## IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF GEORGIA GAINESVILLE DIVISION

ACCELERATED MEMORY TECH, LLC

Plaintiff,

C.A. No. 2:18-cv-00175-RWS

v.

JURY TRIAL DEMANDED

BARRACUDA NETWORKS, INC.

Defendant.

# **COMPLAINT FOR PATENT INFRINGEMENT**

1. This is an action for patent infringement under 35 U.S.C. § 271, et seq., by Accelerated Memory Tech, LLC ("AMT") against Barracuda Networks, Inc. ("Barracuda") for infringement of United States Patent Nos. 6,513,062 (the "062 Patent"). A true and correct copy of the 062 Patent is attached hereto as **Exhibit A**.

# THE PARTIES

AMT is a Georgia limited liability company, located at 9235 Sourwood Drive,
Gainesville, Georgia, 30506. AMT is the owner by assignment of all right, title, and interest in the 062 Patent, including the right to recover for all past, present, and future infringement, including past damages.

3. Barracuda is an American software company that provides security, networking and storage products based on network appliances and cloud services. One of Barracuda's technologies is its Load Balancer ADC. Barracuda is a Delaware corporation with its headquarters at 3175 Winchester Blvd. In addition, Barracuda has physical offices around the country including one at 12725 Morris Rd, Alpharetta, GA 30004.

### JURISDICTION AND VENUE

4. This is an action for infringement of a United States patent arising under 35 U.S.C. § 271, *et seq.* This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

5. This Court has general and specific personal jurisdiction over Barracuda under the due process provisions of the United States and the Georgia Constitutions. Barracuda has a regular and established place of business, including operating at least one office, in the Northern District of Georgia. At least a portion of the infringing offers, use, and sales alleged herein have occurred in Barracuda's physical location in the judicial district and through Barracuda's interactive web site.

6. Upon information and belief, venue is proper pursuant to 28 U.S.C. § 1400(b) because Barracuda has at least one office in this district, and has committed acts of infringement of the 062 Patent in this district by offering for sale and selling one or more versions of its Load Balancer technology.

#### THE ASSERTED PATENT

7. The application for the 062 Patent was filed on May 25, 1999, and the patent issued on January 28, 2003. The 062 Patent is titled, "Method, Apparatus, and Computer Program Product for Efficient Server Response Generation Using Intermediate State Caching."

8. The 062 Patent is valid and enforceable.

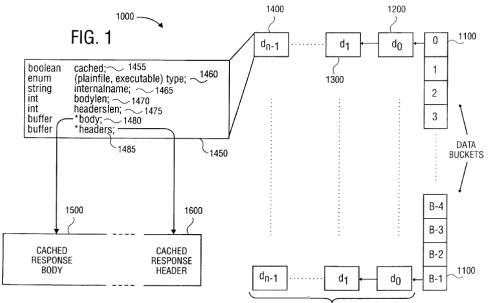
9. The Background of the 062 Patent generally describes how the invention is aimed at improving server efficiency when multiple requests for the same resource are made within a short time period. It states that "conventional servers are not highly efficient." It then goes on to describe how the conventional servers (*e.g.*, HTTP server), in response to a request, engage in a

-2-

### Case 2:18-cv-00175-RWS Document 1 Filed 09/24/18 Page 3 of 10

rewrite mapping process (*i.e.*, one that transforms an external name used in the request to an internal name used for locating the resource and generating the response). Upon receipt of a request for the same resource a short period after the first request, the conventional server has to undertake the same rewrite process. The Background section of the 062 Patent also describes another type of conventional server (*i.e.*, a caching proxy server), but notes that such server has the same drawbacks as the conventional HTTP server – "redundantly performing the mapping from the external name to the internal name for repeatedly-requested resources."

10. The 062 Patent improves on the conventional technology in a number of ways including eliminating the redundant mapping process for repeatedly-requested resources. As set forth in detail in the Detailed Description, the 062 Patent makes this improvement through the utilization of intermediate, cached information. The cache data architecture utilizes a hash table with, in one embodiment, seven types of information. Figure 1 is a graphic example of such hash table.



URI DESCRIPTOR DATA STRUCTURES

### COUNT I - INFRINGEMENT OF THE 062 PATENT

11. AMT herein incorporates the contents of the preceding paragraphs as if restated fully herein.

12. Barracuda's Load Balancer technology is embodied in a product called "Load Balancer ADC." Load Balancer ADC is described as a Secure Application Delivery Controller that enables Application Availability, Acceleration and Control, while providing Application Security Capabilities. It includes features such as features such as caching, compression, and TCP pooling enable faster application delivery and ensure scalability.

