UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
TEXARKANA DIVISION

SABLE NETWORKS, INC. AND SABLE IP, LLC, ***Plaintiffs,*** v. **HEWLETT PACKARD ENTERPRISE COMPANY; ARUBA NETWORKS, INC.,** ***Defendants.***	**Civil Action No._____** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Sable Networks, Inc. and Sable IP, LLC (collectively, "Sable" or "Plaintiffs") bring this action and make the following allegations of patent infringement relating to U.S. Patent Nos.: 6,977,932 (the "'932 patent"); 7,012,919 (the "'919 patent"); 8,085,775 (the "'775 patent"); 8,243,593 (the "'593 patent"); and 8,817,790 (the "'790 patent") (collectively, the "patents-in-suit"). Defendants Hewlett Packard Enterprise Company and Aruba Networks, Inc. (collectively, "HPE" or "Defendant") infringes the patents-in-suit in violation of the patent laws of the United States of America, 35 U.S.C. § 1 *et seq*.

INTRODUCTION

1. The patents-in-suit arise from technologies developed by Dr. Lawrence G. Roberts - one of the founding fathers of the internet.[1] The patents relate to technologies for efficiently managing the flow of data packets over routers and switch devices. Dr. Roberts and engineers at Caspian Networks, Inc. and later Sable Networks, Inc. developed these technologies to address the

[1] Chris Woodford, THE INTERNET: A HISTORICAL ENCYCLOPEDIA VOLUME 2 at 204 (2005) ("Widely regarded as one of the founding fathers of the Internet, Lawrence Roberts was the primary architect of ARPANET, the predecessor of the Internet.").

increasing amount of data sent over computer networks.

2. Dr. Roberts is best known for his work as the Chief Scientist of the Advanced Research Projects Agency (ARPA) where he designed and oversaw the implementation of ARPANET, the precursor to the internet. Dr. Roberts' work on ARPANET played a key role in the development of digital network transmission technologies.[2] Initially, ARPANET was used primarily to send electronic mail and Dr. Roberts developed the first program for reading and sending electronic messages.

Keenan Mayo and Peter Newcomb, *How The Web Was Won*, VANITY FAIR at 96-97 (January 7, 2009); *One of the Engineers Who Invented the Internet Wants to Build A Radical new Router,* IEEE SPECTRUM MAGAZINE (July 2009); Katie Hafner, *Billions Served Daily, and Counting*, N.Y. TIMES at G1 (December 6, 2001)("Lawrence Roberts, who was then a manager at the Advanced Research Projects Agency's Information Processing Techniques Office, solved that problem after his boss began complaining about the volume of e-mail piling up in his in box. In 1972, Dr. Roberts produced the first e-mail manager, called RD, which included a filing system, as well as a Delete function.").

3. Dr. Roberts' work on ARPANET played a key role in the development of packet switching networks. Packet switching is a digital network transmission process in which data is broken into parts which are sent independently and reassembled at a destination. Electronic messages sent over the ARPANET were broken up into packets then routed over a network to a

[2] Katie Hafner, *Lawrence Roberts, Who Helped Design Internet's Precursor,* N.Y. TIMES at A2 (December 31, 2018) ("Dr. Roberts was considered the decisive force behind packet switching, the technology that breaks data into discrete bundles that are then sent along various paths around a network and reassembled at their destination.").

destination. "In designing the ARPANET, Roberts expanded on the work he'd done at MIT, using those tiny data packets to send information from place to place."[3] Packet switching has become the primary technology for data communications over computer networks.

From Two Small Nodes, a Mighty Web Has Grown

By 1966, with these and other basic ideas in place, Lawrence Roberts, recruited by ARPA from the Massachusetts Institute of Technology, mapped out the plan. Two years after the first transmission, the number of host computers grew to 23. The @ symbol was invented in 1972, and a year later 75 percent of the Arpanet traffic was E-mail. It was starting to look like the Net.").

George Johnson, *From Two Small Nodes, a Mighty Web Has Grown*, N.Y. TIMES at F1 (October 12, 1999).

4. After leaving ARPANET, Dr. Roberts grew increasingly concerned that existing technologies for routing data packets were incapable of addressing the increasing amounts of data traversing the internet.[4] Dr. Roberts identified that as the "Net grows, the more loss and transmission of data occurs. Eventually, gridlock will set in."[5]

> ***The Internet is broken. I should know: I designed it***. In 1967, I wrote the first plan for the ancestor of today's Internet, the Advanced Research Projects Agency Network, or ARPANET, and then led the team that designed and built it. The main idea was to share the available network infrastructure by sending data as small, independent packets, which, though they might arrive at different times, would still generally make it to their destinations. The small computers that directed the data traffic-I called them Interface Message Processors, or IMPs-evolved into today's

[3] Code Metz, *Larry Roberts Calls Himself the Founder of The Internet. Who Are You To Argue*, WIRED MAGAZINE (September 24, 2012); John C. McDonald, FUNDAMENTALS OF DIGITAL SWITCHING at 211 (1990) ("The ARPANET was, in part, an experimental verification of the packet switching concept. Robert's objective was a new capability for resource sharing.").

[4] eWeek Editors, *Feeling A Little Congested,* EWEEK MAGAZINE (September 24, 2001) ("Lawrence Roberts, one of the primary developers of Internet precursor ARPANet and CTO of Caspian Networks, recently released research indicating that Net traffic has quadrupled during the past year alone.").

[5] Michael Cooney, *Can ATM Save The Internet,* NETWORK WORLD at 16 (May 20, 1996); Lawrence Roberts, A RADICAL NEW ROUTER, IEEE Spectrum Vol. 46 34-39 (August 2009).

> routers, and for a long time they've kept up with the Net's phenomenal growth. Until now.

Lawrence Roberts, *A Radical New Router*, IEEE SPECTRUM Vol. 46(7) at 34 (August 2009) (emphasis added).

5. In 1998, Dr. Roberts founded Caspian Networks.[6] At Caspian Networks, Dr. Roberts developed a new kind of internet router to efficiently route packets over a network. This new router was aimed at addressing concerns about network "gridlock." In a 2001 interview with Wired Magazine, Dr. Roberts discussed the router he was developing at Caspian Networks – the Apeiro. "Roberts says the Apeiro will also create new revenue streams for the carriers by solving the 'voice and video problem.' IP voice and video, unlike email and static Web pages, breaks down dramatically if there's a delay - as little as a few milliseconds - in getting packets from host to recipient."[7]

Jim Duffy, *Router Newcomers take on Cisco, Juniper*, NETWORK WORLD at 14 (April 14, 2013); Stephen Lawson, *Caspian Testing Stellar Core Offering*, NETWORK WORLD at 33 (December 17, 2001); Tim Greene, *Caspian Plans Superfast Routing For The 'Net Core*, NETWORK WORLD at 10 (January 29, 2001); Andrew P. Madden, *Company Spotlight: Caspian Networks*, MIT TECHNOLOGY REVIEW at 33 (August 2005); and Loring Wirbel, *Caspian Moves Apeiro Router To Full Availability*, EE TIMES (April 14, 2003).

[6] Caspian Networks, Inc. was founded in 1998 as Packetcom, LLC and changed its name to Caspian Networks, Inc. in 1999.

