Fan	Piccard 951
Fan	Muttik
Fan	Szor
Fan	Flores
Fan	Costea

Primary Reference	In Combination With
Fan	Jordan
Fan	Polyakov 482
Fan	Polyakov 636
Fan	Rothwell
Fan	Thomas
Fan	Li
Fan	Mandujano
Fan	SurfControl
Masters	English
Masters	Friedrichs
Masters	Scrimsher
Masters	Pantuso
Masters	Bromwich
Masters	Kronenberg
Masters	Fan
Masters	Repasi
Masters	Huang
Masters	Gladstone
Masters	Piccard 826
Masters	Hartrell 957
Masters	Moran
Masters	Sekiguchi
Masters	Hartrell 659

Primary Reference	In Combination With
Masters	Piccard 951
Masters	Muttik
Masters	Szor
Masters	Flores
Masters	Costea
Masters	Jordan
Masters	Polyakov 482
Masters	Polyakov 636
Masters	Rothwell
Masters	Thomas
Masters	Li
Masters	Mandujano
Masters	SurfControl
Gladstone	English
Gladstone	Friedrichs
Gladstone	Scrimsher
Gladstone	Pantuso
Gladstone	Bromwich
Gladstone	Kronenberg
Gladstone	Fan
Gladstone	Repasi
Gladstone	Huang
Gladstone	Masters

Primary Reference	In Combination With
Gladstone	Piccard 826
Gladstone	Hartrell 957
Gladstone	Moran
Gladstone	Sekiguchi
Gladstone	Hartrell 659
Gladstone	Piccard 951
Gladstone	Muttik
Gladstone	Szor
Gladstone	Flores
Gladstone	Costea
Gladstone	Jordan
Gladstone	Polyakov 482
Gladstone	Polyakov 636
Gladstone	Rothwell
Gladstone	Thomas
Gladstone	Li
Gladstone	Mandujano
Gladstone	SurfControl
Piccard 826	English
Piccard 826	Friedrichs
Piccard 826	Scrimsher
Piccard 826	Pantuso
Piccard 826	Bromwich

Primary Reference	In Combination With
Piccard 826	Kronenberg
Piccard 826	Fan
Piccard 826	Repasi
Piccard 826	Huang
Piccard 826	Masters
Piccard 826	Gladstone
Piccard 826	Hartrell 957
Piccard 826	Moran
Piccard 826	Sekiguchi
Piccard 826	Hartrell 659
Piccard 826	Piccard 951
Piccard 826	Muttik
Piccard 826	Szor
Piccard 826	Flores
Piccard 826	Costea
Piccard 826	Jordan
Piccard 826	Polyakov 482
Piccard 826	Polyakov 636
Piccard 826	Rothwell
Piccard 826	Thomas
Piccard 826	Li
Piccard 826	Mandujano
Piccard 826	SurfControl

Primary Reference	In Combination With
Hartrell 957	English
Hartrell 957	Friedrichs
Hartrell 957	Scrimsher
Hartrell 957	Pantuso
Hartrell 957	Bromwich
Hartrell 957	Kronenberg
Hartrell 957	Fan
Hartrell 957	Repasi
Hartrell 957	Huang
Hartrell 957	Masters
Hartrell 957	Gladstone
Hartrell 957	Piccard 826
Hartrell 957	Moran
Hartrell 957	Sekiguchi
Hartrell 957	Hartrell 659
Hartrell 957	Piccard 951
Hartrell 957	Muttik
Hartrell 957	Szor
Hartrell 957	Flores
Hartrell 957	Costea
Hartrell 957	Jordan
Hartrell 957	Polyakov 482
Hartrell 957	Polyakov 636

Primary Reference	In Combination With
Hartrell 957	Rothwell
Hartrell 957	Thomas
Hartrell 957	Li
Hartrell 957	Mandujano
Hartrell 957	SurfControl
Moran	English
Moran	Friedrichs
Moran	Scrimsher
Moran	Pantuso
Moran	Bromwich
Moran	Kronenberg
Moran	Fan
Moran	Repasi
Moran	Huang
Moran	Masters
Moran	Gladstone
Moran	Piccard 826
Moran	Hartrell 957
Moran	Sekiguchi
Moran	Hartrell 659
Moran	Piccard 951
Moran	Muttik
Moran	Szor

Primary Reference	In Combination With
Moran	Flores
Moran	Costea
Moran	Jordan
Moran	Polyakov 482
Moran	Polyakov 636
Moran	Rothwell
Moran	Thomas
Moran	Li
Moran	Mandujano
Moran	SurfControl
Hartrell 659	English
Hartrell 659	Friedrichs
Hartrell 659	Scrimsher
Hartrell 659	Pantuso
Hartrell 659	Bromwich
Hartrell 659	Kronenberg
Hartrell 659	Fan
Hartrell 659	Repasi
Hartrell 659	Huang
Hartrell 659	Masters
Hartrell 659	Gladstone
Hartrell 659	Piccard 826
Hartrell 659	Hartrell 957

Primary Reference	In Combination With
Hartrell 659	Moran
Hartrell 659	Sekiguchi
Hartrell 659	Piccard 951
Hartrell 659	Muttik
Hartrell 659	Szor
Hartrell 659	Flores
Hartrell 659	Costea
Hartrell 659	Jordan
Hartrell 659	Polyakov 482
Hartrell 659	Polyakov 636
Hartrell 659	Rothwell
Hartrell 659	Thomas
Hartrell 659	Li
Hartrell 659	Mandujano
Hartrell 659	SurfControl
Piccard 951	English
Piccard 951	Friedrichs
Piccard 951	Scrimsher
Piccard 951	Pantuso
Piccard 951	Bromwich
Piccard 951	Kronenberg
Piccard 951	Fan
Piccard 951	Repasi

Primary Reference	In Combination With
Piccard 951	Huang
Piccard 951	Masters
Piccard 951	Gladstone
Piccard 951	Piccard 826
Piccard 951	Hartrell 957
Piccard 951	Moran
Piccard 951	Sekiguchi
Piccard 951	Hartrell 659
Piccard 951	Muttik
Piccard 951	Szor
Piccard 951	Flores
Piccard 951	Costea
Piccard 951	Jordan
Piccard 951	Polyakov 482
Piccard 951	Polyakov 636
Piccard 951	Rothwell
Piccard 951	Thomas
Piccard 951	Li
Piccard 951	Mandujano
Piccard 951	SurfControl
Muttik	English
Muttik	Friedrichs
Muttik	Scrimsher

Primary Reference	In Combination With
Muttik	Pantuso
Muttik	Bromwich
Muttik	Kronenberg
Muttik	Fan
Muttik	Repasi
Muttik	Huang
Muttik	Masters
Muttik	Gladstone
Muttik	Piccard 826
Muttik	Hartrell 957
Muttik	Moran
Muttik	Sekiguchi
Muttik	Hartrell 659
Muttik	Piccard 951
Muttik	Szor
Muttik	Flores
Muttik	Costea
Muttik	Jordan
Muttik	Polyakov 482
Muttik	Polyakov 636
Muttik	Rothwell
Muttik	Thomas
Muttik	Li

Primary Reference	In Combination With
Muttik	Mandujano
Muttik	SurfControl
Szor	English
Szor	Friedrichs
Szor	Scrimsher
Szor	Pantuso
Szor	Bromwich
Szor	Kronenberg
Szor	Fan
Szor	Repasi
Szor	Huang
Szor	Masters
Szor	Gladstone
Szor	Piccard 826
Szor	Hartrell 957
Szor	Moran
Szor	Sekiguchi
Szor	Hartrell 659
Szor	Piccard 951
Szor	Muttik
Szor	Flores
Szor	Costea
Szor	Jordan

Primary Reference	In Combination With
Szor	Polyakov 482
Szor	Polyakov 636
Szor	Rothwell
Szor	Thomas
Szor	Li
Szor	Mandujano
Szor	SurfControl
Flores	English
Flores	Friedrichs
Flores	Scrimsher
Flores	Pantuso
Flores	Bromwich
Flores	Kronenberg
Flores	Fan
Flores	Repasi
Flores	Huang
Flores	Masters
Flores	Gladstone
Flores	Piccard 826
Flores	Hartrell 957
Flores	Moran
Flores	Sekiguchi
Flores	Hartrell 659

Primary Reference	In Combination With
Flores	Piccard 951
Flores	Muttik
Flores	Szor
Flores	Costea
Flores	Jordan
Flores	Polyakov 482
Flores	Polyakov 636
Flores	Rothwell
Flores	Thomas
Flores	Li
Flores	Mandujano
Flores	SurfControl
Costea	English
Costea	Friedrichs
Costea	Scrimsher
Costea	Pantuso
Costea	Bromwich
Costea	Kronenberg
Costea	Fan
Costea	Repasi
Costea	Huang
Costea	Masters
Costea	Gladstone

Primary Reference	In Combination With
Costea	Piccard 826
Costea	Hartrell 957
Costea	Moran
Costea	Sekiguchi
Costea	Hartrell 659
Costea	Piccard 951
Costea	Muttik
Costea	Szor
Costea	Flores
Costea	Jordan
Costea	Polyakov 482
Costea	Polyakov 636
Costea	Rothwell
Costea	Thomas
Costea	Li
Costea	Mandujano
Costea	SurfControl
Jordan	English
Jordan	Friedrichs
Jordan	Scrimsher
Jordan	Pantuso
Jordan	Bromwich
Jordan	Kronenberg

Primary Reference	In Combination With
Jordan	Fan
Jordan	Repasi
Jordan	Huang
Jordan	Masters
Jordan	Gladstone
Jordan	Piccard 826
Jordan	Hartrell 957
Jordan	Moran
Jordan	Sekiguchi
Jordan	Hartrell 659
Jordan	Piccard 951
Jordan	Muttik
Jordan	Szor
Jordan	Flores
Jordan	Costea
Jordan	Polyakov 482
Jordan	Polyakov 636
Jordan	Rothwell
Jordan	Thomas
Jordan	Li
Jordan	Mandujano
Jordan	SurfControl
Polyakov 482	English

Primary Reference	In Combination With
Polyakov 482	Friedrichs
Polyakov 482	Scrimsher
Polyakov 482	Pantuso
Polyakov 482	Bromwich
Polyakov 482	Kronenberg
Polyakov 482	Fan
Polyakov 482	Repasi
Polyakov 482	Huang
Polyakov 482	Masters
Polyakov 482	Gladstone
Polyakov 482	Piccard 826
Polyakov 482	Hartrell 957
Polyakov 482	Moran
Polyakov 482	Sekiguchi
Polyakov 482	Hartrell 659
Polyakov 482	Piccard 951
Polyakov 482	Muttik
Polyakov 482	Szor
Polyakov 482	Flores
Polyakov 482	Costea
Polyakov 482	Jordan
Polyakov 482	Polyakov 636
Polyakov 482	Rothwell

Primary Reference	In Combination With
Polyakov 482	Thomas
Polyakov 482	Li
Polyakov 482	Mandujano
Polyakov 482	SurfControl
Polyakov 636	English
Polyakov 636	Friedrichs
Polyakov 636	Scrimsher
Polyakov 636	Pantuso
Polyakov 636	Bromwich
Polyakov 636	Kronenberg
Polyakov 636	Fan
Polyakov 636	Repasi
Polyakov 636	Huang
Polyakov 636	Masters
Polyakov 636	Gladstone
Polyakov 636	Piccard 826
Polyakov 636	Hartrell 957
Polyakov 636	Moran
Polyakov 636	Sekiguchi
Polyakov 636	Hartrell 659
Polyakov 636	Piccard 951
Polyakov 636	Muttik
Polyakov 636	Szor

Primary Reference	In Combination With
Polyakov 636	Flores
Polyakov 636	Costea
Polyakov 636	Jordan
Polyakov 636	Polyakov 482
Polyakov 636	Rothwell
Polyakov 636	Thomas
Polyakov 636	Li
Polyakov 636	Mandujano
Polyakov 636	SurfControl
Rothwell	English
Rothwell	Friedrichs
Rothwell	Scrimsher
Rothwell	Pantuso
Rothwell	Bromwich
Rothwell	Kronenberg
Rothwell	Fan
Rothwell	Repasi
Rothwell	Huang
Rothwell	Masters
Rothwell	Gladstone
Rothwell	Piccard 826
Rothwell	Hartrell 957
Rothwell	Moran

Primary Reference	In Combination With
Rothwell	Sekiguchi
Rothwell	Hartrell 659
Rothwell	Piccard 951
Rothwell	Muttik
Rothwell	Szor
Rothwell	Flores
Rothwell	Costea
Rothwell	Jordan
Rothwell	Polyakov 482
Rothwell	Polyakov 636
Rothwell	Thomas
Rothwell	Li
Rothwell	Mandujano
Rothwell	SurfControl
Thomas	English
Thomas	Friedrichs
Thomas	Scrimsher
Thomas	Pantuso
Thomas	Bromwich
Thomas	Kronenberg
Thomas	Fan
Thomas	Repasi
Thomas	Huang

Primary Reference	In Combination With
Thomas	Masters
Thomas	Gladstone
Thomas	Piccard 826
Thomas	Hartrell 957
Thomas	Moran
Thomas	Sekiguchi
Thomas	Hartrell 659
Thomas	Piccard 951
Thomas	Muttik
Thomas	Szor
Thomas	Flores
Thomas	Costea
Thomas	Jordan
Thomas	Polyakov 482
Thomas	Polyakov 636
Thomas	Rothwell
Thomas	Li
Thomas	Mandujano
Thomas	SurfControl
Li	Mandujano
Li	SurfControl
Mandujano	SurfControl
Muttik	Szor + Costea

Primary Reference	In Combination With
Muttik	Szor + Polyakov 482
Muttik	Szor + English
Muttik	Szor + Hartrell 957
Muttik	Szor + Mandujano
Muttik	Szor + Sekiguchi
Muttik	Szor + Friedrichs
Muttik	Szor + Scrimsher
Muttik	Szor + Pantuso
Muttik	Szor + Piccard 826
Muttik	Szor + Piccard 951
Muttik	Szor + Hartrell 659
Muttik	Costea + Jordan
Muttik	Costea + Polyakov 482
Muttik	Costea + Polyakov 636
Muttik	Costea + English
Muttik	Costea + Thomas
Muttik	Costea + Rothwell
Muttik	Costea + Hartrell 957
Muttik	Costea + Fan
Muttik	Costea + Mandujano
Muttik	Costea + Sekiguchi
Muttik	Costea + Friedrichs
Muttik	Costea + Scrimsher

Primary Reference	In Combination With
Muttik	Costea + Pantuso
Muttik	Costea + Piccard 826
Muttik	Costea + Piccard 951
Muttik	Costea + Hartrell 659
Muttik	Jordan + Polyakov 482
Muttik	Jordan + English
Muttik	Jordan + Hartrell 957
Muttik	Jordan + Mandujano
Muttik	Jordan + Sekiguchi
Muttik	Jordan + Friedrichs
Muttik	Jordan + Scrimsher
Muttik	Jordan + Pantuso
Muttik	Jordan + Piccard 826
Muttik	Jordan + Piccard 951
Muttik	Jordan + Hartrell 659
Muttik	Polyakov 482 + Polyakov 636
Muttik	Polyakov 482 + English
Muttik	Polyakov 482 + Thomas
Muttik	Polyakov 482 + Rothwell
Muttik	Polyakov 482 + Hartrell 957
Muttik	Polyakov 482 + Fan
Muttik	Polyakov 482 + Mandujano
Muttik	Polyakov 482 + Sekiguchi

Primary Reference	In Combination With
Muttik	Polyakov 482 + Friedrichs
Muttik	Polyakov 482 + Scrimsher
Muttik	Polyakov 482 + Pantuso
Muttik	Polyakov 482 + Piccard 826
Muttik	Polyakov 482 + Piccard 951
Muttik	Polyakov 482 + Hartrell 659
Muttik	Polyakov 636 + English
Muttik	Polyakov 636 + Hartrell 957
Muttik	Polyakov 636 + Mandujano
Muttik	Polyakov 636 + Sekiguchi
Muttik	Polyakov 636 + Friedrichs
Muttik	Polyakov 636 + Scrimsher
Muttik	Polyakov 636 + Pantuso
Muttik	Polyakov 636 + Piccard 826
Muttik	Polyakov 636 + Piccard 951
Muttik	Polyakov 636 + Hartrell 659
Muttik	English + Thomas
Muttik	English + Rothwell
Muttik	English + Hartrell 957
Muttik	English + Fan
Muttik	English + Mandujano
Muttik	English + Sekiguchi
Muttik	English + Friedrichs

Primary Reference	In Combination With
Muttik	English + Scrimsher
Muttik	English + Piccard 826
Muttik	English + Piccard 951
Muttik	English + Hartrell 659
Muttik	Thomas + Hartrell 957
Muttik	Thomas + Mandujano
Muttik	Thomas + Sekiguchi
Muttik	Thomas + Friedrichs
Muttik	Thomas + Scrimsher
Muttik	Thomas + Pantuso
Muttik	Thomas + Piccard 826
Muttik	Thomas + Piccard 951
Muttik	Thomas + Hartrell 659
Muttik	Rothwell + Hartrell 957
Muttik	Rothwell + Mandujano
Muttik	Rothwell + Sekiguchi
Muttik	Rothwell + Friedrichs
Muttik	Rothwell + Scrimsher
Muttik	Rothwell + Pantuso
Muttik	Rothwell + Piccard 826
Muttik	Rothwell + Piccard 951
Muttik	Rothwell + Hartrell 659
Muttik	Hartrell 659 + Fan

Primary Reference	In Combination With
Muttik	Fan + Mandujano
Muttik	Fan + Sekiguchi
Muttik	Fan + Friedrichs
Muttik	Fan + Scrimsher
Muttik	Fan + Pantuso
Muttik	Fan + Piccard 826
Muttik	Fan + Piccard 951
Muttik	Fan + Hartrell 659
Muttik	Mandujano + Scrimsher
Muttik	Mandujano + Pantuso
Muttik	Flores + Costea
Muttik	Flores + Polyakov 482
Muttik	Flores + Hartrell 957
Muttik	Flores + Mandujano
Muttik	Flores + Piccard 826
Muttik	Flores + Piccard 951
Muttik	Flores + Hartrell 659
Szor	Flores + Costea
Szor	Flores + Polyakov 482
Szor	Flores + English
Szor	Flores + Hartrell 957
Szor	Flores + Mandujano
Szor	Flores + Piccard 826

Primary Reference	In Combination With
Szor	Flores + Piccard 951
Szor	Flores + Hartrell 659
Szor	Costea + Polyakov 482
Szor	Costea + English
Szor	Costea + Hartrell 957
Szor	Costea + Mandujano
Szor	Costea + Piccard 826
Szor	Costea + Piccard 951
Szor	Costea + Hartrell 659
Szor	Jordan + Hartrell 957
Szor	Jordan + Mandujano
Szor	Jordan + Piccard 826
Szor	Jordan + Piccard 951
Szor	Jordan + Hartrell 659
Szor	Polyakov 482 + Hartrell 957
Szor	Polyakov 482 + Sekiguchi
Szor	Polyakov 482 + Friedrichs
Szor	Polyakov 482 + Scrimsher
Szor	Polyakov 482 + Piccard 826
Szor	Polyakov 482 + Piccard 951
Szor	Polyakov 482 + Hartrell 659
Szor	Polyakov 636 + English
Szor	Polyakov 636 + Hartrell 957

Primary Reference	In Combination With
Szor	Polyakov 636 + Mandujano
Szor	Polyakov 636 + Friedrichs
Szor	Polyakov 636 + Scrimsher
Szor	Polyakov 636 + Pantuso
Szor	Polyakov 636 + Piccard 826
Szor	Polyakov 636 + Piccard 951
Szor	Polyakov 636 + Hartrell 659
Szor	English + Hartrell 957
Szor	English + Mandujano
Szor	English + Friedrichs
Szor	English + Scrimsher
Szor	English + Pantuso
Szor	English + Piccard 826
Szor	English + Piccard 951
Szor	English + Hartrell 659
Szor	Thomas + Hartrell 957
Szor	Thomas + Mandujano
Szor	Thomas + Friedrichs
Szor	Thomas + Scrimsher
Szor	Thomas + Pantuso
Szor	Thomas + Piccard 826
Szor	Thomas + Piccard 951
Szor	Thomas + Hartrell 659

Primary Reference	In Combination With
Szor	Rothwell + Hartrell 957
Szor	Rothwell + Mandujano
Szor	Rothwell + Friedrichs
Szor	Rothwell + Scrimsher
Szor	Rothwell + Pantuso
Szor	Rothwell + Piccard 826
Szor	Rothwell + Piccard 951
Szor	Rothwell + Hartrell 659
Szor	Hartrell 659 + Fan
Szor	Fan + Mandujano
Szor	Fan + Sekiguchi
Szor	Fan + Friedrichs
Szor	Fan + Scrimsher
Szor	Fan + Pantuso
Szor	Fan + Piccard 826
Szor	Fan + Piccard 951
Szor	Fan + Hartrell 659
Szor	Mandujano + Scrimsher
Szor	Mandujano + Pantuso
Costea	Jordan + Hartrell 957
Costea	Jordan + Mandujano
Costea	Jordan + Piccard 826
Costea	Jordan + Piccard 951

Primary Reference	In Combination With
Costea	Jordan + Hartrell 659
Costea	Polyakov 482 + Hartrell 957
Costea	Polyakov 482 + Sekiguchi
Costea	Polyakov 482 + Friedrichs
Costea	Polyakov 482 + Scrimsher
Costea	Polyakov 482 + Piccard 826
Costea	Polyakov 482 + Piccard 951
Costea	Polyakov 482 + Hartrell 659
Costea	Polyakov 636 + English
Costea	Polyakov 636 + Hartrell 957
Costea	Polyakov 636 + Mandujano
Costea	Polyakov 636 + Friedrichs
Costea	Polyakov 636 + Scrimsher
Costea	Polyakov 636 + Pantuso
Costea	Polyakov 636 + Piccard 826
Costea	Polyakov 636 + Piccard 951
Costea	Polyakov 636 + Hartrell 659
Costea	English + Hartrell 957
Costea	English + Mandujano
Costea	English + Friedrichs
Costea	English + Scrimsher
Costea	English + Pantuso
Costea	English + Piccard 826

Primary Reference	In Combination With
Costea	English + Piccard 951
Costea	English + Hartrell 659
Costea	Thomas + Hartrell 957
Costea	Thomas + Mandujano
Costea	Thomas + Friedrichs
Costea	Thomas + Scrimsher
Costea	Thomas + Pantuso
Costea	Thomas + Piccard 826
Costea	Thomas + Piccard 951
Costea	Thomas + Hartrell 659
Costea	Rothwell + Hartrell 957
Costea	Rothwell + Mandujano
Costea	Rothwell + Friedrichs
Costea	Rothwell + Scrimsher
Costea	Rothwell + Pantuso
Costea	Rothwell + Piccard 826
Costea	Rothwell + Piccard 951
Costea	Rothwell + Hartrell 659
Costea	Hartrell 957 + Scrimsher
Costea	Hartrell 957 + Pantuso
Costea	Hartrell 659 + Fan
Costea	Fan + Mandujano
Costea	Fan + Sekiguchi

Primary Reference	In Combination With
Costea	Fan + Friedrichs
Costea	Fan + Scrimsher
Costea	Fan + Pantuso
Costea	Fan + Piccard 826
Costea	Fan + Piccard 951
Costea	Fan + Hartrell 659
Costea	Mandujano + Scrimsher
Costea	Mandujano + Pantuso
Jordan	Polyakov 482 + Hartrell 957
Jordan	Polyakov 482 + Sekiguchi
Jordan	Polyakov 482 + Friedrichs
Jordan	Polyakov 482 + Scrimsher
Jordan	Polyakov 482 + Piccard 826
Jordan	Polyakov 482 + Piccard 951
Jordan	Polyakov 482 + Hartrell 659
Jordan	Polyakov 636 + English
Jordan	Polyakov 636 + Hartrell 957
Jordan	Polyakov 636 + Mandujano
Jordan	Polyakov 636 + Friedrichs
Jordan	Polyakov 636 + Scrimsher
Jordan	Polyakov 636 + Pantuso
Jordan	Polyakov 636 + Piccard 826
Jordan	Polyakov 636 + Piccard 951

