

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

REALTIME ADAPTIVE STREAMING LLC,

Plaintiff,

v.

BRIGHTCOVE INC., and
BRIGHTCOVE HOLDINGS, INC.,

Defendants.

C.A. No. 17-1519-VAC-MPT

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement arising under the Patent Laws of the United States of America, 35 U.S.C. § 1 *et seq.* in which Plaintiff Realtime Adaptive Streaming LLC (“Plaintiff” or “Realtime”) makes the following allegations against Defendants Brightcove Inc. (“Brightcove”) and Brightcove Holdings, Inc. (“BH”) (collectively “Defendants”).

PARTIES

1. Realtime is a Texas limited liability company. Realtime has a place of business at 1828 E.S.E. Loop 323, Tyler, Texas 75701. Realtime has researched and developed specific solutions for data compression, including, for example, those that increase the speeds at which data can be stored and accessed. As recognition of its innovations rooted in this technological field, Realtime holds multiple United States patents and pending patent applications.

2. On information and belief, Defendants Brightcove and BH are Delaware corporations with their principal place of business at 290 Congress Street, 4th Floor, Boston, MA 02210. Defendants reside in this District because they are incorporated in

Delaware. Defendants offer their products and/or services, including those accused herein of infringement, to customers and potential customers located in Delaware and in this District. Defendants may be served with process through their registered agent for service in Delaware at The Corporation Trust Company, located at Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, 19801.

JURISDICTION AND VENUE

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

4. This Court has personal jurisdiction over Defendants in this action because Defendants have committed acts within the District of Delaware giving rise to this action and have established minimum contacts with this forum such that the exercise of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice. Defendants have also committed and continue 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 patents.

5. Venue is proper in this district, e.g., under 28 U.S.C. § 1400(b). Defendants reside in this District because they are incorporated in Delaware. Furthermore, upon information and belief, Defendants have transacted business in the District of Delaware and have committed acts of direct and indirect infringement in the District of Delaware.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 8,934,535

6. Plaintiff re-alleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.

7. Plaintiff Realtime is the owner by assignment of United States Patent No. 8,934,535 (“the ’535 Patent”) entitled “Systems and methods for video and audio data storage and distribution.” The ’535 Patent was duly and legally issued by the United States Patent and Trademark Office on January 13, 2015. A true and correct copy of the ’535 Patent is included as Exhibit A.

8. On information and belief, Defendants have made, used, offered for sale, sold and/or imported into the United States products that infringe the ’535 Patent, and continue to do so. By way of illustrative example, these infringing products include, without limitation, Defendants’ video encoding, streaming, and publishing services and products, such as, *e.g.*, Video Cloud, Brightcove Live, Mediacoder and Zencoder, and all versions and variations thereof since the issuance of the ’535 Patent (“Accused Instrumentalities”).

9. On information and belief, Defendants have directly infringed and continue to infringe the ’535 Patent, for example, through their own use and testing of the Accused Instrumentalities, which when used, practices the method claimed by Claim 15 of the ’535 Patent, namely, a method, comprising: determining a parameter of at least a portion of a data block; selecting one or more asymmetric compressors from among a plurality of compressors based upon the determined parameter or attribute; compressing the at least the portion of the data block with the selected one or more asymmetric compressors to provide one or more compressed data blocks; and storing at least a

portion of the one or more compressed data blocks. Upon information and belief, Defendants use the Accused Instrumentalities to practice infringing methods for its own internal non-testing business purposes, while testing the Accused Instrumentalities, and while providing technical support and repair services for the Accused Instrumentalities to their customers.

10. For example, the Accused Instrumentalities utilize H.264 video compression standard. For example, users are instructed to select the H.264 video codec when using the Brightcove Live API to create a live stream on Video Cloud (<https://docs.brightcove.com/en/live/getting-started/quick-start.html>) and Zencoder also uses H.264 (<https://support.brightcove.com/zencoder-encoding-settings-h264>) and Meiacoder is a H264 encoder (<https://www.brightcove.com/en/blog/2009/08/h264-encoding-using-mediacoder>). On information and belief, all of the Accused Instrumentalities deliver “adaptive bitrate streaming” to client devices. (<https://www.brightcove.com/en/zencoder>.)

