IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELEWARE

ACCELERATED MEMORY TECH, LLC
     Plaintiff,

v.

HULU, LLC

     Defendant.

C.A. No. _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement under 35 U.S.C. § 271, et seq., by Accelerated Memory Tech, LLC ("AMT") against Hulu, LLC ("Hulu") for infringement of United States Patent No. 6,513,062 (the "'062 Patent"). A true and correct copy of the 062 Patent is attached hereto as **Exhibit A**.

THE PARTIES

1.   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.

2.   Hulu is an American streaming service. Hulu is a corporation duly organized and existing under the laws of the State of Delaware, having its principal place of business located at 2500 Broadway, 2nd Floor, Santa Monica, CA 90404. Defendant may be served through its registered agent, Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware, 19808.

<u>JURISDICTION AND VENUE</u>

3.   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).

4.   This Court has general and specific personal jurisdiction over Hulu under the due

process provisions of the United States and the Delaware Constitutions. Hulu is incorporated in

the state of Delaware.

5.   Venue is proper pursuant to 28 U.S.C. § 1400(b) because Hulu is incorporated in

the state of Delaware and a resident of Delaware.

<u>THE ASSERTED PATENT</u>

6.   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."

7.   The '062 Patent is valid and enforceable.

8.   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."

9.   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:

FIG. 1
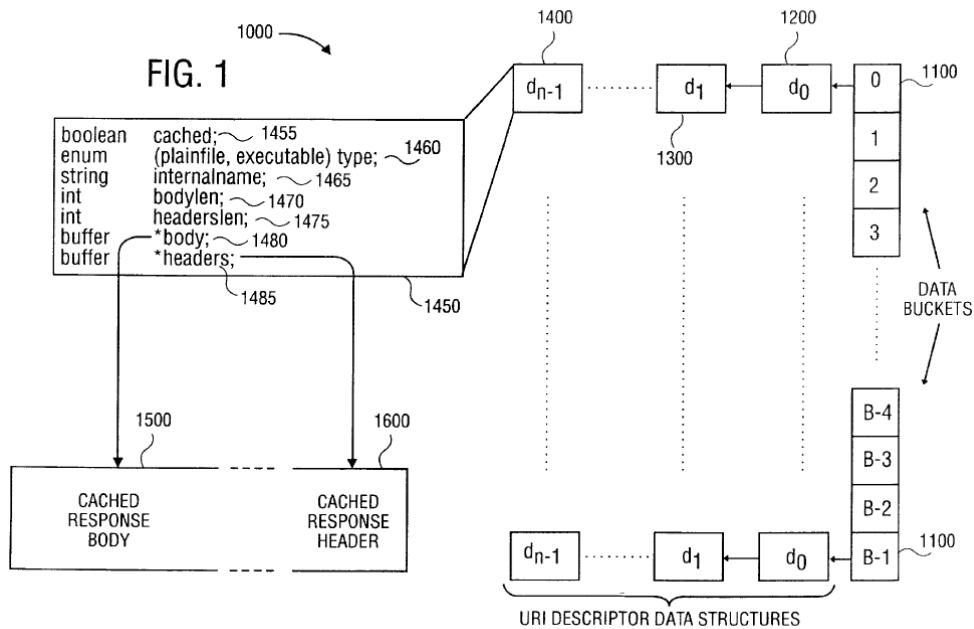
COUNT I – INFRINGEMENT OF THE '062 PATENT

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

11.   Hulu's Redis technology is described as a data delivery system that enables Application Availability, Acceleration and Control, while providing Application Security

Capabilities. It includes features such as caching, compression, and TCP pooling which enable

faster application delivery and ensure scalability.

12.   The functionality and capabilities of Redis are described in **Exhibit B.** Exhibit B

is true and correct copy of the website https://content.pivotal.io/blog/case-study-how-hulu-

scaled-serving-4-billion-videos-using-redis as of June 17, 2019.

