

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

LONGHORN HD LLC.,

Plaintiff,

v.

PALO ALTO NETWORKS, INC.,

Defendant.

§
§
§
§
§
§
§
§
§
§
§

Case No.

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Longhorn HD LLC. (“LHD” or “Plaintiff”) for its Complaint against Defendant Palo Alto Networks, Inc. (“PAN” or “Defendant”) alleges as follows:

THE PARTIES

1. LHD is a limited liability company organized and existing under the laws of the State of Texas, with its principal place of business located at 203 East Travis Street, Marshall, Texas 75670

2. Upon information and belief, Defendant Palo Alto Networks, Inc. is corporation organized under the laws of the state of Delaware, with a regular and established place of business in this Judicial District at 3901 North Dallas Parkway, Plano, Texas 75093. Upon information and belief, PAN does business in Texas and in the Eastern District of Texas, directly or through intermediaries.

JURISDICTION

3. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq.* This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

4. This Court has personal jurisdiction over Defendant. Defendant regularly conducts business and has committed acts of patent infringement and/or has induced acts of patent infringement by others in this Judicial District and/or has contributed to patent infringement by others in this Judicial District, the State of Texas, and elsewhere in the United States.

5. Venue is proper in this Judicial District as to Defendant PAN pursuant to 28 U.S.C. § 1391 because, among other things, PAN is not a resident in the United States, and thus may be sued in any judicial district pursuant to 28 U.S.C. § 1391(c)(3).

6. Defendant is subject to this Court's jurisdiction pursuant to due process and/or the Texas Long Arm Statute due at least to its substantial business in this State and Judicial District, including (a) at least part of its past infringing activities, (b) regularly doing or soliciting business in Texas, and/or (c) engaging in persistent conduct and/or deriving substantial revenue from goods and services provided to customers in Texas.

PATENTS-IN-SUIT

7. On October 11, 2005, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 6,954,790 (the "'790 Patent") entitled "Network-Based Mobile Workgroup System." A true and correct copy of the '790 Patent is available at <http://pdfpiw.uspto.gov/.piw?PageNum=0&docid=6954790>.

8. On August 21, 2007, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,260,846 (the "'846 Patent") entitled "Intrusion Detection System."

A true and correct copy of the '846 Patent is available at <http://pdfpiw.uspto.gov/.piw?PageNum=0&docid=7260846>.

9. On June 15, 2010, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,739,401 (the "'401 Patent") entitled "Restricting Communication of Selected Processes to a Set of Specific Network Addresses." A true and correct copy of the '401 Patent is available at <http://pdfpiw.uspto.gov/.piw?PageNum=0&docid=7,739,401>.

10. LHD is the sole and exclusive owner of all right, title, and interest in the '790 Patent, the '846 Patent, and the '401 Patent, (collectively, the "Patents-in-Suit"), and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this patent infringement lawsuit. LHD also has the right to recover all damages for past, present, and future infringement of the Patents-in-Suit and to seek injunctive relief as appropriate under the law.

FACTUAL ALLEGATIONS

11. The Patents-in-Suit generally cover systems and methods for computer and network security.

12. The '790 Patent generally relates to technology for mobile workgroups' VPN and firewall systems. The technology further implements these mappings as the basis for secure gateways. The technology described in the '790 Patent was developed by Jan Forsl w at Interactive People Unplugged AB. By way of example, this technology is implemented today in VPNs that allow for mobile participation, further implementing network firewalls and gateways that allow for the VPNs to share resources with mobile devices.

13. The '846 Patent generally relates to technology for intrusion detection systems. The technology described in the '846 Patent was developed by Christopher Day at Steelcloud, Inc.

By way of example, this technology is implemented today in intrusion detection systems (“IDS”) and intrusion prevention systems (“IPS”) that utilize machine-learning techniques to detect and prevent intrusions.