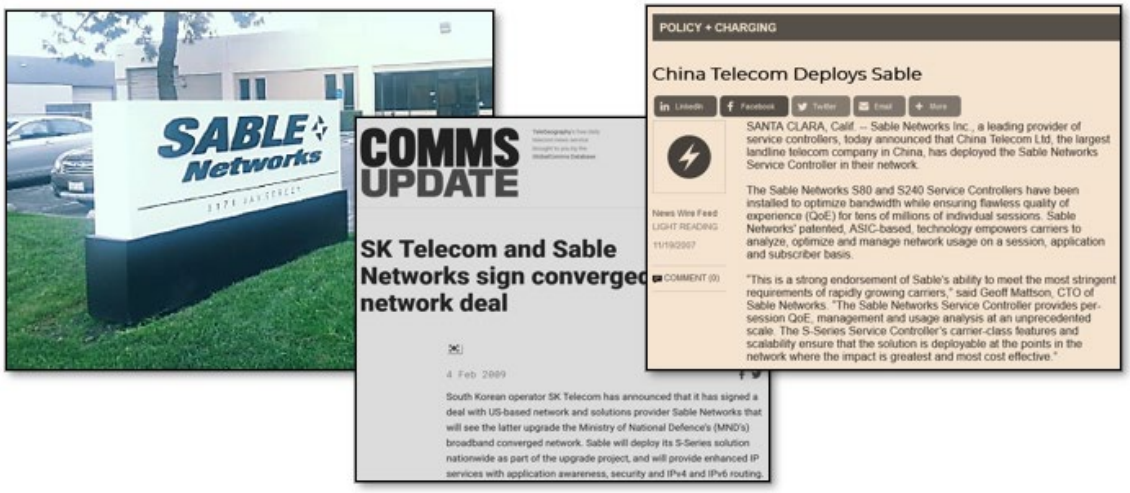
[7] John McHugh, *The n-Dimensional Superswitch*, WIRED MAGAZINE (May 1, 2001).

6. The Apeiro debuted in 2003. The Apeiro, a flow-based router, can identify the nature of a packet – be it audio, text, or video, and prioritize it accordingly. The Apeiro included numerous technological advances including quality of service (QoS) routing and flow-based routing.

7. At its height, Caspian Networks Inc. raised more than $300 million dollars and grew to more than 320 employees in the pursuit of developing and commercializing Dr. Roberts' groundbreaking networking technologies, including building flow-based routers that advanced quality of service and load balancing performance. However, despite early success with its technology and business, Caspian hit hard times when the telecommunications bubble burst.

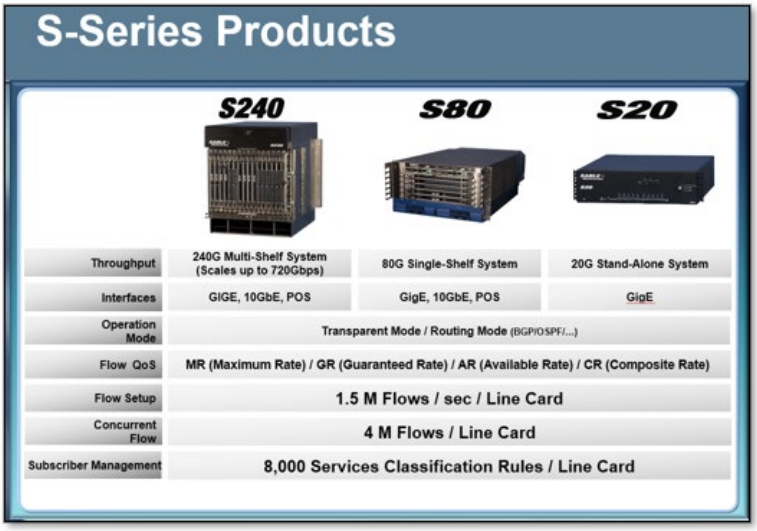
8. Sable Networks, Inc. was formed by Dr. Sang Hwa Lee to further develop and commercialize the flow-based networking technologies developed by Dr. Roberts and Caspian Networks.[8] Sable Networks, Inc. has continued its product development efforts and has gained commercial success with customers in Japan, South Korea, and China. Customers of Sable Networks, Inc. have included: SK Telecom, NTT Bizlink, Hanaro Telecom, Dacom Corporation, USEN Corporation, Korea Telecom, China Unicom, China Telecom, and China Tietong.

[8] Dr. Lee, through his company Mobile Convergence, Ltd. purchased the assets of Caspian Networks Inc. and subsequently created Sable Networks, Inc.



SK Telecom and Sable Networks Sign Convergence Network Deal, COMMS UPDATE – TELECOM NEWS SERVICE (February 4, 2009) ("South Korean operator SK Telecom has announced that it has signed a deal with US-based network and solutions provider Sable Networks."); *China Telecom Deploys Sable*, LIGHT READING NEWS FEED (November 19, 2007) ("Sable Networks Inc., a leading provider of service controllers, today announced that China Telecom Ltd, the largest landline telecom company in China, has deployed the Sable Networks Service Controller in their network.").

9. Armed with the assets of Caspian Networks Inc. as well as members of Caspian Networks' technical team, Sable Networks, Inc. continued the product development efforts stemming from Dr. Roberts' flow-based router technologies. Sable Networks, Inc. developed custom application-specific integrated circuits ("ASIC") designed for flow traffic management. Sable Network, Inc.'s ASICs include the Sable Networks SPI, which enables 20 Gigabit flow processing. In addition, Sable Networks, Inc. developed and released S-Series Service Controllers (*e.g.*, S80 and S240 Service Controller models) that contain Sable Networks' flow-based programmable ASICs, POS and Ethernet interfaces, and carrier-hardened routing and scalability from 10 to 800 Gigabits.



SABLE NETWORKS S-SERIES SERVICE CONTROLLERS (showing the S240-240G Multi-Shelf System, S80-80G Single-Shelf System, and S20-20G Stand-Alone System).

10. Sable pursues the reasonable royalties owed for HPE's use of the inventions claimed in Sable's patent portfolio, which arise from Caspian Networks and Sable Networks' groundbreaking technology.

SABLE'S PATENT PORTFOLIO

11. Sable's patent portfolio includes over 34 patent assets, including 14 granted U.S. patents. Dr. Lawrence Roberts' pioneering work on QoS traffic prioritization, flow-based switching and routing, and the work of Dr. Roberts' colleagues at Caspian Networks Inc. and Sable Networks, Inc. are claimed in the various patents owned by Sable.

12. Highlighting the importance of the patents-in-suit is the fact that the Sable's patent portfolio has been cited by over 1,000 U.S. and international patents and patent applications assigned to a wide variety of the largest companies operating in the computer networking field. Sable's patents have been cited by companies such as:

- Cisco Systems, Inc.[9]

[9] *See, e.g.*, U.S. Patent Nos. 7,411,965; 7,436,830; 7,539,499; 7,580,351; 7,702,765; 7,817546; 7,936,695; 8,077,721; 8,493,867; 8,868,775; and 9,013,985.

- Juniper Networks, Inc.[10]
- Broadcom Limited[11]
- EMC Corporation[12]
- F5 Networks, Inc.[13]
- Verizon Communications Inc.[14]
- Microsoft Corporation[15]
- Intel Corporation[16]
- Extreme Networks, Inc.[17]
- Huawei Technologies Co., Ltd.[18]

THE PARTIES

SABLE NETWORKS, INC.

13. Sable Networks, Inc. ("Sable Networks") is a corporation organized and existing under the laws of the State of California.

14. Sable Networks was formed to continue the research, development, and commercialization work of Caspian Networks Inc., which was founded by Dr. Lawrence Roberts to provide flow-based switching and routing technologies to improve the efficiency and quality of computer networks.

15. Sable Networks is the owner by assignment of all of the patents-in-suit.

[10] *See, e.g.*, U.S. Patent Nos. 7,463,639; 7,702,810; 7,826,375; 8,593,970; 8,717,889; 8,811,163; 8,811,183; 8,964,556; 9,032,089; 9,065,773; and 9,832,099.

[11] *See, e.g.*, U.S. Patent No. 7,187,687; 7,206,283; 7,266,117; 7,596,139; 7,649,885; 8,014,315; 8,037,399; 8,170,044; 8,194,666; 8,271,859; 8,448,162; 8,493,988; 8,514,716; and 7,657,703.

[12] *See, e.g.*, U.S. Patent Nos. 6,976,134; 7,185,062; 7,404,000; 7,421,509; 7,864,758; and 8,085,794.

[13] *See, e.g.*, U.S. Patent Nos. 7,206,282; 7,580,353; 8,418,233; 8,565,088; 9,225,479; 9,106,606; 9,130,846; 9,210,177; 9,614,772; 9,967,331; and 9,832,069.

[14] *See, e.g.*, U.S. Patent Nos. 7,349,393; 7,821,929; 8,218,569; 8,289,973; 9,282,113; and 8,913,623.

[15] *See, e.g.*, U.S. Patent Nos. 7,567,504; 7,590,736; 7,669,235; 7,778,422; 7,941,309; 7,636,917; 9,571,550; and 9,800,592.