13.   Hulu's Redis infringes at least Claim 1 of the 062 Patent as follows [with claim

language underlined]:

    a.   To the extent the preamble is limiting, using Redis 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 Redis performs receiving a first request for a first resource. This is

    shown below as an excerpt of Exhibit B:

- From a durability perspective, we decided to use **Cassandra** as the persistent data store where all writes are made. Data is then loaded on demand from Cassandra to Redis. The first time a request comes for a user, the system will create a job to load all the videos for this user into Redis. Once this is done, the system will update a flag. The next time a request comes in for this user, the flag is checked. If the flag is set, then the system return whatever it has from Redis without hitting Cassandra. This way access to the database is greatly reduced, and we don't have to have every record in Redis. To add additional performance improvements, we also built in intelligent querying,

    As noted above, using "Redis involves a "first time a request comes." This first

    time request includes a request for a server resource such as, for example, a video

    provided by the server.

    c.   Using Redis performs 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 (*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) associated with the first resource. As discussed above with respect to

Exhibit B, Redis uses its system to route a request from a source to a destination using a

mapping of an external name to an internal name. The intermediate state information

may be, for example, at least a flag that is a result of mapping an external name (*e.g.,* a

URL for accessing media content) to an internal name (*e.g*., the location of the media

content). The intermediate state information may also be, for example, a file path to an

intermediate location of the requested resource. See Exhibit B (stating that Hulu uses a

flag for a particular user to locate information stored in Redis). 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 Redis performs caching said intermediate state information. For

example, Redis creates and manages persistent data storage and caches data for future

use. This is discussed above with respect to Exhibit B. On information and belief, Hulu

uses Redis and a flag storage system for handling subsequent requests. The flag is

cached in memory. The flag is associated with a particular job that relates to the first

request. As discussed above in the excerpt of Ex. B, the job includes a job to load videos

for fast accesses and for handling repeated requests for the same resource.

e.   Using Redis performs receiving a second request for the first resource.

For example, Redis allows for repeated requests to be directed to the same resource that

handled the first request. As discussed above with respect to Exhibit B, Redis uses a flag

storage system for efficiently generating responses for repeated resource requests. In the

context of Redis, persistence involves handling repeated video requests. The second request is discussed in Ex. B as the "next time a request comes."

       f.   Using Redis performs <u>retrieving said intermediate state information.</u> For example, Redis allows for repeated requests to be directed to the same resource that handled the first request. The flag is associated with a particular user. The flag will alert the system to return information for a particular user stored in Redis each time the user submits an additional request. See Exhibit B (stating "[i]f the flag is set, then the system return whatever it has from Redis without hitting Cassandra").

       g.   Using Redis performs <u>generating a second response to said second request using said intermediate state information.</u> For example, after Redis directs a second request to the system that handled the first request, the system provides Redis with an initial response. Redis then generates a second response to the user using the information stored in Redis.

14.   Because all elements of at least Claim 1 are present in Redis, either literally or under the doctrine of equivalents, Hulu's demonstration, use, sale, and offer for sale of Redis infringes at least Claim 1 of the '062 Patent.

15.   On information and belief, Hulu 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 Redis.

16.   Hulu had knowledge and notice of the '062 Patent and its infringement at least as early as January 24, 2019 when it received a letter from AMT dated January 24, 2019 that described the '062 Patent in relation to Redis.

17.   Hulu has induced infringement, and continues to induce infringement, of one or more claims of the '062 Patent under 35 U.S.C. § 271(b). Hulu actively, knowingly, and intentionally induced, and continues to actively, knowingly, and intentionally induce, infringement of the '062 Patent by selling or otherwise supplying Redis 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 Redis 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 Redis and/or the creation and dissemination of documentation and technical information related to Redis. In addition, Hulu encourages its customers to use Redis in a manner that infringes the '062 Patent by disseminating user manuals, articles, and other documentations describing how to configure and use Redis.

18.   Hulu has contributed to the infringement by third parties, including Hulu's customers, and continues to contribute to infringement by third parties, including Hulu'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 Redis 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.

19.   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 Hulu has directly and indirectly infringed the 062 Patent;

B.   That Hulu 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 AMT 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; and

E.   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: June 21, 2019   BAYARD, P.A.

OF COUNSEL: /s/ Stephen B. Brauerman
                                               Stephen B. Brauerman (#4952)
Steven G. Hill   600 North King Street, Suite 400
Vivek Ganti   Wilmington, Delaware 19801
Martha L. Decker   (302) 655-5000
HILL, KERTSCHER & WHARTON, LLP   sbrauerman@bayardlaw.com
3350 Riverwood Parkway, Suite 800
Atlanta, GA 30339   *Attorneys for Plaintiff Accelerated Memory*
Tel: (770) 953-0995   *Tech, LLC*
sgh@hkw-law.com
vg@hkw-law.com