14. The '401 Patent generally relates to technology that solves problems endemic to the computer server and networking fields. More specifically, the inventions disclosed in the '401 Patent provide advancements in the field of computer server virtualization, resource sharing, and security through the use of methods for restricting network address-based communication. The technology described in the '401 Patent was developed by Pawan Goyal at Digital Asset Enterprises LLC. By way of example, this technology is implemented today in gateway and firewall devices to allow or disallow resources for computer processes on ports so as to provide advancements in computer security and resource management.

15. PAN has infringed and is continuing to infringe one or more of the Patents-in-Suit by making, using, selling, offering to sell, and/or importing, and by actively inducing others to make, use, sell, offer to sell, and/or importing, products that include security gateways, routers, control system security appliance, clouds, and components and software that provide firewall, VPN, IPsec, DNS, IDS/IPS, and selective network address-based communication, mobile security, and threat protection functionality that infringes the Patents-in-Suit (“Accused Products”) including, but not limited to, the AutoFocus Threat Intelligence Product, Cortex Data Lake Product, Cortex XSOAR Product, DNS Security Product, Firewall Migration Tool Product, GlobalProtect Product, K2-Series Product, MineMeld Threat Intelligence Sharing Product, PA-220 Product, PA-220R Product, PA-800 Series Products, PA-3000 Series Products, PA-3200 Products, PA-7000 Series Products, Panorama Product, Prisma Access Product, Prisma Cloud Product, Prisma Cloud Product, Prisma SaaS Product, Threat Prevention Product, URL Filtering

Web Security Product, VM-Series Products, VM-Series on AWS Products, VM-Series on Google Cloud Products, VM-Series on Microsoft Azure Products, Wildfire Malware Analysis Products, and PAN-OS software.

COUNT I
(Infringement of the '790 Patent)

16. Paragraphs 1 through 15 are incorporated by reference as if fully set forth herein.

17. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '790 Patent.

18. Defendant has and continues to directly infringe the '790 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '790 Patent. Such products include gateway units which provide a mobile user workgroup.

19. For example, Defendant has and continues to directly infringe at least claim 1 of the '790 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include gateway devices that provide mobile user workgroups. The infringing systems include a network-based mobile workgroup system comprising a plurality of mobile client nodes, each mobile client node providing an interface for user interaction by a mobile user, for example, PAN GlobalProtect running on mobile devices, including but not limited to Android devices.

20. For example, the Accused Products include the PAN GlobalProtect, which upon information and belief, includes a network-based mobile workgroup system comprising a plurality


of mobile client nodes, each mobile client node providing an interface for user interaction by a mobile user:¹

GlobalProtect™: Safely Enabling Mobile Devices

GlobalProtect provides a unique mobile security solution that integrates traditionally distinct technologies to manage the device, protect the device and control the data.

GlobalProtect components:

- **GlobalProtect Gateway:** Delivers mobile threat prevention and policy enforcement based on apps, users, content, device and device state
- **GlobalProtect App:** Enables device management, provides device state information, and establishes secure connectivity
- **GlobalProtect Mobile Security Manager:** Provides device management, malware detection and shares device state information with GlobalProtect Gateway



Mobile computing is one of the most disruptive forces in information technology. It is revolutionizing how and where employees work, and the tools that they use to perform their jobs. Mobile devices are not just ways to access existing applications such as corporate email, but the platform for opening up entirely new ways of doing business.

21. The Accused Products include a plurality of mobile service router nodes, each mobile service router node providing a mobile Virtual Private Network (VPN) to the mobile client nodes spanning multiple router hops and sites, for example, a PAN Gateway or Firewall unit in connection with access points. The Accused Products further include a network address identifier (NAI) with which a user of a mobile client is uniquely identified to the mobile VPN system, for example, a device Media Access Control (“MAC”) address.

