

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

UNILOC USA, INC; UNILOC LICENSING
USA LLC; UNILOC 2017, LLC,

Plaintiffs,

v.

AMAZON.COM, INC.; AMAZON WEB
SERVICES, INC.; AMAZON DIGITAL
SERVICES, LLC; AMAZON DIGITAL
SERVICES, INC.; AMAZON
FULFILLMENT SERVICES, INC.,

Defendants.

§
§ CIVIL ACTION NO. 2:18-cv-00340
§
§
§ PATENT CASE
§
§ JURY TRIAL DEMANDED
§
§
§
§
§

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs, Uniloc USA, Inc., Uniloc Licensing USA LLC, and Uniloc 2017, LLC (together “Uniloc”), as and for their complaint against defendants, Amazon.com, Inc., Amazon Web Services, Inc., Amazon Digital Services, LLC, Amazon Digital Services, Inc., and Amazon Fulfillment Services, Inc. (together “Amazon”) allege as follows:

THE PARTIES

1. Uniloc USA, Inc. is a Texas corporation having a principal place of business at Legacy Town Center I, Suite 380, 7160 Dallas Parkway, Plano Texas 75024. Uniloc also maintains a place of business at 102 N. College, Suite 303, Tyler, Texas 75702.

2. Uniloc Licensing USA LLC is a Delaware corporation having places of business at 1209 Orange Street, Wilmington, Delaware 19801 and 620 Newport Center Drive, Newport Beach, California 92660.

3. Uniloc 2017 LLC is a Delaware corporation having places of business at 1209 Orange Street, Wilmington, Delaware 19801 and 620 Newport Center Drive, Newport Beach,

California 92660.

4. Uniloc holds all substantial rights, title and interest in and to the asserted patent.

5. On information and belief, Amazon.com, Inc. is a Delaware corporation with its principal office at 410 Terry Avenue North, Seattle, WA 98109. Amazon can be served through its registered agent, Corporation Service Company, 2711 Centerville Rd., Wilmington, DE 19808. Amazon.com is the parent company of Amazon Web Services, Inc. and the primary operator and controller of the www.amazon.com commerce website. Amazon offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas and in the judicial Eastern District of Texas. As non-limiting examples, Amazon distributes the accused products through its distribution facilities in Denton County, TX. Among other business, Amazon is in the business of manufacturing and selling electronic goods sold in this judicial district.

6. On information and belief, Defendant Amazon Digital Services, LLC is a Delaware limited liability company with a principal place of business at 410 Terry Avenue North, Seattle, Washington 98109. Amazon Digital Services, LLC can be served with process through its registered agent, the Corporation Services Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808. Defendant Amazon Digital Services, LLC resides in this judicial district. Defendant Amazon Digital Services, LLC regularly conducts business in this district.

7. On information and belief, Amazon Digital Services, Inc. is a Delaware corporation with its principal place of business at 410 Terry Avenue North, Seattle, WA98109. Amazon Digital Services, Inc. can be served through its registered agent, Corporation Service Company d/b/a CSC – Lawyers Incorporating Service Company, 211 E. 7th Street, Suite 620, Austin, Texas 78701-3218. Defendant Amazon Digital Services, Inc. resides in this judicial district. Defendant Amazon

Digital Services, Inc. regularly conducts business in this district.

8. On information and belief, Amazon Web Services, Inc. is a Delaware corporation with a principal place of business at 410 Terry Avenue North, Seattle, Washington 98109. Amazon Web Services, Inc. can be served with process through its registered agent, Corporation Service Company, at 211 E 7st., Ste 620, Austin, TX 78701. Defendant Amazon Web Services, Inc. resides in this judicial district. Defendant Amazon Web Services, Inc. regularly conducts business in this district.

9. On information and belief, Defendant, Amazon Fulfillment Services, Inc. is a Delaware corporation with a principal office located at 410 Terry Avenue North, Seattle, Washington. Defendant, Amazon Fulfillment Services, Inc. resides in this judicial district. Defendant, Amazon Fulfillment Services, Inc. regularly conducts business in this district.