Primary Reference	In Combination With
Jordan	Polyakov 636 + Hartrell 659
Jordan	English + Hartrell 957
Jordan	English + Mandujano
Jordan	English + Friedrichs
Jordan	English + Scrimsher
Jordan	English + Pantuso
Jordan	English + Piccard 826
Jordan	English + Piccard 951
Jordan	English + Hartrell 659
Jordan	Thomas + Hartrell 957
Jordan	Thomas + Mandujano
Jordan	Thomas + Friedrichs
Jordan	Thomas + Scrimsher
Jordan	Thomas + Pantuso
Jordan	Thomas + Piccard 826
Jordan	Thomas + Piccard 951
Jordan	Thomas + Hartrell 659
Jordan	Rothwell + Hartrell 957
Jordan	Rothwell + Mandujano
Jordan	Rothwell + Friedrichs
Jordan	Rothwell + Scrimsher
Jordan	Rothwell + Pantuso
Jordan	Rothwell + Piccard 826

Primary Reference	In Combination With
Jordan	Rothwell + Piccard 951
Jordan	Rothwell + Hartrell 659
Jordan	Hartrell 659 + Fan
Jordan	Fan + Mandujano
Jordan	Fan + Sekiguchi
Jordan	Fan + Friedrichs
Jordan	Fan + Scrimsher
Jordan	Fan + Pantuso
Jordan	Fan + Piccard 826
Jordan	Fan + Piccard 951
Jordan	Fan + Hartrell 659
Jordan	Mandujano + Scrimsher
Jordan	Mandujano + Pantuso
Polyakov 482	Polyakov 636 + English
Polyakov 482	Polyakov 636 + Hartrell 957
Polyakov 482	Polyakov 636 + Mandujano
Polyakov 482	Polyakov 636 + Sekiguchi
Polyakov 482	Polyakov 636 + Friedrichs
Polyakov 482	Polyakov 636 + Scrimsher
Polyakov 482	Polyakov 636 + Pantuso
Polyakov 482	Polyakov 636 + Piccard 826
Polyakov 482	Polyakov 636 + Piccard 951
Polyakov 482	Polyakov 636 + Hartrell 659

Primary Reference	In Combination With
Polyakov 482	English + Hartrell 957
Polyakov 482	English + Mandujano
Polyakov 482	English + Friedrichs
Polyakov 482	English + Scrimsher
Polyakov 482	English + Pantuso
Polyakov 482	English + Piccard 826
Polyakov 482	English + Piccard 951
Polyakov 482	English + Hartrell 659
Polyakov 482	Thomas + Hartrell 957
Polyakov 482	Thomas + Mandujano
Polyakov 482	Thomas + Friedrichs
Polyakov 482	Thomas + Scrimsher
Polyakov 482	Thomas + Pantuso
Polyakov 482	Thomas + Piccard 826
Polyakov 482	Thomas + Piccard 951
Polyakov 482	Thomas + Hartrell 659
Polyakov 482	Rothwell + Hartrell 957
Polyakov 482	Rothwell + Mandujano
Polyakov 482	Rothwell + Friedrichs
Polyakov 482	Rothwell + Scrimsher
Polyakov 482	Rothwell + Pantuso
Polyakov 482	Rothwell + Piccard 826
Polyakov 482	Rothwell + Piccard 951

Primary Reference	In Combination With
Polyakov 482	Rothwell + Hartrell 659
Polyakov 482	Hartrell 659 + Fan
Polyakov 482	Fan + Mandujano
Polyakov 482	Fan + Sekiguchi
Polyakov 482	Fan + Friedrichs
Polyakov 482	Fan + Scrimsher
Polyakov 482	Fan + Pantuso
Polyakov 482	Fan + Piccard 826
Polyakov 482	Fan + Piccard 951
Polyakov 482	Fan + Hartrell 659
Polyakov 482	Mandujano + Scrimsher
Polyakov 482	Mandujano + Pantuso
English	Thomas + Hartrell 957
English	Thomas + Mandujano
English	Thomas + Friedrichs
English	Thomas + Scrimsher
English	Thomas + Pantuso
English	Thomas + Piccard 826
English	Thomas + Piccard 951
English	Thomas + Hartrell 659
English	Rothwell + Hartrell 957
English	Rothwell + Mandujano
English	Rothwell + Friedrichs

Primary Reference	In Combination With
English	Rothwell + Scrimsher
English	Rothwell + Pantuso
English	Rothwell + Piccard 826
English	Rothwell + Piccard 951
English	Rothwell + Hartrell 659
English	Hartrell 659 + Fan
English	Fan + Mandujano
English	Fan + Sekiguchi
English	Fan + Friedrichs
English	Fan + Scrimsher
English	Fan + Pantuso
English	Fan + Piccard 826
English	Fan + Piccard 951
English	Fan + Hartrell 659
English	Mandujano + Scrimsher
English	Mandujano + Pantuso
Thomas	Rothwell + Hartrell 957
Thomas	Rothwell + Mandujano
Thomas	Rothwell + Friedrichs
Thomas	Rothwell + Scrimsher
Thomas	Rothwell + Pantuso
Thomas	Rothwell + Piccard 826
Thomas	Rothwell + Piccard 951

Primary Reference	In Combination With
Thomas	Rothwell + Hartrell 659
Thomas	Hartrell 659 + Fan
Thomas	Fan + Mandujano
Thomas	Fan + Sekiguchi
Thomas	Fan + Friedrichs
Thomas	Fan + Scrimsher
Thomas	Fan + Pantuso
Thomas	Fan + Piccard 826
Thomas	Fan + Piccard 951
Thomas	Fan + Hartrell 659
Thomas	Mandujano + Scrimsher
Thomas	Mandujano + Pantuso
Rothwell	Hartrell 659 + Fan
Rothwell	Fan + Mandujano
Rothwell	Fan + Sekiguchi
Rothwell	Fan + Friedrichs
Rothwell	Fan + Scrimsher
Rothwell	Fan + Pantuso
Rothwell	Fan + Piccard 826
Rothwell	Fan + Piccard 951
Rothwell	Fan + Hartrell 659
Rothwell	Mandujano + Scrimsher
Rothwell	Mandujano + Pantuso

Primary Reference	In Combination With
Hartrell 957	Fan + Scrimsher
Hartrell 957	Fan + Pantuso
Fan	Mandujano + Scrimsher
Fan	Mandujano + Pantuso
Fan	Mandujano + Sekiguchi
Fan	Scrimsher + Piccard 826
Fan	Pantuso + Piccard 826
Mandujano	Muttik + Costea
SurfControl	Muttik + Szor
SurfControl	Muttik + Flores
SurfControl	Muttik + English
SurfControl	Muttik + Hartrell 957
SurfControl	Szor + Flores
SurfControl	Szor + English
SurfControl	Szor + Hartrell 957
SurfControl	Flores + English
SurfControl	Flores + Hartrell 957
SurfControl	English + Hartrell 957
SurfControl	Muttik + Costea
SurfControl	Muttik + Jordan
SurfControl	Sekiguchi + Muttik
SurfControl	Sekiguchi + Szor
SurfControl	Sekiguchi + Flores

Primary Reference	In Combination With
SurfControl	Sekiguchi + English
SurfControl	Sekiguchi + Hartrell 957
SurfControl	Mandujano + Muttik
SurfControl	Mandujano + Szor
SurfControl	Mandujano + Flores
SurfControl	Mandujano + English
SurfControl	Mandujano + Hartrell 957
SurfControl	Mandujano + Sekiguchi
SurfControl	Fan + Muttik
SurfControl	Fan + Szor
SurfControl	Fan + Flores
SurfControl	Fan + English
SurfControl	Fan + Hartrell 957
SurfControl	Fan + Sekiguchi
SurfControl	Fan + Mandujano

Forcepoint reserves the right to amend these Contentions and prior art combinations in light of new information that may arise from third parties related to additional malware detection and containment systems. The following list of references are also evidence of the knowledge of POSITA at the time of the alleged invention of the '243 Patent: Kramer 341, Lemley, Kraemer, Andruss 261, Andruss 006, Wang, Apap, Kouznetsov, Deshmukh, Matalytski, Khazan, Kramer 304, Rabek, Moffie, Chari, Vasudevan.

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have

understood that each of these references are in the same field of endeavor, namely methods and devices relating to computer security. *See, e.g.*, Muttik at 1:9-13; Costea at [0001]; Jordan at Abstract; Polyakov 482 at Abstract; Polyakov 636 at Abstract; English at Abstract; Thomas at 1:8-10; Rothwell at 1:7-12; Hartrell 957 at [0003]; Fan at 1:6-9; Friedrichs at Abstract; Scrimsher at [0001]; Pantuso at Abstract; Bromwich at Abstract; Kronenberg at [0003]; Repasi at Abstract; Huang at Abstract; Masters at Abstract; Gladstone at Abstract; Piccard 826 at [0001]; Moran at 2:10-12; Sekiguchi at Abstract; Hartrell 659 at Abstract; Piccard 951 at Abstract; Szor at Abstract; Flores at Abstract; Li at Abstract; Mandujano at Abstract; SurfControl (Exhibit 243-F-29) at 4–9 (citing 2005 MS Windows Guide at 1; 2003 Evaluators' Guide at 5–6, 10; 2006 Email Filter Datasheet at 2; Spyware Factsheet at 1–2; 2004 Anti-Spam Agent Datasheet at 2; 2004 Press Release).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving computer security. *See, e.g.*, Muttik at 1:9-13; Costea at [0007]; Jordan at 2:15-21; Polyakov 482 at 2:38-55; Polyakov 636 at 2:13-29; English at 2:51-57; Thomas at 3:44-64; Rothwell at 2:53-67; Hartrell 957 at [0001]-[0004]; Fan at 2:29-45; Friedrichs at [0002]; Scrimsher at [0008]; Pantuso at 1:7-9; Bromwich at 1:8-10; Kronenberg at [0006]; Repasi at [0001]; Huang at [0005]; Masters at 1:6-10; Gladstone at 1:36-53; Piccard 826 at [0007]; Moran at 6:4-22; Sekiguchi at [0001]; Hartrell 659 at 1:50-64; Piccard 951 at [0001]; Szor at 1:7-9; Flores at 2:1-17; Li at Introduction; Mandujano at Introduction; SurfControl (Exhibit 243-F-29) at 4–9 (citing 2005 MS Windows Guide at 1; 2003 Evaluators' Guide at 5–6, 10; 2006 Email Filter Datasheet at 2; Spyware Factsheet at 1–2; 2004 Anti-Spam Agent Datasheet at 2; 2004 Press Release).

Further, the Asserted Claims of the ’243 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—*i.e.* the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe methods of detecting malicious software and computer programs and the origins of such software and computer programs. *See, e.g.*, Muttik at 1:48-4:12; Costea at [0006]-[0016]; Jordan at 1:8-2:21; Polyakov 482 at 2:38-3:46; Polyakov 636 at 5:54-7:42; English at 2:51-4:10; Thomas at 2:15-3:59; Rothwell at 1:6-2:67; Hartrell 957 at [0004]-[0014]; Fan at 1:6-5:44; Friedrichs at [0018]-[0019]; Scrimsher at [0001]-[0003]; Pantuso at 1:7-3:51; Bromwich at 1:8-2:34; Kronenberg at [0002]-[0006]; Repasi at [0001], [0019]-[0026]; Huang at [0002]-[0011]; Masters at 4:45-5:23; Gladstone at 3:13-8:13; Piccard 826 at [0001]-[0018]; Moran at 16:3-8; Sekiguchi at [0001]-[0013]; Hartrell 659 at 1:6-2:59; Piccard 951 at [0002]-[0007]; Szor at 1:58-5:6; Flores at 2:1-3:58; Li at 1–3; Mandujano at 3, 34–57; SurfControl (Exhibit 243-F-29) at 4–9 (citing 2005 MS Windows Guide at 1; 2003 Evaluators’ Guide at 5–6, 10; 2006 Email Filter Datasheet at 2; Spyware Factsheet at 1–2; 2004 Anti-Spam Agent Datasheet at 2; 2004 Press Release).

The prior art references further describe “monitoring, using a kernel-mode driver, the computer for activity that is indicative of pestware, wherein the monitoring includes monitoring API calls and storing a history of at least a portion of the API calls in an activity log.” *See, e.g.*, Muttik at 1:31-5:15; Costea at [0007]-[0008], [0018]-[0027]; Jordan at 5:66-6:43; Polyakov 482 at 2:38-5:16; Polyakov 636 at 3:10-6:20; English at 3:65-5:61; Thomas at 6:1-9:62; Rothwell at 3:1-6:11, 14:13-17:51; Hartrell 957 at [0004], [0014]-[0027]; Fan at 6:19-11:56; Friedrichs at [0008]-[0029]; Scrimsher at [0026]-[0051]; Pantuso at 1:57-4:46; Bromwich at 2:10-6:11; Kronenberg at [0006]-[0029]; Repasi at [0004]-[0060]; Huang at [0004]-[0029]; Masters at 4:51-

7:45; Gladstone at 3:13-6:61; Piccard 826 at [0007]-[0022]; Moran at 16:3-21:8; Sekiguchi at [0007]-[0011]; Hartrell 659 at 3:59-6:59; Piccard 951 at [0014]-[0024]; Szor at 5:18-7:29; Flores at 3:5-6:30; Li at 1–9; Mandujano at 27–66; SurfControl (Exhibit 243-F-29) at 9–13 (citing 2003 Evaluators' Guide at 5, 19–20, 23; 2003 Email Filter Reviewer's Guide at 6–7; 2006 Virtual Control Agent Article).

The prior art references further describe "analyzing, heuristically, computer activity to determine whether one or more weighted factors associated with an activity exceeds a threshold so as to arrive at a determination that the activity is indicative of pestware." *See, e.g.*, Muttik at 1:23-2:53, 5:30-6:48; Costea at [0024]-[0035]; Jordan at 1:56-4:61; Polyakov 482 at 5:42-10:48; Polyakov 636 at 7:55-11:37; English at 3:65-5:61; Thomas at 7:56-11:63; Rothwell at 1:37-5:61, 16:4-67; Hartrell 957 at [0003], [0014]-[0038]; Fan at 2:62-9:66; Friedrichs at [0019]-[0039]; Scrimsher at [0040]-[0042]; Pantuso at 2:1-5, 4:47-62; Bromwich at 5:11-9:7; Kronenberg at [0006]-[0029]; Repasi at [0015]-[0055]; Huang at [0005]-[0029], [0056]; Masters at 3:44-8:31; Gladstone at 5:66-11:67; Piccard 826 at [0006]-[0024]; Moran at 17:4-28:3; Sekiguchi at [0004]-[0011]; Hartrell 659 at 2:39-11:9; Piccard 951 at [0015]-[0022]; Szor at 3:34-7:29; Flores at 3:5-7:17; Li at 1–10; Mandujano at 18, 38–61, 110–114; SurfControl (Exhibit 243-F-29) at 13–17 (citing 2003 Evaluators' Guide at 8, 10, 13, 41; 2006 Virtual Control Agent Article; Anti-Virus Agent Datasheet at 1; RBOC Update Article; 2004 Anti-Spam Agent Datasheet at 2).

The prior art references further describe "identifying, based upon the activity, an object residing on the computer that is a suspected pestware object." *See, e.g.*, Muttik at 3:22-31, 5:5-15; Costea at [0024]-[0035]; Jordan at 1:56-7:24; Polyakov 482 at 5:42-10:48; Polyakov 636 at 7:55-13:59; English at 3:65-5:61; Thomas at 7:56-11:63; Rothwell at 1:37-5:61, 16:4-67; Hartrell 957 at [0004], [0014]-[0027]; Fan at 5:6-11:31, 12:36-16:16; Friedrichs at [0019]-[0039]; Scrimsher

at [0040]-[0042]; Pantuso at 3:43-4:62; Bromwich at 2:29-9:7; Kronenberg at [0006]; Repasi at [0019]-[0120]; Huang at [0005]-[0029], [0056]; Masters at 3:44-9:45; Gladstone at 7:10-13:12; Piccard 826 at [0006]-[0024]; Moran at 16:22-27:12; Sekiguchi at [0004]-[0011]; Hartrell 659 at 4:18-11:9; Piccard 951 at [0015]-[0022]; Szor at 3:34-6:22; Flores at 2:1-4:25; Li at 2–10; Mandujano at 13, 38–61, 110–114; SurfControl (Exhibit 243-F-29) at 17–20 (citing 2003 Evaluators' Guide at 6; Spyware Factsheet at 2).

The prior art references further describe "accessing, in response to the identifying an object, at least a portion of a recorded history of externally networked sources that the computer received files from so as to identify a reference to an identity of a particular externally networked source that the suspected pestware object originated from." *See, e.g.*, Muttik at 1:66-3:31, 5:57-6:16; Costea at [0016]-[0023], [0036]-[0039]; Jordan at 2:15-3:50; Polyakov 482 at 5:1-11:40; Polyakov 636 at 3:10-5:53, 9:41-11:62; English at 4:34-6:23; Thomas at 6:26-10:7; Rothwell at 8:7-9:60, 21:22-22:17; Hartrell 957 at [0014]-[0025]; Fan at 5:16-12:46; Friedrichs at [0008]-[0047]; Scrimsher at [0027]-[0028]; Pantuso at 2:18-5:56; Bromwich at 6:12-9:60; Kronenberg at [0006]-[0023]; Repasi at [0013]-[0079]; Huang at [0003]-[0048]; Masters at 1:45-7:12; Gladstone at 4:13-15:15; Piccard 826 at [0015]-[0022]; Moran at 16:3-24:3; Sekiguchi at [0007]-[0012]; Hartrell 659 at 3:1-10:50; Piccard 951 at [0015]-[0028]; Szor at 4:62-7:41; Flores at 6:13-8:19; Li at 2–9; Mandujano at 7, 37–61, 88, 110; SurfControl (Exhibit 243-F-29) at 20–24 (citing 2003 Evaluators' Guide at 6, 9, 20–21; 2005 Report Central Datasheet at 3; 2006 Web Filter Datasheet at 4; Spyware Factsheet at 2).

The prior art references further describe "reporting the identity of the particular externally networked source to an externally networked pestware research entity so as to enable the externally networked pestware research entity to research whether the particular externally networked source

is a source of pestware." *See, e.g.*, Muttik at 3:6-6:17; Costea at [0006], [0020]-[0039]; Jordan at 2:15-5:30; Polyakov 482 at 5:17-9:35; Polyakov 636 at 9:26-12:56; English at 5:49-61; Thomas at 7:51-9:32; Rothwell at 21:49-24:29; Hartrell 957 at [0014]-[0037]; Fan at 5:45-62, 11:17-65; Friedrichs at [0025]-[0039]; Scrimsher at [0025]-[0039]; Pantuso at 2:38-6:16; Bromwich at 1:59-2:6, 5:11-9:60; Kronenberg at [0006]-[0031]; Repasi at [0017]-[0023], [0172]-[0174]; Huang at [0005]-[0007]; Masters at 1:45-7:12; Gladstone at 6:13-15:15; Piccard 826 at [0015]-[0023]; Moran at 21:9-25, 64:17-65:5; Sekiguchi at [0013]-[0015]; Hartrell 659 at 5:2-10:50; Piccard 951 at [0018]-[0028]; Szor at 6:23-7:41; Flores at 2:18-7:30; Li at 6–10; Mandujano at 12, 59–86, 113–114; SurfControl (Exhibit 243-F-29) at 24–27 (citing 2003 Evaluators' Guide at 35, 41; Anti-Virus Agent Datasheet at 1; 2005 Report Central Datasheet at 3).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 243-F-1 through 243-F-29. It would have been known and simple to take a prior art for malware detection and neutralization to analyze the origin of suspicious objects, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving computer security. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '243 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the limitations of the '243 Patent that are invalid based on indefiniteness under pre-AIA 35 U.S.C. § 112 ¶ 2, or enablement or written description under pre-AIA 35 U.S.C. § 112 ¶ 1. These Contentions are being proffered without the full benefit of expert disclosure or discovery.

Asserted Claims 1, 2, 3, 5, 6, 8, and 10-14 of the '243 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). For example, as applied in Plaintiffs' Infringement Contentions, the terms "indicative of pestware," "suspected pestware object," "activity log," "exceeds a threshold", "the identity of the particular externally networked source," "the group consisting of an I.P. address and a URL," "the group consisting of an activity log, a browser history," "reference to an identity of a particular externally networked source that the suspected pestware object originated from," "activity monitor," "heuristics module," "research portion," and "reporting portion" are indefinite because each of these phrases not only is subjective but also does not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 1, 3, 5, 6, 11, 12, and 14 of the '243 Patent are invalid under § 112 ¶ 1, because the specification as filed does not contain a sufficient written description supporting those claims. For example, the patent disclosure would not lead a person of ordinary skill in the art to understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. For example, Asserted Claims 1, 3, 5, 6, 11, 12, and 14 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '243 Patent fails to provide an adequate written description of the phrases "activity log," "the identity of the particular externally networked source," "reference to an identity of a particular externally networked source that the suspected pestware object

originated from," "activity monitor," "heuristics module," "research portion," and "reporting portion" as applied in Plaintiffs' Infringement Contentions.

The aforementioned claims are invalid because they are not enabled or described by the specification of the '243 Patent. The subject matter of these claims, as described above, are not sufficiently shown in the specification of the '243 Patent. The subject matter of these claims, as described above, are not sufficiently enabled because they do not teach one skilled in the art how to make and use the alleged invention from the specification of the '243 Patent. For example, the '243 Patent fails to enable the following and thus, Asserted Claims 1, 3, 5, 6, 11, 12, and 14 of the '243 Patent are invalid: "activity log," "the identity of the particular externally networked source," "reference to an identity of a particular externally networked source that the suspected pestware object originated from," "activity monitor," "heuristics module," "research portion," and "reporting portion." The foregoing phrases are not described in such a way that one of ordinary skill in the art could implement it to achieve the results sought by the individual named on the face of the '243 Patent as the inventor. The foregoing phrases are not described in such a way that a person having ordinary skill in the art at the time of the alleged invention would have understood that the individual named as the inventor on the face of the '243 Patent was in possession of the claimed subject matter. The Asserted Claims of the '243 Patent also do not comply with § 112 because they do not set forth what the applicant regards is the invention.

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court's Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the '243 Patent they contend are directed to ineligible subject matter under pre-AIA 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the '243 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the '243 Patent are directed to the long-standing abstract idea of tracing where harmful content originated (*i.e.*, the abstract idea and mental process of observing harm and seeking the source). The Asserted Patent Claims of the '243 Patent merely take mental processes and human activities (*e.g.*, monitoring for harm, seeking the source of the harm, and telling others about the harm) and tie those processes and activities to a computer. For example, Claim 1 of the '243 Patent is directed to "monitoring . . . analyzing . . . identifying . . . accessing . . . and reporting the identity of [a] particular externally networked source to an externally networked pestware research entity[.]" '243 Patent cl. 1; *see also id.* at 9:63-65 ("[T]he present invention provides, among other things, a system and method for identifying a source of pestware or suspected pestware on a computer."). Accordingly, the Asserted Claims are directed to basic concepts of monitoring activities on a computer and identifying the source of those activities.