[16] *See, e.g.*, U.S. Patent Nos. 7,177,956; 7,283,464; 9,485,178; 9,047,417; 8,718,096; 8,036,246; 8,493,852; and 8,730,984.

[17] *See, e.g.*, U.S. Patent Nos. 7,903,654; 7,978,614; 8,149839; 10,212,224; 9,112,780; and 8,395,996.

[18] *See, e.g.*, U.S. Patent Nos. 7,903,553; 7,957,421; 10,015,079; 10,505,840; and Chinese Patent Nos. CN108028828 and CN106161333.

SABLE IP, LLC

16. Sable IP, LLC ("Sable IP") is a Delaware limited liability company with its principal place of business at 225 S. 6th Street, Suite 3900, Minneapolis, Minnesota 55402. Pursuant to an exclusive license agreement with Sable Networks, Sable IP is the exclusive licensee of the patents-in-suit.

HPE DEFENDANTS

17. Hewlett Packard Enterprise Company is a Delaware corporation with its principal place of business at 3000 Hanover Street, Palo Alto, California 94304. Hewlett Packard Enterprise Company may be served through its registered agent CT Corporation System, 1999 Bryan St., Ste. 900, Dallas, Texas 75201. Hewlett Packard Enterprise Company is registered to do business in the State of Texas and has been since at least March 13, 2015.

18. Aruba Networks, Inc. is a Delaware corporation with its principal place of business at 3333 Scott Blvd., Santa Clara, California 95054. Aruba Networks, Inc. may be served through its registered agent CT Corporation System, 1999 Bryan St., Ste. 900, Dallas, Texas 75201. Aruba Networks, Inc. is registered to do business in the State of Texas and has been since at least April 4, 2007.

19. Aruba Networks, Inc. is a wholly-owned subsidiary of Defendant Hewlett Packard Enterprise Company. Defendants conduct business operations within the Eastern District of Texas where they sell, develop, and/or market their products, including facilities at 6080 Tennyson Parkway, Suite 400, Plano, Texas 75024.

JURISDICTION AND VENUE

20. This action arises under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has exclusive subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

21. This Court has personal jurisdiction over HPE in this action because HPE has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over HPE would not offend traditional notions of fair play and substantial justice. HPE, directly and/or through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in this District by, among other things, offering to sell and selling products and/or services that infringe the patents-in-suit. Moreover, Defendants are registered to do business in the State of Texas, have offices and facilities in the State of Texas, and actively direct their activities to customers located in the State of Texas.

22. Venue is proper in this district under 28 U.S.C. §§ 1391(b)-(d) and 1400(b). Defendants have offices in the Eastern District of Texas, have transacted business in the Eastern District of Texas and have committed acts of direct and indirect infringement in the Eastern District of Texas.

23. Defendants have a regular and established place of business in this District and have committed acts of infringement in this District. HPE has also committed acts of infringement in this District by commercializing, marketing, selling, distributing, testing, and servicing certain accused products.

24. This Court has personal jurisdiction over HPE. HPE has conducted and does conduct business within the State of Texas. HPE, directly or through subsidiaries or intermediaries (including distributors, retailers, and others), ships, distributes, makes, uses, offers for sale, sells, imports, and/or advertises (including by providing an interactive web page) its products and/or services in the United States and the Eastern District of Texas and/or contributes to and actively induces its customers to ship, distribute, make, use, offer for sale, sell, import, and/or advertise

(including the provision of an interactive web page) infringing products and/or services in the United States and the Eastern District of Texas. HPE, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has purposefully and voluntarily placed one or more of its infringing products and/or services, as described below, into the stream of commerce with the expectation that those products will be purchased and used by customers and/or consumers in the Eastern District of Texas. These infringing products and/or services have been and continue to be made, used, sold, offered for sale, purchased, and/or imported by customers and/or consumers in the Eastern District of Texas. HPE has committed acts of patent infringement within the Eastern District of Texas. HPE interacts with customers in Texas, including through visits to customer sites in Texas. Through these interactions and visits, HPE directly infringes the patents-in-suit. HPE also interacts with customers who sell the accused products into Texas, knowing that these customers will sell the Accused Products into Texas, either directly or through intermediaries.

25. HPE has minimum contacts with this District such that the maintenance of this action within this District would not offend traditional notions of fair play and substantial justice. Thus, the Court therefore has both general and specific personal jurisdiction over HPE.

THE ASSERTED PATENTS

U.S. PATENT NO. 6,977,932

26. U.S. Patent No. 6,977,932 (the "'932 patent") entitled, *System and Method for Network Tunneling Utilizing Micro-Flow State Information*, was filed on January 16, 2002. The '932 patent is subject to a 35 U.S.C. § 154(b) term extension of 815 days. Sable Networks, Inc. is the owner by assignment of the '932 patent. Sable IP is the exclusive licensee of the '932 patent. A true and correct copy of the '932 patent is attached hereto as Exhibit A.

27. The ‘932 patent discloses novel methods and apparatuses for utilizing a router capable of network tunneling utilizing flow state information.

28. The inventions disclosed in the ‘932 patent enable the use of micro-flow state information to improve network tunneling techniques.

29. The inventions disclosed in the ‘932 patent maintain flow state information for various quality of service characteristics by utilizing aggregate flow blocks.

30. The aggregate flow blocks disclosed in the ‘932 patent maintain micro-flow block information.

31. The technologies claimed in the ‘932 patent speed the flow of network traffic over computer networks by avoiding time consuming and processor intensive tasks by combining flow state information with other information such as label switched paths utilization information. This permits the micro-flows associated with an aggregate flow block to all be processed in a similar manner.

32. The technologies disclosed in the ‘932 patent result in more efficient computer networks by avoiding the processor intensive tasks of searching millions of flow blocks to identify flow blocks having certain micro-flow characteristics in order to process large numbers of micro-flows.

33. The ‘932 patent discloses a router capable of network tunneling utilizing flow state information containing an aggregate flow block having tunnel specific information for a particular network tunnel.

34. The ‘932 patent discloses a router capable of network tunneling utilizing flow state information containing a flow block having flow state information for a micro-flow, the flow block further including an identifier that associates the flow block with the aggregate flow block.

35. The ‘932 patent discloses a router capable of network tunneling utilizing flow state information wherein the aggregate flow block stores statistics for the particular network tunnel.

36. The ‘932 patent has been cited by 86 patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the ‘932 patent as relevant prior art:

- Cisco Systems, Inc.
- Juniper Networks, Inc.
- Avaya, Inc.
- Fujitsu, Ltd.
- Intel Corporation
- Nokia Corporation
- Qualcomm, Inc.
- Sprint Communications Co.
- Telefonaktiebolaget LM Ericsson
- Verizon Communications, Inc.

U.S. PATENT NO. 7,012,919

37. U.S. Patent No. 7,012,919 (the “‘919 patent”) entitled, *Micro-Flow Label Switching*, was filed on December 8, 2000, and claims priority to April 19, 2000. The ‘919 patent is subject to a 35 U.S.C. § 154(b) term extension of 1,069 days. Sable Networks, Inc. is the owner by assignment of the ‘919 patent. Sable IP is the exclusive licensee of the ‘919 patent. A true and correct copy of the ‘919 patent is attached hereto as Exhibit B.

38. The ‘919 patent claims specific methods and systems for providing aggregate micro-flows.

39. The technologies claimed in the ‘919 patent improve data transmission in computer networks by providing micro-flow based label switched path utilization.

40. The inventions taught in the '919 patent achieve improvements in intelligent network traffic engineering protocols by providing load balancing based on the utilization of individual label switched paths.

41. In one embodiment described in the '919 patent, a method for providing an aggregate micro-flow having intelligent load balancing is disclosed.

42. In this embodiment, a set of label switched paths is defined for a network domain, and as the network receives a set of data packets, a micro-flow comprising the set of data packets is defined.

43. The '919 patent further discloses including a quality of service type in addition to the information included in each data packet.

44. The '919 patent teaches selecting a label switched path from the defined set of label switched paths based on the quality of service type of the micro-flow.

