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

ACCELERATED MEMORY TECH,	
LLC	
Plaintiff,	
	C.A. No
v.	
	JURY TRIAL DEMANDED
CITRIX SYSTEMS, 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 Citrix Systems, Inc. ("Citrix") 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

- 2. 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, encompassing the right to recover for all past, present, and future infringement, including past damages.
- 3. Citrix is an American multinational software company that provides server, application and desktop virtualization, networking, and software as service and

cloud computing technologies. One of Citrix's technologies is its NetScaler ADC technology.

4. Citrix has a physical office in the District located at 13560 Morris Road #2500, Alpharetta, Georgia 3004. Upon information and belief, the Alpharetta office includes sales, engineering, technical support and training services. Citrix is listed with the Georgia Secretary of State as a Foreign Profit Corporation, with its registered agent being Corporation Service Company, located at 40 Technology Parkway South Suite 300, Norcross, GA 30092.

## JURISDICTION AND VENUE

- 5. 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).
- 6. This Court has general and specific personal jurisdiction over Citrix under the due process provisions of the United States and the Georgia Constitutions. Citrix has a regular and established place of business in the Northern District of Georgia. Upon information and belief, at least a portion of the infringing offers, use, sales and inducements alleged herein have occurred in Citrix's physical location in the judicial district and through Citrix's interactive web site.
- 7. Upon information and belief, venue is proper pursuant to 28 U.S.C. § 1400(b) because Citrix has a regular and established place of business, including

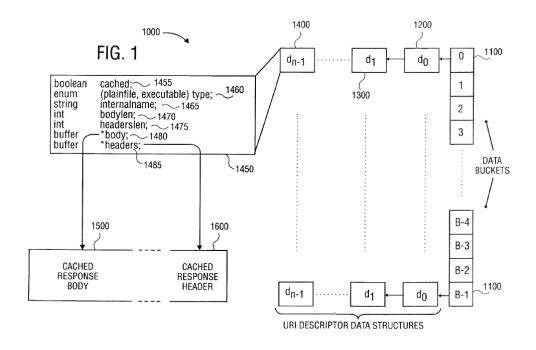
but not limited to the Alpharetta office, in the District, and has committed acts of infringement of the 062 Patent in this district by offering for sale and selling one or more versions of its NetScaler ADC technology.

#### THE ASSERTED PATENT

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

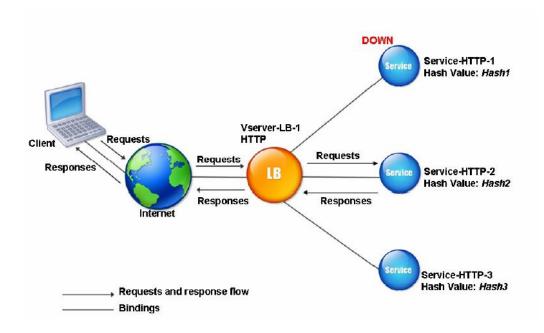
HTTP server – "redundantly performing the mapping from the external name to the internal name for repeatedly-requested resources."

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.



### COUNT I – INFRINGEMENT OF THE 062 PATENT

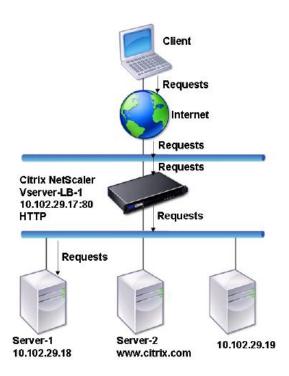
- 11. AMT herein incorporates the contents of the preceding paragraphs as if restated fully herein.
- 12. Citrix's NetScaler ADC is a software-defined application delivery controller (ADC) and load balancer. NetScaler ADC is designed to improve application performance and reliability for mobile, remote and branch users; allow customers to transition their infrastructure to an application-driven, software-defined network; eliminate multiple remote access solutions for improved security; and consolidate data centers.
- 13. NetScaler 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 NetScaler ADC performs a computer-implemented method for efficiently generating responses for repeated resource requests. This is discussed in further detail below with respect to the remaining parts of this paragraph.
  - b. Using NetScaler ADC performs receiving a first request for a first resource. Below is an HTML Request/Response environment in which NetScaler ADC practices the method of Claim 1 according to publicly available NetScaler documentation.



The diagram above is an example that shows multiple HTML requests received by NetScaler ADC. Moreover, this shows a request for a resource such as, for example, documents, data, or files generated by an application distributed across three servers each having their own IP address or server name. According to publicly available NetScaler documentation, a resource provided by a virtual server may bind, for example, three physical servers: "Service-HTTP-1, Service-HTTP-2, and Service-HTTP-3."

c. Using the NetScaler ADC performs <u>deriving intermediate state</u>
information used in generating a first response to said first request said
intermediate state information comprising a result of mapping an external
name (e.g., a domain name, a URL) of the first request for the first resource
to an internal name (e.g., a destination IP address or server name) <u>associated</u>

with the first resource. In NetScaler ADC, an HTML request, such as, for example, a GET request, leads to a corresponding HTML response.



Below is a discussion of HTML requests and responses used in NetScaler ADC according to publicly available documentation:

#### Format of an HTTP Request

An HTTP request contains a series of lines that each end with a carriage return and a line feed, represented as either <CR> <LF> or \r\n.

The first line of a request (the *message line*) contains the HTTP method and target. For example, a message line for a GET request contains the keyword GET and a string that represents the object that is to be fetched, as shown in the following example:

GET /mysite/mydirectory/index.html HTTP/1.1\r\n

The rest of the request contains HTTP headers, including a required Host header and, if applicable, a message body.