The specification of the '243 Patent confirms that the Asserted Claims are directed to those basic concepts. *See, e.g.*, *id.* at 2:17-19 ("The present invention can provide a system and method for researching an identity of a source of activity that is indicative of pestware."); 3:34-40 ("[T]he research module 108 is configured to research the activity log 120 and/or the N files 130, which include information (e.g., historical logs) relating to events on the computer 100, to identify a source of the pestware 122, 124 or pestware-related activities, which may be reported by the reporting module 114 to a centralized data store for subsequent pestware management purposes.");

4:12-15 ("The basic functions of the detection engine 102 is to compare files, processes and registry entries on the protected computer against known pestware definitions and characteristics."); 5:22-29 ("The activity monitor 116 in several embodiments monitors activities on the computer and stores information about the activities in the activity log 120 so as to assist the research module 108 in identifying activities associated with pestware and the source of the pestware. In some embodiments, for example, the activity log 120 includes a list of processes that are running on the protected computer and the files that are associated with the processes."); 8:33-38 ("As depicted in FIG. 4, if the source of the suspicious object(s) is identified (Block 408), then the source of the suspicious object(s) is then reported (e.g., to a pestware research entity). In this way, the suspicious objects and the web sites originating the suspicious objects may be further researched to establish the extent to which they may be a threat.").

Second, the Asserted Claims of the '243 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '243 Patent describes determining the source of computer programs using conventional computing devices, computer programs, computer objects, storage media, and networks well-known in the prior art. *See, e.g.*, *id.* at 1:35-36 ("The present invention relates to computer system management."); *id.* at 3:5-7 ("Those of skill in the art can easily adapt these implementations for other types of operating systems or computer systems."). Although the embodiments of the invention described with reference to the drawings comprise computer processes performed in computer apparatus and computer apparatus itself, the invention also extends to computer programs, particularly computer programs on or in a carrier, adapted for putting the invention into practice. Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of identifying the origin or source of

code or a computer program. The program may be in the form of processor-executable instructions such as in partially compiled form, or in any other form suitable for use in the implementation of the processes according to the invention. The carrier may be any entity or device capable of carrying the program. For example, the carrier may comprise a non-transitory computer readable medium including processor-executable instructions. *See* '243 Patent at claim 12. Simply identifying an overarching desirable outcome without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intell. Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic computer components and do not claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '243 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '243 Patent are ineligible because they

would preempt the entire field of tracing where certain harmful content originated, that is, receiving information, analyzing information, and outputting a result.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '243 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions. Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs' application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '243 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not. Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility

claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

IX. INVALIDITY CONTENTIONS FOR THE '932 PATENT

A. General State of the Art at the Time of the Alleged Inventions

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '932 Patent, may provide background and context pertinent to the teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '932 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 932-G-1 through 932-G-28 identify where each limitation of the Asserted Claims of the '932 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 932-G-1 through 932-G-28, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 932-G-1 through 932-G-28

and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combinations in Section IV.E, *infra*.

'932 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 932-G-1	U.S. Patent No. 8,321,910 ("English")	U.S.	Jan. 6, 2006	Nov. 27, 2012
Ex. 932-G-2	U.S. Patent Application Publication No. 2003/0084349 ("Friedrichs")	U.S.	Aug. 9, 2002	May 1, 2003
Ex. 932-G-3	U.S. Patent Publication No. 2006/0179484 ("Scrimsher")	U.S.	Feb. 9, 2005	Aug. 10, 2006
Ex. 932-G-4	U.S. Patent No. 7,093,292 ("Pantuso")	U.S.	Feb. 8, 2002	Aug. 15, 2006
Ex. 932-G-5	U.S. Patent No. 7,558,796 ("Bromwich")	U.S.	May 19, 2005	Jul. 7, 2009
Ex. 932-G-6	PCT Application No. 60/762,359 ("Kronenberg")	U.S.	Jan. 25, 2006	
Ex. 932-G-7	U.S. Patent No. 7,784,098 ("Fan")	U.S.	Jul. 14, 2005	Aug. 24, 2010

'932 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 932-G-8	U.S. Patent Application Publication No. 2006/0206937 ("Repasi")	U.S.	Feb. 24, 2006	Sep. 14, 2006
Ex. 932-G-9	U.S. Patent Application Publication 2004/0225877 ("Huang")	U.S.	Mar. 3, 2004	Nov. 11, 2004
Ex. 932-G-10	U.S. Patent No. 7,756,834 ("Masters")	U.S.	Nov. 3, 2005	Jul. 13, 2010
Ex. 932-G-11	U.S. Patent No. 7,979,889 ("Gladstone")	U.S.	Jan. 7, 2005	Jul. 12, 2011
Ex. 932-G-12	U.S. Patent Application Publication No. 2009/0144826 ("Piccard 826")	U.S.	Jun. 30, 2005	Jun. 4, 2009
Ex. 932-G-13	U.S. Patent Application Publication No. 2007/0150957 ("Hartrell 957")	U.S.	Dec. 28, 2005	Jun. 28, 2007
Ex. 932-G-14	WO 2001/016709 ("Moran")	U.S.	Aug. 30, 2000	Mar. 8, 2001
Ex. 932-G-15	JP 2004-086241 ("Sekiguchi")	Japan	Aug. 22, 2002	Mar. 18, 2004
Ex. 932-G-16	U.S. Patent No. 8,117,659 ("Hartrell 659")	U.S.	Dec. 28, 2005	Feb. 14, 2012
Ex. 932-G-18	U.S. Patent No. 8,627,458 B2 ("Muttik")	U.S.	Jan. 13, 2004	Jan. 7, 2014
Ex. 932-G-19	U.S. Patent No. 7,934,103 B2 ("Kidron")	U.S.	Apr. 15, 2003	Apr. 26, 2011
Ex. 932-G-20	US Patent Publication No. 2006/0070130 ("Costea")	U.S.	Sep. 27, 2004	Mar. 30, 2006
Ex. 932-G-21	U.S. Patent No. 7,231,667 ("Jordan")	U.S.	May 29, 2003	Jun. 12, 2007

'932 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 932-G-22	U.S. Patent No. 7,571,482 ("Polyakov 482")	U.S.	Jun. 28, 2005	Aug. 4, 2009
Ex. 932-G-23	U.S. Patent No. 7,647,636 ("Polyakov 636")	U.S.	Aug. 24, 2005	Jan. 12, 2010
Ex. 932-G-24	U.S. Patent No. 9,129,111 ("Rothwell")	U.S.	Jan. 18, 2006	Sep. 8, 2015
Ex. 932-G-25	U.S. Patent No. 8,516,583 ("Thomas")	U.S.	Mar. 31, 2005	Aug. 20, 2013
Ex. 932-G-26	U.S. Publication No. 2007/0016951 ("Piccard 951")	U.S.	Jul. 13, 2005	Jan. 18, 2007

'932 Patent Prior Art Publications				
Ex. No.	**Title**	**Date of Publication**	**Author**	**Publisher**
Ex. 932-G-17	Li, et al., UCLog: A Unified, Correlated Logging Architecture for Intrusion Detection¸Int'l Conf. on Telecomm. Sys.-Modelling & Analysis (2004) ("Li")	2004	Li, Z., Taylor, J., Partridge, E., Zhou, Y., Yurcik, W., Abad, C., Barlow, J. & Rosendale, J.	12th International Conference on Telecommunication Systems-Modeling and Analysis (ICTSM)
Ex. 932-G-27	Salvador Mandujano Vergara, A multiagent approach to outbound intrusion detection (2004) (Ph.D. Thesis, Instituto Tecnológico y de Estudios Superires de Monterrey) ("Mandujano")	2004	Salvador Mandujano Vergara	Instituto Tecnológico y de Estudios Superires de Monterrey

'932 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 932-G-28	SurfControl Web Filter and Email Filter ("SurfControl")
	System and/or product art received pursuant to Forcepoint's subpoena to Trend Micro, Inc. (dated October 27, 2023)
	System and/or product art received pursuant to Forcepoint's subpoena to Sophos Ltd. (dated October 31, 2023)

'932 Patent Additional Prior Art/Background Art
U.S. Patent No. 7,673,341 ("Kramer 341")
U.S. Patent No. 7,818,800 ("Lemley")
U.S. Patent No. 8,495,743 ("Kraemer")
U.S. Patent No. 8,205,261 ("Andruss 261")
U.S. Patent No. 7,854,006 ("Andruss 006")
U.S. Patent No. 7,765,592 ("Wang")
U.S. Patent No. 7,448,084 ("Apap")
U.S. Patent No. 6,973,577 ("Kouznetsov")
U.S. Patent No. 8,090,816 ("Deshmukh")
U.S. Patent Application Publication No. 2007/0240212 ("Matalytski")
U.S. Patent Application Publication No. 2005/0108562 ("Khazan")
U.S. Patent Application Publication No. 2007/0006304 ("Kramer 304")
Rabek, Jesse C., et al. "Detection of injected, dynamically generated, and obfuscated malicious code." *Proceedings of the 2003 ACM workshop on Rapid malcode*. 2003. ("Rabek")
Moffie, Micha, and David Kaeli. "ASM: application security monitor." *ACM SIGARCH Computer Architecture News* 33.5 (2005): 21-26. ("Moffie")
Chari, Suresh N., and Pau-Chen Cheng. "BlueBox: A policy-driven, host-based intrusion detection system." *ACM Transactions on Information and System Security (TISSEC)* 6.2 (2003): 173-200. ("Chari")

’932 Patent Additional Prior Art/Background Art
Vasudevan, Amit, and Ramesh Yerraballi. “Spike: engineering malware analysis tools using unobtrusive binary-instrumentation.” *Proceedings of the 29th Australasian Computer Science Conference-Volume 48*. 2006. (“Vasudevan”)

Furthermore, with respect to the ’932 Patent, under pre-AIA 35 U.S.C. §§ 102(a), (b), and (g)(2), Forcepoint reserves the right to identify additional prior art systems developed prior to April 20, 2006. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656, at *8-11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery.

D. Anticipation

At least under Plaintiffs’ apparent infringement theory, the Asserted Claims of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Muttik as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Costea as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Jordan as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Polyakov 482 as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted

Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Polyakov 636 as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by English as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Thomas as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Rothwell as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Hartrell 957 as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Fan as set forth in the attached claim chart. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 1-15 of the ’932 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Mandujano as set forth in the attached claim chart.

E. Obviousness

At least under Plaintiffs’ apparent infringement theory, the Asserted Claims of the ’932 Patent are rendered obvious by the references identified in the attached claim charts, either alone or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted ’932 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to

reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint's anticipation contentions, which shall not be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	In Combination With
English	Friedrichs
English	Scrimsher
English	Pantuso
English	Bromwich
English	Kronenberg
English	Fan
English	Repasi
English	Huang
English	Masters
English	Gladstone
English	Piccard 826
English	Hartrell 957
English	Moran
English	Sekiguchi
English	Hartrell 659
English	Muttik
English	Kidron
English	Costea

Primary Reference	In Combination With
English	Jordan
English	Polyakov 482
English	Polyakov 636
English	Rothwell
English	Thomas
English	Li
English	Piccard 951
English	Mandujano
English	SurfControl
Friedrichs	English
Friedrichs	Scrimsher
Friedrichs	Pantuso
Friedrichs	Bromwich
Friedrichs	Kronenberg
Friedrichs	Fan
Friedrichs	Repasi
Friedrichs	Huang
Friedrichs	Masters
Friedrichs	Gladstone
Friedrichs	Piccard 826
Friedrichs	Hartrell 957
Friedrichs	Moran
Friedrichs	Sekiguchi

Primary Reference	In Combination With
Friedrichs	Hartrell 659
Friedrichs	Muttik
Friedrichs	Kidron
Friedrichs	Costea
Friedrichs	Jordan
Friedrichs	Polyakov 482
Friedrichs	Polyakov 636
Friedrichs	Rothwell
Friedrichs	Thomas
Friedrichs	Li
Friedrichs	Piccard 951
Friedrichs	Mandujano
Friedrichs	SurfControl
Scrimsher	English
Scrimsher	Friedrichs
Scrimsher	Pantuso
Scrimsher	Bromwich
Scrimsher	Kronenberg
Scrimsher	Fan
Scrimsher	Repasi
Scrimsher	Huang
Scrimsher	Masters
Scrimsher	Gladstone

Primary Reference	In Combination With
Scrimsher	Piccard 826
Scrimsher	Hartrell 957
Scrimsher	Moran
Scrimsher	Sekiguchi
Scrimsher	Hartrell 659
Scrimsher	Muttik
Scrimsher	Kidron
Scrimsher	Costea
Scrimsher	Jordan
Scrimsher	Polyakov 482
Scrimsher	Polyakov 636
Scrimsher	Rothwell
Scrimsher	Thomas
Scrimsher	Li
Scrimsher	Piccard 951
Scrimsher	Mandujano
Scrimsher	SurfControl
Pantuso	English
Pantuso	Friedrichs
Pantuso	Scrimsher
Pantuso	Bromwich
Pantuso	Kronenberg
Pantuso	Fan

Primary Reference	In Combination With
Pantuso	Repasi
Pantuso	Huang
Pantuso	Masters
Pantuso	Gladstone
Pantuso	Piccard 826
Pantuso	Hartrell 957
Pantuso	Moran
Pantuso	Sekiguchi
Pantuso	Hartrell 659
Pantuso	Muttik
Pantuso	Kidron
Pantuso	Costea
Pantuso	Jordan
Pantuso	Polyakov 482
Pantuso	Polyakov 636
Pantuso	Rothwell
Pantuso	Thomas
Pantuso	Li
Pantuso	Piccard 951
Pantuso	Mandujano
Pantuso	SurfControl
Bromwich	English
Bromwich	Friedrichs

Primary Reference	In Combination With
Bromwich	Scrimsher
Bromwich	Pantuso
Bromwich	Kronenberg
Bromwich	Fan
Bromwich	Repasi
Bromwich	Huang
Bromwich	Masters
Bromwich	Gladstone
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Bromwich	Moran
Bromwich	Sekiguchi
Bromwich	Hartrell 659
Bromwich	Muttik
Bromwich	Kidron
Bromwich	Costea
Bromwich	Jordan
Bromwich	Polyakov 482
Bromwich	Polyakov 636
Bromwich	Rothwell
Bromwich	Thomas
Bromwich	Li
Bromwich	Piccard 951

Primary Reference	In Combination With
Bromwich	Mandujano
Bromwich	SurfControl
Kronenberg	English
Kronenberg	Friedrichs
Kronenberg	Scrimsher
Kronenberg	Pantuso
Kronenberg	Bromwich
Kronenberg	Fan
Kronenberg	Repasi
Kronenberg	Huang
Kronenberg	Masters
Kronenberg	Gladstone
Kronenberg	Piccard 826
Kronenberg	Hartrell 957
Kronenberg	Moran
Kronenberg	Sekiguchi
Kronenberg	Hartrell 659
Kronenberg	Muttik
Kronenberg	Kidron
Kronenberg	Costea
Kronenberg	Jordan
Kronenberg	Polyakov 482
Kronenberg	Polyakov 636

Primary Reference	In Combination With
Kronenberg	Rothwell
Kronenberg	Thomas
Kronenberg	Li
Kronenberg	Piccard 951
Kronenberg	Mandujano
Kronenberg	SurfControl
Fan	English
Fan	Friedrichs
Fan	Scrimsher
Fan	Pantuso
Fan	Bromwich
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Fan	Piccard 826
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Fan	Moran
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Fan	Muttik
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Primary Reference	In Combination With
Fan	Costea
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Fan	Polyakov 482
Fan	Polyakov 636
Fan	Rothwell
Fan	Thomas
Fan	Li
Fan	Piccard 951
Fan	Mandujano
Fan	SurfControl
Masters	English
Masters	Friedrichs
Masters	Scrimsher
Masters	Pantuso
Masters	Bromwich
Masters	Kronenberg
Masters	Fan
Masters	Repasi
Masters	Huang
Masters	Gladstone
Masters	Piccard 826
Masters	Hartrell 957
Masters	Moran

Primary Reference	In Combination With
Masters	Sekiguchi
Masters	Hartrell 659
Masters	Muttik
Masters	Kidron
Masters	Costea
Masters	Jordan
Masters	Polyakov 482
Masters	Polyakov 636
Masters	Rothwell
Masters	Thomas
Masters	Li
Masters	Piccard 951
Masters	Mandujano
Masters	SurfControl
Gladstone	English
Gladstone	Friedrichs
Gladstone	Scrimsher
Gladstone	Pantuso
Gladstone	Bromwich
Gladstone	Kronenberg
Gladstone	Fan
Gladstone	Repasi
Gladstone	Huang

Primary Reference	In Combination With
Gladstone	Masters
Gladstone	Piccard 826
Gladstone	Hartrell 957
Gladstone	Moran
Gladstone	Sekiguchi
Gladstone	Hartrell 659
Gladstone	Muttik
Gladstone	Kidron
Gladstone	Costea
Gladstone	Jordan
Gladstone	Polyakov 482
Gladstone	Polyakov 636
Gladstone	Rothwell
Gladstone	Thomas
Gladstone	Li
Gladstone	Piccard 951
Gladstone	Mandujano
Gladstone	SurfControl
Piccard 826	English
Piccard 826	Friedrichs
Piccard 826	Scrimsher
Piccard 826	Pantuso
Piccard 826	Bromwich

Primary Reference	In Combination With
Piccard 826	Kronenberg
Piccard 826	Fan
Piccard 826	Repasi
Piccard 826	Huang
Piccard 826	Masters
Piccard 826	Gladstone
Piccard 826	Hartrell 957
Piccard 826	Moran
Piccard 826	Sekiguchi
Piccard 826	Hartrell 659
Piccard 826	Muttik
Piccard 826	Kidron
Piccard 826	Costea
Piccard 826	Jordan
Piccard 826	Polyakov 482
Piccard 826	Polyakov 636
Piccard 826	Rothwell
Piccard 826	Thomas
Piccard 826	Li
Piccard 826	Piccard 951
Piccard 826	Mandujano
Piccard 826	SurfControl
Hartrell 957	English

Primary Reference	In Combination With
Hartrell 957	Friedrichs
Hartrell 957	Scrimsher
Hartrell 957	Pantuso
Hartrell 957	Bromwich
Hartrell 957	Kronenberg
Hartrell 957	Fan
Hartrell 957	Repasi
Hartrell 957	Huang
Hartrell 957	Masters
Hartrell 957	Gladstone
Hartrell 957	Piccard 826
Hartrell 957	Moran
Hartrell 957	Sekiguchi
Hartrell 957	Hartrell 659
Hartrell 957	Muttik
Hartrell 957	Kidron
Hartrell 957	Costea
Hartrell 957	Jordan
Hartrell 957	Polyakov 482
Hartrell 957	Polyakov 636
Hartrell 957	Rothwell
Hartrell 957	Thomas
Hartrell 957	Li

Primary Reference	In Combination With
Hartrell 957	Piccard 951
Hartrell 957	Mandujano
Hartrell 957	SurfControl
Moran	English
Moran	Friedrichs
Moran	Scrimsher
Moran	Pantuso
Moran	Bromwich
Moran	Kronenberg
Moran	Fan
Moran	Repasi
Moran	Huang
Moran	Masters
Moran	Gladstone
Moran	Piccard 826
Moran	Hartrell 957
Moran	Sekiguchi
Moran	Hartrell 659
Moran	Muttik
Moran	Kidron
Moran	Costea
Moran	Jordan
Moran	Polyakov 482

Primary Reference	In Combination With
Moran	Polyakov 636
Moran	Rothwell
Moran	Thomas
Moran	Li
Moran	Piccard 951
Moran	Mandujano
Moran	SurfControl
Hartrell 659	English
Hartrell 659	Friedrichs
Hartrell 659	Scrimsher
Hartrell 659	Pantuso
Hartrell 659	Bromwich
Hartrell 659	Kronenberg
Hartrell 659	Fan
Hartrell 659	Repasi
Hartrell 659	Huang
Hartrell 659	Masters
Hartrell 659	Gladstone
Hartrell 659	Piccard 826
Hartrell 659	Hartrell 957
Hartrell 659	Moran
Hartrell 659	Sekiguchi
Hartrell 659	Muttik

Primary Reference	In Combination With
Hartrell 659	Kidron
Hartrell 659	Costea
Hartrell 659	Jordan
Hartrell 659	Polyakov 482
Hartrell 659	Polyakov 636
Hartrell 659	Rothwell
Hartrell 659	Thomas
Hartrell 659	Li
Hartrell 659	Piccard 951
Hartrell 659	Mandujano
Hartrell 659	SurfControl
Muttik	English
Muttik	Friedrichs
Muttik	Scrimsher
Muttik	Pantuso
Muttik	Bromwich
Muttik	Kronenberg
Muttik	Fan
Muttik	Repasi
Muttik	Huang
Muttik	Masters
Muttik	Gladstone
Muttik	Piccard 826

Primary Reference	In Combination With
Muttik	Hartrell 957
Muttik	Moran
Muttik	Sekiguchi
Muttik	Hartrell 659
Muttik	Kidron
Muttik	Costea
Muttik	Jordan
Muttik	Polyakov 482
Muttik	Polyakov 636
Muttik	Rothwell
Muttik	Thomas
Muttik	Li
Muttik	Piccard 951
Muttik	Mandujano
Muttik	SurfControl
Kidron	English
Kidron	Friedrichs
Kidron	Scrimsher
Kidron	Pantuso
Kidron	Bromwich
Kidron	Kronenberg
Kidron	Fan
Kidron	Repasi

Primary Reference	In Combination With
Kidron	Huang
Kidron	Masters
Kidron	Gladstone
Kidron	Piccard 826
Kidron	Hartrell 957
Kidron	Moran
Kidron	Sekiguchi
Kidron	Hartrell 659
Kidron	Muttik
Kidron	Costea
Kidron	Jordan
Kidron	Polyakov 482
Kidron	Polyakov 636
Kidron	Rothwell
Kidron	Thomas
Kidron	Li
Kidron	Piccard 951
Kidron	Mandujano
Kidron	SurfControl
Costea	English
Costea	Friedrichs
Costea	Scrimsher
Costea	Pantuso

Primary Reference	In Combination With
Costea	Bromwich
Costea	Kronenberg
Costea	Fan
Costea	Repasi
Costea	Huang
Costea	Masters
Costea	Gladstone
Costea	Piccard 826
Costea	Hartrell 957
Costea	Moran
Costea	Sekiguchi
Costea	Hartrell 659
Costea	Muttik
Costea	Kidron
Costea	Jordan
Costea	Polyakov 482
Costea	Polyakov 636
Costea	Rothwell
Costea	Thomas
Costea	Li
Costea	Piccard 951
Costea	Mandujano
Costea	SurfControl

Primary Reference	In Combination With
Jordan	English
Jordan	Friedrichs
Jordan	Scrimsher
Jordan	Pantuso
Jordan	Bromwich
Jordan	Kronenberg
Jordan	Fan
Jordan	Repasi
Jordan	Huang
Jordan	Masters
Jordan	Gladstone
Jordan	Piccard 826
Jordan	Hartrell 957
Jordan	Moran
Jordan	Sekiguchi
Jordan	Hartrell 659
Jordan	Muttik
Jordan	Kidron
Jordan	Costea
Jordan	Polyakov 482
Jordan	Polyakov 636
Jordan	Rothwell
Jordan	Thomas

Primary Reference	In Combination With
Jordan	Li
Jordan	Piccard 951
Jordan	Mandujano
Jordan	SurfControl
Polyakov 482	English
Polyakov 482	Friedrichs
Polyakov 482	Scrimsher
Polyakov 482	Pantuso
Polyakov 482	Bromwich
Polyakov 482	Kronenberg
Polyakov 482	Fan
Polyakov 482	Repasi
Polyakov 482	Huang
Polyakov 482	Masters
Polyakov 482	Gladstone
Polyakov 482	Piccard 826
Polyakov 482	Hartrell 957
Polyakov 482	Moran
Polyakov 482	Sekiguchi
Polyakov 482	Hartrell 659
Polyakov 482	Muttik
Polyakov 482	Kidron
Polyakov 482	Costea

Primary Reference	In Combination With
Polyakov 482	Jordan
Polyakov 482	Polyakov 636
Polyakov 482	Rothwell
Polyakov 482	Thomas
Polyakov 482	Li
Polyakov 482	Piccard 951
Polyakov 482	Mandujano
Polyakov 482	SurfControl
Polyakov 636	English
Polyakov 636	Friedrichs
Polyakov 636	Scrimsher
Polyakov 636	Pantuso
Polyakov 636	Bromwich
Polyakov 636	Kronenberg
Polyakov 636	Fan
Polyakov 636	Repasi
Polyakov 636	Huang
Polyakov 636	Masters
Polyakov 636	Gladstone
Polyakov 636	Piccard 826
Polyakov 636	Hartrell 957
Polyakov 636	Moran
Polyakov 636	Sekiguchi

