

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

-----X	:	
SELENE COMMUNICATION	:	
TECHNOLOGIES, LLC,	:	
	:	
Plaintiff,	:	
	:	
v.	:	C.A. No. _____
	:	
BARRACUDA NETWORKS, INC.,	:	<b>JURY TRIAL DEMANDED</b>
	:	
Defendant.	:	
-----X		

**COMPLAINT**

This is an action for patent infringement in which Plaintiff, Selene Communication Technologies, LLC (“Selene”), makes the following allegations against Defendant Barracuda Networks, Inc. (“Barracuda”):

**PARTIES**

1. Plaintiff Selene is a Delaware limited liability company with its principal place of business at 2961 Fontenay Road, Shaker Heights, Ohio 44120.

2. On information and belief, Barracuda is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 3175 S. Winchester Blvd., Campbell, California 95008. Barracuda has appointed Registered Agent Solutions, Inc., 1679 S. Dupont Hwy, Ste. 100, Dover, Delaware 19901, as its agent for service of process.

**JURISDICTION AND VENUE**

3. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

4. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action concerns the infringement of United States patents.

5. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391 and 1400(b) because, among other reasons, Barracuda has transacted business in the State of Delaware and Barracuda has committed and continues to commit acts of patent infringement in Delaware.

6. Upon information and belief, this Court has personal jurisdiction over Barracuda because it is a corporation organized under the laws of the State of Delaware and has purposely availed itself of the privileges and benefits of the laws of the State of Delaware, and because it transacts substantial business in the State of Delaware, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein, and (ii) regularly doing or soliciting business in Delaware, engaging in other persistent courses of conduct, maintaining continuous and systematic contacts in Delaware, purposefully availing itself of the privileges of doing business in Delaware, and/or deriving substantial revenue from goods and services provided to individuals in Delaware.

#### **FACTUAL BACKGROUND**

7. This lawsuit asserts a cause of action for infringement of United States Patent No. 7,143,444 (the “444 Patent”), entitled “Application-Layer Anomaly and Misuse Detection,” issued on November 28, 2006. The inventions disclosed in the ’444 Patent were conceived and created by Phillip Andrew Porras, Magnus Almgren, Ulf E. Lindqvist, and Steven Mark Dawson, inventors working for a 501(c)(3) nonprofit research institute known as SRI International (“SRI”).

8. Based on a purchase agreement and assignment from SRI, Plaintiff Selene owns the '444 Patent, and has the exclusive right to sue for infringement and recover damages for all past, present, and future infringement.

### **THE HISTORY OF SRI**

9. All of the inventions disclosed and claimed in the '444 Patent were originally invented and patented by technology researchers at SRI, a premier institution with a long history of leading technological innovation.

10. SRI, which began as an initiative among researchers at Stanford University, was founded in 1946 as the Stanford Research Institute.

11. Since its inception, SRI was a pioneer in advancing technology in ways that had a profound global impact. For instance, in 1963, engineers at SRI created the first optical video disk recording system, paving the way for modern optical storage technologies such as CD-ROMs, DVDs, and Blu-Ray discs. In the early 1960s, SRI engineers invented the world's first computer mouse. In the late 1960s, SRI collaborated with the U.S. Department of Defense to create "ARPANET" -- the progenitor of what would become the global Internet.

12. SRI was spun out from Stanford University in 1970. In the early 1970s, SRI was the first organization to utilize domain names, with extensions such as ".com," ".org," or ".gov." In 1977, SRI created what is considered to be the first true Internet connection, by connecting three dissimilar networks.

13. In 1988, SRI acquired the Sarnoff Corporation ("Sarnoff"). Sarnoff, formed in 1941, traces its origins to David Sarnoff, a principal technology researcher at RCA Laboratories. It was created to be a research and development company specializing in vision, video, and semiconductor technology, and it later expanded its research areas to include various facets of

information technology. Sarnoff is known for several important technological advances. For instance, in 1953, David Sarnoff and RCA Laboratories created the world's first color television system. From 1963 to 1968, a team of engineers at the David Sarnoff Research Center developed a revolutionary method for the electronic control of light reflected from liquid crystals -- leading to their invention of the liquid crystal display (LCD). Sarnoff is also credited for the development of the electron microscope and early optoelectronic components such as lasers and LEDs.