13. The functionality and capabilities of the Load Balancer ADC are described in Exhibits B,

C, and D. Exhibit B is true and correct copy of the website

https://campus.barracuda.com/product/loadbalanceradc/doc/18874379/persistence-settings/ as of

September 19, 2018. Exhibit C is true and correct copy of the website

https://campus.barracuda.com/product/loadbalanceradc/knowledgebase/5016000000H2rTAAS/

How+does+the+Barracuda+Load+Balancer+handle+Layer+7+persistence+-cookies-/ as of

September 19, 2018. Exhibit D is true and correct copy of the website

https://campus.barracuda.com/product/webapplicationfirewall/doc/4259910/content-rewriting/ as of September 19, 2018.

14. Load Balancer ADC infringes at least Claim 1 of the 062 Patent as follows [with claim language underlined]:

a. To the extent the preamble is limiting, using Load Balancer ADC performs a <u>computer-implemented method for efficiently generating responses for repeated resource</u> <u>requests</u>. Load Balancer ADC enables persistent connections using cookies to handle repeated

### Case 2:18-cv-00175-RWS Document 1 Filed 09/24/18 Page 5 of 10

requests in a manner that performs the limitations of Claim 1. This is discussed in further detail below with respect to the remaining parts of this paragraph.

b. Using Load Balancer ADC performs <u>receiving a first request for a first resource</u>.

For example, Load Balancer ADC receives HTTP/HTTPS requests, which are examples of a first request. The first resource may be, for example, a server or content generated by a server that is being requested. This is shown below in **Exhibit B**:

### HTTP/HTTPS

There are a variety of supported persistence methods for HTTP/HTTPS sessions:

- **Cookie Insert** Routes the first request from a client to one of the servers based on the load balancing algorithm. At the same time, it inserts a cookie to identify the client. Subsequent requests from the client include the persistence cookie, so they can be routed to the same server as the first request was.
- **Cookie Passive** Similar to Cookie Insert, only the server inserts the cookie if needed. This provides additional optimization because requests are load-balanced normally unless there is a requirement to persist a session, which is indicated by the presence of a cookie.
- c. Using the Load Balancer ADC performs deriving intermediate state information

<u>used in generating a first response to said first request, said intermediate state information</u> <u>comprising a result of mapping an external name</u> (e.g., a domain name, a URL) <u>of the first</u> <u>request for the first resource to an internal name</u> (e.g., a destination IP address or server name) <u>associated with the first resource</u>. As discussed above with respect to **Exhibit B**, Load Balancer ADC uses "Cookie Insert" to route a request from a source to a destination using a mapping of an external name to an internal name. Publically available documentation states: "If the L7 Cookie field for a particular service is left blank but Layer 7 Persistence is enabled, the Barracuda Load Balancer will create and manage its own cookie (called

### BARRACUDA\_LB\_COOKIE)." Exhibit C.

Load Balancer ADC derives intermediate state information as part of the creation and management of a persistent cookie. For example, a persistent cookie involves an association

### Case 2:18-cv-00175-RWS Document 1 Filed 09/24/18 Page 6 of 10

between a client and a particular server in an HTML session. This example of intermediate state information is derived from a first request as the destination server is selected according to a load balancing algorithm. See **Exhibit B** (stating that Load Balancer ADC [r]outes the first request from a client to one of the servers based on the load balancing algorithm). Furthermore, this process comprises a mapping between an external name (e.g., the domain name in a request) and an internal name (e.g., the name of the destination server).

d. Using the Load Balancer ADC performs <u>caching said intermediate state</u> <u>information</u>. For example, Load Balancer ADC creates and manages persistent cookies and caches them for future use. This is discussed above with respect to **Exhibit C**, which describes "BARRACUDA\_LB\_COOKIE." On information and belief, Load Balancer ADC uses a persistence table to store persistent cookie data for handling subsequent requests as part of an HTML session.

e. Using the Load Balancer ADC performs <u>receiving a second request for said first</u> <u>resource.</u> For example, Load Balancer ADC allows for repeated requests to be directed to the same resource that handled the first request. As discussed above with respect to **Exhibit B**, Load Balancer ADC uses cookie persistence for efficiently generating responses for repeated resource requests. In the context of Load Balancer ADC, persistence involves handling repeated requests in an HTML session.

f. Using the Load Balancer ADC performs <u>retrieving said intermediate state</u> <u>information</u>. For example, Load Balancer ADC allows for repeated requests to be directed to the same resource that handled the first request. The cookie is associated with a particular server that handled the first request. The cookie is created and repeatedly and accessed by