Primary Reference	In Combination With
Polyakov 636	Hartrell 659
Polyakov 636	Muttik
Polyakov 636	Kidron
Polyakov 636	Costea
Polyakov 636	Jordan
Polyakov 636	Polyakov 482
Polyakov 636	Rothwell
Polyakov 636	Thomas
Polyakov 636	Li
Polyakov 636	Piccard 951
Polyakov 636	Mandujano
Polyakov 636	SurfControl
Rothwell	English
Rothwell	Friedrichs
Rothwell	Scrimsher
Rothwell	Pantuso
Rothwell	Bromwich
Rothwell	Kronenberg
Rothwell	Fan
Rothwell	Repasi
Rothwell	Huang
Rothwell	Masters
Rothwell	Gladstone

Primary Reference	In Combination With
Rothwell	Piccard 826
Rothwell	Hartrell 957
Rothwell	Moran
Rothwell	Sekiguchi
Rothwell	Hartrell 659
Rothwell	Muttik
Rothwell	Kidron
Rothwell	Costea
Rothwell	Jordan
Rothwell	Polyakov 482
Rothwell	Polyakov 636
Rothwell	Thomas
Rothwell	Li
Rothwell	Piccard 951
Rothwell	Mandujano
Rothwell	SurfControl
Thomas	English
Thomas	Friedrichs
Thomas	Scrimsher
Thomas	Pantuso
Thomas	Bromwich
Thomas	Kronenberg
Thomas	Fan

Primary Reference	In Combination With
Thomas	Repasi
Thomas	Huang
Thomas	Masters
Thomas	Gladstone
Thomas	Piccard 826
Thomas	Hartrell 957
Thomas	Moran
Thomas	Sekiguchi
Thomas	Hartrell 659
Thomas	Muttik
Thomas	Kidron
Thomas	Costea
Thomas	Jordan
Thomas	Polyakov 482
Thomas	Polyakov 636
Thomas	Rothwell
Thomas	Li
Thomas	Piccard 951
Thomas	Mandujano
Thomas	SurfControl
Piccard 951	English
Piccard 951	Friedrichs
Piccard 951	Scrimsher

Primary Reference	In Combination With
Piccard 951	Pantuso
Piccard 951	Bromwich
Piccard 951	Kronenberg
Piccard 951	Fan
Piccard 951	Repasi
Piccard 951	Huang
Piccard 951	Masters
Piccard 951	Gladstone
Piccard 951	Piccard 826
Piccard 951	Hartrell 957
Piccard 951	Moran
Piccard 951	Sekiguchi
Piccard 951	Hartrell 659
Piccard 951	Muttik
Piccard 951	Kidron
Piccard 951	Costea
Piccard 951	Jordan
Piccard 951	Polyakov 482
Piccard 951	Polyakov 636
Piccard 951	Rothwell
Piccard 951	Li
Piccard 951	Thomas
Piccard 951	Mandujano

Primary Reference	In Combination With
Piccard 951	SurfControl
Mandujano	English
Mandujano	Friedrichs
Mandujano	Scrimsher
Mandujano	Pantuso
Mandujano	Bromwich
Mandujano	Kronenberg
Mandujano	Fan
Mandujano	Repasi
Mandujano	Huang
Mandujano	Masters
Mandujano	Gladstone
Mandujano	Piccard 826
Mandujano	Hartrell 957
Mandujano	Moran
Mandujano	Sekiguchi
Mandujano	Hartrell 659
Mandujano	Muttik
Mandujano	Kidron
Mandujano	Costea
Mandujano	Jordan
Mandujano	Polyakov 482
Mandujano	Polyakov 636

Primary Reference	In Combination With
Mandujano	Rothwell
Mandujano	Li
Mandujano	Piccard 951
Mandujano	Thomas
Mandujano	SurfControl
Muttik	Kidron + Costea
Muttik	Kidron + Polyakov 482
Muttik	Kidron + English
Muttik	Kidron + Hartrell 957
Muttik	Kidron + Sekiguchi
Muttik	Kidron + Friedrichs
Muttik	Kidron + Scrimsher
Muttik	Kidron + Pantuso
Muttik	Kidron + Piccard 826
Muttik	Kidron + Piccard 951
Muttik	Kidron + Hartrell 659
Muttik	Kidron + Mandujano
Muttik	Costea + Jordan
Muttik	Costea + Polyakov 482
Muttik	Costea + Polyakov 636
Muttik	Costea + English
Muttik	Costea + Thomas
Muttik	Costea + Rothwell

Primary Reference	In Combination With
Muttik	Costea + Hartrell 957
Muttik	Costea + Fan
Muttik	Costea + Sekiguchi
Muttik	Costea + Friedrichs
Muttik	Costea + Scrimsher
Muttik	Costea + Pantuso
Muttik	Costea + Piccard 826
Muttik	Costea + Piccard 951
Muttik	Costea + Hartrell 659
Muttik	Costea + Mandujano
Muttik	Jordan + Polyakov 482
Muttik	Jordan + English
Muttik	Jordan + Hartrell 957
Muttik	Jordan + Sekiguchi
Muttik	Jordan + Friedrichs
Muttik	Jordan + Scrimsher
Muttik	Jordan + Pantuso
Muttik	Jordan + Piccard 826
Muttik	Jordan + Piccard 951
Muttik	Jordan + Hartrell 659
Muttik	Jordan + Mandujano
Muttik	Polyakov 482 + Polyakov 636
Muttik	Polyakov 482 + English

Primary Reference	In Combination With
Muttik	Polyakov 482 + Thomas
Muttik	Polyakov 482 + Rothwell
Muttik	Polyakov 482 + Hartrell 957
Muttik	Polyakov 482 + Fan
Muttik	Polyakov 482 + Sekiguchi
Muttik	Polyakov 482 + Friedrichs
Muttik	Polyakov 482 + Scrimsher
Muttik	Polyakov 482 + Pantuso
Muttik	Polyakov 482 + Piccard 826
Muttik	Polyakov 482 + Piccard 951
Muttik	Polyakov 482 + Hartrell 659
Muttik	Polyakov 482 + Mandujano
Muttik	Polyakov 636 + English
Muttik	Polyakov 636 + Hartrell 957
Muttik	Polyakov 636 + Sekiguchi
Muttik	Polyakov 636 + Friedrichs
Muttik	Polyakov 636 + Scrimsher
Muttik	Polyakov 636 + Pantuso
Muttik	Polyakov 636 + Piccard 826
Muttik	Polyakov 636 + Piccard 951
Muttik	Polyakov 636 + Hartrell 659
Muttik	Polyakov 636 + Mandujano
Muttik	English + Thomas

Primary Reference	In Combination With
Muttik	English + Rothwell
Muttik	English + Hartrell 957
Muttik	English + Fan
Muttik	English + Sekiguchi
Muttik	English + Friedrichs
Muttik	English + Scrimsher
Muttik	English + Piccard 826
Muttik	English + Piccard 951
Muttik	English + Hartrell 659
Muttik	English + Mandujano
Muttik	Thomas + Hartrell 957
Muttik	Thomas + Sekiguchi
Muttik	Thomas + Friedrichs
Muttik	Thomas + Scrimsher
Muttik	Thomas + Pantuso
Muttik	Thomas + Piccard 826
Muttik	Thomas + Piccard 951
Muttik	Thomas + Hartrell 659
Muttik	Thomas + Mandujano
Muttik	Rothwell + Hartrell 957
Muttik	Rothwell + Sekiguchi
Muttik	Rothwell + Friedrichs
Muttik	Rothwell + Scrimsher

Primary Reference	In Combination With
Muttik	Rothwell + Pantuso
Muttik	Rothwell + Piccard 826
Muttik	Rothwell + Piccard 951
Muttik	Rothwell + Hartrell 659
Muttik	Rothwell + Mandujano
Muttik	Hartrell 659 + Fan
Muttik	Fan + Sekiguchi
Muttik	Fan + Friedrichs
Muttik	Fan + Scrimsher
Muttik	Fan + Pantuso
Muttik	Fan + Piccard 826
Muttik	Fan + Piccard 951
Muttik	Fan + Hartrell 659
Muttik	Fan + Mandujano
Muttik	Mandujano + Scrimsher
Muttik	Mandujano + Pantuso
Kidron	Costea + Polyakov 482
Kidron	Costea + English
Kidron	Costea + Hartrell 957
Kidron	Costea + Piccard 826
Kidron	Costea + Piccard 951
Kidron	Costea + Hartrell 659
Kidron	Costea + Mandujano

Primary Reference	In Combination With
Kidron	Jordan + Hartrell 957
Kidron	Jordan + Piccard 826
Kidron	Jordan + Piccard 951
Kidron	Jordan + Hartrell 659
Kidron	Jordan + Mandujano
Kidron	Polyakov 482 + Hartrell 957
Kidron	Polyakov 482 + Sekiguchi
Kidron	Polyakov 482 + Friedrichs
Kidron	Polyakov 482 + Scrimsher
Kidron	Polyakov 482 + Piccard 826
Kidron	Polyakov 482 + Piccard 951
Kidron	Polyakov 482 + Hartrell 659
Kidron	Polyakov 482 + Mandujano
Kidron	Polyakov 636 + English
Kidron	Polyakov 636 + Hartrell 957
Kidron	Polyakov 636 + Friedrichs
Kidron	Polyakov 636 + Scrimsher
Kidron	Polyakov 636 + Pantuso
Kidron	Polyakov 636 + Piccard 826
Kidron	Polyakov 636 + Piccard 951
Kidron	Polyakov 636 + Hartrell 659
Kidron	Polyakov 636 + Mandujano
Kidron	English + Hartrell 957

Primary Reference	In Combination With
Kidron	English + Friedrichs
Kidron	English + Scrimsher
Kidron	English + Pantuso
Kidron	English + Piccard 826
Kidron	English + Piccard 951
Kidron	English + Hartrell 659
Kidron	English + Mandujano
Kidron	Thomas + Hartrell 957
Kidron	Thomas + Friedrichs
Kidron	Thomas + Scrimsher
Kidron	Thomas + Pantuso
Kidron	Thomas + Piccard 826
Kidron	Thomas + Piccard 951
Kidron	Thomas + Hartrell 659
Kidron	Thomas + Mandujano
Kidron	Rothwell + Hartrell 957
Kidron	Rothwell + Friedrichs
Kidron	Rothwell + Scrimsher
Kidron	Rothwell + Pantuso
Kidron	Rothwell + Piccard 826
Kidron	Rothwell + Piccard 951
Kidron	Rothwell + Hartrell 659
Kidron	Rothwell + Mandujano

Primary Reference	In Combination With
Kidron	Hartrell 659 + Fan
Kidron	Fan + Sekiguchi
Kidron	Fan + Friedrichs
Kidron	Fan + Scrimsher
Kidron	Fan + Pantuso
Kidron	Fan + Piccard 826
Kidron	Fan + Piccard 951
Kidron	Fan + Hartrell 659
Kidron	Fan + Mandujano
Costea	Jordan + Hartrell 957
Costea	Jordan + Mandujano
Costea	Jordan + Scrimsher
Costea	Jordan + Pantuso
Costea	Jordan + Piccard 826
Costea	Jordan + Piccard 951
Costea	Jordan + Hartrell 659
Costea	Polyakov 482 + Hartrell 957
Costea	Polyakov 482 + Sekiguchi
Costea	Polyakov 482 + Friedrichs
Costea	Polyakov 482 + Scrimsher
Costea	Polyakov 482 + Piccard 826
Costea	Polyakov 482 + Piccard 951
Costea	Polyakov 482 + Hartrell 659

Primary Reference	In Combination With
Costea	Polyakov 482 + Mandujano
Costea	Polyakov 636 + English
Costea	Polyakov 636 + Hartrell 957
Costea	Polyakov 636 + Friedrichs
Costea	Polyakov 636 + Scrimsher
Costea	Polyakov 636 + Pantuso
Costea	Polyakov 636 + Piccard 826
Costea	Polyakov 636 + Piccard 951
Costea	Polyakov 636 + Hartrell 659
Costea	Polyakov 636 + Mandujano
Costea	English + Hartrell 957
Costea	English + Friedrichs
Costea	English + Scrimsher
Costea	English + Pantuso
Costea	English + Piccard 826
Costea	English + Piccard 951
Costea	English + Hartrell 659
Costea	English + Mandujano
Costea	Thomas + Hartrell 957
Costea	Thomas + Friedrichs
Costea	Thomas + Scrimsher
Costea	Thomas + Pantuso
Costea	Thomas + Piccard 826

Primary Reference	In Combination With
Costea	Thomas + Piccard 951
Costea	Thomas + Hartrell 659
Costea	Thomas + Mandujano
Costea	Rothwell + Hartrell 957
Costea	Rothwell + Friedrichs
Costea	Rothwell + Scrimsher
Costea	Rothwell + Pantuso
Costea	Rothwell + Piccard 826
Costea	Rothwell + Piccard 951
Costea	Rothwell + Hartrell 659
Costea	Rothwell + Mandujano
Costea	Hartrell 957 + Scrimsher
Costea	Hartrell 957 + Pantuso
Costea	Hartrell 659 + Fan
Costea	Fan + Sekiguchi
Costea	Fan + Friedrichs
Costea	Fan + Scrimsher
Costea	Fan + Pantuso
Costea	Fan + Piccard 826
Costea	Fan + Piccard 951
Costea	Fan + Hartrell 659
Costea	Fan + Mandujano
Costea	Scrimsher + Pantuso

Primary Reference	In Combination With
Costea	Mandujano + Scrimsher
Costea	Mandujano + Pantuso
Jordan	Polyakov 482 + Hartrell 957
Jordan	Polyakov 482 + Sekiguchi
Jordan	Polyakov 482 + Friedrichs
Jordan	Polyakov 482 + Scrimsher
Jordan	Polyakov 482 + Piccard 826
Jordan	Polyakov 482 + Piccard 951
Jordan	Polyakov 482 + Hartrell 659
Jordan	Polyakov 482 + Mandujano
Jordan	Polyakov 636 + English
Jordan	Polyakov 636 + Hartrell 957
Jordan	Polyakov 636 + Friedrichs
Jordan	Polyakov 636 + Scrimsher
Jordan	Polyakov 636 + Pantuso
Jordan	Polyakov 636 + Piccard 826
Jordan	Polyakov 636 + Piccard 951
Jordan	Polyakov 636 + Hartrell 659
Jordan	Polyakov 636 + Mandujano
Jordan	English + Hartrell 957
Jordan	English + Friedrichs
Jordan	English + Scrimsher
Jordan	English + Pantuso

Primary Reference	In Combination With
Jordan	English + Piccard 826
Jordan	English + Piccard 951
Jordan	English + Hartrell 659
Jordan	English + Mandujano
Jordan	Thomas + Hartrell 957
Jordan	Thomas + Friedrichs
Jordan	Thomas + Scrimsher
Jordan	Thomas + Pantuso
Jordan	Thomas + Piccard 826
Jordan	Thomas + Piccard 951
Jordan	Thomas + Hartrell 659
Jordan	Thomas + Mandujano
Jordan	Rothwell + Hartrell 957
Jordan	Rothwell + Friedrichs
Jordan	Rothwell + Scrimsher
Jordan	Rothwell + Pantuso
Jordan	Rothwell + Piccard 826
Jordan	Rothwell + Piccard 951
Jordan	Rothwell + Hartrell 659
Jordan	Rothwell + Mandujano
Jordan	Hartrell 659 + Fan
Jordan	Fan + Sekiguchi
Jordan	Fan + Friedrichs

Primary Reference	In Combination With
Jordan	Fan + Scrimsher
Jordan	Fan + Pantuso
Jordan	Fan + Piccard 826
Jordan	Fan + Piccard 951
Jordan	Fan + Hartrell 659
Jordan	Fan + Mandujano
Jordan	Mandujano + Scrimsher
Jordan	Mandujano + Pantuso
Polyakov 482	Polyakov 636 + English
Polyakov 482	Polyakov 636 + Hartrell 957
Polyakov 482	Polyakov 636 + Sekiguchi
Polyakov 482	Polyakov 636 + Friedrichs
Polyakov 482	Polyakov 636 + Scrimsher
Polyakov 482	Polyakov 636 + Pantuso
Polyakov 482	Polyakov 636 + Piccard 826
Polyakov 482	Polyakov 636 + Piccard 951
Polyakov 482	Polyakov 636 + Hartrell 659
Polyakov 482	Polyakov 636 + Mandujano
Polyakov 482	English + Hartrell 957
Polyakov 482	English + Friedrichs
Polyakov 482	English + Scrimsher
Polyakov 482	English + Pantuso
Polyakov 482	English + Piccard 826

Primary Reference	In Combination With
Polyakov 482	English + Piccard 951
Polyakov 482	English + Hartrell 659
Polyakov 482	English + Mandujano
Polyakov 482	Thomas + Hartrell 957
Polyakov 482	Thomas + Friedrichs
Polyakov 482	Thomas + Scrimsher
Polyakov 482	Thomas + Pantuso
Polyakov 482	Thomas + Piccard 826
Polyakov 482	Thomas + Piccard 951
Polyakov 482	Thomas + Hartrell 659
Polyakov 482	Thomas + Mandujano
Polyakov 482	Rothwell + Hartrell 957
Polyakov 482	Rothwell + Friedrichs
Polyakov 482	Rothwell + Scrimsher
Polyakov 482	Rothwell + Pantuso
Polyakov 482	Rothwell + Piccard 826
Polyakov 482	Rothwell + Piccard 951
Polyakov 482	Rothwell + Hartrell 659
Polyakov 482	Rothwell + Mandujano
Polyakov 482	Hartrell 659 + Fan
Polyakov 482	Fan + Sekiguchi
Polyakov 482	Fan + Friedrichs
Polyakov 482	Fan + Scrimsher

Primary Reference	In Combination With
Polyakov 482	Fan + Pantuso
Polyakov 482	Fan + Piccard 826
Polyakov 482	Fan + Piccard 951
Polyakov 482	Fan + Hartrell 659
Polyakov 482	Fan + Mandujano
Polyakov 482	Mandujano + Scrimsher
Polyakov 482	Mandujano + Pantuso
English	Thomas + Hartrell 957
English	Thomas + Friedrichs
English	Thomas + Scrimsher
English	Thomas + Pantuso
English	Thomas + Piccard 826
English	Thomas + Piccard 951
English	Thomas + Hartrell 659
English	Thomas + Mandujano
English	Rothwell + Hartrell 957
English	Rothwell + Friedrichs
English	Rothwell + Scrimsher
English	Rothwell + Pantuso
English	Rothwell + Piccard 826
English	Rothwell + Piccard 951
English	Rothwell + Hartrell 659
English	Rothwell + Mandujano

Primary Reference	In Combination With
English	Hartrell 659 + Fan
English	Fan + Sekiguchi
English	Fan + Friedrichs
English	Fan + Scrimsher
English	Fan + Pantuso
English	Fan + Piccard 826
English	Fan + Piccard 951
English	Fan + Hartrell 659
English	Fan + Mandujano
English	Mandujano + Scrimsher
English	Mandujano + Pantuso
Thomas	Rothwell + Hartrell 957
Thomas	Rothwell + Friedrichs
Thomas	Rothwell + Scrimsher
Thomas	Rothwell + Pantuso
Thomas	Rothwell + Piccard 826
Thomas	Rothwell + Piccard 951
Thomas	Rothwell + Hartrell 659
Thomas	Rothwell + Mandujano
Thomas	Hartrell 659 + Fan
Thomas	Fan + Sekiguchi
Thomas	Fan + Friedrichs
Thomas	Fan + Scrimsher

Primary Reference	In Combination With
Thomas	Fan + Pantuso
Thomas	Fan + Piccard 826
Thomas	Fan + Piccard 951
Thomas	Fan + Hartrell 659
Thomas	Fan + Mandujano
Thomas	Mandujano + Scrimsher
Thomas	Mandujano + Pantuso
Rothwell	Hartrell 659 + Fan
Rothwell	Fan + Sekiguchi
Rothwell	Fan + Friedrichs
Rothwell	Fan + Scrimsher
Rothwell	Fan + Pantuso
Rothwell	Fan + Piccard 826
Rothwell	Fan + Piccard 951
Rothwell	Fan + Hartrell 659
Rothwell	Fan + Mandujano
Rothwell	Mandujano + Scrimsher
Rothwell	Mandujano + Pantuso
Hartrell 957	Fan + Scrimsher
Hartrell 957	Fan + Pantuso
Fan	Mandujano + Scrimsher
Fan	Mandujano + Pantuso
Fan	Mandujano + Sekiguchi

Primary Reference	In Combination With
Fan	Scrimsher + Piccard 826
Fan	Pantuso + Piccard 826
Mandujano	Muttik + Costea
SurfControl	Muttik + Kidron
SurfControl	Muttik + Costea
SurfControl	Muttik + Jordan
SurfControl	Muttik + English
SurfControl	Muttik + Hartrell 957
SurfControl	Muttik + Sekiguchi
SurfControl	Kidron + Costea
SurfControl	Kidron + Jordan
SurfControl	Kidron + English
SurfControl	Kidron + Hartrell 957
SurfControl	Kidron + Sekiguchi
SurfControl	Costea + Jordan
SurfControl	Costea + English
SurfControl	Costea + Hartrell 957
SurfControl	Costea + Sekiguchi
SurfControl	Jordan + English
SurfControl	Jordan + Hartrell 957
SurfControl	Jordan + Sekiguchi
SurfControl	English + Hartrell 957
SurfControl	English + Sekiguchi

Primary Reference	In Combination With
SurfControl	Hartrell 957 + Sekiguchi
SurfControl	Fan + Muttik
SurfControl	Fan + Kidron
SurfControl	Fan + Costea
SurfControl	Fan + Jordan
SurfControl	Fan + English
SurfControl	Fan + Hartrell 957
SurfControl	Fan + Sekiguchi
SurfControl	Thomas + Fan
SurfControl	Thomas + Muttik
SurfControl	Thomas + Kidron
SurfControl	Thomas + Costea
SurfControl	Thomas + Jordan
SurfControl	Thomas + English
SurfControl	Thomas + Hartrell 957
SurfControl	Thomas + Sekiguchi

Forcepoint reserves the right to amend these Contentions and prior art combinations in light of new information that may arise from third parties related to additional malware detection and containment systems. The following list of references are also evidence of the knowledge of POSITA at the time of the alleged invention of the ’932 Patent: Kramer 341, Lemley, Kraemer, Andruss 261, Andruss 006, Wang, Apap, Kouznetsov, Deshmukh, Matalytski, Khazan, Kramer 304, Rabek, Moffie, Chari, Vasudevan.