45. The '919 patent discloses a method for providing aggregate micro-flows that defines a set of label switched paths.

46. The '919 patent discloses a method for providing aggregate micro-flows that defines a micro-flow comprising a set of data packets, the micro-flow having a quality of service type.

47. The '919 patent discloses a method for providing aggregate micro-flows that selects a particular label switched path from the defined set of label switched paths based on the quality of service type of the micro-flow.

48. The '919 patent discloses a method for providing aggregate micro-flows that transmits the micro-flow along the selected label switched path, the micro-flow having an

associated forwarding equivalence class, the forwarding equivalence class defining additional transmission constraints for the micro-flow.

49. The '919 patent has been cited by 242 United States and international patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '919 patent family as relevant prior art.

- Cisco Systems, Inc.
- Juniper Networks, Inc.
- Advanced Micro Devices, Inc.
- AT&T, Inc.
- Broadcom, Inc.
- Brocade Communications Systems, Inc.
- Arris Enterprises LLC
- Nicira, Inc.
- Extreme Networks, Inc.
- Fortinet, Inc.
- Foundry Networks, Inc.
- Fujitsu Ltd.
- Intel Corporation
- Huawei Technologies Co., Ltd.
- Hitachi, Ltd.
- ***Hewlett Packard Enterprise Company***
- Marlow Technologies, LLC
- Microsoft Corporation
- ServiceNow, Inc.
- Telefonaktiebolaget LM Ericsson
- Telcordia Technologies, Inc.
- Riverbed Technology, Inc.
- Uber Technologies, Inc.
- The Regents of the University of California
- Verizon Communications, Inc.

U.S. PATENT NO. 8,085,775

50. U.S. Patent No. 8,085,775 (the "'775 patent") entitled, *Identifying Flows Based On Behavior Characteristics And Applying User-Defined Actions*, was filed on July 31, 2006. The '775 patent is subject to a 35 U.S.C. § 154(b) term extension of 467 days. Sable Networks, Inc. is

the owner by assignment of the '775 patent. Sable IP is the exclusive licensee of the '775 patent. A true and correct copy of the '775 patent is attached hereto as Exhibit C.

51. The '775 patent discloses novel methods for identifying and handling a single application flow of a plurality of information packets.

52. The inventions disclosed in the '775 patent teach methods of identifying, classifying, and controlling information packet flows based on their observed behavior rather than the content of the data packets.

53. The '775 patent teaches technologies that can effectively identify and control specific types of data traffic despite attempts to conceal the content or type of traffic represented by the data packets.

54. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that creates a flow block as the first packet of a flow is processed by a router.

55. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that utilizes a flow block adapted to store payload-content agnostic behavioral statistics about the flow.

56. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that updates the flow block with the flow's payload-content agnostic behavioral statistics as packets belonging to the flow are processed by the router.

57. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that utilizes a flow incapable of being identified by header information alone.

58. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that heuristically determines whether at least one user-specified policy is satisfied by the payload-content agnostic behavioral statistics stored in the flow block.

59. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that includes functionality wherein the payload-content agnostic behavioral statistics for the flow are calculated by the router.

60. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that includes functionality wherein the payload-content agnostic behavioral statistics reflect the empirical behavior of the flow.

61. The '775 patent discloses a machine-implemented method for the identification and handling of a single application flow that includes functionality wherein at least one of the payload-content agnostic behavioral statistics is one of the following characteristics: (1) total byte count accumulated for the flow, (2) flow life duration, (3) average rate of flow, (4) average packet size, (5) average packet rate, (6) average inter-packet gap, (7) instantaneous flow rate, and (8) moving average flow rate.

62. The '775 patent has been cited by 36 patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have all cited the '775 patent as relevant prior art:

- Cisco Systems, Inc.
- Calix, Inc.
- British Telecommunications Public Limited Company
- Extreme Networks, Inc.
- Fujitsu Ltd.
- Level 3 Communications, Inc.
- Nokia Corporation
- Sprint Spectrum L.P.

- Solana Networks Inc.
- Taiwan Semiconductor Mfg. Co. Ltd.
- Verizon Communications, Inc.

U.S. PATENT NO. 8,243,593

63. U.S. Patent No. 8,243,593 entitled, *Mechanism for Identifying and Penalizing Misbehaving Flows in a Network*, was filed on December 22, 2004. The '593 patent is subject to a 35 U.S.C. § 154(b) term extension of 1,098 days. Sable Networks, Inc. is the owner by assignment of the '593 patent. Sable IP is the exclusive licensee of the '593 patent. A true and correct copy of the '593 patent is attached hereto as Exhibit D.

64. The '593 patent discloses novel methods and systems for processing a flow of a series of information packets.

65. The inventions disclosed in the '593 patent teach technologies that permit the identification and control of less desirable network traffic.

66. Because the characteristics of data packets in undesirable network traffic can be disguised, the '593 patent improves the operation of computer networks by disclosing technologies that monitor the characteristics of flows of data packets rather than ancillary factors such as port numbers or signatures.

67. The '593 patent discloses tracking the behavioral statistics of a flow of data packets that can be used to determine whether the flow is undesirable.

68. The '593 patent further discloses taking actions to penalize the flow of undesirable network traffic.

69. The '593 patent discloses a method for processing a flow of a series of information packets that maintains a set of behavioral statistics for the flow, wherein the set of behavioral

statistics is updated based on each information packet belonging to the flow, as each information packet is processed.

70. The '593 patent discloses a method for processing a flow of a series of information packets that determines, based at least partially upon the set of behavioral statistics, whether the flow is exhibiting undesirable behavior.

71. The '593 patent discloses that the determination as to whether the flow is exhibiting undesirable behavior is made regardless of the presence or absence of congestion.

72. The '593 patent discloses a method for processing a flow of data packets that enforces a penalty on the flow in response to a determination that the flow is exhibiting undesirable behavior.

73. The '593 patent has been cited by 17 patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '593 patent as relevant prior art.

- Cisco Systems, Inc.
- AT&T, Inc.
- International Business Machines Corporation
- Telecom Italia S.p.A.
- McAfee, LLC

U.S. PATENT NO. 8,817,790

74. U.S. Patent No. 8,817,790 (the "'790 patent") entitled, *Identifying Flows Based on Behavior Characteristics and Applying User-Defined Actions*, was filed on September 23, 2011, and claims priority to July 31, 2006. Sable Networks, Inc. is the owner by assignment of the '790 patent. Sable IP is the exclusive licensee of the '790 patent. A true and correct copy of the '790 patent is attached hereto as Exhibit E.

75. The ‘790 patent claims specific methods and devices for handling a flow of information packets.

76. The ‘790 patent discloses methods and systems for efficiently identifying undesirable traffic over data networks.

77. The ‘790 patent teaches technologies that identify traffic not by inspecting the payload of each data packet, but rather by analyzing and classifying the behavior of the data flows to identify undesirable traffic.

78. The ‘790 patent discloses applying a user-specified action associated with a policy applicable to data flows that are designated undesirable.

79. The ‘790 patent discloses a method of handling a flow that processes a flow comprised of two or more information packets having header information in common.

80. The ‘790 patent discloses a method of handling a flow that stores header-independent statistics about the flow in a flow block associated with the flow.

81. The ‘790 patent discloses a method of handling a flow that updates the header-independent statistics in the flow block as each information packet belonging to the flow is processed.

82. The ‘790 patent discloses a method of handling a flow that categorizes the flow as one or more traffic types by determining whether the header-independent statistics match one or more profiles corresponding to a traffic type.

83. The ‘790 patent discloses a method of handling a flow that performs an operation that is determined according to the one or more traffic types on one or more information packets belonging to the flow if the one or more traffic types match one or more particular traffic types designated by a user.

84. The '790 patent family has been cited by 24 United States and international patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '790 patent family as relevant prior art:

- Cisco Systems, Inc.
- Solana Networks, Inc.
- British Telecommunications Public Limited Company
- Level 3 Communications, LLC
- Calix, Inc.
- Nokia Corporation
- Verizon Communications, Inc.
- Sprint Spectrum L.P.
- Hon Hai Precision Industry Co., Ltd.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 6,977,932

85. Plaintiffs reference and incorporate by reference the preceding paragraphs of this Complaint as if fully set forth herein.