-6-

### Case 2:18-cv-00175-RWS Document 1 Filed 09/24/18 Page 7 of 10

Load Balancer ADC. See **Exhibit C** (stating "Barracuda Load Balancer will create and manage its own cookie").

g. Using the Load Balancer ADC performs <u>generating a second response to said</u> <u>second request using said intermediate state information.</u> For example, after Load Balancer ADC directs a second request to the server that handled the first request, the server provides Load Balancer ADC with an initial response. Thereafter, Load Balancer ADC generates a final response by rewriting a portion of the initial response through a response rewrite. This is shown below in **Exhibit C**.

#### **Configuring HTTP Response Rewrite**

This policy sets rewrite rules for outbound responses. It allows you to add, delete, or rewrite headers. Response Rewrites are used for many purposes. For example, if a response included a header listing the source IP address, response rewrite could delete that header preventing external users from seeing the actual IP address of the server. To configure HTTP Response Rewrite, use **WEBSITES > Website Translations > HTTP Response Rewrite**. For detailed configuration instructions, click **Help** on that page.

In addition, Load Balancer ADC generates the second response by inserting a persistence

cookie when generating a second HTML response. See Exhibit B (describing Cookie Insert).

15. On information and belief, Barracuda has used and operated Load Balancer ADC in a manner that infringes through the development of user guides, manuals, brochures, training

materials, or marketing materials or through the activities of testing, validating, selling, offering

to sell, marketing, training others, and/or demonstrating the capabilities of Load Balancer ADC.

16. Because all elements of at least Claim 1 are present in Load Balancer ADC, either literally or under the doctrine of equivalents, Barracuda's demonstration (use), sale, and offer for sale of Load Balancer ADC units infringes at least Claim 1 of the 062 Patent.

17. Barracuda has knowledge and notice of the 062 Patent and its infringement at least as early as August 27, 2018 when it received a letter from AMT dated August 14, 2018 that described the 062 Patent in relation to Load Balancer ADC.

### Case 2:18-cv-00175-RWS Document 1 Filed 09/24/18 Page 8 of 10

18. Barracuda has induced infringement, and continues to induce infringement, of one or more claims of the 062 Patent under 35 U.S.C. § 271(b). Barracuda actively, knowingly, and intentionally induced, and continues to actively, knowingly, and intentionally induce, infringement of the 062 Patent by selling or otherwise supplying the Load Balancer ADC with the knowledge and intent that third parties will use, sell, and/or offer for sale in the United States, and/or import into the United States the Load Balancer ADC for their intended purpose to infringe the 062 Patent; and with the knowledge and intent to encourage and facilitate the infringement through the dissemination of the Load Balancer ADC and/or the creation and dissemination of documentation and technical information related to the Load Balancer ADC. In addition, Barracuda encourages its customers to use the Load Balancer ADC in a manner that infringes the 062 Patent by disseminating user manuals, articles, and other documentations describing how to configure and use Load Balancer ADC.

19. Barracuda has contributed to the infringement by third parties, including Barracuda's customers, and continues to contribute to infringement by third parties, including the Barracuda's customers, of one or more claims of the 062 Patent under 35 U.S.C. § 271(c), by selling and/or offering for sale in the United States and/or importing into the United States the Load Balancer ADC knowing that those products constitute a material part of the inventions of the 062 Patent, knowing that use of those products are especially made or adapted to infringe the 062 Patent, and knowing that those products are not staple articles of commerce suitable for substantial non-infringing use.

20. By reason of these infringing activities, AMT has suffered, and will continue to suffer, substantial damages in an amount to be determined at trial, including but not limited to a reasonable royalty.

-8-

### PRAYER FOR RELIEF

WHEREFORE, AMT respectfully requests the Court to enter judgment as follows:

A. That Barracuda has directly and indirectly infringed the 062 Patent;

B. That Barracuda be ordered to pay damages adequate to compensate AMT for its infringement of the 062 Patent, but in no event less than a reasonable royalty, together with prejudgment and post-judgment interest thereon;

E. That AMT be ordered to account for any post-verdict infringement;

F. That this case be declared exceptional under 35 U.S.C. §285 and that AMT be awarded its reasonable attorneys' fees, costs, and expenses; and

G. That AMT be granted such other and additional relief as the Court deems just and proper.

## JURY DEMAND

AMT hereby demands a jury trial as to all issues so triable.

Dated: September 24, 2018

RESPECTFULLY SUBMITTED,

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