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have understood that each of these references are in the same field of endeavor, namely methods and devices relating to computer security. *See, e.g.*, Muttik at 1:9-13; Costea at [0001]; Jordan at Abstract; Polyakov 482 at Abstract; Polyakov 636 at Abstract; English at Abstract; Thomas at 1:8-10; Rothwell at 1:7-12; Hartrell 957 at [0003]; Fan at 1:6-9; Friedrichs at Abstract; Scrimsher at [0001]; Pantuso at Abstract; Bromwich at Abstract; Kronenberg at [0003]; Repasi at Abstract; Huang at Abstract; Masters at Abstract; Gladstone at Abstract; Piccard 826 at [0001]; Moran at 2:10-12; Sekiguchi at Abstract; Hartrell 659 at Abstract; Piccard 951 at Abstract; Kidron at Abstract; Li at Abstract; Mandujano at Abstract; SurfControl (Exhibit 932-G-28) at 4–9 (citing 2005 MS Windows Guide at 1; 2003 Evaluators' Guide at 5–6, 10; 2006 Email Filter Datasheet at 2; Spyware Factsheet at 1–2; 2004 Anti-Spam Agent Datasheet at 2; 2004 Press Release).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving computer security. *See, e.g.*, Muttik at 1:9-13; Costea at [0007]; Jordan at 2:15-21; Polyakov 482 at 2:38-55; Polyakov 636 at 2:13-29; English at 2:51-57; Thomas at 3:44-64; Rothwell at 2:53-67; Hartrell 957 at [0001]-[0004]; Fan at 2:29-45; Friedrichs at [0002]; Scrimsher at [0008]; Pantuso at 1:7-9; Bromwich at 1:8-10; Kronenberg at [0006]; Repasi at [0001]; Huang at [0005]; Masters at 1:6-10; Gladstone at 1:36-53; Piccard 826 at [0007]; Moran at 6:4-22; Sekiguchi at [0001]; Hartrell 659 at 1:50-64; Piccard 951 at [0001]; Kidron at 1:16-19; Li at Introduction; Mandujano at Introduction; SurfControl (Exhibit 932-G-28) at 4–9 (citing 2005 MS Windows Guide at 1; 2003 Evaluators' Guide at 5–6, 10; 2006 Email Filter Datasheet at 2; Spyware Factsheet at 1–2; 2004 Anti-Spam Agent Datasheet at 2; 2004 Press Release).

Further, the Asserted Claims of the '932 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—*i.e.* the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe methods of detecting malicious software and computer programs and the origins of such software and computer programs. *See, e.g.*, Muttik at 1:48-4:12; Costea at [0006]-[0016]; Jordan at 1:8-2:21; Polyakov 482 at 2:38-3:46; Polyakov 636 at 5:54-7:42; English at 2:51-4:10; Thomas at 2:15-3:59; Rothwell at 1:6-2:67; Hartrell 957 at [0004]-[0014]; Fan at 1:6-5:44; Friedrichs at [0018]-[0019]; Scrimsher at [0001]-[0003]; Pantuso at 1:7-3:51; Bromwich at 1:8-2:34; Kronenberg at [0002]-[0006]; Repasi at [0001], [0019]-[0026]; Huang at [0002]-[0011]; Masters at 4:45-5:23; Gladstone at 3:13-8:13; Piccard 826 at [0001]-[0018]; Moran at 16:3-8; Sekiguchi at [0001]-[0013]; Hartrell 659 at 1:6-2:59; Piccard 951 at [0002]-[0007]; Kidron at 3:25-7:22; Li at 1–3; Mandujano at 3, 34–57; SurfControl (Exhibit 932-G-28) at 4–9 (citing 2005 MS Windows Guide at 1; 2003 Evaluators' Guide at 5–6, 10; 2006 Email Filter Datasheet at 2; Spyware Factsheet at 1–2; 2004 Anti-Spam Agent Datasheet at 2; 2004 Press Release).

The prior art references further describe "monitoring, using a kernel-mode driver, API call activity on the computer." *See, e.g.*, Muttik at 1:31-5:15; Costea at [0007]-[0008], [0018]-[0027]; Jordan at 5:66-6:43; Polyakov 482 at 2:38-5:16; Polyakov 636 at 3:10-6:20; English at 3:65-5:61; Thomas at 6:1-9:62; Rothwell at 3:1-6:11, 14:13-17:51; Hartrell 957 at [0004], [0014]-[0027]; Fan at 6:19-11:56; Friedrichs at [0008]-[0029]; Scrimsher at [0026]-[0051]; Pantuso at 1:57-4:46; Bromwich at 2:10-6:11; Kronenberg at [0006]-[0029]; Repasi at [0004]-[0060]; Huang at [0004]-[0029]; Masters at 4:51-7:45; Gladstone at 3:13-6:61; Piccard 826 at [0007]-[0022]; Moran at 16:3-21:8; Sekiguchi at [0007]-[0011]; Hartrell 659 at 3:59-6:59; Piccard 951 at [0014]-[0024];

Kidron at 5:1-8:20; Li at 1–9; Mandujano at 27–66; SurfControl (Exhibit 932-G-28) at 9–13 (citing 2003 Evaluators' Guide at 5, 19–20, 23; 2003 Email Filter Reviewer's Guide at 6–7; 2006 Virtual Control Agent Article).

The prior art references further describe "storing information related to the API call activity in a log." *See, e.g.*, Muttik at 1:31-5:15; Costea at [0007]-[0008], [0018]-[0027]; Jordan at 5:66-6:43; Polyakov 482 at 2:38-5:16; Polyakov 636 at 3:10-6:20; English at 3:65-5:61; Thomas at 6:1-9:62; Rothwell at 3:1-6:11, 14:13-17:51; Hartrell 957 at [0004], [0014]-[0027]; Fan at 6:19-11:56; Friedrichs at [0008]-[0029]; Scrimsher at [0026]-[0051]; Pantuso at 1:57-4:46; Bromwich at 2:10-6:11; Kronenberg at [0006]-[0029]; Repasi at [0004]-[0060]; Huang at [0004]-[0029]; Masters at 4:51-7:45; Gladstone at 3:13-6:61; Piccard 826 at [0007]-[0022]; Moran at 16:3-21:8; Sekiguchi at [0007]-[0011]; Hartrell 659 at 3:59-6:59; Piccard 951 at [0014]-[0024]; Kidron at 5:1-8:20; Li at 1–9; Mandujano at 27–66; SurfControl (Exhibit 932-G-28) at 13–20 (citing 2003 Evaluators' Guide at 9, 20–21, 2004 SMTP Guide at 9; 2005 Report Central Datasheet at 3, 2006 Report Central User Guide at 18–19).

The prior art references further describe "analyzing, heuristically, the API call activity to determine whether one or more weighted factors associated with the API call activity exceeds a threshold." *See, e.g.*, Muttik at 1:23-2:53, 5:30-6:48; Costea at [0024]-[0035]; Jordan at 1:56-4:61; Polyakov 482 at 5:42-10:48; Polyakov 636 at 7:55-11:37; English at 3:65-5:61; Thomas at 7:56-11:63; Rothwell at 1:37-5:61, 16:4-67; Hartrell 957 at [0003], [0014]-[0038]; Fan at 2:62-9:66; Friedrichs at [0019]-[0039]; Scrimsher at [0040]-[0042]; Pantuso at 2:1-5, 4:47-62; Bromwich at 5:11-9:7; Kronenberg at [0006]-[0029]; Repasi at [0015]-[0055]; Huang at [0005]-[0029], [0056]; Masters at 3:44-8:31; Gladstone at 5:66-11:67; Piccard 826 at [0006]-[0024]; Moran at 17:4-28:3; Sekiguchi at [0004]-[0011]; Hartrell 659 at 2:39-11:9; Piccard 951 at [0015]-

[0022]; Kidron at 4:41-7:44; Li at 1–10; Mandujano at 18, 38–61, 110–114; SurfControl (Exhibit 932-G-28) at 20–24 (citing 2003 Evaluators' Guide at 8, 10, 13, 41; 2006 Virtual Control Agent Article; Anti-Virus Agent Datasheet at 1; RBOC Update Article; 2004 Anti-Spam Agent Datasheet at 1–2).

The prior art references further describe "identifying, based upon the API call activity, a suspected pestware object on the computer." *See, e.g.*, Muttik at 3:22-31, 5:5-15; Costea at [0024]-[0035]; Jordan at 1:56-7:24; Polyakov 482 at 5:42-10:48; Polyakov 636 at 7:55-13:59; English at 3:65-5:61; Thomas at 7:56-11:63; Rothwell at 1:37-5:61, 16:4-67; Hartrell 957 at [0004], [0014]-[0027]; Fan at 5:6-11:31, 12:36-16:16; Friedrichs at [0019]-[0039]; Scrimsher at [0040]-[0042]; Pantuso at 3:43-4:62; Bromwich at 2:29-9:7; Kronenberg at [0006]; Repasi at [0019]-[0120]; Huang at [0005]-[0029], [0056]; Masters at 3:44-9:45; Gladstone at 7:10-13:12; Piccard 826 at [0006]-[0024]; Moran at 16:22-27:12; Sekiguchi at [0004]-[0011]; Hartrell 659 at 4:18-11:9; Piccard 951 at [0015]-[0022]; Kidron at 3:25-7:55; Li at 2–10; Mandujano at 13, 38–61, 110–114; SurfControl (Exhibit 932-G-28) at 24–28 (citing 2003 Evaluators' Guide at 6; Spyware Factsheet at 2; 2004 Anti-Spam Agent Datasheet at 1–2).

The prior art references further describe "identifying, in response to the identifying the suspected pestware object, a reference to an identity of an externally networked source of the suspected pestware object." *See, e.g.*, Muttik at 1:66-3:31, 5:57-6:16; Costea at [0016]-[0023], [0036]-[0039]; Jordan at 2:15-3:50; Polyakov 482 at 5:1-11:40; Polyakov 636 at 3:10-5:53, 9:41-11:62; English at 4:34-6:23; Thomas at 6:26-10:7; Rothwell at 8:7-9:60, 21:22-22:17; Hartrell 957 at [0014]-[0025]; Fan at 5:16-12:46; Friedrichs at [0008]-[0047]; Scrimsher at [0027]-[0028]; Pantuso at 2:18-5:56; Bromwich at 6:12-9:60; Kronenberg at [0006]-[0023]; Repasi at [0013]-[0079]; Huang at [0003]-[0048]; Masters at 1:45-7:12; Gladstone at 4:13-15:15; Piccard 826 at

[0015]-[0022]; Moran at 16:3-24:3; Sekiguchi at [0007]-[0012]; Hartrell 659 at 3:1-10:50; Piccard 951 at [0015]-[0028]; Kidron at 1:23-7:55; Li at 2–9; Mandujano at 7, 37–61, 88, 110; SurfControl (Exhibit 932-G-28) at 28–30 (citing 2003 Evaluators' Guide at 6, 9; 2005 Report Central Datasheet at 3; 2006 Web Filter Datasheet at 4; Spyware Factsheet at 2).

The prior art references further describe "reporting the identity of the externally networked source to an externally networked pestware research entity, wherein the identity of the externally networked source is selected from a group consisting of an I.P. address, a URL, an email client and a program." *See, e.g.*, Muttik at 1:15-6:17; Costea at [0006], [0020]-[0039]; Jordan at 2:15-5:30; Polyakov 482 at 5:17-11:4; Polyakov 636 at 3:10-13:59; English at 5:2-61; Thomas at 7:51-9:32; Rothwell at 21:22-24:29; Hartrell 957 at [0014]-[0037]; Fan at 5:45-6:41, 11:17-15:40; Friedrichs at [0025]-[0039]; Scrimsher at [0025]-[0039]; Pantuso at 2:38-6:16; Bromwich at 1:59-2:6, 5:11-9:60; Kronenberg at [0006]-[0031]; Repasi at [0017]-[0023], [0172]-[0174]; Huang at [0005]-[0007]; Masters at 1:45-7:12; Gladstone at 6:13-15:15; Piccard 826 at [0015]-[0023]; Moran at 21:9-25, 64:17-65:5; Sekiguchi at [0013]-[0015]; Hartrell 659 at 5:2-10:50; Piccard 951 at [0018]-[0028]; Kidron at 5:5-8:54; Li at 6–10; Mandujano at 12, 59–86, 113–114; SurfControl (Exhibit 932-G-28) at 30–34 (citing 2003 Evaluators' Guide at 8, 12, 25, 30, 35, 41; Anti-Virus Agent Datasheet at 1; 2005 Report Central Datasheet at 3).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 932-G-1 through 932-G-28. It would have been known and simple to take a prior art for malware detection and neutralization to analyze the origin of suspicious objects, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving computer security. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '932 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the limitations of the '932 Patent that are invalid based on indefiniteness under pre-AIA 35 U.S.C. § 112 ¶ 2, or enablement or written description under pre-AIA 35 U.S.C. § 112 ¶ 1. These Contentions are being proffered without the full benefit of expert disclosure or discovery.

Asserted Claims 1, 2, 4, 5, 7, 9, 11–13, and 15 of the '932 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). For example, as applied in Plaintiffs' Infringement Contentions, the terms "indicative of pestware," "suspected pestware object," "activity log," "exceeds a threshold," "the identity of the externally networked source," "the group consisting of an I.P. address and a URL," "the group consisting of an activity log, a browser history," "reference to an identity of an externally networked source of the suspected pestware object," "kernel-level monitor," "heuristics module," "research portion," and "reporting portion" are indefinite because each of these phrases not only is subjective but also does not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 1, 2, 4, 5, 9, 11–13, 15 of the '932 Patent are invalid under § 112 ¶ 1, because the specification as filed does not contain a sufficient written description supporting those claims. In particular, the patent disclosure would not lead a person of ordinary skill in the art to

understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. For example, Asserted Claims 1, 2, 4, 5, 9, 11–13, 15 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '932 Patent fails to provide an adequate written description of the phrases "activity log," "the identity of the externally networked source," "reference to an identity of an externally networked source of the suspected pestware object," "kernel-level monitor," "heuristics module," "research portion," and "reporting portion" as applied in Plaintiffs' Infringement Contentions.

The aforementioned claims are invalid because they are not enabled or described by the specification of the '932 Patent. The subject matter of these claims, as described above, are not sufficiently shown in the specification of the '932 Patent. The subject matter of these claims, as described above, are not sufficiently enabled because they do not teach one skilled in the art how to make and use the alleged invention from the specification of the '932 Patent. For example, the '932 Patent fails to enable the following and thus, Asserted Claims 1, 2, 4, 5, 9, 11–13, 15 of the '932 Patent are invalid: "activity log," "the identity of the externally networked source," "reference to an identity of an externally networked source of the suspected pestware object," "kernel-level monitor," "heuristics module," "research portion," and "reporting portion." The foregoing phrases are not described in such a way that one of ordinary skill in the art could implement it to achieve the results sought by the individual named on the face of the '932 Patent as the inventor. The foregoing phrases are not described in such a way that a person having ordinary skill in the art at the time of the alleged invention would have understood that the individual named as the inventor on the face of the '932 Patent was in possession of the claimed subject matter. The Asserted

Claims of the ’932 Patent also do not comply with § 112 because they do not set forth what the applicant regards is the invention.

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court’s Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the ’932 Patent they contend are directed to ineligible subject matter under pre-AIA 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the ’932 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the ’932 Patent are directed to the long-standing abstract idea of tracing where harmful content originated (*i.e.*, the abstract idea and mental process of observing harm and seeking the source). The Asserted Patent Claims of the ’932 Patent merely take mental processes and human activities (*e.g.*, monitoring for harm, seeking the source of the harm, and telling others about the harm) and tie those processes and activities to a computer. For example, Claim 1 of the ’932 Patent is directed to “monitoring . . . storing . . . analyzing . . . identifying . . . [and] reporting the identity of [a] externally networked source to an externally networked pestware research entity[.]” ’932 Patent cl. 1; *see also id.* at 10:7-9 (“[T]he present invention provides, among other things, a system and method for identifying a source of pestware or suspected pestware on a computer.”). Accordingly, the Asserted Claims are directed to basic concepts of monitoring activities on a computer and identifying the source of those activities.

The specification of the ’932 Patent confirms that the Asserted Claims are directed to those basic concepts. *See, e.g.*, *id.* at 2:24-26 (“The present invention can provide a system and method

for researching an identity of a source of activity that is indicative of pestware."); 3:45-51 ("[T]he research module 108 is configured to research the activity log 120 and/or the N files 130, which include information (e.g., historical logs) relating to events on the computer 100, to identify a source of the pestware 122, 124 or pestware-related activities, which may be reported by the reporting module 114 to a centralized data store for subsequent pestware management purposes."); 4:23-26 ("The basic functions of the detection engine 102 is to compare files, processes and registry entries on the protected computer against known pestware definitions and characteristics."); 5:33-40 ("The activity monitor 116 in several embodiments monitors activities on the computer and stores information about the activities in the activity log 120 so as to assist the research module 108 in identifying activities associated with pestware and the source of the pestware. In some embodiments, for example, the activity log 120 includes a list of processes that are running on the protected computer and the files that are associated with the processes."); 8:43-49 ("As depicted in FIG. 4, if the source of the suspicious object(s) is identified (Block 408), then the source of the suspicious object(s) is then reported (e.g., to a pestware research entity). In this way, the suspicious objects and the web sites originating the suspicious objects may be further researched to establish the extent to which they may be a threat.").

Second, the Asserted Claims of the '932 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '932 Patent describes determining the source of computer programs using conventional computing devices, computer programs, computer objects, storage media, and networks well-known in the prior art. *See, e.g.*, *id.* at 1:43-44 ("The present invention relates to computer system management."); *id.* at 3:16-18 ("Those of skill in the art can easily adapt these implementations for other types of operating systems or computer systems."). Although the

embodiments of the invention described with reference to the drawings comprise computer processes performed in computer apparatus and computer apparatus itself, the invention also extends to computer programs, particularly computer programs on or in a carrier, adapted for putting the invention into practice. Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of identifying the source of code or a computer program. The program may be in the form of processor-executable instructions such as in partially compiled form, or in any other form suitable for use in the implementation of the processes according to the invention. The carrier may be any entity or device capable of carrying the program. For example, the carrier may comprise a non-transitory computer readable medium including processor-executable instructions. *See* '932 Patent at claim 12. Simply identifying an overarching desirable outcome without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intell. Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic computer components and do not claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an

environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '932 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '932 Patent are ineligible because they would preempt the entire field of tracing where certain harmful content originated, that is, receiving information, analyzing information, and outputting a result.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '932 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions. Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs' application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '932 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not.

Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

X. INVALIDITY CONTENTIONS FOR THE '869 PATENT

A. General State of the Art at the Time of the Alleged Inventions

The prior art references identified in these Invalidity Contentions, and the "References Cited" on the face of the '869 Patent, may provide background and context pertinent to the teachings in, and interpretation of, the prior art referenced by the attached claim charts. Forcepoint may rely upon that prior art, including the "References Cited" on the face of the '869 Patent, to demonstrate the general state of the art at the time of the alleged inventions and what one of ordinary skill in the art would have understood at a time prior to the date of the alleged invention of the Asserted Claims. This prior art is exemplary only and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood at the times of the alleged inventions. Forcepoint reserves the right to rely upon additional prior art, information, and/or knowledge to demonstrate what one of ordinary skill would have understood at any time prior to the date of alleged invention of the Asserted Claims.

B. Claim Charts

Pursuant to Section II, Paragraph 4 of the Order, the claim charts attached in Appendix A as Exhibits 869-H-1 through 869-H-38 identify where each limitation of the Asserted Claims of the '869 Patent is found in the prior art.

C. Identification of the Prior Art

Based on Plaintiffs' Preliminary Infringement Contentions and authorized supplements thereto, Forcepoint identifies prior art below and in Appendix A as Exhibits 869-H-1 through 869-H-38, which contains charts disclosing the identity of each item of prior art that anticipates each claim and/or renders it obvious. As shown in Appendix A as Exhibits 869-H-1 through 869-H-38 and below, Forcepoint has identified each prior art reference by its number, country of origin, author, and date of issue (where applicable). Forcepoint notes that it has applied the prior art in accordance with Plaintiffs' improper assertions of infringement and improper applications of the claims. Forcepoint does not agree with Plaintiffs' application of the claims and denies infringement.

Forcepoint further contends that all claims that are anticipated by a particular reference are also rendered obvious by that same reference alone, in combination with the other references, and/or in combination with the knowledge of a person of ordinary skill in the art. Forcepoint reserves the right to rely upon any combination of the charted prior art under 35 U.S.C. § 103, yet Forcepoint has also identified exemplary obviousness combinations in Section V.E, *infra*.

'869 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 869-H-1	U.S. Patent No. 8,955,133 B2 ("Kumar")	U.S.	Jun. 9, 2011	Feb. 10, 2015
Ex. 869-H-2	U.S. Patent No. 10,268,820 ("Okano")	U.S.	Jun. 8, 2015	Apr. 23, 2019
Ex. 869-H-3	U.S. Patent No. 9,672,355 B2 ("Titonis")	U.S.	Sep. 14, 2012	Jun. 6, 2017
Ex. 869-H-4	U.S. Patent Publication No. 2006/0037080A1 ("Maloof")	U.S.	Aug. 12, 2005	Feb. 16, 2006

'869 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 869-H-5	U.S. Patent Publication No. 2014/0090061A1 ("Avasarala")	U.S.	Sep. 26, 2013	Mar. 27, 2014
Ex. 869-H-6	U.S. Patent No. 9,245,120 ("Friedrichs")	U.S.	Jul. 15, 2013	Jan. 26, 2016
Ex. 869-H-7	U.S. Patent Publication No. 2015/0213376A1 ("Ideses")	U.S.	Jan. 29, 2015	Jul. 30, 2015
Ex. 869-H-8	U.S. Patent Publication No. 2010/0162395 ("Kennedy")	U.S.	Dec. 18, 2008	Jun. 24, 2010
Ex. 869-H-9	U.S. Patent Publication No. 2017/0098074A1 ("Okano 074")	U.S.	Jun. 8, 2015	Apr. 6, 2017
Ex. 869-H-10	U.S. Patent No. 9,398,034 ("Ronen")	U.S.	Dec. 19, 2013	Jul. 19, 2016
Ex. 869-H-11	U.S. Patent No. 8,799,190 ("Stokes")	U.S.	Jun. 17, 2011	Aug. 5, 2014
Ex. 869-H-12	EP2182458 ("Moskovitch")	Europe	Oct. 1, 2009	May 5, 2010
Ex. 869-H-13	U.S. Patent Publication No. 2011/0225655 ("Niemela")	U.S.	Mar. 15, 2010	Sep. 15, 2011
Ex. 869-H-14	U.S. Patent Publication No. 2014/0181973 ("Lee")	U.S.	May 7, 2013	Jun. 26, 2014
Ex. 869-H-15	U.S. Patent Publication No. 2015/0096024A1 ("Haq")	U.S.	Sep. 30, 2013	Apr. 2, 2015
Ex. 869-H-16	U.S. Patent No. 7,689,531 ("Diao 531")	U.S.	Sep. 28, 2005	Mar. 30, 2010
Ex. 869-H-17	U.S. Patent No. 7,756,535 ("Diao 535")	U.S.	Jul. 7, 2006	Jul. 13, 2010
Ex. 869-H-18	U.S. Patent No. 7,949,771 ("Chen 771")	U.S.	Sep. 5, 2007	May 24, 2011

'869 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 869-H-19	U.S. Patent No. 8,023,974 ("Diao 974")	U.S.	Feb. 15, 2007	Sep. 20, 2011
Ex. 869-H-20	U.S. Patent No. 8,161,548 ("Wan")	U.S.	Aug. 15, 2005	Apr. 17, 2012
Ex. 869-H-21	U.S. Patent No. 8,495,144 ("Cheng")	U.S.	Oct. 6, 2004	Jul. 23, 2013
Ex. 869-H-22	U.S. Patent No. 8,505,094 ("Xuewen")	U.S.	Jan. 13, 2010	Aug. 6, 2013
Ex. 869-H-23	U.S. Patent No. 8,560,466 ("Diao 466")	U.S.	Feb. 26, 2010	Oct. 15, 2013
Ex. 869-H-24	U.S. Patent No. 8,826,439 ("Hu")	U.S.	Jan. 26, 2011	Sep. 2, 2014
Ex. 869-H-25	U.S. Patent No. 8,838,992 ("Zhu")	U.S.	Apr. 28, 2011	Sep. 16, 2014
Ex. 869-H-26	U.S. Patent No. 8,850,570 ("Ramzan")	U.S.	Jun. 30, 2008	Sep. 30, 2014
Ex. 869-H-27	U.S. Patent No. 8,935,788 ("Diao")	U.S.	Oct. 15, 2008	Jan. 13, 2015
Ex. 869-H-28	U.S. Patent No. 9,208,323 ("Karta")	U.S.	Jan. 13, 2014	Dec. 8, 2015
Ex. 869-H-29	U.S. Patent No. 9,781,151 ("McCorkendale")	U.S.	Oct. 11, 2011	Oct. 3, 2017
Ex. 869-H-30	U.S. Patent No. 10,666,676 ("Hsu")	U.S.	Aug. 18, 2014	May 26, 2020
Ex. 869-H-31	U.S. Patent Publication No. 2006/0026675A1 ("Cai")	U.S.	Jul. 28, 2004	Feb. 2, 2006
Ex. 869-H-32	U.S. Patent Publication No. 2009/0254992A1 ("Schultz")	U.S.	Dec. 18, 2008	Oct. 8, 2009