86. HPE designs, makes, sells, offers to sell, imports, and/or uses HPE devices for utilizing flow state information in network tunneling including at least the following devices: Aruba 2920 Switch Series (J9726A, J9727A, J9728A, J9729A, J9836A); Aruba 2930F Switch Series (JL253A, JL254A, JL255A, JL256A, JL258A, JL259A, JL260A, JL261A, JL262A, JL263A, JL264A, JL557A, JL558A, JL559A); Aruba 2930M Switch Series (JL319A, JL320A, JL321A, JL322A, JL323A, JL324A); Aruba 3810 Switch Series (JL071A, JL072A, JL073A, JL074A, JL075A, JL076A); and Aruba 5400R ZL2 Switch Series (J9821A, J9822A, J9850A, J9851A, JL001A, JL002A, JL003A, JL095A) (collectively, the "HPE '932 Products").

87. One or more HPE subsidiaries and/or affiliates use the HPE '932 Products in regular business operations.

88. HPE has directly infringed and continues to directly infringe the '932 patent by, among other things, making, using, offering for sale, and/or selling technology that utilize flow state information to perform a method of network tunneling.

89. One or more of the HPE '932 Products utilize flow state information to perform a network tunneling method.

90. One or more of the HPE '932 Products create a flow block having flow state information for a received first data packet of a micro-flow.

91. One or more of the HPE '932 Products store a tunnel identifier for the micro-flow in the flow block, the tunnel identifier identifying a selected network tunnel to be used to transmit the data packet.

92. One or more of the HPE '932 Products index an aggregate flow block using the tunnel identifier.

93. One or more of the HPE '932 Products utilize an aggregate flow block with tunnel specific information for the selected network tunnel and that stores statistics for the selected network tunnel.

94. One or more of the HPE '932 Products transmit data packets using the selected network tunnel based on the tunnel specific information.

95. The HPE '932 Products are available to businesses and individuals throughout the United States.

96. The HPE '932 Products are provided to businesses and individuals located in the Eastern District of Texas.

97. By making, using, testing, offering for sale, and/or selling products utilizing flow state information to perform a method of network tunneling, including but not limited to the HPE

'932 Products, HPE has injured Plaintiffs and is liable to Plaintiffs for directly infringing one or more claims of the '932 patent, including at least claim 1 pursuant to 35 U.S.C. § 271(a).

98. HPE also indirectly infringes the '932 patent by actively inducing infringement under 35 USC § 271(b).

99. HPE has had knowledge of the '932 patent since at least service of this Complaint or shortly thereafter, and HPE knew of the '932 patent and knew of its infringement, including by way of this lawsuit.

100. HPE intended to induce patent infringement by third-party customers and users of the HPE '932 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. HPE specifically intended and was aware that the normal and customary use of the accused products would infringe the '932 patent. HPE performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '932 patent and with the knowledge that the induced acts would constitute infringement. For example, HPE provides the HPE '932 Products that have the capability of operating in a manner that infringe one or more of the claims of the '932 patent, including at least claim 1, and HPE further provides documentation and training materials that cause customers and end users of the HPE '932 Products to utilize the products in a manner that directly infringe one or more claims of the '932 patent.[19] By providing instruction and training to

[19] *See, e.g.*, Shaun Wackerly, *Flexible ASIC-based Open Flow Pipeline*, ARUBA PRESENTATION (2017); *Aruba 5400R ZL2 Switch Series Datasheet,* HPE-ARUBA DOCUMENTATION (2020); *Aruba Service Insertion Guide for ArubaOS-Switch 16.05*, ARUBA-HPE DOCUMENTATION PART NUMBER 5200-4217 (December 2017); *HPE Service Insertion Guide –Wired Switches K/KA/KB/WB 16.01*, HPE DOCUMENTATION PART NUMBER 5200-0147 (January 2016); *Aruba OpenFlow 1.3 Administrator Guide for ArubaOS-Switch 16.0x,* HPE-ARUBA DOCUMENTATION PART NUMBER 5200-5496 (December 2018); *Common Criteria Configuration Network Device Collaboration Protection Profile: Target of Evaluation: Aruba 2930F, 2930M, 3810M and 5400R Switch Series,* HPE-ARUBA DOCUMENTATION VERSION 1.4 (May 22, 2018); *Technical White Paper - User Roles and User-Based Tunneling: ArubaOS Switch,* HPE-ARUBA DOCUMENTATION (February 2019); *Technical White Paper – Aruba 2930F Switch Series*

customers and end-users on how to use the HPE '932 Products in a manner that directly infringes one or more claims of the '932 patent, including at least claim 1, HPE specifically intended to induce infringement of the '932 patent. HPE engaged in such inducement to promote the sales of the HPE '932 Products, e.g., through HPE user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '932 patent. Accordingly, HPE has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '932 patent, knowing that such use constitutes infringement of the '932 patent.

101. The '932 patent is well-known within the industry as demonstrated by multiple citations to the '932 patent in published patents and patent applications assigned to technology companies and academic institutions. HPE is utilizing the technology claimed in the '932 patent without paying a reasonable royalty. HPE is infringing the '932 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

102. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '932 patent.

103. As a result of HPE's infringement of the '932 patent, Plaintiffs have suffered monetary damages, and seek recovery in an amount adequate to compensate for HPE's

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Technical Product Guide: Product Deep Dive, HPE-ARUBA DOCUMENTATION (2016); *[ATM17] A Simplified SDN-driven Campus Bypass NAT Design Using an Aruba Switch Custom Pipeline Model*, ARUBA YOUTUBE.COM CHANNEL (March 24, 2017), *available at*: https://www.youtube.com/watch?v=rs1A36PEeZQ; Rob Haviland, Ruben Iglesias, and Justin Noonan, *[ATM16] Take A Walk On The Wired Side – Atmosphere 2016 Presentation*, ARUBA YOUTUBE.COM CHANNEL (March 31, 2016), *available at*: https://www.youtube.com/watch?v=OZYrrfPDDTM; Jean Tourrilhes, Puneet Sharma, Sujata Banerjee, and Justin Pettit, *The Evolution of SDN and OpenFlow: A Standards Perspective,* HP LABORATORIES HPL-2014-41 PAPER (December 6, 2014); and *HP OpenFlow and SDN Technical Overview,* HPE TECHNICAL SOLUTION GUIDE VERSION 1 (September 2013).

infringement, but in no event less than a reasonable royalty for the use made of the invention by HPE together with interest and costs as fixed by the Court.

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 7,012,919

104. Plaintiffs reference and incorporate by reference the preceding paragraphs of this Complaint as if fully set forth herein.

105. HPE designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for providing an aggregate micro-flow.

106. HPE designs, makes, sells, offers to sell, imports, and/or uses HPE devices for transmitting a data flow over a network connection, including at least the following devices: HPE FlexNetwork MSR2000 Router Series, HPE FlexNetwork MSR3000 Router Series, HPE FlexNetwork MSR4000 Router Series, HPE FlexNetwork HSR6800 Router Series, HPE FlexFabric 5980 Switch Series, HPE FlexFabric 5945 Switch Series, HPE FlexFabric 5900 Switch Series, HPE FlexFabric 5950 Switch Series, HPE FlexFabric 5940 Switch Series, HPE FlexFabric 5930 Switch Series, and HPE FlexFabric 5920 Switch Series (collectively, the "HPE '919 Products").

107. One or more HPE subsidiaries and/or affiliates use the HPE '919 Products in regular business operations.

108. One or more of the HPE '919 Products include technology for providing an aggregate micro-flow.

109. One or more of the HPE '919 Products define a set of label switched paths ("LSP").

110. One or more of the HPE '919 Products define a micro-flow comprising a set of data packets, the micro-flow having a quality of service type.

111. One or more of the HPE '919 Products select a particular label switched path from the defined set of label switched paths based on the quality of service type of the micro-flow.

112. One or more of the HPE '919 Products transmits the micro-flow along the selected label switched path, the micro-flow having an associated forwarding equivalence class, the forwarding equivalence class defining additional transmission constraints for the micro-flow.