11. The Accused Instrumentalities determine a parameter of at least a portion of a video data block. As shown below, examples of such parameters include bitrate (or max video bitrate) and resolution parameters. Different parameters correspond with different end applications. H.264 provides for multiple different ranges of such parameters, each included in the “profiles” and “levels” defined by the H.264 standard. See http://www.axis.com/files/whitepaper/wp_h264_31669_en_0803_lo.pdf at 5:

4. H.264 profiles and levels

The joint group involved in defining H.264 focused on creating a simple and clean solution, limiting options and features to a minimum. An important aspect of the standard, as with other video standards, is providing the capabilities in profiles (sets of algorithmic features) and levels (performance classes) that optimally support popular productions and common formats.

H.264 has seven profiles, each targeting a specific class of applications. Each profile defines what feature set the encoder may use and limits the decoder implementation complexity.

Network cameras and video encoders will most likely use a profile called the baseline profile, which is intended primarily for applications with limited computing resources. The baseline profile is the most suitable given the available performance in a real-time encoder that is embedded in a network video product. The profile also enables low latency, which is an important requirement of surveillance video and also particularly important in enabling real-time, pan/tilt/zoom (PTZ) control in PTZ network cameras.

H.264 has 11 levels or degree of capability to limit performance, bandwidth and memory requirements. Each level defines the bit rate and the encoding rate in macroblock per second for resolutions ranging from QCIF to HDTV and beyond. The higher the resolution, the higher the level required.

See https://en.wikipedia.org/wiki/H.264/MPEG-4_AVC:

Levels with maximum property values

Level	Max decoding speed		Max frame size		Max video bit rate for video coding layer (VCL) kbit/s			Examples for high resolution @ highest frame rate (max stored frames) Toggle additional details
	Luma samples/s	Macroblocks/s	Luma samples	Macroblocks	Baseline, Extended and Main Profiles	High Profile	High 10 Profile	
1	380,160	1,485	25,344	99	64	80	192	176x144@15.0 (4)
1b	380,160	1,485	25,344	99	128	160	384	176x144@15.0 (4)
1.1	768,000	3,000	101,376	396	192	240	576	352x288@7.5 (2)
1.2	1,536,000	6,000	101,376	396	384	480	1,152	352x288@15.2 (6)
1.3	3,041,280	11,880	101,376	396	768	960	2,304	352x288@30.0 (6)
2	3,041,280	11,880	101,376	396	2,000	2,500	6,000	352x288@30.0 (6)
2.1	5,068,800	19,800	202,752	792	4,000	5,000	12,000	352x576@25.0 (6)
2.2	5,184,000	20,250	414,720	1,620	4,000	5,000	12,000	720x576@12.5 (5)
3	10,368,000	40,500	414,720	1,620	10,000	12,500	30,000	720x576@25.0 (5)
3.1	27,648,000	108,000	921,600	3,600	14,000	17,500	42,000	1,280x720@30.0 (5)
3.2	55,296,000	216,000	1,310,720	5,120	20,000	25,000	60,000	1,280x1,024@42.2 (4)
4	62,914,560	245,760	2,097,152	8,192	20,000	25,000	60,000	2,048x1,024@30.0 (4)
4.1	62,914,560	245,760	2,097,152	8,192	50,000	62,500	150,000	2,048x1,024@30.0 (4)
4.2	133,693,440	522,240	2,228,224	8,704	50,000	62,500	150,000	2,048x1,080@60.0 (4)
5	150,994,944	589,824	5,652,480	22,080	135,000	168,750	405,000	3,672x1,536@26.7 (5)
5.1	251,658,240	983,040	9,437,184	36,864	240,000	300,000	720,000	4,096x2,304@26.7 (5)
5.2	530,841,600	2,073,600	9,437,184	36,864	240,000	300,000	720,000	4,096x2,304@56.3 (5)

12. A video data block is organized by the group of pictures (GOP) structure, which is a “collection of successive pictures within a coded video stream.” See https://en.wikipedia.org/wiki/Group_of_pictures. A GOP structure can contain intra

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.