14. In 2007, SRI spun off its creation of Siri, a virtual personal assistant with a natural language interface, as Siri, Inc. Siri was acquired by Apple Inc. in 2011.

15. SRI today is a nonprofit, independent research and innovation center serving government and industry that derives revenue from a variety of sources, including licensing. SRI employs over 2,500 employees at research facilities across the United States and abroad, including researchers at the former Sarnoff facilities in Princeton, New Jersey.

**UNITED STATES PATENT NO. 7,143,444**

16. SRI pioneered the field of network intrusion detection. In 1997, SRI researchers published their creation of the Event Monitoring Enabling Responses to Anomalous Live Disturbances ("EMERALD"), which became a foundational and patented industry standard for intrusion detection.

17. SRI continues to license its patents related to its EMERALD technology to industry leaders in the field of cyber-security to date, including, most recently, Symantec and IBM. SRI's EMERALD research team is led by Principal Investigator Phillip Porras, the Program Director of SRI's Internet Security Group and an inventor of the '444 Patent.

18. On November 28, 2001, Phillip Andrew Porras, Magnus Almgren, Ulf E. Lindqvist, and Steven Mark Dawson filed their application for what would become the '444 Patent. Each of the inventors was employed by SRI at its facilities in Menlo Park, California. On November 28, 2006, after a full and fair examination, the United States Patent and Trademark Office (the "PTO") duly and legally issued United States Patent No. 7,143,444, entitled "Application-Layer Anomaly and Misuse Detection." A true and correct copy of the '444 Patent is attached as Exhibit A.

19. The '444 Patent issued as the result of the inventiveness of SRI personnel and its significant research investment.

20. The '444 Patent, while covering technology distinct from EMERALD, advanced the state of the art of intrusion detection by teaching methods and systems for effectively hosting an intrusion detection process in a server and integrating the intrusion detection processes into server processes. The inventions of the '444 Patent are fundamental to modern methods and systems for intrusion detection. The '444 Patent has been cited during the prosecution of at least 13 later-filed patents. The '444 Patent has been cited in the patent applications of a variety of industry leaders in intrusion detection including Hewlett-Packard, Symantec, and Microsoft.

21. By way of example only, Claim 1 recites one of the inventions disclosed in the '444 Patent: "1. A method comprising: in a server, hosting an intrusion detection process that provides intrusion detection services; integrating the intrusion detection process with a server process; and passing a request for data received by the server process to the intrusion detection process, where the intrusion detection process comprises: packing a subset of information from the request into an analysis format; and delivering the subset in a funneling process, via a socket, to an analysis process."

22. By way of further example, Claim 16 recites one of the inventions disclosed in the '444 Patent: "16. A computer program product residing on a computer readable medium having instructions stored thereon which, when executed by a processor, cause the processor to: host, in a server, an intrusion detection process that provides intrusion detection services; integrate the intrusion detection process with a server process; and pass a request for data received by the server process to the intrusion detection process, where the intrusion detection process comprises: packing a subset of information from the request into an analysis format; and delivering the subset in a funneling process, via a socket, to an analysis process."

**SELENE COMMUNICATION TECHNOLOGIES, LLC**

23. Selene was created in 2011 in order to advance technological innovation by active participation in all areas of the patent market, including licensing. By creating a secondary market for SRI patents, Selene believes it is promoting innovation and providing capital to SRI that can be reinvested by SRI in further research.

24. Selene completed a transaction to, among other things, acquire the '444 Patent from SRI in July 2013. The transaction included a non-exclusive license to the U.S. government for the patents.

25. Selene is the owner of the entire right, title, and interest in and to the '444 Patent by assignment, and has the exclusive right to sue for infringement and recover damages for all past, present, and future infringement, including against Barracuda.

**COUNT I**  
**INFRINGEMENT OF U.S. PATENT NO. 7,143,444**

26. Plaintiff incorporates paragraphs 1 through 25 herein by reference as if set forth here in full.

27. Barracuda is liable for direct infringement of the '444 Patent pursuant to 35 U.S.C. § 271(a).

28. Barracuda has been and now is directly infringing the '444 Patent literally and/or under the doctrine of equivalents, in this judicial District and elsewhere in the United States, by, among other things, practicing a method comprising: in a server, hosting an intrusion detection process that provides intrusion detection services; integrating the intrusion detection process with a server process; passing a request for data received by the server process to the intrusion detection process, where the intrusion detection process comprises packing a subset of information from the request into an analysis format; and delivering the subset in a funneling process, via a socket, to an analysis process.