113. The HPE '919 Products perform the operation of defining a micro-flow comprising a set of data packets, the micro-flow having a quality of service type.

114. The HPE '919 Products are available to businesses and individuals throughout the United States.

115. The HPE '919 Products are provided to businesses and individuals located in the Eastern District of Texas.

116. HPE has directly infringed and continues to directly infringe the '919 patent by, among other things, making, using, offering for sale, and/or selling technology for providing an aggregate micro-flow, including but not limited to the HPE '919 Products.

117. By making, using, testing, offering for sale, and/or selling products and services, including but not limited to the HPE '919 Products, HPE has injured Plaintiffs and is liable for directly infringing one or more claims of the '919 patent, including at least claim 1, pursuant to 35 U.S.C. § 271(a).

118. HPE also indirectly infringes the '919 patent by actively inducing infringement under 35 USC § 271(b).

119. HPE has had knowledge of the '919 patent since at least service of this Complaint or shortly thereafter, and HPE knew of the '919 patent and knew of its infringement, including by way of this lawsuit.

120. Alternatively, HPE has had knowledge of the '919 patent since at least September 17, 2019, when U.S. Patent No. 10,419,350, which is owned by HPE and cites the '919 patent as relevant prior art, was issued.

121. HPE intended to induce patent infringement by third-party customers and users of the HPE '919 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. HPE specifically intended and was aware that the normal and customary use of the accused products would infringe the '919 patent. HPE performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '919 patent and with the knowledge that the induced acts would constitute infringement. For example, HPE provides the HPE '919 Products that have the capability of operating in a manner that infringe one or more of the claims of the '919 patent, including at least claim 1, and HPE further provides documentation and training materials that cause customers and end users of the HPE '919 Products to utilize the products in a manner that directly infringe one or more claims of the '919 patent.[20] By providing instruction and training to customers and end-users on how to use the HPE '919 Products in a manner that directly infringes

[20] *See, e.g.*, *HPE FlexNetwork MSR Router Series Comware 7 MPLS Configuration Guide*, HPE DOCUMENTATION PART NO. 5200-3019 (2017); *HPE FlexNetwork MSR Router Series Comware 7 ACL and QoS Configuration Guide*, HPE DOCUMENTATION PART NO. 5200-3006 (2017); *HPE FlexNetwork MSR Router Series Comware 7 OpenFlow Configuration Guide*, HPE DOCUMENTATION PART NO. 5200-3023 (2017); *HPE FlexNetwork MSR2000 Router Series QuickSpecs,* HPE DOCUMENTATION (December 2, 2019); *HPE MSR2000 Router Series Data Sheet*, HPE DOCUMENTATION (September 2016); *HPE MSR4000 Router Series Data Sheet,* HPE DOCUMENTATION (March 2017); *HPE FlexNetwork HSR6800 Routers Comware 7 ACL and QoS Command Reference*, HPE DOCUMENTATION PART NO. 5200-3491 (2017); *HPE FlexNetwork HSR6800 Routers Comware 7 OpenFlow Configuration Guide,* HPE DOCUMENTATION PART NO. 5200-3516 (2017); *HPE FlexNetwork HSR6800 Routers Comware 7 MPLS Configuration Guide,* HPE DOCUMENTATION PART NO. 5200-3512 (2017); *HPE FlexFabric 5950 Switch Series – OpenFlow Configuration Guide*, HPE DOCUMENTATION RELEASE 6123 (2017); *HPE FlexFabric 5950 Switch Series – OpenFlow Configuration Guide*, HPE DOCUMENTATION RELEASE 6301 (2019); and *HPE FlexFabric 5940 Switch Series - OpenFlow Configuration Guide,* HPE DOCUMENTATION RELEASE 25XX (2017).

one or more claims of the '919 patent, including at least claim 1, HPE specifically intended to induce infringement of the '919 patent. HPE engaged in such inducement to promote the sales of the HPE '919 Products, e.g., through HPE user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '919 patent. Accordingly, HPE has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '919 patent, knowing that such use constitutes infringement of the '919 patent.

122. The '919 patent is well-known within the industry as demonstrated by multiple citations to the '919 patent in published patents and patent applications assigned to technology companies and academic institutions. HPE is utilizing the technology claimed in the '919 patent without paying a reasonable royalty. HPE is infringing the '919 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

123. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '919 patent.

124. As a result of HPE's infringement of the '919 patent, Plaintiffs have suffered monetary damages, and seek recovery in an amount adequate to compensate for HPE's infringement, but in no event less than a reasonable royalty for the use made of the invention by HPE together with interest and costs as fixed by the Court.

COUNT III
INFRINGEMENT OF U.S. PATENT NO. 8,085,775

125. Plaintiffs reference and incorporate by reference the preceding paragraphs of this Complaint as if fully set forth herein.

126. HPE designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for identifying and handling a single application flow of a plurality of information packets.

127. HPE designs, makes, sells, offers to sell, imports, and/or uses HPE devices that enable the identification of a flow based on the behavior of the flow, including at least the following devices: Aruba Mobility Controller Virtual Appliance (MC-VA-10, MC-VA-50, MC-VA-250, MC-VA-1K), Aruba 7000 Series Mobility Controllers (7005, 7008, 7010, 7024, 7030), Aruba 7200 Series Mobility Controllers (7205, 7210, 7220, 7240XM, 7280), and Aruba 9000 Series Gateways (9004, 9004-LTE, 9012) (collectively, the "HPE '775 Products").

128. One or more HPE subsidiaries and/or affiliates use the HPE '775 Products in regular business operations.

129. One or more of the HPE '775 Products include technology for identifying and handling a single application flow of a plurality of information packets.

130. HPE has directly infringed and continues to directly infringe the '775 patent by, among other things, making, using, offering for sale, and/or selling technology for identifying and handling a single application flow of a plurality of information packets, including but not limited to the HPE '775 Products.

131. One or more of the HPE '775 Products creates a flow block as the first packet of a flow is processed by a router.

132. One or more of the HPE '775 Products utilize a flow block adapted to store payload-content agnostic behavioral statistics about the flow.

133. One or more of the HPE ‘775 Products update the flow block with the flow’s payload-content agnostic behavioral statistics as packets belonging to the flow are processed by the router.

134. One or more of the HPE ‘775 Products utilize a flow incapable of being identified by header information alone.

135. One or more of the HPE ‘775 Products heuristically determine whether at least one user-specified policy is satisfied by the payload-content agnostic behavioral statistics stored in the flow block.

136. One or more of the HPE ‘775 Products apply to at least one packet belonging to at least one user-specified action that is mapped to the user-specified policy that is satisfied by the payload-content agnostic behavioral statistics upon determining that the user-specified policy is satisfied by the payload-content agnostic behavioral statistics.

137. One or more of the HPE ‘775 Products include functionality wherein the payload-content agnostic behavioral statistics for the flow are calculated by the router.

138. One or more of the HPE ‘775 Products include functionality wherein the payload-content agnostic behavioral statistics reflect the empirical behavior of the flow.

139. One or more of the HPE ‘775 Products include functionality wherein at least one of the payload-content agnostic behavioral statistics is chosen from the group consisting of: (1) total byte count accumulated for the flow, (2) flow life duration, (3) average rate of flow, (4) average packet size, (5) average packet rate, (6) average inter-packet gap, (7) instantaneous flow rate, and (8) moving average flow rate.

140. The HPE ‘775 Products are available to businesses and individuals throughout the United States.

141. The HPE '775 Products are provided to businesses and individuals located in the Eastern District of Texas.

142. By making, using, testing, offering for sale, and/or selling products and services for identifying and handling a single application flow of a plurality of information packets, including but not limited to the HPE '775 Products, HPE has injured Plaintiffs and is liable to Plaintiffs for directly infringing one or more claims of the '775 patent, including at least claim 1 pursuant to 35 U.S.C. § 271(a).

143. HPE also indirectly infringes the '775 patent by actively inducing infringement under 35 USC § 271(b).

144. HPE has had knowledge of the '775 patent since at least service of this Complaint or shortly thereafter, and HPE knew of the '775 patent and knew of its infringement, including by way of this lawsuit.