'869 Patent Prior Art Patents/Patent Applications				
Ex. No.	**Patent / Publication No.**	**Country of Origin**	**Filing Date**	**Date of Issue / Publication**
Ex. 869-H-33	R.R. Ravula, *Classification of Malware Using Reverse Engineering and Data Mining Techniques* (August 2011) ("Ravula")			August 2011
Ex. 869-H-34	Masud et al., *Data Mining Tools For Malware Detection* (2011) ("Masud")			2011
Ex. 869-H-35	Tahan et al., *Mal-ID: Automatic Malware Detection Using Common Segment Analysis and Meta-Features*, (April 2012) ("Tahan")			April 2012
Ex. 869-H-36	Menahem et al., *Improving Malware Detection by Applying Multi-Inducer Ensemble,* (February 2009), ("Menahem")			February 2009

'869 Patent Prior Art Systems	
Ex. No.	**System**
Ex. 869-H-37	Websense ThreatSeeker ("ThreatSeeker")
Ex. 869-H-38	Stonesoft StoneGate Next Generation Firewall ("Next Generation Firewall")
	System and/or product art received pursuant to Forcepoint's subpoena to Trend Micro, Inc. (dated October 27, 2023)
	System and/or product art received pursuant to Forcepoint's subpoena to Sophos Ltd. (dated October 31, 2023)

'869 Patent Additional Prior Art/Background Art
U.S. Patent Publication No. 2010/0191734A1 ("Rajaram")
U.S. Patent Publication No. 2014/0090064A1 ("Pistoia")
U.S. Patent No. 8,533,831 ("Satish")
U.S. Patent No. 8,885,938 ("Hong")
U.S. Patent No. 9,129,110 ("Mason")

'869 Patent Additional Prior Art/Background Art
U.S. Patent No. 9,497,204 ("Symons")
U.S. Patent No. 9,516,039 ("Yen")
U.S. Patent No. 9,832,211 ("Hsiao")
U.S. Patent No. 9,853,997 ("Canzanese")
U.S. Patent No. 8,578,497 ("Antonakakis")
U.S. Patent Publication No. 2016/0277423A1 ("Apostolescu")
U.S. Patent Publication No. 2011/0047618A1 ("Evans")
U.S. Patent Publication No. 2013/0198841A1 ("Poulson")
U.S. Patent Publication No. 2007/0240220A1 ("Tuvell")
U.S. Patent No. 8,719,939 ("Krasser")
U.S. Patent No. 9,286,182 ("Fries")
U.S. Patent No. 9,330,257 ("Valencia")
U.S. Patent No. 10,395,032 ("Keller")
U.S. Patent No. 9,398,034 ("Brand")
CN 103473506 ("Yang")
CN 103106365 ("Lai")
CN102142068 ("Li")
Shafiq et al., *A Framework for Efficient Mining of Structural Information to Detect Zero-Day Malicious Portable Executables*, Jan. 2009 ("Shafiq")
Shafiq et al., *PE-Probe: Leveraging Packer Detection and Structural Information to Detect Malicious Portable Executables*, National University of Computer & Emerging Sciences, June 2009 ("Shafiq, Tabish")
Wang et al., *Detection of packed executables using support vector machines*, IEEE Xplore, August 2011 ("Wang")
Nath et al, *Static Malware Analysis Using Machine Learning Methods*, University of Hyderabad, 2014 ("Nath")
Sun et al., *Pattern Recognition Techniques for the Classification of Malware Packers*, RMIT University, 2010 ("Sun")
Nataraj et al., *Detecting Packed Executables Based On Raw Binary Data*, University of California, Santa Barbara, 2010 ("Nataraj")
Tang et al., *Support Vector Machines and Random Forests Modeling for Spam Senders Behaviour Analysis*, IEEE "GLOBECOM", 2008 ("Tang")
Krasser et al., *Valkyrie: Behavioural Malware Detection Using Global Kernel-Level Telemetry Data*, IEEE International, 2015 ("Krasser")
Wang et al., *Detecting Unknown Malicious Executables Using Portable Executable Headers*, IEEE, 2009 ("Wang et al.")
Lai, *A Feature Selection for Malicious Detection*, Beijing University, 2008 ("Lai")

Furthermore, with respect to the ’869 Patent, under 35 U.S.C. §§ 102(a) and (b), Forcepoint reserves the right to identify additional prior art systems developed prior to May 12, 2015. *See, e.g.*, *Intell. Ventures II LLC v. FedEx Corp.*, No. 2:16-CV-00980-JRG, 2019 WL 1434656, at *8–11 (E.D. Tex. Mar. 29, 2019). Discovery is ongoing, and Forcepoint reserves the right to amend the Invalidity Contentions herein based on third-party discovery.

D. Anticipation

At least under Plaintiffs’ apparent infringement theory, the Asserted Claims of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by the references as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Kumar, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Titonis, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Okano, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Moskovitch, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person

having ordinary skill in the art, by Menaham, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Tahan, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Cai, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Schultz, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Kennedy, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Niemela, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Lee, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Haq, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–

59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 531, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 535, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Chen, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 974, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Wan, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Cheng, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Xuewen, as set forth in the attached claim charts. At least under Plaintiffs’ apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the ’869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 466, as set forth in the attached claim charts. At least under

Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Hu, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Zhu, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Ramzan, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Diao 788, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by McCorkendale, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by Hsu, as set forth in the attached claim charts. At least under Plaintiffs' apparent infringement theory, Asserted Claims 18–21, 24, 26–35, 40–49, 52, and 54–59 of the '869 Patent are anticipated, either expressly or inherently as understood by a person having ordinary skill in the art, by ThreatSeeker, as set forth in the attached claim charts.

E. Obviousness

At least under Plaintiffs' apparent infringement theory, the Asserted Claims of the '869 Patent are rendered obvious by the references identified in the attached claim charts, either alone

or in the combinations with other prior art references as identified below. Forcepoint contends that one of ordinary skill in the art, at the time of the alleged invention of the Asserted '869 Patent Claims, would have been motivated to combine the references disclosed herein in such a way to reach the alleged inventions. In certain instances, the suggested obviousness combinations are provided in the alternative to Forcepoint's anticipation contentions, which shall not be construed to suggest that any reference included in the combinations is not by itself anticipatory. The combinations evidencing teachings, suggestions, and/or motivations to combine the prior-art references in a way that renders the Asserted Claims obvious are merely exemplary.

Primary Reference	**In Combination With**
Kumar	Okano
Kumar	Titonis
Kumar	Moskovitch
Kumar	Menahem
Kumar	Tahan
Kumar	Cai
Kumar	Schultz
Kumar	Kennedy
Kumar	Niemela
Kumar	Lee
Kumar	Haq
Kumar	Diao 535
Kumar	Diao 531
Kumar	Chen
Kumar	Diao 974

Primary Reference	In Combination With
Kumar	Wan
Kumar	Cheng
Kumar	Xuewen
Kumar	Diao 466
Kumar	Hu
Kumar	Zhu
Kumar	Ramzan
Kumar	Diao 788
Kumar	McCorkendale
Kumar	Hsu
Kumar	Idses
Kumar	Okano 074
Kumar	Stokes
Kumar	Friedrichs
Kumar	Maloof
Kumar	Avasarala
Kumar	Ronen
Kumar	Karta
Kumar	Ravula
Kumar	Masud
Kumar	ThreatSeeker
Kumar	Next Generation Firewall
Kumar	ThreatSeeker + Titonis

Primary Reference	In Combination With
Kumar	ThreatSeeker + Moskovitch
Kumar	ThreatSeeker + Okano
Kumar	ThreatSeeker + Schultz
Kumar	ThreatSeeker + Diao 466
Titonis	Kumar
Titonis	Okano
Titonis	Moskovitch
Titonis	Menahem
Titonis	Tahan
Titonis	Cai
Titonis	Schultz
Titonis	Kennedy
Titonis	Niemela
Titonis	Lee
Titonis	Haq
Titonis	Diao 535
Titonis	Diao 531
Titonis	Chen
Titonis	Diao 974
Titonis	Wan
Titonis	Cheng
Titonis	Xuewen
Titonis	Diao 466

Primary Reference	In Combination With
Titonis	Hu
Titonis	Zhu
Titonis	Ramzan
Titonis	Diao 788
Titonis	McCorkendale
Titonis	Hsu
Titonis	Idses
Titonis	Okano 074
Titonis	Stokes
Titonis	Friedrichs
Titonis	Maloof
Titonis	Avasarala
Titonis	Ronen
Titonis	Karta
Titonis	Ravula
Titonis	Masud
Titonis	ThreatSeeker
Titonis	Next Generation Firewall
Titomis	ThreatSeeker + Okano
Titonis	Kumar + Okano
Titonis	ThreatSeeker + Kumar
Titonis	ThreatSeeker + Schultz
Titonis	Kumar + Schultz

Primary Reference	In Combination With
Titonis	ThreatSeeker + Diao 466
Titonis	Kumar + Diao 466
Titonis	ThreatSeeker + Moskovitch
Titonis	Kumar + Moskovitch
Okano	Kumar
Okano	Titonis
Okano	Moskovitch
Okano	Menahem
Okano	Tahan
Okano	Cai
Okano	Schultz
Okano	Kennedy
Okano	Niemela
Okano	Lee
Okano	Haq
Okano	Diao 535
Okano	Diao 531
Okano	Chen
Okano	Diao 974
Okano	Wan
Okano	Cheng
Okano	Xuewen
Okano	Diao 466

Primary Reference	In Combination With
Okano	Hu
Okano	Zhu
Okano	Ramzan
Okano	Diao 788
Okano	McCorkendale
Okano	Hsu
Okano	Idses
Okano	Okano 074
Okano	Stokes
Okano	Friedrichs
Okano	Maloof
Okano	Avasarala
Okano	Ronen
Okano	Karta
Okano	Ravula
Okano	Masud
Okano	ThreatSeeker
Okano	Next Generation Firewall
Okano	Moskovitch + ThreatSeeker
Okano	Moskovitch + Kumar
Okano	ThreatSeeker + Diao 466
Okano	Kumar + Diao 466
Okano	ThreatSeeker + Schultz

Primary Reference	In Combination With
Okano	Kumar + Schultz
Okano	ThreatSeeker + Kumar
Moskovitch	Okano
Moskovitch	Kumar
Moskovitch	Titonis
Moskovitch	Menahem
Moskovitch	Tahan
Moskovitch	Cai
Moskovitch	Schultz
Moskovitch	Kennedy
Moskovitch	Niemela
Moskovitch	Lee
Moskovitch	Haq
Moskovitch	Diao 535
Moskovitch	Diao 531
Moskovitch	Chen
Moskovitch	Diao 974
Moskovitch	Wan
Moskovitch	Cheng
Moskovitch	Xuewen
Moskovitch	Diao 466
Moskovitch	Hu
Moskovitch	Zhu

Primary Reference	In Combination With
Moskovitch	Ramzan
Moskovitch	Diao 788
Moskovitch	McCorkendale
Moskovitch	Hsu
Moskovitch	Idses
Moskovitch	Okano 074
Moskovitch	Stokes
Moskovitch	Friedrichs
Moskovitch	Maloof
Moskovitch	Avasarala
Moskovitch	Ronen
Moskovitch	Karta
Moskovitch	Ravula
Moskovitch	Masud
Moskovitch	ThreatSeeker
Moskovitch	Next Generation Firewall
Moskovitch	ThreatSeeker + Kumar
Moskovitch	Okano + Kumar
Moskovitch	Okano + ThreatSeeker
Moskovitch	Schultz + Kumar
Moskovitch	Schultz + ThreatSeeker
Moskovitch	ThreatSeeker + Diao 466
Moskovitch	Kumar + Diao 466

Primary Reference	In Combination With
Menahem	Moskovitch
Menahem	Okano
Menahem	Kumar
Menahem	Titonis
Menahem	Tahan
Menahem	Cai
Menahem	Schultz
Menahem	Kennedy
Menahem	Niemela
Menahem	Lee
Menahem	Haq
Menahem	Diao 535
Menahem	Diao 531
Menahem	Chen
Menahem	Diao 974
Menahem	Wan
Menahem	Cheng
Menahem	Xuewen
Menahem	Diao 466
Menahem	Hu
Menahem	Zhu
Menahem	Ramzan
Menahem	Diao 788

Primary Reference	In Combination With
Menahem	McCorkendale
Menahem	Hsu
Menahem	Idses
Menahem	Okano 074
Menahem	Stokes
Menahem	Friedrichs
Menahem	Maloof
Menahem	Avasarala
Menahem	Ronen
Menahem	Karta
Menahem	Ravula
Menahem	Masud
Menahem	ThreatSeeker
Menahem	Next Generation Firewall
Menahem	ThreatSeeker + Kumar
Menahem	ThreatSeeker + Okano
Menahem	Okano + Kumar
Menahem	ThreatSeeker + Schultz
Menahem	Kumar + Schultz
Menahem	Okano + Schultz
Tahan	Menahem
Tahan	Moskovitch
Tahan	Okano

Primary Reference	In Combination With
Tahan	Kumar
Tahan	Titonis
Tahan	Cai
Tahan	Schultz
Tahan	Kennedy
Tahan	Niemela
Tahan	Lee
Tahan	Haq
Tahan	Diao 535
Tahan	Diao 531
Tahan	Chen
Tahan	Diao 974
Tahan	Wan
Tahan	Cheng
Tahan	Xuewen
Tahan	Diao 466
Tahan	Hu
Tahan	Zhu
Tahan	Ramzan
Tahan	Diao 788
Tahan	McCorkendale
Tahan	Hsu
Tahan	Idses

Primary Reference	In Combination With
Tahan	Okano 074
Tahan	Stokes
Tahan	Friedrichs
Tahan	Maloof
Tahan	Avasarala
Tahan	Ronen
Tahan	Karta
Tahan	Ravula
Tahan	Masud
Tahan	ThreatSeeker
Tahan	Next Generation Firewall
Tahan	ThreatSeeker + Kumar
Tahan	ThreatSeeker + Okano
Tahan	Okano + Kumar
Cai	Tahan
Cai	Menahem
Cai	Moskovitch
Cai	Okano
Cai	Kumar
Cai	Titonis
Cai	Schultz
Cai	Kennedy
Cai	Niemela

Primary Reference	In Combination With
Cai	Lee
Cai	Haq
Cai	Diao 535
Cai	Diao 531
Cai	Chen
Cai	Diao 974
Cai	Wan
Cai	Cheng
Cai	Xuewen
Cai	Diao 466
Cai	Hu
Cai	Zhu
Cai	Ramzan
Cai	Diao 788
Cai	McCorkendale
Cai	Hsu
Cai	Idses
Cai	Okano 074
Cai	Stokes
Cai	Friedrichs
Cai	Maloof
Cai	Avasarala
Cai	Ronen

Primary Reference	In Combination With
Cai	Karta
Cai	Ravula
Cai	Masud
Cai	ThreatSeeker
Cai	Next Generation Firewall
Cai	ThreatSeeker + Kumar
Cai	ThreatSeeker + Okano
Cai	Okano + Kumar
Cai	Ramzan + ThreatSeeker
Cai	Ramzan + Kumar
Cai	Ramzan + Okano
Schultz	Cai
Schultz	Tahan
Schultz	Menahem
Schultz	Moskovitch
Schultz	Okano
Schultz	Kumar
Schultz	Titonis
Schultz	Kennedy
Schultz	Niemela
Schultz	Lee
Schultz	Haq
Schultz	Diao 535

Primary Reference	In Combination With
Schultz	Diao 531
Schultz	Chen
Schultz	Diao 974
Schultz	Wan
Schultz	Cheng
Schultz	Xuewen
Schultz	Diao 466
Schultz	Hu
Schultz	Zhu
Schultz	Ramzan
Schultz	Diao 788
Schultz	McCorkendale
Schultz	Hsu
Schultz	Idses
Schultz	Okano 074
Schultz	Stokes
Schultz	Friedrichs
Schultz	Maloof
Schultz	Avasarala
Schultz	Ronen
Schultz	Karta
Schultz	Ravula
Schultz	Masud

Primary Reference	In Combination With
Schultz	ThreatSeeker
Schultz	Next Generation Firewall
Schultz	ThreatSeeker + Kumar
Schultz	ThreatSeeker + Okano
Schultz	Okano + Kumar
Schultz	Ramzan + ThreatSeeker
Schultz	Ramzan + Okano
Schultz	Ramzan + Kumar
Kennedy	Schultz
Kennedy	Cai
Kennedy	Tahan
Kennedy	Menahem
Kennedy	Moskovitch
Kennedy	Okano
Kennedy	Kumar
Kennedy	Titonis
Kennedy	Niemela
Kennedy	Lee
Kennedy	Haq
Kennedy	Diao 535
Kennedy	Diao 531
Kennedy	Chen
Kennedy	Diao 974

Primary Reference	In Combination With
Kennedy	Wan
Kennedy	Cheng
Kennedy	Xuewen
Kennedy	Diao 466
Kennedy	Hu
Kennedy	Zhu
Kennedy	Ramzan
Kennedy	Diao 788
Kennedy	McCorkendale
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Kennedy	Maloof
Kennedy	Avasarala
Kennedy	Ronen
Kennedy	Karta
Kennedy	Ravula
Kennedy	Masud
Kennedy	ThreatSeeker
Kennedy	Next Generation Firewall
Kennedy	ThreatSeeker + Kumar

Primary Reference	In Combination With
Kennedy	ThreatSeeker + Okano
Kennedy	Okano + Kumar
Niemela	Kennedy
Niemela	Schultz
Niemela	Okano
Niemela	Kumar
Niemela	Titonis
Niemela	Lee
Niemela	Haq
Niemela	Diao 535
Niemela	Diao 531
Niemela	Chen
Niemela	Diao 974
Niemela	Wan
Niemela	Cheng
Niemela	Xuewen
Niemela	Diao 466
Niemela	Hu
Niemela	Zhu
Niemela	Ramzan
Niemela	Diao 788
Niemela	McCorkendale
Niemela	Hsu

Primary Reference	In Combination With
Niemela	Idses
Niemela	Okano 074
Niemela	Stokes
Niemela	Friedrichs
Niemela	Maloof
Niemela	Avasarala
Niemela	Ronen
Niemela	Karta
Niemela	Ravula
Niemela	Masud
Niemela	ThreatSeeker
Niemela	Next Generation Firewall
Niemela	ThreatSeeker + Kumar
Niemela	ThreatSeeker + Okano
Niemela	Okano + Kumar
Lee	Niemela
Lee	Kennedy
Lee	Schultz
Lee	Cai
Lee	Tahan
Lee	Menahem
Lee	Moskovitch
Lee	Okano

Primary Reference	In Combination With
Lee	Kumar
Lee	Titonis
Lee	Haq
Lee	Diao 535
Lee	Diao 531
Lee	Chen
Lee	Diao 974
Lee	Wan
Lee	Cheng
Lee	Xuewen
Lee	Diao 466
Lee	Hu
Lee	Zhu
Lee	Ramzan
Lee	Diao 788
Lee	McCorkendale
Lee	Hsu
Lee	Idses
Lee	Okano 074
Lee	Stokes
Lee	Friedrichs
Lee	Maloof
Lee	Avasarala

Primary Reference	In Combination With
Lee	Ronen
Lee	Karta
Lee	Ravula
Lee	Masud
Lee	ThreatSeeker
Lee	Next Generation Firewall
Lee	ThreatSeeker + Kumar
Lee	ThreatSeeker + Okano
Lee	Okano + Kumar
Haq	Lee
Haq	Cai
Haq	Tahan
Haq	Menahem
Haq	Moskovitch
Haq	Niemela
Haq	Kennedy
Haq	Schultz
Haq	Okano
Haq	Kumar
Haq	Titonis
Haq	Diao 535
Haq	Diao 531
Haq	Chen

Primary Reference	In Combination With
Haq	Diao 974
Haq	Wan
Haq	Cheng
Haq	Xuewen
Haq	Diao 466
Haq	Hu
Haq	Zhu
Haq	Ramzan
Haq	Diao 788
Haq	McCorkendale
Haq	Hsu
Haq	Idses
Haq	Okano 074
Haq	Stokes
Haq	Friedrichs
Haq	Maloof
Haq	Avasarala
Haq	Ronen
Haq	Karta
Haq	Ravula
Haq	Masud
Haq	ThreatSeeker
Haq	Next Generation Firewall

Primary Reference	In Combination With
Haq	ThreatSeeker + Kumar
Haq	ThreatSeeker + Okano
Haq	Okano + Kumar
Haq	ThreatSeeker + Moskovitch
Haq	ThreatSeeker + Menahem
Haq	Kumar + Moskovitch
Haq	Kumar + Menahem
Diao 535	Haq
Diao 535	Lee
Diao 535	Cai
Diao 535	Tahan
Diao 535	Menahem
Diao 535	Moskovitch
Diao 535	Niemela
Diao 535	Kennedy
Diao 535	Schultz
Diao 535	Okano
Diao 535	Kumar
Diao 535	Titonis
Diao 535	Diao 531
Diao 535	Chen
Diao 535	Diao 974
Diao 535	Wan

Primary Reference	In Combination With
Diao 535	Cheng
Diao 535	Xuewen
Diao 535	Diao 466
Diao 535	Hu
Diao 535	Zhu
Diao 535	Ramzan
Diao 535	Diao 788
Diao 535	McCorkendale
Diao 535	Hsu
Diao 535	Idses
Diao 535	Okano 074
Diao 535	Stokes
Diao 535	Friedrichs
Diao 535	Maloof
Diao 535	Avasarala
Diao 535	Ronen
Diao 535	Karta
Diao 535	Ravula
Diao 535	Masud
Diao 535	ThreatSeeker
Diao 535	Next Generation Firewall
Diao 535	ThreatSeeker + Kumar
Diao 535	ThreatSeeker + Okano

Primary Reference	In Combination With
Diao 535	Okano + Kumar
Diao 531	Diao 535
Diao 531	Haq
Diao 531	Lee
Diao 531	Cai
Diao 531	Tahan
Diao 531	Menahem
Diao 531	Moskovitch
Diao 531	Niemela
Diao 531	Kennedy
Diao 531	Schultz
Diao 531	Okano
Diao 531	Kumar
Diao 531	Titonis
Diao 531	Chen
Diao 531	Diao 974
Diao 531	Wan
Diao 531	Cheng
Diao 531	Xuewen
Diao 531	Diao 466
Diao 531	Hu
Diao 531	Zhu
Diao 531	Ramzan

Primary Reference	In Combination With
Diao 531	Diao 788
Diao 531	McCorkendale
Diao 531	Hsu
Diao 531	Idses
Diao 531	Okano 074
Diao 531	Stokes
Diao 531	Friedrichs
Diao 531	Maloof
Diao 531	Avasarala
Diao 531	Ronen
Diao 531	Karta
Diao 531	Ravula
Diao 531	Masud
Diao 531	ThreatSeeker
Diao 531	Next Generation Firewall
Diao 531	ThreatSeeker + Kumar
Diao 531	ThreatSeeker + Okano
Diao 531	Okano + Kumar
Chen	Diao 531
Chen	Diao 535
Chen	Haq
Chen	Lee
Chen	Cai

Primary Reference	In Combination With
Chen	Tahan
Chen	Menahem
Chen	Moskovitch
Chen	Niemela
Chen	Kennedy
Chen	Schultz
Chen	Okano
Chen	Kumar
Chen	Titonis
Chen	Diao 974
Chen	Wan
Chen	Cheng
Chen	Xuewen
Chen	Diao 466
Chen	Hu
Chen	Zhu
Chen	Ramzan
Chen	Diao 788
Chen	McCorkendale
Chen	Hsu
Chen	Idses
Chen	Okano 074
Chen	Stokes

