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

ACCELERATED MEMORY TECH, LLC	

C.A. No. \_\_\_\_\_\_\_
JURY TRIAL DEMANDED

Plaintiff,

v.

KEMP TECHNOLOGIES, 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 Kemp Technologies, Inc. ("Kemp") 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, including the right to recover for all past, present, and future infringement, including past damages.
- 3. Kemp is a software company that provides load balancing for private and multicloud environments. One of Kemp's products is called LoadMaster. Kemp is a Delaware Corporation with its principal place of business at 989 6th Ave 16th Floor, New York, NY 10018, United States. Kemp may be served with process through its registered agent, the Corporation Services Company, 251 Little Falls Parkway, Wilmington, Delaware 19808.

#### JURISDICTION AND VENUE

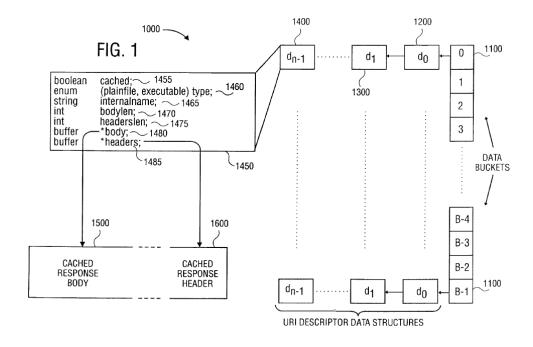
- 4. This is an action for infringement of a United States patent arising under 35 U.S.C. § 271, et seq. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).
- 5. This Court has general and specific personal jurisdiction over Kemp under the due process provisions of the United States and the Delaware Constitutions. Kemp resides in the state of Delaware and has a regular and established place of business in Delaware.
- 6. Upon information and belief, venue is proper pursuant to 28 U.S.C. § 1400(b) because Kemp resides in this judicial district.

#### 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, "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. Kemp's LoadMaster performs functions such as handling HTTP requests, dynamic caching, and load balancing.

- 13. The functionality and capabilities of the Kemp's LoadMaster are described in **Exhibit B**. **Exhibit B** is true and correct copy of the Kemp LoadMaster LM5305-FIPS Product Overview.
- 14. As used herein, "Accused Instrumentality" refers to Kemp's LoadMaster product including, for example, the LM5305-FIPS.
- 15. Claim 1 of the 062 Patent states as follows, with claim element labels added in brackets:
- [a] A computer-implemented method for efficiently generating responses for repeated resource requests, said method comprising:
- [b] receiving a first request for a first resource;
- [c] deriving intermediate state information used in generating a first response to said first request, said intermediate state information comprising a result of mapping an external name of the first request for the first resource to an internal name associated with the first resource;
- [d] caching said intermediate state information;
- [e] receiving a second request for said first resource;
- [f] retrieving said intermediate state information; and
- [g] generating a second response to said second request using said intermediate state information.
- 16. Use of the Accused Instrumentality infringes at least Claim 1 of the '062 Patent as follows [with claim language underlined]:
- 15. To the extent the preamble limitation [a] of Claim 1 is limiting, using the Accused Instrumentality performs a computer-implemented method for efficiently generating responses for repeated resource requests. Using the load balancing method of the Accused Instrumentality in combination with at least Active Cookie Persistence, as discussed below, performs the limitations of claim 1.

16. Using the Accused Instrumentality performs limitation [b] of Claim 1 -- receiving a first request for a first resource. For example, the Accused Instrumentality provides load balancing with persistence as shown below:

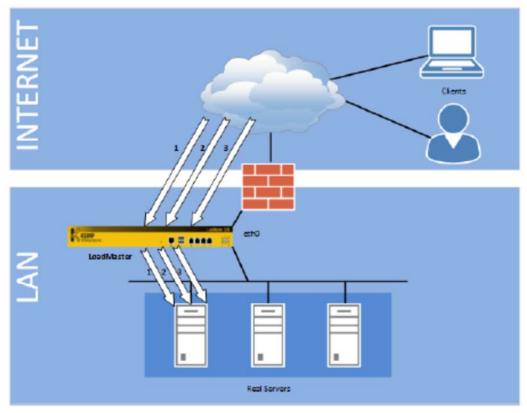


Figure 4-2: Load balancing with persistence

(**Exhibit B** at 21.) As shown above, The Accused Instrumentality receives a first request from a client over the internet and routes it to a first real server to obtain a resource such as web content.

17. Using the Accused Instrumentality performs limitation [c] of Claim 1 - <u>deriving</u> intermediate state 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 destination server name) associated with the first resource. The Accused Instrumentality generates responses to requests as shown below:



The Accused Instrumentality receives requests and generates corresponding responses by providing a virtual server that load balances requests: "The Virtual Service has been configured to balance the incoming traffic across the Real Servers (server 1, 2 and 3)." (**Exhibit B** at 11.) The load balancing involves mapping an external name (*e.g.*, URL of related data in an HTML request) of the first request for the first resource to an internal name (*e.g.*, the address or name of the destination server) associated with the first resource. For example, in the Accused Instrumentality:

- A user requests the URL http://www.kemptechnologies.com.
- The URL will be resolved by the DNS into IP address 66.220.13.66.
- The request will be routed to the LoadMaster, which offers this IP address as an IP-alias of its network interface eth0.
- The LoadMaster is connected to the server farm subnet 10.0.0.0 via its network interface eth1.
- The LoadMaster knows that there are three Real Servers in this subnet that are assigned to the requested address 66.220.13.66 and are able to deliver the required content.
- The LoadMaster uses the load balancing method configured, for example weighted round robin, to send the request on to one of the three Real Servers.