145. HPE intended to induce patent infringement by third-party customers and users of the HPE '775 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. HPE specifically intended and was aware that the normal and customary use of the accused products would infringe the '775 patent. HPE performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '775 patent and with the knowledge that the induced acts would constitute infringement. For example, HPE provides the HPE '775 Products that have the capability of operating in a manner that infringe one or more of the claims of the '775 patent, including at least claim 1, and HPE further provides documentation and training materials that cause customers and end users of the HPE '775 Products to utilize the products in a manner that

directly infringe one or more claims of the '775 patent.[21] By providing instruction and training to customers and end-users on how to use the HPE '775 Products in a manner that directly infringes one or more claims of the '775 patent, including at least claim 1, HPE specifically intended to induce infringement of the '775 patent. HPE engaged in such inducement to promote the sales of the HPE '775 Products, e.g., through HPE user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '775 patent. Accordingly, HPE has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '775 patent, knowing that such use constitutes infringement of the '775 patent.

146. The '775 patent is well-known within the industry as demonstrated by multiple citations to the '775 patent in published patents and patent applications assigned to technology companies and academic institutions. HPE is utilizing the technology claimed in the '775 patent without paying a reasonable royalty. HPE is infringing the '775 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

[21] *See, e.g.*, *Aruba Mobility Controller Virtual Appliance Data Sheet,* ARUBA-HPE DOCUMENTATION (2020); Pagalavan Karunanidhi, TECHNICAL CLIMB WEBINAR APPRF 6.X & 8.X, ARUBA PRESENTATION (November 27, 2018); *Aruba Policy Enforcement Firewall: App Visibility And Role-Based Security For Mobile Enterprises – Data Sheet*, ARUBA-HPE DOCUMENTATION (2016); *Aruba 7200 Series Mobility Controllers Data Sheet,* ARUBA DOCUMENTATION (2020); *Aruba 9000 Series Gateways Data Sheet,* ARUBA DOCUMENTATION (2020); *Aruba 7000 Series Mobility Controllers Data Sheet,* ARUBA DOCUMENTATION (2020); *Aruba SW-WAN Quality of Service Supplemental Guide*, ARUBA DOCUMENTATION (June 2019); *ArubaOS 8.2 Series – Part 1 – Mobility Master,* ARUBA AIRHEADS YOUTUBE.COM CHANNEL (January 25, 2018), *available at*: https://www.youtube.com/watch?v=_1XRm0jZ5mw; *Aruba Networks Dynamic Segmentation Inside Out Part XV: Quality of Services,* ARUBA AIRHEADS YOUTUBE.COM CHANNEL (November 8, 2019) *available at*: https://www.youtube.com/watch?v=IppR9xhDf8I; and *Mani Ganesan and Samuel Perez, SD-WAN Application Policies,* ARUBA PRESENTATION (October 4, 2019), *available at*: https://www.youtube.com/watch?v=c7Ono2tdkTo.

147. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '775 patent.

148. As a result of HPE's infringement of the '775 patent, Plaintiffs have suffered monetary damages, and seek recovery in an amount adequate to compensate for HPE's infringement, but in no event less than a reasonable royalty for the use made of the invention by HPE together with interest and costs as fixed by the Court.

COUNT IV
INFRINGEMENT OF U.S. PATENT NO. 8,243,593

149. Plaintiffs reference and incorporate by reference the preceding paragraphs of this Complaint as if fully set forth herein.

150. HPE designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for processing a flow of a series of information packets.

151. HPE designs, makes, sells, offers to sell, imports, and/or uses HPE devices that enable the identification and penalization of data flows based on the behavior of the data flow, including at least the following devices: Aruba SD-WAN Branch Gateways (9004, 7005, 7008, 7010, 7024, 7030, 7210, 7220, 7240XM) and Aruba SD-WAN Headend Gateways (7010, 7024, 7030, 7210, 7220, 7240XM) (collectively, the "HPE '593 Products").

152. One or more HPE subsidiaries and/or affiliates use the HPE '593 Products in regular business operations.

153. One or more of the HPE '593 Products include technology for processing a flow of a series of information packets. Specifically, the HPE '593 Products maintain a set of behavioral statistics based on each and every information packet belonging to a flow.

154. The HPE '593 Products are available to businesses and individuals throughout the United States.

155. The HPE '593 Products are provided to businesses and individuals located in the Eastern District of Texas.

156. HPE has directly infringed and continues to directly infringe the '593 patent by, among other things, making, using, offering for sale, and/or selling products and services for processing a flow of a series of information packets.

157. The HPE '593 Products maintain a set of behavioral statistics for the flow, wherein the set of behavioral statistics is updated based on each information packet belonging to the flow, as each information packet is processed.

158. The HPE '593 Products enable the generation of behavioral statistics based on each packet that is processed.

159. The HPE '593 Products determine, based at least partially upon the set of behavioral statistics, whether the flow is exhibiting undesirable behavior.

160. The HPE '593 Products determine whether the flow is exhibiting undesirable behavior regardless of the presence or absence of congestion.

161. The HPE '593 Products enforce a penalty on the flow in response to a determination that the flow is exhibiting undesirable behavior.

162. By making, using, testing, offering for sale, and/or selling products and services for processing a flow of a series of information packets, including but not limited to the HPE '593 Products, HPE has injured Plaintiffs and is liable for directly infringing one or more claims of the '593 patent, including at least claim 4, pursuant to 35 U.S.C. § 271(a).

163. HPE also indirectly infringes the '593 patent by actively inducing infringement under 35 USC § 271(b).

164. HPE has had knowledge of the '593 patent since at least service of this Complaint or shortly thereafter, and HPE knew of the '593 patent and knew of its infringement, including by way of this lawsuit.

165. HPE intended to induce patent infringement by third-party customers and users of the HPE '593 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. HPE specifically intended and was aware that the normal and customary use of the accused products would infringe the '593 patent. HPE performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '593 patent and with the knowledge that the induced acts would constitute infringement. For example, HPE provides the HPE '593 Products that have the capability of operating in a manner that infringe one or more of the claims of the '593 patent, including at least claim 4, and HPE further provides documentation and training materials that cause customers and end users of the HPE '593 Products to utilize the products in a manner that directly infringe one or more claims of the '593 patent.[22] By providing instruction and training to customers and end-users on how to use the HPE '593 Products in a manner that directly infringes one or more claims of the '593 patent, including at least claim 4, HPE specifically intended to induce infringement of the '593 patent. HPE engaged in such inducement to promote the sales of the HPE '593 Products, e.g., through HPE user manuals, product support, marketing materials,

[22] *See, e.g.*, *Aruba SD-Branch Overview White Paper*, ARUBA DOCUMENTATION (June 2018); *HPE ArubaOS-Switch Advanced Traffic Management Guide for YA/YB.16.02*, HPE-ARUBA DOCUMENTATION PART NO. 5200-1657A (September 2016); *Aruba SD-WAN Data Sheet*, ARUBA DOCUMENTATION (2020); *Aruba SD-WAN Quality of Service Supplemental Guide*, ARUBA DOCUMENTATION (June 2016); *Aruba SD-Wan Solution User Guide,* HPE-ARUBA DOCUMENTATION (2020); Mitchell Pompe, *Aruba's Software Defined Branch Services,* ARUBA NETWORKS PRESENTATION (November 4, 2019); Ramanan Subramanian, *Aruba SD Branch Solution Overview*, ARUBA NETWORKS PRESENTATION (October 4, 2019), *available at*: https://www.youtube.com/watch?v=ODOYeM5-Lqk; and *[ATM19] SD WAN Demonstration,* ARUBA NETWORKS PRESENTATION – ARUBA YOUTUBE.COM CHANNEL (May 9, 2019), *available at*: https://www.youtube.com/watch?v=xmUw3VC4WB4.

and training materials to actively induce the users of the accused products to infringe the '593 patent. Accordingly, HPE has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '593 patent, knowing that such use constitutes infringement of the '593 patent.

166. The '593 patent is well-known within the industry as demonstrated by multiple citations to the '593 patent in published patents and patent applications assigned to technology companies and academic institutions. HPE is utilizing the technology claimed in the '593 patent without paying a reasonable royalty. HPE is infringing the '593 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

167. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '593 patent.