Primary Reference	In Combination With
Chen	Friedrichs
Chen	Maloof
Chen	Avasarala
Chen	Ronen
Chen	Karta
Chen	Ravula
Chen	Masud
Chen	ThreatSeeker
Chen	Next Generation Firewall
Chen	ThreatSeeker + Kumar
Chen	ThreatSeeker + Okano
Chen	Okano + Kumar
Diao 974	Chen
Diao 974	Diao 531
Diao 974	Diao 535
Diao 974	Haq
Diao 974	Lee
Diao 974	Cai
Diao 974	Tahan
Diao 974	Menahem
Diao 974	Moskovitch
Diao 974	Niemela
Diao 974	Kennedy

Primary Reference	In Combination With
Diao 974	Schultz
Diao 974	Okano
Diao 974	Kumar
Diao 974	Titonis
Diao 974	Wan
Diao 974	Cheng
Diao 974	Xuewen
Diao 974	Diao 466
Diao 974	Hu
Diao 974	Zhu
Diao 974	Ramzan
Diao 974	Diao 788
Diao 974	McCorkendale
Diao 974	Hsu
Diao 974	Idses
Diao 974	Okano 074
Diao 974	Stokes
Diao 974	Friedrichs
Diao 974	Maloof
Diao 974	Avasarala
Diao 974	Ronen
Diao 974	Karta
Diao 974	Ravula

Primary Reference	In Combination With
Diao 974	Masud
Diao 974	ThreatSeeker
Diao 974	Next Generation Firewall
Diao 974	ThreatSeeker + Kumar
Diao 974	ThreatSeeker + Okano
Diao 974	Okano + Kumar
Wan	Diao 974
Wan	Chen
Wan	Diao 531
Wan	Diao 535
Wan	Haq
Wan	Lee
Wan	Cai
Wan	Tahan
Wan	Menahem
Wan	Moskovitch
Wan	Niemela
Wan	Kennedy
Wan	Schultz
Wan	Okano
Wan	Kumar
Wan	Titonis
Wan	Cheng

Primary Reference	In Combination With
Wan	Xuewen
Wan	Diao 466
Wan	Hu
Wan	Zhu
Wan	Ramzan
Wan	Diao 788
Wan	McCorkendale
Wan	Hsu
Wan	Idses
Wan	Okano 074
Wan	Stokes
Wan	Friedrichs
Wan	Maloof
Wan	Avasarala
Wan	Ronen
Wan	Karta
Wan	Ravula
Wan	Masud
Wan	ThreatSeeker
Wan	Next Generation Firewall
Wan	ThreatSeeker + Kumar
Wan	ThreatSeeker + Okano
Wan	Okano + Kumar

Primary Reference	In Combination With
Cheng	Wan
Cheng	Diao 974
Cheng	Chen
Cheng	Diao 531
Cheng	Diao 535
Cheng	Haq
Cheng	Lee
Cheng	Cai
Cheng	Tahan
Cheng	Menahem
Cheng	Moskovitch
Cheng	Niemela
Cheng	Kennedy
Cheng	Schultz
Cheng	Okano
Cheng	Kumar
Cheng	Titonis
Cheng	Xuewen
Cheng	Diao 466
Cheng	Hu
Cheng	Zhu
Cheng	Ramzan
Cheng	Diao 788

Primary Reference	In Combination With
Cheng	McCorkendale
Cheng	Hsu
Cheng	Idses
Cheng	Okano 074
Cheng	Stokes
Cheng	Friedrichs
Cheng	Maloof
Cheng	Avasarala
Cheng	Ronen
Cheng	Karta
Cheng	Ravula
Cheng	Masud
Cheng	ThreatSeeker
Cheng	Next Generation Firewall
Cheng	ThreatSeeker + Kumar
Cheng	ThreatSeeker + Okano
Cheng	Okano + Kumar
Xuewen	Cheng
Xuewen	Wan
Xuewen	Diao 974
Xuewen	Chen
Xuewen	Diao 531
Xuewen	Diao 535

Primary Reference	In Combination With
Xuewen	Haq
Xuewen	Lee
Xuewen	Cai
Xuewen	Tahan
Xuewen	Menahem
Xuewen	Moskovitch
Xuewen	Niemela
Xuewen	Kennedy
Xuewen	Schultz
Xuewen	Okano
Xuewen	Kumar
Xuewen	Titonis
Xuewen	Diao 466
Xuewen	Hu
Xuewen	Zhu
Xuewen	Ramzan
Xuewen	Diao 788
Xuewen	McCorkendale
Xuewen	Hsu
Xuewen	Idses
Xuewen	Okano 074
Xuewen	Stokes
Xuewen	Friedrichs

Primary Reference	In Combination With
Xuewen	Maloof
Xuewen	Avasarala
Xuewen	Ronen
Xuewen	Karta
Xuewen	Ravula
Xuewen	Masud
Xuewen	ThreatSeeker
Xuewen	Next Generation Firewall
Xuewen	ThreatSeeker + Kumar
Xuewen	ThreatSeeker + Okano
Xuewen	Okano + Kumar
Diao 466	Xuewen
Diao 466	Cheng
Diao 466	Wan
Diao 466	Diao 974
Diao 466	Chen
Diao 466	Diao 531
Diao 466	Diao 535
Diao 466	Haq
Diao 466	Lee
Diao 466	Cai
Diao 466	Tahan
Diao 466	Menahem

Primary Reference	In Combination With
Diao 466	Moskovitch
Diao 466	Niemela
Diao 466	Kennedy
Diao 466	Schultz
Diao 466	Okano
Diao 466	Kumar
Diao 466	Titonis
Diao 466	Hu
Diao 466	Zhu
Diao 466	Ramzan
Diao 466	Diao 788
Diao 466	McCorkendale
Diao 466	Hsu
Diao 466	Idses
Diao 466	Okano 074
Diao 466	Stokes
Diao 466	Friedrichs
Diao 466	Maloof
Diao 466	Avasarala
Diao 466	Ronen
Diao 466	Karta
Diao 466	Ravula
Diao 466	Masud

Primary Reference	In Combination With
Diao 466	ThreatSeeker
Diao 466	Next Generation Firewall
Diao 466	ThreatSeeker + Kumar
Diao 466	ThreatSeeker + Okano
Diao 466	Okano + Kumar
Diao 466	Moskovitch + ThreatSeeker
Diao 466	Moskovitch + Kumar
Diao 466	Ramzan + ThreatSeeker
Diao 466	Ramzan + Kumar
Hu	Diao 466
Hu	Xuewen
Hu	Cheng
Hu	Wan
Hu	Diao 974
Hu	Chen
Hu	Diao 531
Hu	Diao 535
Hu	Haq
Hu	Lee
Hu	Cai
Hu	Tahan
Hu	Menahem
Hu	Moskovitch

Primary Reference	In Combination With
Hu	Niemela
Hu	Kennedy
Hu	Schultz
Hu	Okano
Hu	Kumar
Hu	Titonis
Hu	Zhu
Hu	Ramzan
Hu	Diao 788
Hu	McCorkendale
Hu	Hsu
Hu	Idses
Hu	Okano 074
Hu	Stokes
Hu	Friedrichs
Hu	Maloof
Hu	Avasarala
Hu	Ronen
Hu	Karta
Hu	Ravula
Hu	Masud
Hu	ThreatSeeker
Hu	Next Generation Firewall

Primary Reference	In Combination With
Hu	ThreatSeeker + Kumar
Hu	ThreatSeeker + Okano
Hu	Okano + Kumar
Zhu	Hu
Zhu	Diao 466
Zhu	Xuewen
Zhu	Cheng
Zhu	Wan
Zhu	Diao 974
Zhu	Chen
Zhu	Diao 531
Zhu	Diao 535
Zhu	Haq
Zhu	Lee
Zhu	Cai
Zhu	Tahan
Zhu	Menahem
Zhu	Moskovitch
Zhu	Niemela
Zhu	Kennedy
Zhu	Schultz
Zhu	Okano
Zhu	Kumar

Primary Reference	In Combination With
Zhu	Titonis
Zhu	Ramzan
Zhu	Diao 788
Zhu	McCorkendale
Zhu	Hsu
Zhu	Idses
Zhu	Okano 074
Zhu	Stokes
Zhu	Friedrichs
Zhu	Maloof
Zhu	Avasarala
Zhu	Ronen
Zhu	Karta
Zhu	Ravula
Zhu	Masud
Zhu	ThreatSeeker
Zhu	Next Generation Firewall
Zhu	ThreatSeeker + Kumar
Zhu	ThreatSeeker + Okano
Zhu	Okano + Kumar
Ramzan	Zhu
Ramzan	Hu
Ramzan	Diao 466

Primary Reference	In Combination With
Ramzan	Xuewen
Ramzan	Cheng
Ramzan	Wan
Ramzan	Diao 974
Ramzan	Chen
Ramzan	Diao 531
Ramzan	Diao 535
Ramzan	Haq
Ramzan	Lee
Ramzan	Cai
Ramzan	Tahan
Ramzan	Menahem
Ramzan	Moskovitch
Ramzan	Niemela
Ramzan	Kennedy
Ramzan	Schultz
Ramzan	Okano
Ramzan	Kumar
Ramzan	Titonis
Ramzan	Diao 788
Ramzan	McCorkendale
Ramzan	Hsu
Ramzan	Idses

Primary Reference	In Combination With
Ramzan	Okano 074
Ramzan	Stokes
Ramzan	Friedrichs
Ramzan	Maloof
Ramzan	Avasarala
Ramzan	Ronen
Ramzan	Karta
Ramzan	Ravula
Ramzan	Masud
Ramzan	ThreatSeeker
Ramzan	Next Generation Firewall
Ramzan	ThreatSeeker + Kumar
Ramzan	ThreatSeeker + Okano
Ramzan	Okano + Kumar
Ramzan	Schultz + ThreatSeeker
Ramzan	Schultz + Kumar
Ramzan	Schultz + Okano
Diao 788	Ramzan
Diao 788	Zhu
Diao 788	Hu
Diao 788	Diao 466
Diao 788	Xuewen
Diao 788	Cheng

Primary Reference	In Combination With
Diao 788	Wan
Diao 788	Diao 974
Diao 788	Chen
Diao 788	Diao 531
Diao 788	Diao 535
Diao 788	Haq
Diao 788	Lee
Diao 788	Cai
Diao 788	Tahan
Diao 788	Menahem
Diao 788	Moskovitch
Diao 788	Niemela
Diao 788	Kennedy
Diao 788	Schultz
Diao 788	Okano
Diao 788	Kumar
Diao 788	Titonis
Diao 788	McCorkendale
Diao 788	Hsu
Diao 788	Idses
Diao 788	Okano 074
Diao 788	Stokes
Diao 788	Friedrichs

Primary Reference	In Combination With
Diao 788	Maloof
Diao 788	Avasarala
Diao 788	Ronen
Diao 788	Karta
Diao 788	Ravula
Diao 788	Masud
Diao 788	ThreatSeeker
Diao 788	Next Generation Firewall
Diao 788	ThreatSeeker + Kumar
Diao 788	ThreatSeeker + Okano
Diao 788	Okano + Kumar
McCorkendale	Diao 788
McCorkendale	Ramzan
McCorkendale	Zhu
McCorkendale	Hu
McCorkendale	Diao 466
McCorkendale	Xuewen
McCorkendale	Cheng
McCorkendale	Wan
McCorkendale	Diao 974
McCorkendale	Chen
McCorkendale	Diao 531
McCorkendale	Diao 535

Primary Reference	In Combination With
McCorkendale	Haq
McCorkendale	Lee
McCorkendale	Cai
McCorkendale	Tahan
McCorkendale	Menahem
McCorkendale	Moskovitch
McCorkendale	Niemela
McCorkendale	Kennedy
McCorkendale	Schultz
McCorkendale	Okano
McCorkendale	Kumar
McCorkendale	Titonis
McCorkendale	Hsu
McCorkendale	Idses
McCorkendale	Okano 074
McCorkendale	Stokes
McCorkendale	Friedrichs
McCorkendale	Maloof
McCorkendale	Avasarala
McCorkendale	Ronen
McCorkendale	Karta
McCorkendale	Ravula
McCorkendale	Masud

Primary Reference	In Combination With
McCorkendale	ThreatSeeker
McCorkendale	Next Generation Firewall
McCorkendale	ThreatSeeker + Kumar
McCorkendale	ThreatSeeker + Okano
McCorkendale	Okano + Kumar
Hsu	McCorkendale
Hsu	Diao 788
Hsu	Ramzan
Hsu	Zhu
Hsu	Hu
Hsu	Diao 466
Hsu	Xuewen
Hsu	Cheng
Hsu	Wan
Hsu	Diao 974
Hsu	Chen
Hsu	Diao 531
Hsu	Diao 535
Hsu	Haq
Hsu	Lee
Hsu	Cai
Hsu	Tahan
Hsu	Menahem

Primary Reference	In Combination With
Hsu	Moskovitch
Hsu	Niemela
Hsu	Kennedy
Hsu	Schultz
Hsu	Okano
Hsu	Kumar
Hsu	Titonis
Hsu	Idses
Hsu	Okano 074
Hsu	Stokes
Hsu	Friedrichs
Hsu	Maloof
Hsu	Avasarala
Hsu	Ronen
Hsu	Karta
Hsu	Ravula
Hsu	Masud
Hsu	ThreatSeeker
Hsu	Next Generation Firewall
Hsu	ThreatSeeker + Kumar
Hsu	ThreatSeeker + Okano
Hsu	Okano + Kumar
Hsu	Schultz + ThreatSeeker

Primary Reference	In Combination With
Hsu	Schultz + Kumar
Hsu	Ramzan + ThreatSeeker
Hsu	Ramzan + Kumar
Idses	Hsu
Idses	McCorkendale
Idses	Diao 788
Idses	Ramzan
Idses	Zhu
Idses	Hu
Idses	Diao 466
Idses	Xuewen
Idses	Cheng
Idses	Wan
Idses	Diao 974
Idses	Chen
Idses	Diao 531
Idses	Diao 535
Idses	Haq
Idses	Lee
Idses	Cai
Idses	Tahan
Idses	Menahem
Idses	Moskovitch

Primary Reference	In Combination With
Idses	Niemela
Idses	Kennedy
Idses	Schultz
Idses	Okano
Idses	Kumar
Idses	Titonis
Idses	Okano 074
Idses	Stokes
Idses	Friedrichs
Idses	Maloof
Idses	Avasarala
Idses	Ronen
Idses	Karta
Idses	Ravula
Idses	Masud
Idses	ThreatSeeker
Idses	Next Generation Firewall
Idses	ThreatSeeker + Kumar
Idses	ThreatSeeker + Okano
Idses	Okano + Kumar
Okano 074	Idses
Okano 074	Hsu
Okano 074	McCorkendale

Primary Reference	In Combination With
Okano 074	Diao 788
Okano 074	Ramzan
Okano 074	Zhu
Okano 074	Hu
Okano 074	Diao 466
Okano 074	Xuewen
Okano 074	Cheng
Okano 074	Wan
Okano 074	Diao 974
Okano 074	Chen
Okano 074	Diao 531
Okano 074	Diao 535
Okano 074	Haq
Okano 074	Lee
Okano 074	Cai
Okano 074	Tahan
Okano 074	Menahem
Okano 074	Moskovitch
Okano 074	Niemela
Okano 074	Kennedy
Okano 074	Schultz
Okano 074	Okano
Okano 074	Kumar

Primary Reference	In Combination With
Okano 074	Titonis
Okano 074	Stokes
Okano 074	Friedrichs
Okano 074	Maloof
Okano 074	Avasarala
Okano 074	Ronen
Okano 074	Karta
Okano 074	Ravula
Okano 074	Masud
Okano 074	ThreatSeeker
Okano 074	Next Generation Firewall
Okano 074	ThreatSeeker + Kumar
Okano 074	Moskovitch + ThreatSeeker
Okano 074	Moskovitch + Kumar
Okano 074	Schultz + ThreatSeeker
Okano 074	Schultz + Kumar
Stokes	Okano 074
Stokes	Idses
Stokes	Hsu
Stokes	McCorkendale
Stokes	Diao 788
Stokes	Ramzan
Stokes	Zhu

Primary Reference	In Combination With
Stokes	Hu
Stokes	Diao 466
Stokes	Xuewen
Stokes	Cheng
Stokes	Wan
Stokes	Diao 974
Stokes	Chen
Stokes	Diao 531
Stokes	Diao 535
Stokes	Haq
Stokes	Lee
Stokes	Cai
Stokes	Tahan
Stokes	Menahem
Stokes	Moskovitch
Stokes	Niemela
Stokes	Kennedy
Stokes	Schultz
Stokes	Okano
Stokes	Kumar
Stokes	Titonis
Stokes	Friedrichs
Stokes	Maloof

Primary Reference	In Combination With
Stokes	Avasarala
Stokes	Ronen
Stokes	Karta
Stokes	Ravula
Stokes	Masud
Stokes	ThreatSeeker
Stokes	Next Generation Firewall
Stokes	ThreatSeeker + Kumar
Stokes	ThreatSeeker + Okano
Stokes	Okano + Kumar
Friedrichs	Stokes
Friedrichs	Okano 074
Friedrichs	Idses
Friedrichs	Hsu
Friedrichs	McCorkendale
Friedrichs	Diao 788
Friedrichs	Ramzan
Friedrichs	Zhu
Friedrichs	Hu
Friedrichs	Diao 466
Friedrichs	Xuewen
Friedrichs	Cheng
Friedrichs	Wan

Primary Reference	In Combination With
Friedrichs	Diao 974
Friedrichs	Chen
Friedrichs	Diao 531
Friedrichs	Diao 535
Friedrichs	Haq
Friedrichs	Lee
Friedrichs	Cai
Friedrichs	Tahan
Friedrichs	Menahem
Friedrichs	Moskovitch
Friedrichs	Niemela
Friedrichs	Kennedy
Friedrichs	Schultz
Friedrichs	Okano
Friedrichs	Kumar
Friedrichs	Titonis
Friedrichs	Maloof
Friedrichs	Avasarala
Friedrichs	Ronen
Friedrichs	Karta
Friedrichs	Ravula
Friedrichs	Masud
Friedrichs	ThreatSeeker

Primary Reference	In Combination With
Firedrichs	Next Generation Firewall
Friedrichs	ThreatSeeker + Kumar
Friedrichs	ThreatSeeker + Okano
Firedrichs	Okano + Kumar
Maloof	Friedrichs
Maloof	Stokes
Maloof	Okano 074
Maloof	Idses
Maloof	Hsu
Maloof	McCorkendale
Maloof	Diao 788
Maloof	Ramzan
Maloof	Zhu
Maloof	Hu
Maloof	Diao 466
Maloof	Xuewen
Maloof	Cheng
Maloof	Wan
Maloof	Diao 974
Maloof	Chen
Maloof	Diao 531
Maloof	Diao 535
Maloof	Haq

Primary Reference	In Combination With
Maloof	Lee
Maloof	Cai
Maloof	Tahan
Maloof	Menahem
Maloof	Moskovitch
Maloof	Niemela
Maloof	Kennedy
Maloof	Schultz
Maloof	Okano
Maloof	Kumar
Maloof	Titonis
Maloof	Avasarala
Maloof	Ronen
Maloof	Karta
Maloof	Ravula
Maloof	Masud
Maloof	ThreatSeeker
Maloof	Next Generation Firewall
Maloof	ThreatSeeker + Kumar
Maloof	ThreatSeeker + Okano
Maloof	Okano + Kumar
Avasarala	Maloof
Avasarala	Friedrichs

Primary Reference	In Combination With
Avasarala	Stokes
Avasarala	Okano 074
Avasarala	Idses
Avasarala	Hsu
Avasarala	McCorkendale
Avasarala	Diao 788
Avasarala	Ramzan
Avasarala	Zhu
Avasarala	Hu
Avasarala	Diao 466
Avasarala	Xuewen
Avasarala	Cheng
Avasarala	Wan
Avasarala	Diao 974
Avasarala	Chen
Avasarala	Diao 531
Avasarala	Diao 535
Avasarala	Haq
Avasarala	Lee
Avasarala	Cai
Avasarala	Tahan
Avasarala	Menahem
Avasarala	Moskovitch

Primary Reference	In Combination With
Avasarala	Niemela
Avasarala	Kennedy
Avasarala	Schultz
Avasarala	Okano
Avasarala	Kumar
Avasarala	Titonis
Avasarala	Ronen
Avasarala	Karta
Avasarala	Ravula
Avasarala	Masud
Avasarala	ThreatSeeker
Avasarala	Next Generation Firewall
Avasarala	ThreatSeeker + Kumar
Avasarala	ThreatSeeker + Okano
Avasarala	Okano + Kumar
Avasarala	Menahem + ThreatSeeker
Avasarala	Menahem + Kumar
Avasarala	Ramzan + ThreatSeeker
Avasarala	Ramzan + Kumar
Ronen	Avasarala
Ronen	Maloof
Ronen	Friedrichs
Ronen	Stokes

Primary Reference	In Combination With
Ronen	Okano 074
Ronen	Idses
Ronen	Hsu
Ronen	McCorkendale
Ronen	Diao 788
Ronen	Ramzan
Ronen	Zhu
Ronen	Hu
Ronen	Diao 466
Ronen	Xuewen
Ronen	Cheng
Ronen	Wan
Ronen	Diao 974
Ronen	Chen
Ronen	Diao 531
Ronen	Diao 535
Ronen	Haq
Ronen	Lee
Ronen	Cai
Ronen	Tahan
Ronen	Menahem
Ronen	Moskovitch
Ronen	Niemela

Primary Reference	In Combination With
Ronen	Kennedy
Ronen	Schultz
Ronen	Okano
Ronen	Kumar
Ronen	Titonis
Ronen	Karta
Ronen	Ravula
Ronen	Masud
Ronen	ThreatSeeker
Ronen	Next Generation Firewall
Ronen	ThreatSeeker + Kumar
Ronen	ThreatSeeker + Okano
Ronen	Okano + Kumar
Karta	Ronen
Karta	Avasarala
Karta	Maloof
Karta	Friedrichs
Karta	Stokes
Karta	Okano 074
Karta	Idses
Karta	Hsu
Karta	McCorkendale
Karta	Diao 788

Primary Reference	In Combination With
Karta	Ramzan
Karta	Zhu
Karta	Hu
Karta	Diao 466
Karta	Xuewen
Karta	Cheng
Karta	Wan
Karta	Diao 974
Karta	Chen
Karta	Diao 531
Karta	Diao 535
Karta	Haq
Karta	Lee
Karta	Cai
Karta	Tahan
Karta	Menahem
Karta	Moskovitch
Karta	Niemela
Karta	Kennedy
Karta	Schultz
Karta	Okano
Karta	Kumar
Karta	Titonis

Primary Reference	In Combination With
Karta	Ravula
Karta	Masud
Karta	ThreatSeeker
Karta	Next Generation Firewall
Karta	ThreatSeeker + Kumar
Karta	ThreatSeeker + Okano
Karta	Okano + Kumar
Ravula	Karta
Ravula	Ronen
Ravula	Avasarala
Ravula	Maloof
Ravula	Friedrichs
Ravula	Stokes
Ravula	Okano 074
Ravula	Idses
Ravula	Hsu
Ravula	McCorkendale
Ravula	Diao 788
Ravula	Ramzan
Ravula	Zhu
Ravula	Hu
Ravula	Diao 466
Ravula	Xuewen

Primary Reference	In Combination With
Ravula	Cheng
Ravula	Wan
Ravula	Diao 974
Ravula	Chen
Ravula	Diao 531
Ravula	Diao 535
Ravula	Haq
Ravula	Lee
Ravula	Cai
Ravula	Tahan
Ravula	Menahem
Ravula	Moskovitch
Ravula	Niemela
Ravula	Kennedy
Ravula	Schultz
Ravula	Okano
Ravula	Kumar
Ravula	Titonis
Ravula	Masud
Ravula	ThreatSeeker
Ravula	Next Generation Firewall
Ravula	ThreatSeeker + Kumar
Ravula	ThreatSeeker + Okano

Primary Reference	In Combination With
Ravula	Okano + Kumar
Masud	Ravula
Masud	Karta
Masud	Ronen
Masud	Avasarala
Masud	Maloof
Masud	Friedrichs
Masud	Stokes
Masud	Okano 074
Masud	Idses
Masud	Hsu
Masud	McCorkendale
Masud	Diao 788
Masud	Ramzan
Masud	Zhu
Masud	Hu
Masud	Diao 466
Masud	Xuewen
Masud	Cheng
Masud	Wan
Masud	Diao 974
Masud	Chen
Masud	Diao 531

Primary Reference	In Combination With
Masud	Diao 535
Masud	Haq
Masud	Lee
Masud	Cai
Masud	Tahan
Masud	Menahem
Masud	Moskovitch
Masud	Niemela
Masud	Kennedy
Masud	Schultz
Masud	Okano
Masud	Kumar
Masud	Titonis
Masud	ThreatSeeker
Masud	Next Generation Firewall
Masud	ThreatSeeker + Kumar
Masud	ThreatSeeker + Okano
Masud	Okano + Kumar
Masud	Ramzan + ThreatSeeker
Masud	Ramzan + Kumar
Masud	Schultz + ThreatSeeker
Masud	Schultz + Kumar

Forcepoint reserves the right to amend these Contentions and prior art combinations in light of new information that may arise from third parties related to additional computer security systems. The following list of references are also evidence of the knowledge of POSITA at the time of the alleged invention of the '869 Patent: Kumar, Okano, Titonis, Moskovitch, Menahem, Tahan, Cai, Schultz, Kennedy, Niemela, Lee, Haq, Diao 535, Diao 531, Chen, Diao 974, Wan, Cheng, Xuewen, Diao 466, Hu, Zhu, Ramzan, Diao 788, McCorkendale, Hsu, Ideses, Okano 074, Stokes, Friedrichs, Maloof, Avasarala, Ronen, Karta, Ravula, Masud, ThreatSeeker, and Next Generation Firewall.