10. Amazon has a regular and established place of business in this District, including, e.g., distribution facilities, employees, and other business. For example, Amazon's property was appraised on the property tax rolls by Denton County at \$248 million and \$428,000. <https://www.dentoncad.com/api/notices/notice/699143?year=2017;> <https://www.dentoncad.com/api/notices/notice/659411?year=2017;> <https://blog.taxjar.com/amazon-warehouse-locations/> (“#DFW6 – 940 W Bethel Road Coppell, TX 75019”); <https://trustfile.avalara.com/resources/amazon-warehouselocations/>. As another example, Amazon has its Amazon Fulfillment Center FTW3-4 at 15201 Heritage Pkwy, Fort Worth, TX 76177, which is in this District. Amazon also maintains data center(s) in Dallas/Fort Worth area, which is involved in the operation of the accused instrumentalities. Amazon offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas and in this District. Amazon derives financial benefits through its business in Texas and in this District. *See, e.g.,* <http://dir.texas.gov/View->

[Search/ContractsDetail.aspx?contractnumber=DIR-TSO-2733;](#)

<https://aws.amazon.com/contractcenter/cloud-services-for-the-state-of-texas/>.¹

JURISDICTION

11. Uniloc brings this action for patent infringement under the patent laws of the United States, 35 U.S.C. § 271 *et seq.* This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

12. This Court has personal jurisdiction over Amazon in this action because Amazon has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over Amazon would not offend traditional notions of fair play and substantial justice. Amazon has committed and continues to commit acts of infringement in this District by, among other things, offering to sell and selling products and/or services that infringe the asserted patent.

13. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and 1400(b). Amazon is registered to do business in Texas, and upon information and belief, Amazon has transacted business in the Eastern District of Texas and has committed acts of direct and indirect infringement in the Eastern District of Texas. Amazon has regular and established place of business in this District, as set forth above.

COUNT I

(INFRINGEMENT OF U.S. PATENT NO. 6,396,875)

14. Uniloc incorporates the preceding paragraphs above by reference.

15. U.S. Patent No. 6,396,875 (“the ’875 Patent”), entitled METHOD OF SWITCHING

¹ See also, e.g., <http://www.costar.com/News/Article/Amazon-Establishes-Austin-HQ-in-Domain-7/171852>; <http://www.datacenterknowledge.com/archives/2008/11/18/whereamazons-data-centers-are-located>; <http://www.govtech.com/computing/Texas-and-Amazon-Unite-on-Cloud-Services-Contract.html>; http://publishingext.dir.texas.gov/portal/internal/contracts-and-services/Contracts/Contract%20DIR_TSO_2733.pdf.

OF CODED VIDEO SEQUENCES AND CORRESPONDING DEVICE that issued on May 28, 2002. A true and correct copy of the '875 Patent is attached as Exhibit A hereto.

16. Pursuant to 35 U.S.C. § 282, the '875 Patent is presumed valid.

17. The '875 Patent describes inventive features that are not well-understood, routine, and conventional.

18. Amazon makes, uses, offers for sale, sells and/or imports into the United States a platform marketed under the name "Amazon Web Services" or "AWS". Products falling within this marketed family include services and platforms called "AWS Elemental MediaConvert" or "MediaConvert" (e.g., <https://aws.amazon.com/mediaconvert/>) and "AWS Elemental MediaLive" or "MediaLive" (e.g., <https://aws.amazon.com/medialive/>). AWS Elemental MediaConvert and AWS Elemental MediaLive are cloud based media encoding services for VoD and live streaming content respectively. These Amazon products allow variable and constant bitrate encoding and use HRD buffer model in order to manipulate bitrate, buffer size and buffering delay as described and claimed in the '875 Patent. Collectively, such a system is the "Accused Infringing Devices".

19. The Accused Infringing Devices practice a method of switching at a time t_{sw} , before decoding, from a first coded video sequence at a bitrate R_{old} to a second one at a higher bitrate R_{new} .

20. AWS Elemental MediaConvert and AWS Elemental MediaLive provide encoding services for VOD and live content respectively. The API of the Accused Infringing Devices enable a user to manipulate the buffer size and maximum and average bitrate for a bitstream based on the Hypothetical Reference Decoder (HRD) buffer model.

21. The Accused Infringing Devices compare the maximum size of the decoder's buffer state the total number of bits given by the addition of the bits associated to the last transmitted picture (02) of the first sequence and the first transmitted picture (N1) of the second sequence

entering the decoder's buffer between said time t_{sw} and the decoding time of said last transmitted picture (02). Through the use of HRD buffer model, the Accused Infringing Devices change the value of the bitrate when switching between frames of different coded picture sequences (e.g., switching between access unit n and $n-1$ which are parts of different coded video sequences). It also compares the old CPB size to the new CPB size.

22. When the Accused Infringing Devices call the `hrd_parameters()` function, such a function implements changes to the coded picture buffer size and the bitrate of an access unit.