29. Barracuda has also been and now is directly infringing the '444 Patent literally and/or under the doctrine of equivalents, in this judicial District and elsewhere in the United States, by, among other things, making, using, selling, offering for sale, or importing a computer program product residing on a computer readable medium having instructions stored thereon which, when executed by a processor, cause the processor to: host, in a server, an intrusion detection process that provides intrusion detection services; integrate the intrusion detection process with a server process; and pass a request for data received by the server process to the intrusion detection process, where the intrusion detection process comprises: packing a subset of information from the request into an analysis format; and delivering the subset in a funneling process, via a socket, to an analysis process. The infringing products and services include, for example, Barracuda Networks Firewall, including but not limited to, model numbers X100, X200, X300, X400, and X600, Barracuda Networks NG Firewall, including but not limited to, model numbers F10, F100, F101, F200, F201, F280, F300, F301, F400, F600, F800, and F900,

and Barracuda Networks NG Firewall Vx products including but not limited to, model numbers VF25, VF50, VF100, VF250, VF500, VF1000, VF2000, VF4000, and VF8000.

30. Barracuda has had knowledge of the '444 Patent and evidence of infringement of the '444 Patent by Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers) since at least the date Barracuda was served with this Complaint, and Barracuda has induced its customers and users of Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers) to infringe the '444 Patent by providing instructions to Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers), to practice a method comprising: in a server, hosting an intrusion detection process that provides intrusion detection services; integrating the intrusion detection process with a server process; and passing a request for data received by the server process to the intrusion detection process, where the intrusion detection process comprises packing a subset of information from the request into an analysis format; and delivering the subset in a funneling process, via a socket, to an analysis process.

31. Barracuda has further induced its customers and users of its Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers) to infringe the '444 Patent by creating and promoting its Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers) knowing that they embody default infringing



intrusion detection functionality. By doing so, Barracuda knowingly induced its customers and users to infringe, knowing that their use of its Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers) that embody the default infringing intrusion detection functionality is a default feature of the Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers).

32. Thus, Barracuda has induced its customers to infringe the '444 Patent literally and/or under the doctrine of equivalents. Upon information and belief, Barracuda acted with the specific intent to induce its customers to use the methods claimed by the '444 Patent by continuing the above-mentioned activities with knowledge of the '444 Patent. For example, Barracuda is aware that its Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers) embody default infringing intrusion detection functionality and, therefore, that Barracuda's customers and users will infringe the '444 Patent by using the default infringing intrusion detection functionality when they use the Barracuda Networks Firewall, Barracuda Networks NG Firewall, and Barracuda Networks NG Firewall Vx products (including but not limited to the aforementioned respective model numbers).

33. Selene has suffered and continues to suffer damages as a result of Barracuda's infringement of Selene's '444 Patent. Pursuant to 35 U.S.C. § 284, Selene is entitled to recover damages from Barracuda for its infringing acts in an amount subject to proof at trial, but no less than a reasonable royalty.

34. Barracuda's infringement of Selene's '444 Patent has damaged and will continue to damage Selene, causing irreparable harm for which there is no adequate remedy at law, unless Barracuda is enjoined by this Court.

**PRAYER FOR RELIEF**

Selene respectfully requests the Court to enter judgment in its favor and against Barracuda, granting the following relief:

A. Judgment in Plaintiff's favor that Barracuda has infringed and continues to infringe, literally and/or under the doctrine of equivalents, directly and/or indirectly, the '444 Patent;

B. A permanent injunction enjoining Barracuda and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert therewith from infringement of the '444 Patent, or such other equitable relief the Court determines is warranted;

C. An award to Plaintiff of damages adequate to compensate it for Barracuda's acts of patent infringement, but in no event less than a reasonable royalty, together with interest, costs, and expenses as fixed by the court pursuant to 35 U.S.C. § 284;

D. A judgment and order requiring Barracuda to provide an accounting and to pay supplemental damages to Selene, including without limitation, prejudgment and postjudgment interest; and

E. Any further relief to which Selene may be entitled.

**JURY DEMAND**

Selene, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any and all issues so triable by right.

Dated: April 23, 2014

BAYARD, P.A.

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