22. Additionally, the Accused Products include a set of firewall filters and route policies with which the workgroup is protected, such as, for example, firewalls and rules enforced by the PAN Gateway or Firewall units. Additionally, the mobile VPN provides each mobile client

¹ See, e.g., <http://www.paloguard.com/datasheets/globalprotect.pdf>

secure data access to the VPN and provides secure data access to each mobile client from within the mobile VPN, wherein a point of attachment of any mobile client node to the mobile VPN may change without affecting that mobile client node's participation in the mobile VPN.

23. Defendant has and continues to indirectly infringe one or more claims of the '790 Patent by knowingly and intentionally inducing others, including PAN customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as PAN client for mobile devices.

24. Defendant, with knowledge that these products, or the use thereof, infringe the '790 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '790 Patent by providing these products to end users for use in an infringing manner.

25. Defendant induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '790 Patent, but while remaining willfully blind to the infringement.

26. LHD has suffered damages as a result of Defendant's direct and indirect infringement of the '790 Patent in an amount to be proved at trial.

27. LHD has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '790 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT II
(Infringement of the '846 Patent)

28. Paragraphs 1 through 15 are incorporated by reference as if fully set forth herein.

29. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '846 Patent.

30. Defendant has and continues to directly infringe the '846 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '846 Patent. Such products include intrusion detection systems and intrusion prevention systems including PAN IDP and IPS products, such as PAN Threat Prevention Product, PAN NGFW appliances and devices, such as the PA-220 Products, and accompanying software, such as the PAN-OS products, which upon information and belief, is the operating system running on the accused IDS, IPS, and NGFW products².

31. For example, Defendant has and continues to directly infringe at least claim 7 of the '846 Patent by making, using, offering to sell, selling, and/or importing into the United States products that include IDS and/or IPS systems that practice the claimed method alone, or in combination with other PAN products or services.

32. The Accused Products are systems that perform an intrusion detection method comprising the steps of monitoring network traffic passing across a network communications path. For example, the PAN OS, deployed in a number of PAN products monitors network traffic:³

PAN-OS® is the software that runs all Palo Alto Networks® next-generation firewalls. By leveraging the key technologies that are built into PAN-OS natively—App-ID, Content-ID, Device-ID, and User-ID—you can have complete visibility and control of the applications in use across all users and devices in all locations all the time. And, because inline ML and the application and threat signatures automatically reprogram your firewall with the latest intelligence, you can be assured that all traffic you allow is free of known and unknown threats.

33. Additionally, PAN OS performs network traffic parsing on the accused products:⁴

² See, e.g., <https://docs.paloaltonetworks.com/pan-os>.

³ *Id.*

⁴ See, e.g., <https://knowledgebase.paloaltonetworks.com/KCSArticleDetail?id=kA10g000000CIVHCA0>.

Day in the Life of a Packet

PAN-OS Packet Flow Sequence. Since PAN-OS 7.0.2 and 6.1.7

Contents:

SECTION 1: OVERVIEW

SECTION 2: INGRESS STAGE

- 2.1 PACKET PARSING
- 2.2 TUNNEL DECAPSULATION
- 2.3 IP DEFRAGMENTATION

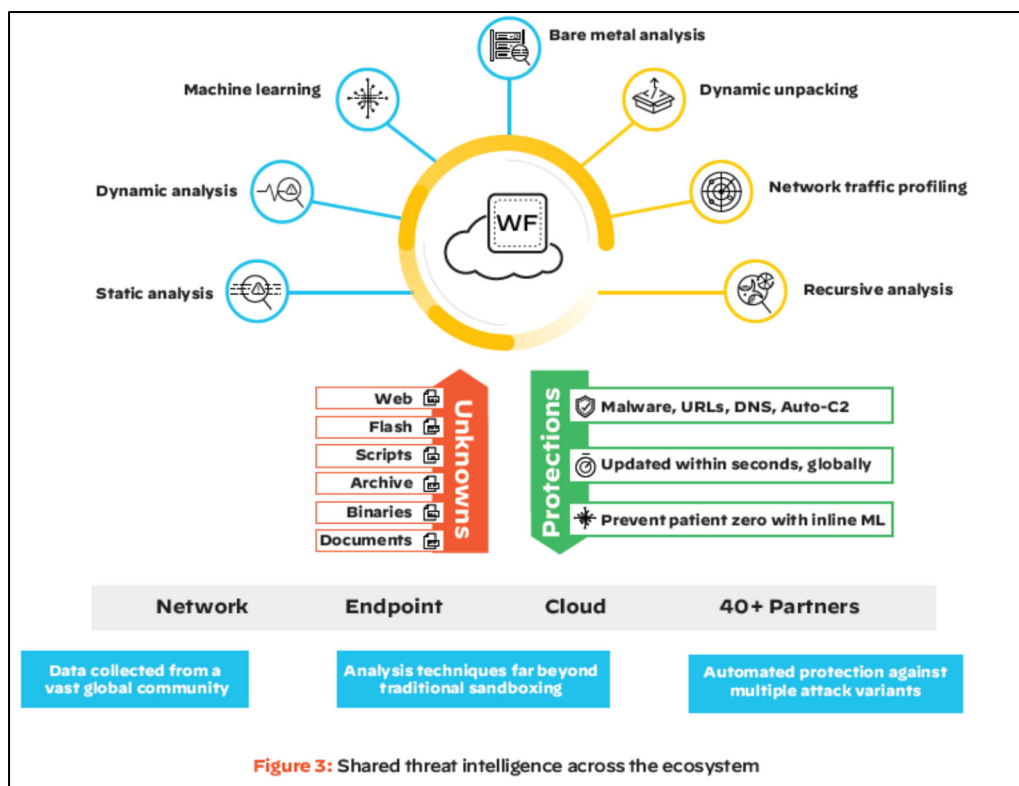
34. Additionally, the Accused Products, such as the PAN Dynamic Data Protection Products, store individual components of said network packets in a database and construct multi-dimensional vectors from at least two of said stored individual components and applying at least one multi-variate analysis to said constructed multi-dimensional vectors, said at least one multi-variate analysis producing a corresponding output set. For example, upon information and belief, machine learning techniques are applied to captured packets. Additionally, upon information and belief, the Accused Products establish a correlation between individual output sets based upon a selected metric to identify anomalous behavior:⁵

Download📄 58362 downloads⭐ 31 saves👁 109051 views🔗

Jun 17, 2020 at 05:00 AM

This paper provides a comprehensive overview of the critical PAN-OS features that power all next-generation firewalls from Palo Alto Networks. As the cornerstone of our integrated Security Operating Platform, Palo Alto Networks NGFWs offer a prevention-focused architecture that is easy to deploy and operate; uses automation to reduce manual effort so that security teams can focus on what matters; and helps organizations easily adopt new innovations.

⁵ <https://www.paloaltonetworks.com/resources/datasheets/firewall-feature-overview-datasheet>.



35. Upon information and belief, the Accused Products classify the anomalous behavior as an event selected from the group consisting of a network fault, a change in network performance, and a network attack.

36. Defendant has and continues to indirectly infringe one or more claims of the '846 Patent by knowingly and intentionally inducing others, including PAN customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology, such as IDS, IPS, and NGFW systems.

37. Defendant, with knowledge that these products, or the use thereof, infringe the '846 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '846 Patent by providing these products to end users for use in an infringing manner.

38. Defendant induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '846 Patent, but while remaining willfully blind to the infringement.

39. LHD has suffered damages as a result of Defendant's direct and indirect infringement of the '846 Patent in an amount to be proved at trial.

40. LHD has suffered, and will continue to suffer, irreparable harm as a result of Defendant's infringement of the '846 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

COUNT III
(Infringement of the '401 Patent)

41. Paragraphs 1 through 15 are incorporated by reference as if fully set forth herein.

42. LHD has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the '401 Patent.

43. Defendant has and continues to directly infringe the '401 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '401 Patent. Such products include utilities, such as the PAN Gateway and Firewall units that control network traffic by limiting and/or assigning processes and addresses. On information and belief, infringing products include at least the Gateway and Firewall products specified above as Accused Products.