One of ordinary skill in the art would be motivated to combine these references in the above combinations for at least the following reasons. One of ordinary skill in the art would have understood that each of these references are in the same field of endeavor, namely methods and devices relating to computer security. *See, e.g.*, Titonis at Abstract; Okano at Abstract; Kumar at Abstract; Moskovitch at [0057]; Menahem at [1483]; Tahan at 962; Cai at [0027]; Schultz at [0104]; Kennedy at [0015]; Niemela at [0009]; Lee at [0007]; Haq at [0022]; Diao 535 at 3:6-23; Diao 531 at 3:6-23, Chen at 2:16-53; Diao 974 at 2:21-33; Wan at 11:44-60; Cheng at 2:19-58; Xuewen at 9:42-10:43; Diao 466 at 3:32-49; Hu at 1:46-58; Zhu at 3:44-4:7; Ramzan at 4:19-40; Diao 788 at 10:9-27; McCorkendale at 10:50-11:3; Hsu at 2:22-39; Ideses at [0063]; Okano 074 at Abstact; Stokes at Abstract.; Friedrichs at Abstract; Maloof at Abstract.; Avasarala at Abstract; Ronen at Abstract; Karta at 3:7-42; Ravula at 27-28; Masud at 50; ThreatSeeker (Exhibit 869-H-37) at 4–5 (citing Websense Express (June 28, 2007) at 2; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 2); Next Generation Firewall (Exhibit 869-H-38) at 3–4 (citing StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010)

at 26, 112; StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 17).

One of ordinary skill in the art would have recognized that these references are directed to addressing the same problem, in particular, improving computer security. *See, e.g.*, Titonis at Abstract; Okano at Abstract; Kumar at Abstract; Moskovitch at [0057]; Menahem at [1483]; Tahan at 962; Cai at [0027]; Schultz at [0104]; Kennedy at [0015]; Niemela at [0009]; Lee at [0007]; Haq at [0022]; Diao 535 at 3:6-23; Diao 531 at 3:6-23; Chen at 2:16-53; Diao 974 at 2:21-33; Wan at 11:44-60; Cheng at 2:19-58; Xuewen at 9:42-10:43; Diao 466 at 3:32-49; Hu at 1:46-58; Zhu at 3:44-4:7; Ramzan at 4:19-40; Diao 788 at 10:9-27; McCorkendale at 10:50-11:3; Hsu at 2:22-39; Ideses at [0063]; Okano 074 at Abstact; Stokes at Abstract.; Friedrichs at Abstract; Maloof at Abstract.; Avasarala at Abstract; Ronen at Abstract; Karta at 3:7-42; Ravula at 27-28; Masud at 50; ThreatSeeker (Exhibit 869-H-37) at 4–5 (citing Websense Express (June 28, 2007) at 2; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 2); Next Generation Firewall (Exhibit 869-H-38) at 3–4 (citing StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 26, 112; StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 17).

Further, the Asserted Claims of the ’869 Patent contain merely a duplication of concepts known in the prior art and have no patentable significance given that no unexpected results occur—*i.e.* the patentee merely combines known prior art elements according to known methods to yield predictable results. For example, the prior art references describe methods of using “identifying static data points…indicative of either a harmful or benign executable file.” *See e.g.*, Kumar at 4:34-49; Okano at 7:46-58; Titonis at 12:1-23; Moskovitch at [0029]-[0030]; Menahem at [1483] ; Tahan at 955; Cai at [0027]; Schultz at [0042]; Kennedy at [0017]; Niemela at [0011]; Lee at

[0009]; Haq at [0044]; Diao 535 at 3:48-56; Diao 531 at 1:63-67; Chen at 3:31-43; Diao 974 at 3:20-33; Wan at 8:51-9:1; Cheng at 5:7-31; Xuewen at 7:57-63; Diao 466 at 2:10-14; Hu at 3:63-4:2; Zhu at 4:28-39; Ramzan at 2:65-3:3; Diao 788 at 5:26-35; McCorkendale at 2:30-37; Hsu at 6:50-7:6; Ideses at [0089]; Okano 074 at [0074]-[0080]; Stokes at 3:61-4:5; Friedrichs at Abstract; Maloof at [0027]; Avasarala at [0037]; Ronen at 1:44-58; Karta at 3:43-4:9; Ravula at 47-48; Masud at 206; ThreatSeeker (Exhibit 869-H-37) at 6–7 (citing Websense Express (June 28, 2007) at 2; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 2, 7, 9; The Web Isn't Fun Anymore: How Websense Technology Protects Against Internet-Based Threats (Aug. 1, 2007) at 4; Websense Product Overview (Jan. 10, 2007) at 4); Next Generation Firewall (Exhibit 869-H-38) at 4–5 (citing StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 112; StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 17; StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 21).

The prior art references further describe a "associating the identified static data point with one of a plurality of categories of files" *See e.g.*, Titonis 45:31-36; Okano at 8:19-29; Kumar at 6:4-14; Moskovitch at [0029]-[0030]; Menahem at [1487] ; Tahan at 949; Cai at [0012]; Schultz at [0042]; Kennedy at [0023]; Niemela at [0067]; Lee at [0010]; Haq at [0044]; Diao 535 at 1:63-67; Diao 531 at 1:63-67; Chen at 3:31-43; Diao 974 at 3:20-33; Wan at 8:51-9:1; Cheng at 5:7-31; Xuewen at 7:57-63; Diao 466 at 4:44-62; Hu at 3:63-4:2; Zhu at 4:28-39; Ramzan at 2:65-3:3; Diao 788 at 5:26-35; McCorkendale at 2:30-37; Hsu at 6:50-7:6; Ideses at [0096]; Okano 074 at [0074]-[0080]; Stokes at 5:59-67; Friedrichs at 6:18-29; Maloof at [0027]; Avasarala at [0037]; Ronen at 6:46-60; Karta at 1:57-62; Ravula at 47-48; Masud at 206; ThreatSeeker (Exhibit 869-H-37) at 8–10 (citing Websense Express (June 28, 2007) at 2; The Websense ThreatSeeker

Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 8, 12; Websense Enterprise V6.2 and Web Security Suites "Aries" Requirements Document (May 01, 2005) at 6); Next Generation Firewall (Exhibit 869-H-38) at 6–7 (citing StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 29, 114; The Evolution to the Next Generation Firewall: Meeting Today's Critical Enterprise Network Demands (Feb. 22, 2010) at 10).

The prior art references further describe a "identifying an executable file to be evaluated." *See e.g.*, Titonis at 4:58-67; Okano at 9:13-29; Kumar at 4:34-49; Moskovitch at [0033]; Menahem at [1487]; Tahan at 955; Cai at [0016]; Schultz at [0019]; Kennedy at [0004]; Niemela at [0062]; Lee at [0032]; Haq at [0064]; Diao 535 at 4:1-11; Diao 531 at 51:1-11; Chen at 4:49-61; Diao 974 at 3:20-24; Wan at 8:27-32; Cheng at 3:14-39; Xuewen at 4:65-5:1; Diao 466 at 4:26-36; Hu at 3:38-62; Zhu at 4:49-51; Ramzan at 5:1-12; Diao 788 at 4:13-15; McCorkendale at 1:29-42; Hsu at 3:43-51; Ideses at [0096]; Okano 074 at [0074]-[0080]; Stokes at 2:32-55; Friedrichs at 13:27-14:27; Maloof at [0027]; Avasarala at [0044]; Ronen at 1:59-2:8; Karta at 3:43-4:9; Ravula at 77; Masud at 211; ThreatSeeker (Exhibit 869-H-37) at 10–11 (citing Websense Express (June 28, 2007) at 2; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 2; Websense Enterprise V6.2 and Web Security Suites "Aries" Requirements Document (May 01, 2005) at 10); Next Generation Firewall (Exhibit 869-H-38) at 8–9 (citing StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 20, 112; The Evolution to the Next Generation Firewall: Meeting Today's Critical Enterprise Network Demands (Feb. 22, 2010) at 10).

The prior art references further describe a "extracting a plurality of static data points from the executable file." *See e.g.*, Titonis at 21:48-22:2; Okano at 9:13-41; Kumar at 5:43-52; Moskovitch at [0021]; Menahem at [1488]; Tahan at 949; Cai at [0012]; Schultz at [0021];

Kennedy at [0028]; Niemela at [0068]; Lee at [0032]; Haq at [0018]; Diao 535 at 4:1-11; Diao 531 at 4:1-11; Chen at 3:31-43; Diao 974 at 3:21-26; Wan at 4:34-40; Cheng at 3:45-67; Xuewen at 5:49-55; Diao 466 at 4:26-30; Hu at 7:13-29; Zhu at 1:36-41; Ramzan at 2:56-65; Diao 788 at 7:33-38; McCorkendale at 1:29-42; Hsu at 3:30-42; Ideses at [0089]; Okano 074 at [0074]-[0080]; Stokes at 4:37-50; Friedrichs at 3:4-16; Maloof at [0027]; Avasarala at [0037]; Ronen at 1:44-58; Karta at 3:43-4:9; Ravula at 40; Masud at 211; ThreatSeeker (Exhibit 869-H-37) at 11–13 (citing The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 8; Websense Email Security Suite: DataSheet (Sept. 16, 2008) at 2); Next Generation Firewall (Exhibit 869-H-38) at 9–10 (citing StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 10; The Evolution to the Next Generation Firewall: Meeting Today's Critical Enterprise Network Demands (Feb. 22, 2010) at 10).

The prior art references further describe a "generating a feature vector from the plurality of static data points." See e.g., Titonis at 29:30-45; Okano at 9:13-41; Kumar at 4:50-5:3; Moskovitch at [0034]; Menahem at [1487]; Tahan at 951; Cai at [0025]; Schultz at [0115]; Kennedy at [0027]; Niemela at [0067]; Lee at [0008]; Haq at [0085]; Diao 535 3:24-34; Diao 531 at 3:24-34; Chen at 3:6-14; Diao 974 at 3:52-4:1; Wan at 5:27-45; Cheng at 4:1-6; Xuewen at 5:15-19; Diao 466 at 4:26-30; Hu at 7:30-40; Zhu at 1:36-41; Ramzan at 2:65-3:3; Diao 788 at 5:26-35; McCorkendale at 7:15-32; Hsu at 4:33-41; Ideses at [0044]; Okano 074 at [0090]-[0091]; Stokes at 4:37-50; Friedrichs at 6:57-64; Maloof at [0040]; Avasarala at [0050]; Ronen at 1:59-2:8; Karta at 9:13-10:52; Ravula at 40; Masud at 91; ThreatSeeker (Exhibit 869-H-37) at 10–13 (citing Websense Product Overview (Jan. 10, 2007) at 3; The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 13–16; The Web Isn't Fun Anymore: How Websense Technology Protects Against Internet-Based Threats (Aug. 1, 2007) at

3); Next Generation Firewall (Exhibit 869-H-38) at 11–13 (citing StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 17, 21, 27; StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 112).

The prior art references further describe a "evaluating the feature vector using a machine learning model" *See e.g.*, Titonis at 25:56-26:35; Okano at 8:62-9:11; Kumar at 8:21-28; Moskovitch at [0046]; Menahem at [1484]; Tahan at 951; Cai at [0025]; Schultz at [0042]; Kennedy at [0027]; Niemela at [0067]; Lee at [0030]; Haq at [0085]; Diao 535 at 3:56-67; Diao 531 at 3:56-67; Chen at 3:20-27; Diao 974 at 4:8-14; Wan at 7:32-48; Cheng at 6:43-52; Xuewen at 5:22-28; Diao 466 at 4:26-34; Hu at 3:63-4:2; Zhu at 4:14-23; Ramzan at 3:14-17; Diao 788 at 6:14-19; McCorkendale at 1:29-42; Hsu at 7:7-18; Ideses at [0096]; Okano 074 at [0107]-[0109]; Stokes at 1:17-33; Friedrichs at 6:18-29; Maloof at [0011]; Avasarala at [0036]; Ronen at 1:59-2:8; Karta at 10:1-14; Ravula at 38; Masud at 77; ThreatSeeker (Exhibit 869-H-37) at 17–18 (citing The Websense ThreatSeeker Network: Leveraging Websense HoneyGrid Computing (Sep. 4, 2008) at 9); Next Generation Firewall (Exhibit 869-H-38) at 14–15 (citing StoneGate Firewall/VPN Common Criteria Security Target Report (Jan. 23, 2009) at 17; StoneGate 5.1: Firewall/VPN Reference Guide (Jan. 13, 2010) at 112, 114).

Other examples of these concepts are cited in the attached charts for the above references. *See* Exs. 869-H-1 through 869-H-38. It would have been known and simple to take a prior art for malware detection by comparison with similar objects, and it would have been obvious to a POSITA to try this. *Id.* It would have also yielded predictable results in the context of improving computer security. *Id.*

Forcepoint is not aware of any secondary considerations supporting non-obviousness of the '869 Patent claims. To the extent Plaintiffs seek to introduce any alleged secondary considerations in the future, Forcepoint reserves the right to respond at that time.

F. Invalidity Under Section 112

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the limitations of the '869 Patent that are invalid based on indefiniteness under 35 U.S.C. § 112(b), or enablement or written description under 35 U.S.C. § 112(a). These Contentions are being proffered without the full benefit of expert disclosure or discovery.

Asserted Claims 18, 32, and 46 of the '869 Patent (and all claims which depend from these claims) are indefinite, and thus invalid. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). For example, as applied in Plaintiffs' Infringement Contentions, the terms "selectively turned on or off", "predetermined range", "harmful [executable] file[s]", "benign [executable] file[s]", "classifier", "one or more categories of files", "without decrypting or unpacking the executable file", "artificial neural network", "user request for a file download" "evaluating the feature vector using a machine learning model", "machine learning model", "detected condition", and "harmful" are indefinite because each of these phrases not only is subjective but also does not have a meaning that can be clearly determined from the patent, and thus fails to put the public on notice of what is and is not covered by these claims.

Asserted Claims 18, 32, and 46 of the '869 Patent (and all claims which depend from these claims) of the '869 Patent are invalid under § 112 ¶ 1, because the specification as filed does not contain a sufficient written description supporting those claims. In particular, the patent disclosure

would not lead a person of ordinary skill in the art to understand that the named inventor had possession of the purported inventions as claimed and in view of Plaintiffs' contentions. For example, Asserted Claims 18, 32, and 46 (and all claims that depend from these claims) fail to satisfy the requirements of 35 U.S.C. § 112 for at least the following reasons: the '869 Patent fails to provide an adequate written description of the phrases "selectively turned on or off", "predetermined range", "harmful [executable] file[s]", "benign [executable] file[s]", "classifier", "generating a feature vector from a plurality of static data points", "classifier trained to classify the static data points", "files known to fit into one of the plurality of categories of files", "one or more categories of files", "plurality of static data points are extracted without decrypting or unpacking the executable file", "determination of whether the executable file is harmful", "classifying the executable file as harmful", "artificial neural network", "user request for a file download", "evaluating the feature vector using a machine learning model", "machine learning model", "detected condition", and "harmful".

A more detailed basis for the above indefiniteness, written description, and enablement defenses may be set forth in any expert report(s) on invalidity to be served on Plaintiffs in accordance with the Court's Scheduling Order.

G. Invalidity Under Section 101

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint provides an identification of the claims of the '869 Patent they contend are directed to ineligible subject matter under AIA 35 U.S.C. § 101. These Contentions are being proffered without expert disclosure or discovery.

Each Asserted Claim of the '869 Patent is directed to ineligible subject matter under 35 U.S.C. § 101. First, the Asserted Patent Claims of the '869 Patent are directed to the abstract idea of, for example, identifying, extracting and classifying data based on known data points. Such a process does not go beyond routine mental processes of data classification based on pre-existing

criteria. *See, e.g.*, '869 Patent at claims 18, 46. For example, the specification of the '869 confirms that the Asserted Claims are directed to basic concepts of identifying, extracting, and classifying data. *See, e.g.*, *id.* at 4:29–34 ("To classify executable files into one of the above identified categories, the knowledge component 102 collects static data on a large variety of executable files (e.g., PE files)."); *id.* at 5:8–11 ("In examples, the collected data on the executable files is analyzed to identify static data points that may indicate one of a malicious file, a benign file or a potentially unwanted file."); *id.* at 5:11–47 ("For instance, the knowledge component 102 may employ one or more programming operations to identify static data points for collection, and to associate the static data points with one of the categories of files (e.g., malicious, benign or potentially unwanted). Programming operations utilized by the knowledge component 102 include operations to collect file data (e.g., executable files or data points from executable files), parse the file data, and store extracted data points.").

Second, the Asserted Claims of the '869 Patent do not contain any inventive concept as they combine standard, generic, and well-known components in a conventional way to arrive at the claimed invention. The '869 Patent describes identifying, extracting and classifying data based on known data points using well-known devices "such as a computer, a client device . . . and/or any other electronic devices[.]" *Id.* at 3:17–21.

Considered individually or as an ordered combination, the claim limitations recite nothing more than the abstract idea of identifying, extracting and classifying data based on known data points. Simply identifying an overarching desirable outcome ("threat detection of executable files") without specifying any technical improvements over the prior art to achieve that outcome does not rise to the level of an inventive and, thus, patent-eligible concept. *See Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330–32 (Fed. Cir. 2017) ("The recited use of a mobile

interface and pointers to retrieve user information evidences nothing more than a 'generic computer implementation' of the abstract idea that is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention."); *Intell. Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–68 (Fed. Cir. 2015) (claims directed to internet-based communications recite generic computer components and do not claim inventive concepts). Moreover, the prior art cited throughout Forcepoint's Contentions, as well as the patents themselves and the prior art cited therein, demonstrate that each claim element in every Asserted Claim is directed to well-understood, routine, and conventional computer security components and techniques. The remaining Asserted Claims merely apply those conventional and generic computer components and techniques in a selected physical or technical environment—an environment where they had already long been used by those of ordinary skill as the prior art referenced herein reflects. Thus, the Asserted Claims of the '869 Patent fail to add anything to the underlying abstract idea sufficient to transform them into patent-eligible subject matter.

Furthermore, at least under Plaintiffs' apparent infringement theory, as set forth in their Infringement Contentions, the Asserted Claims of the '869 Patent are ineligible because they would preempt the entire field of threat detection.

This ineligibility contention is based in whole or in part on Forcepoint's present understanding of the Asserted Claims of the '869 Patent, their current construction of the claims, and/or Plaintiffs' apparent construction of the claims in their current Infringement Contentions. Forcepoint is not adopting Plaintiffs' apparent claim construction, nor admitting to the accuracy of any particular claim construction. To the extent that Plaintiffs' apparent claim construction or applications thereof are reflected in this Contention, nothing herein should be construed as an admission that Forcepoint agrees with Plaintiffs' apparent claim construction or Plaintiffs'

application of that claim construction in Plaintiffs' current Infringement Contentions. Further, claim construction is not necessary to determine that the Asserted Claims of the '869 Patent are ineligible.

Forcepoint's Contentions regarding ineligibility under 35 U.S.C. § 101 may be based on Plaintiffs' allegations of infringement. Forcepoint does not necessarily agree with the interpretations set forth in Plaintiffs' Infringement Contentions and thus this ineligibility contention is not an admission that the accused products meet any particular claim element or infringe the Asserted Claim. In addition, nothing in this ineligibility contention should be interpreted as a position about whether any portion of the Asserted Claims are limiting or not. Further, by submitting this ineligibility contention, Forcepoint does not waive and hereby expressly reserves its right to raise invalidity defenses including, but not limited, to defenses under 35 U.S.C. §§ 102, 103, and/or 112.

Discovery in this case is ongoing and, accordingly, this ineligibility contention is not to be considered final. Forcepoint reserves all rights to revise, amend, or supplement this ineligibility claim at a later date as discovery progresses, if the Court issues further claim construction rulings, or if Plaintiffs amend their Infringement Contentions.

XI. DOCUMENT PRODUCTION

Pursuant to Section II, Paragraph 4 of the Order, Forcepoint states that (1) all prior art related to these Contentions and (2) technical documents, excluding source code, within Forcepoint's possession, sufficient to show the operation of the accused product(s) were either already produced (e.g., at FP_WR00006352 - FP_WR00017692 and FP_WR00030916 - FP_WR00034239) or are being produced concurrently with service of these Contentions at FP_WR00586274 - FP_WR00599749. Forcepoint's will make source code available for inspection in the Austin office of Kirkland & Ellis.

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Respectfully submitted,

/s/ Kat Li

Kat Li (SBN 24070142)
kat.li@kirkland.com
Nadia E. Haghighatian (SBN 24087652)
nadia.haghighatian@kirkland.com
KIRKLAND & ELLIS LLP
401 Congress Avenue
Austin, TX 78701
Telephone: (512) 678-9100
Facsimile: (512) 678-9101

Adam R. Alper (admitted *pro hac vice*)
aalper@kirkland.com
Akshay S. Deoras (admitted *pro hac vice*)
adeoras@kirkland.com
Laura Ashley Harris (admitted *pro hac vice*)
lauraashley.harris@kirkland.com
KIRKLAND & ELLIS LLP
555 California Street
San Francisco, CA 94104
Telephone: (415) 439-1400
Facsimile: (415) 439-1500

Michael W. De Vries (admitted *pro hac vice*)
michael.devries@kirkland.com
KIRKLAND & ELLIS LLP
555 South Flower Street
Los Angeles, CA 90071
Telephone: (213) 680-8400
Facsimile: (213) 680-8500

Leslie M. Schmidt (admitted *pro hac vice*)
leslie.schmidt@kirkland.com
KIRKLAND & ELLIS LLP
601 Lexington Ave.
New York, NY 10022
Telephone: (212) 446-4800
Facsimile: (212) 446-4900

Attorneys for Forcepoint LLC

CERTIFICATE OF SERVICE

I hereby certify that counsel of record are being served on November 1, 2023, with a copy of this document, along with all exhibits and attachments, via email.

/s/ Kat Li
Kat Li