23. The Accused Infringing Devices increase the bitrate of the second sequence with respect to the bitrate R_{new} for at least its first transmitted picture, at least up to a value R_{int} for which said total number is correspondingly reduced to a value at most equal to said maximum size if said number is higher than said maximum size. The bitrate of an access unit n or the first frame of the second coded sequence would be increased to an intermittent bitrate to conform to the decoding requirements such that the fullness of the buffer is maintained, and overflow is avoided. If the new value of the buffer size is greater than the old value, the change in CPB size comes into effect at the initial arrival time of the access unit n and the change in bitrate also takes place at the same time.

24. Amazon has directly infringed, and continues to directly infringe one or more claims of the '875 Patent in the United States during the pendency of the '875 Patent, including at least claim 1 literally and/or under the doctrine of equivalents, by or through making, using, offering for sale and/or selling the Accused Infringing Devices that operate as described above.

25. In addition, should the Accused Infringing Devices be found to not literally infringe claims of the '875 Patent, use of the devices would nevertheless infringe one or more claims of the '875 Patent. More specifically, the devices perform substantially the same function (switching from a first bit rate to a second higher bitrate), in substantially the same way (via comparing to the

maximum size of the decoder's buffer state to the last transmitted picture and if said number is higher than said maximum size, increasing the bitrate of said second sequence) to yield substantially the same result (a higher bitrate) Amazon would thus be liable for direct infringement under the doctrine of equivalents.

26. Amazon has indirectly infringed and continues to indirectly infringe at least claim 1 of the '875 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the using, offering for sale or selling the Accused Infringing Devices. Amazon's customers who use such devices in accordance with Amazon's instructions directly infringe one or more of claims of the '875 Patent in violation of 35 U.S.C. § 271. Amazon directly and/or indirectly intentionally instructs its customers to infringe through training videos, demonstrations, brochures, installation and/or user guides such as those located at one or more of the following:

- <https://aws.amazon.com/mediaconvert/>
- <https://aws.amazon.com/medialive/>
- <https://docs.aws.amazon.com/mediaconvert/latest/apireference/presets.html>
- <https://docs.aws.amazon.com/medialive/latest/apireference/channels-channelid.html>

Amazon is thereby liable for infringement of the '875 Patent under 35 U.S.C. § 271(b).

27. Amazon has indirectly infringed and continues to indirectly infringe at least claim 1 of the '875 Patent by, among other things, contributing to the direct infringement by others including, without limitation customers using the Accused Infringing Devices, by making, offering to sell, selling and/or importing into the United States, a component of a patented machine, manufacture or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringing the '875 Patent and not a staple article or commodity of commerce suitable for substantial non-infringing use.

28. Amazon will have been on notice of the '875 Patent since, at the latest, the service

of this complaint upon Amazon. By the time of trial, Amazon will have known and intended (since receiving such notice) that its continued actions would actively induce and contribute to the infringement of one or more of claims of the '875 Patent.

29. Amazon may have infringed the '875 Patent through other devices, systems, and software utilizing the same or reasonably similar functionality as described above. Uniloc reserves the right to discover and pursue all such additional infringing software and devices.

30. Uniloc has been damaged by Amazon's infringement of the '875 Patent.

PRAYER FOR RELIEF

Uniloc requests that the Court enter judgment against Amazon as follows:

- (A) declaring that Amazon has infringed the '875 Patent;
- (B) awarding Uniloc its damages suffered as a result of Amazon's infringement of the '875 Patent pursuant to 35 U.S.C. § 284;
- (C) awarding Uniloc its costs, attorneys' fees, expenses and interest, and
- (D) granting Uniloc such further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Uniloc hereby demands trial by jury on all issues so triable pursuant to Fed. R. Civ. P. 38.

Dated: August 5, 2018

Respectfully submitted,

By: /s/ James L. Etheridge
James L. Etheridge
Texas Bar No. 24059147
Ryan S. Loveless
Texas Bar No. 24036997
Brett A. Mangrum
Texas Bar No. 24065671
Travis L. Richins
Texas Bar No. 24061296
Jeff Huang
Etheridge Law Group, PLLC

2600 E. Southlake Blvd., Suite 120 / 324

Southlake, TX 76092

Tel.: (817) 470-7249

Fax: (817) 887-5950

Jim@EtheridgeLaw.com

Ryan@EtheridgeLaw.com

Brett@EtheridgeLaw.com

Travis@EtheridgeLaw.com

Jeff@EtheridgeLaw.com

**ATTORNEYS FOR PLAINTIFFS UNILOC USA,
INC; UNILOC LICENSING USA LLC; UNILOC
2017, LLC**

v