The request ends with a bank line (an extra <CR><LF> or \r\n).

Following is an example of a request:

Get /mysite/index.html HTTP/1.1\r\n Host: 10.101.101.10\r\n Accept: \*/\*\r\n \r\n Format of an HTTP Response

An HTTP response contains a status message, response HTTP headers, and the requested object or, if the requested object cannot be served, an error message.

Following is an example of a response:

HTTP/1.1 200 OK\r\n Content-Length: 55\r\n Content-Type: text/html\r\n

Last-Modified: Wed, 12 Aug 1998 15:03:50 GMT\r\n

Accept-Ranges: bytes\r\n ETag: "04f97692cbd1:377"\r\n

Date: Thu, 19 Jun 2008 19:29:07 GMT\r\n

\r\n

Furthermore, publicly available NetScaler documentation states, "When you request DNS resolution of a domain name, the NetScaler appliance uses the configured load balancing method to select a DNS service. The DNS server to which the service is bound then resolves the domain name and returns the IP address as the response." Determining the destination IP address in NetScaler ADC is indicative of mapping the external name (*e.g.*, URL or domain name in the request) to the internal name (*e.g.*, destination IP address or server name). Intermediate State information is derived from the result of this mapping, as evidence by the use of a hashing method (e.g., URL Hashing method) in NetScaler ADC.

In a destination IP hash method of NetScaler ADC, "A load balancing virtual server configured to use the destination IP hash method uses the hashed value of the destination IP address to select a server. You can mask the destination IP address to specify which part of it to use in the hash value

calculation, so that requests that are from different networks but destined for the same subnet are all directed to the same server. This method supports IPv4 and IPv6-based destination servers. This load balancing method is appropriate for use with the cache redirection feature. To configure the destination IP hash method for an IPv4 destination server, you set the netMask parameter. To configure this method for an IPv6 destination server, you use the v6NetMaskLen parameter. In the configuration utility, text boxes for setting these parameters appear when you select the Destination IP Hash method."

- d. Using the NetScaler ADC performs <u>caching said intermediate state</u> <u>information</u>. According to publicly available NetScaler documentation, "When you configure the NetScaler appliance to use the URL hash method for load balancing the services, for selecting a service, the NetScaler generates a hash value of the HTTP URL present in the incoming request. If the service selected by the hash value is DOWN, the algorithm has a method to select another service from the list of active services. The *NetScaler caches the hashed value of the URL*, and when it receives subsequent requests that use the same URL, it forwards them to the same service."
- e. Using the NetScaler ADC performs <u>receiving a second request for</u>
  <u>said first resource</u>. According to publicly available NetScaler

documentation, "When you configure the NetScaler appliance to use the URL hash method for load balancing the services, for selecting a service, the NetScaler generates a hash value of the HTTP URL present in the incoming request. If the service selected by the hash value is DOWN, the algorithm has a method to select another service from the list of active services. The NetScaler caches the hashed value of the URL, and when it receives subsequent requests that use the same URL, it forwards them to the same service."

f. Using the NetScaler ADC performs retrieving said intermediate state information. In response to subsequent requests, "destination IP hash method uses the hashed value of the destination IP address to select a server," as stated in publicly available NetScaler® documentation. The selected server or service includes cache redirection, particularly in the case of Destination IP hashing. For example, Destination IP hashing "is appropriate for use with the cache redirection feature," as stated in publicly available NetScaler documentation. In addition, "[a] cache stores frequently requested HTTP content. When you configure cache redirection on a virtual server, the NetScaler appliance sends cacheable HTTP requests to the cache," as stated in publicly available NetScaler documentation.

- Using the NetScaler ADC performs generating a second response to g. said second request using said intermediate state information. According to publicly available NetScaler documentation, Destination IP hashing "is appropriate for use with the cache redirection feature." In cache redirection, "responses are served from a cache." A "NetScaler® appliance with cache redirection enabled can serve this content from a cache server instead of from the origin server." NetScaler ADC is configured for generating a second response using its integrated (i.e., on-board, AppCache) cache. According to publicly available NetScaler documentation, "if you have purchased and installed the Citrix NetScaler Enterprise Edition license and need to enable the Integrated Caching feature, you first need to purchase and install the AppCache license." Integrated Caching determines "whether HTTP responses can be stored in, and served from, the NetScaler appliance's integrated cache."
- 14. On information and belief, Citrix has used and operated NetScaler 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 NetScaler ADC.

- 15. Because all elements of at least Claim 1 are present in the NetScaler ADC, either literally or under the doctrine of equivalents, Citrix's demonstration (use), sale, and offer for sale of NetScaler ADC units infringes at least Claim 1 of the 062 Patent.
- 16. In addition to the Citrix's direct infringement, Citrix induces its customers to infringe through the above mentioned activities. Upon information and belief, Citrix has knowledge that the induced acts constitute infringement including but not limited to the fact that on April 11, 2018, undersigned counsel sent Citrix a letter putting Citrix on notice of the 062 Patent, including a claim chart analyzing the 062 Patent in the context of the NetScaler ADC technology.
- 17. 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.

### PRAYER FOR RELIEF

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

- A. That Citrix has directly infringed the 062 Patent;
- B. That Citrix has induced the infringement of the 062 Patent;
- C. That Citrix 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;

- D. That AMT be ordered to account for any post-verdict infringement;
- E. 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
- F. 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: April 20, 2018

HILL, KERTSCHER & WHARTON, LLP

s/Steven G. Hill

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