168. As a result of HPE's infringement of the '593 patent, Plaintiffs have suffered monetary damages, and seek recovery in an amount adequate to compensate for HPE's infringement, but in no event less than a reasonable royalty for the use made of the invention by HPE together with interest and costs as fixed by the Court.

COUNT V
INFRINGEMENT OF U.S. PATENT NO. 8,817,790

169. Plaintiffs reference and incorporate by reference the preceding paragraphs of this Complaint as if fully set forth herein.

170. HPE designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for handling a flow of information packets.

171. HPE designs, makes, sells, offers to sell, imports, and/or uses HPE devices that enable the identification of a flow based on the behavior of the flow, including at least the

following devices: Aruba Mobility Controller Virtual Appliance (MC-VA-10, MC-VA-50, MC-VA-250, MC-VA-1K), Aruba 7000 Series Mobility Controllers (7005, 7008, 7010, 7024, 7030), Aruba 7200 Series Mobility Controllers (7205, 7210, 7220, 7240XM, 7280), and Aruba 9000 Series Gateways (9004, 9004-LTE, 9012) (collectively, the "HPE '790 Products").

172. One or more HPE subsidiaries and/or affiliates use the HPE '790 Products in regular business operations.

173. One or more of the HPE '790 Products include technology for handling a flow of information packets. Specifically, the HPE '790 Product process information packets that have the same header information.

174. The HPE '790 Products are available to businesses and individuals throughout the United States.

175. The HPE '790 Products are provided to businesses and individuals located in the Eastern District of Texas.

176. HPE has directly infringed and continues to directly infringe the '790 patent by, among other things, making, using, offering for sale, and/or selling technology for handling a flow of information packets, including but not limited to the HPE '790 Products.

177. The HPE '790 Products process a flow comprised of two or more information packets having header information in common. Further, the HPE '790 Products use header-independent statistics for traffic classification. These statistics include bit rate, packet counts, and byte counts that are used to identify a particular traffic type.

178. The HPE '790 Products store header-independent statistics about the flow in a flow block associated with the flow.

179. The HPE ‘790 Products perform traffic matching using header-independent statistics such as: total number of input packets, total number of output packets, input bit rates, and output bit rates.

180. The HPE ‘790 Products update the header-independent statistics in the flow block as each information packet belonging to the flow is processed. The header-independent statistics are stored in a flow block associated with the flow.

181. The HPE ‘790 Products categorize the flow as one or more traffic types by determining whether the header-independent statistics match one or more profiles corresponding to a traffic type.

182. The HPE ‘790 Products perform an operation that is determined according to the one or more traffic types on one or more information packets belonging to the flow if the one or more traffic types match one or more particular traffic types designated by a user.

183. By making, using, testing, offering for sale, and/or selling products and services, including but not limited to the HPE ‘790 Products, HPE has injured Plaintiffs and is liable for directly infringing one or more claims of the ‘790 patent, including at least claim 1, pursuant to 35 U.S.C. § 271(a).

184. HPE also indirectly infringes the ‘790 patent by actively inducing infringement under 35 USC § 271(b).

185. HPE has had knowledge of the ‘790 patent since at least service of this Complaint or shortly thereafter, and HPE knew of the ‘790 patent and knew of its infringement, including by way of this lawsuit.

186. HPE intended to induce patent infringement by third-party customers and users of the HPE ‘790 Products and had knowledge that the inducing acts would cause infringement or was

willfully blind to the possibility that its inducing acts would cause infringement. HPE specifically intended and was aware that the normal and customary use of the accused products would infringe the '790 patent. HPE performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '790 patent and with the knowledge that the induced acts would constitute infringement. For example, HPE provides the HPE '790 Products that have the capability of operating in a manner that infringe one or more of the claims of the '790 patent, including at least claim 1, and HPE further provides documentation and training materials that cause customers and end users of the HPE '790 Products to utilize the products in a manner that directly infringe one or more claims of the '790 patent.[23] By providing instruction and training to customers and end-users on how to use the HPE '790 Products in a manner that directly infringes one or more claims of the '790 patent, including at least claim 1, HPE specifically intended to induce infringement of the '790 patent. HPE engaged in such inducement to promote the sales of the HPE '790 Products, e.g., through HPE user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '790 patent. Accordingly, HPE has induced and continues to induce users of the accused products to

[23] *See, e.g.*, *Aruba Mobility Controller Virtual Appliance Data Sheet,* ARUBA-HPE DOCUMENTATION (2020); Pagalavan Karunanidhi, TECHNICAL CLIMB WEBINAR APPRF 6.X & 8.X, ARUBA PRESENTATION (November 27, 2018); *Aruba Policy Enforcement Firewall: App Visibility And Role-Based Security For Mobile Enterprises – Data Sheet*, ARUBA-HPE DOCUMENTATION (2016); *Aruba 7200 Series Mobility Controllers Data Sheet,* ARUBA DOCUMENTATION (2020); *Aruba 9000 Series Gateways Data Sheet,* ARUBA DOCUMENTATION (2020); *Aruba 7000 Series Mobility Controllers Data Sheet,* ARUBA DOCUMENTATION (2020); *Aruba SW-WAN Quality of Service Supplemental Guide*, ARUBA DOCUMENTATION (June 2019); *ArubaOS 8.2 Series – Part 1 – Mobility Master,* ARUBA AIRHEADS YOUTUBE.COM CHANNEL (January 25, 2018), *available at*: https://www.youtube.com/watch?v=_1XRm0jZ5mw; *Aruba Networks Dynamic Segmentation Inside Out Part XV: Quality of Services,* ARUBA AIRHEADS YOUTUBE.COM CHANNEL (November 8, 2019) *available at*: https://www.youtube.com/watch?v=IppR9xhDf8I; and *Mani Ganesan and Samuel Perez, SD-WAN Application Policies,* ARUBA PRESENTATION (October 4, 2019), *available at*: https://www.youtube.com/watch?v=c7Ono2tdkTo.

use the accused products in their ordinary and customary way to infringe the '790 patent, knowing that such use constitutes infringement of the '790 patent.

187. The '790 patent is well-known within the industry as demonstrated by multiple citations to the '790 patent in published patents and patent applications assigned to technology companies and academic institutions. HPE is utilizing the technology claimed in the '790 patent without paying a reasonable royalty. HPE is infringing the '790 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

188. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '790 patent.

189. As a result of HPE's infringement of the '790 patent, Plaintiffs have suffered monetary damages, and seek recovery in an amount adequate to compensate for HPE's infringement, but in no event less than a reasonable royalty for the use made of the invention by HPE together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs Sable IP, LLC and Sable Networks, Inc. respectfully request that this Court enter:

A. A judgment in favor of Plaintiffs that HPE has infringed, either literally and/or under the doctrine of equivalents, the '932, '919, '775, '593, and '790 patents;

B. An award of damages resulting from HPE's acts of infringement in accordance with 35 U.S.C. § 284;

C. A judgment and order finding that HPE's infringement was willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate within the meaning of 35 U.S.C. § 284 and awarding to Plaintiffs enhanced damages.

D. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiffs their reasonable attorneys' fees against HPE.

E. Any and all other relief to which Plaintiffs may show themselves to be entitled.

JURY TRIAL DEMANDED

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiffs Sable IP, LLC and Sable Networks, Inc. request a trial by jury of any issues so triable by right.

Dated: June 30, 2020

Respectfully submitted,

/s/ Daniel P. Hipskind

Dorian S. Berger (CA SB No. 264424)
Daniel P. Hipskind (CA SB No. 266763)
BERGER & HIPSKIND LLP
9538 Brighton Way, Ste. 320
Beverly Hills, CA 90210
Telephone: 323-886-3430
Facsimile: 323-978-5508
E-mail: dsb@bergerhipskind.com
E-mail: dph@bergerhipskind.com

Elizabeth L. DeRieux
State Bar No. 05770585
Capshaw DeRieux, LLP
114 E. Commerce Ave.
Gladewater, TX 75647
Telephone: 903-845-5770
E-mail: ederieux@capshawlaw.com

Attorneys for Sable Networks, Inc. and Sable IP, LLC