44. For example, Defendant has and continues to directly infringe at least claim 1 of the '401 Patent by making, using, offering to sell, selling, and/or importing into the United States products that perform the method for efficiently managing communication via a set of specific

multiple network addresses. The Accused Products associate at least one selected process, such as, for example, HTTP or FTP, with at least one network address, such as, for example, a MAC address. The Accused Products detect when a selected process attempts to communicate via an unassociated address, such as when a process, such as HTTP, is either allowed or disallowed for a specific address. The Accused Products then prevent or allow the communication to proceed.

45. For example, upon information and belief, the PAN PA-220 NGFW Product, and associated IPS, IDS, and software, allows manages communication across a wide range of devices and channels. The PAN Virtual Appliance product monitors these channels, applies a policy, and determines whether to prevent or allow a communication to proceed.

46. Defendant has and continues to indirectly infringe one or more claims of the '401 Patent by knowingly and intentionally inducing others, including PAN customers and end-users, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling and/or importing into the United States products that include infringing technology and by directing their customers to utilize the Accused Products in an infringing matter through marketing and support materials.⁶

47. Defendant, with knowledge that these products, or the use thereof, infringe the '401 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continues to knowingly and intentionally induce, direct infringement of the '401 Patent by providing these products to end users for use in an infringing manner.

48. Defendant induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability

⁶ See e.g., <https://www.paloaltonetworks.com/network-security/next-generation-firewall/pa-220>.

that others, including end users, infringe the '401 Patent, but while remaining willfully blind to the infringement.

49. LHD has suffered damages as a result of Defendant's direct and indirect infringement of the '401 Patent in an amount to be proved at trial.

50. LHD has suffered, and will continue to suffer irreparable harm as a result of Defendant's infringement of the '401 Patent, for which there is no adequate remedy at law, unless Defendant's infringement is enjoined by this Court.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a jury for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, LHD prays for relief against Defendant as follows:

- a. Entry of judgment declaring that Defendant has directly and/or indirectly infringed one or more claims of each of the Patents-in-Suit;
- b. An order pursuant to 35 U.S.C. § 283 permanently enjoining Defendant, its officers, agents, servants, employees, attorneys, and those persons in active concert or participation with it, from further acts of infringement of the Patents-in-Suit;
- c. An order awarding damages sufficient to compensate LHD for Defendant's infringement of the Patents-in-Suit, but in no event less than a reasonable royalty, together with interest and costs;
- d. Entry of judgment declaring that this case is exceptional and awarding LHD its costs and reasonable attorney fees under 35 U.S.C. § 285; and,
- e. Such other and further relief as the Court deems just and proper.

Dated: August 6, 2020

Respectfully submitted,

/s/ Vincent J. Rubino, III

Alfred R. Fabricant

NY Bar No. 2219392

Email: afabricant@fabricantllp.com

Peter Lambrianakos

NY Bar No. 2894392

Email: plambrianakos@fabricantllp.com

Vincent J. Rubino, III

NY Bar No. 4557435

Email: vrubino@fabricantllp.com

FABRICANT LLP

230 Park Ave, 3rd Fl. W.

New York, NY 10169

Telephone: (212) 257-5797

Facsimile: (212) 257-5796

John Andrew Rubino

NY Bar No. 5020797

Email: jarubino@rubinoip.com

RUBINO LAW LLC

830 Morris Turnpike, 4th Floor

Short Hills, NJ, 07078

Telephone: (973) 535-0920

Facsimile (973) 535-0921

Justin Kurt Truelove

Texas Bar No. 24013653

Email: kurt@truelovelawfirm.com

TRUELOVE LAW FIRM, PLLC

100 West Houston

Marshall, Texas 75670

Telephone: (903) 938-8321

Facsimile: (903) 215-8510

**ATTORNEYS FOR PLAINTIFF
LONGHORN HD LLC.**