### (Exhibit B at 11.)

18. Moreover, with respect to limitation [c] of Claim 1, the Accused Instrumentality derives intermediate state information such as, for example, an active cookie and/or a persistence

table in order to route subsequent requests efficiently to the same server that processed the first request. This is described in more detail below:

#### 4.4.2 Active Cookie Persistence

The Active Cookie method is a Layer 7 feature that uses cookies like the pervious method, but with Active Cookie the cookies are generated by the LoadMaster, not the server.

When a connection comes into a LoadMaster Virtual Service configured with Active Cookie, the LoadMaster looks for a specific cookie. If that cookie is not there, the LoadMaster inserts it into the HTTP stream with a Set-Cookie directive. Existing cookies are not affected.

As with the Server Cookie persistence method, the value for the LoadMaster-generated cookie is unique to each user, allowing the LoadMaster to differentiate between users.

With Active Cookie persistence, the cookie is valid for the session or until the persistence time expires. For example, if using Active Cookie persistence with the persistence timeout set to 10 minutes and the client connects at 2pm, then disconnects and reconnects at 2.05pm — this would reset the persistence timeout value. If the client tries to connect to a Virtual Service after the persistence timeout has expired, they would present the old cookie. The LoadMaster will check its persistence table and see that it does not have a valid entry. The LoadMaster would then generate a new cookie for the client and would update its persistence table.

## (Exhibit B at 23.)

- 19. Using the Accused Instrumentality performs <u>caching said intermediate state</u> <u>information</u>, as recited in limitation [d]. For example, after generating the active cookie, the Accused Instrumentality caches it by storing it as part of a persistence table in memory. (**Exhibit B** at 23).
- 20. Using the Accused Instrumentality practices limitation [e] receiving a second request for said first resource. For example, "the LoadMaster inserts [an active cookie] into the HTTP stream with a Set-Cookie directive." (**Exhibit B** at 23.) This means that subsequent requests that are received for the same resource will include the active cookie.
- 21. Using the Accused Instrumentality also performs limitation [f] of Claim 1-retrieving said intermediate state information. For example, the Accused Instrumentality

performs a lookup operation with respect to a persistence table to determine where a request should be routed based on the presence of an active cookie in the subsequent request. (**Exhibit B** at 23.)

22. Using the Accused Instrumentality performs limitation [g] of Claim 1 -generating a second response to said second request using said intermediate state information.

For example, the Accused Instrumentality generates subsequent responses using the active cookie. This involves generating a response by inserting an active cookie in the HTML stream (Exhibit B at 23) and/or by compressing responses received from a real server. The Accused Instrumentality generates responses to requests as shown below:



- 23. On information and belief, Kemp has used and operated the Accused Instrumentality in a manner that infringes through the activities of testing, validating, training others, and/or demonstrating the capabilities of the Accused Instrumentality.
- 24. Because all elements of at least Claim 1 are present in the Accused Instrumentality, either literally or under the doctrine of equivalents, Kemp's demonstration (use), sale, and offer for sale of the Accused Instrumentality infringes at least Claim 1 of the '062 Patent.
- 25. Kemp has knowledge and notice of the '062 Patent and its infringement thereof, at least as early as December 2018 when it received a letter from AMT dated December 18, 2018

("the Letter") that described the '062 Patent, and provided a claim chart in relation to the Accused Instrumentality demonstrating the infringement as outlined herein.

- 26. Kemp has induced infringement, and continues to induce infringement, of one or more claims of the '062 Patent under 35 U.S.C. § 271(b). With the aforesaid knowledge of the 062 Patent and infringement thereof, Kemp actively, knowingly, and intentionally induced, and continues to actively, knowingly, and intentionally induce, infringement of the '062 Patent by selling or otherwise supplying the Accused Instrumentality 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 Accused Instrumentality 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 Accused Instrumentality and/or the creation and dissemination of documentation and technical information related to the Accused Instrumentality. In addition, Kemp encourages its customers to use the Accused Instrumentality in manner that infringes the 062 Patent by disseminating user manuals, articles, and other documentations describing how to configure and use the Accused Instrumentality.
- 27. With the aforesaid knowledge of the '062 Patent and the infringement thereof, Kemp has contributed to the infringement by third parties, including Kemp's customers, and continues to contribute to infringement by third parties, including the Kemp'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 Accused Instrumentality 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.

- 28. Kemp knew of the '062 Patent at least by receiving the Letter and further knew that its conduct amounted to infringement of the '062 Patent as outlined in the claim chart attached to the Letter. Kemp's infringement is therefore willful.
- 29. 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 Kemp has directly and indirectly infringed the '062 Patent;
- B. That Kemp 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;
  - C. That Kemp be ordered to account for any post-verdict infringement;
- D. That this case be declared exceptional under 35 U.S.C. §285 and that AMT be awarded its reasonable attorneys' fees, costs, and expenses;
- E. That the damages awarded to AMT be trebled in the event that the jury determines that the patent infringement in this case was willful; 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.

May 20, 2019

BAYARD, P.A.

OF COUNSEL:

vg@hkw-law.com

Steven G. Hill Vivek Ganti HILL, KERTSCHER & WHARTON, LLP 3350 Riverwood Parkwaay, Suite 800 Atlanta, GA 30339 (770) 953-0995 sgh@hkw-law.com /s/ Stephen B. Brauerman Stephen B. Brauerman (#4952) 600 North King Street, Suite 400 Wilmington, DE 19801 (302) 655-5000 sbrauerman@bayardlaw.com

Attorneys for Accelerated Memory Tech, LLC