



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
**United States Patent and Trademark Office**  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/730,519	06/04/2015	David Arbuckle	102005.022080	1092
71581	7590	02/04/2020	EXAMINER	
BakerHostetler / Comcast Cira Centre, 12th Floor 2929 Arch Street Philadelphia, PA 19104-2891			GEE, ALEXANDER	
			ART UNIT	PAPER NUMBER
			2425	
			NOTIFICATION DATE	DELIVERY MODE
			02/04/2020	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficemonitor@bakerlaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* DAVID ARBUCKLE, JASON BURGESS,  
NEILL KIPP, and RICHARD FLIAM

---

Appeal 2018-003669  
Application 14/730,519  
Technology Center 2400

---

Before ERIC S. FRAHM, JOHNNY A. KUMAR, and  
JOYCE CRAIG, *Administrative Patent Judges*.

FRAHM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 4–13 and 21–27. Claims 1–3 stand withdrawn in response to a restriction requirement (*see* Restriction Requirement mailed April 22, 2016; Response to Restriction Requirement filed June 22, 2016). Claims 14–20 have been canceled (*see* Final Act. 2; Appeal Br. 18). We have jurisdiction under 35 U.S.C. § 6(b).

---

<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. “The word ‘applicant’ when used in this title refers to the inventor or all of the joint inventors, or to the person applying for a patent as provided in §§ 1.43, 1.45, or 1.46.” 37 C.F.R. § 1.42(a). According to Appellant, Comcast Cable Communications, LLC is the real party in interest (Appeal Br. 1).

We REVERSE.

## INVENTION

Appellant's invention is directed to a method for managing storage and delivery of recorded content (e.g., a television program, movie, or sports event consisting of plural segments in a sequential order) in a cloud or network (as opposed to a set-top box) digital video recording (DVR) system 100 in which a service provider (e.g., a cable television service provider) may receive and respond to requests to deliver programs for playback (*see* Fig. 1; Spec. ¶¶ 1–4, 16). Program segments may be “2-second segments” (Spec. ¶ 18), and segments may correspond to advertisements inserted in the program (*see* Spec. ¶ 21). A linear module 116 controls how a program is segmented and put together for delivery and playback (*see* Spec. ¶ 20), and a recording management system 124 coordinates multiple duplicate program delivery and playback to multiple users (*see* Spec. ¶ 23). Appellant's disclosed and claimed invention can increase performance “because the read operation of the segment from the linear storage 120 need only occur a single time for all the segment copies instead of once for each segment copy” (Spec. ¶ 25). In addition, Appellant's invention delivers content more efficiently for playback by managing segments (*see e.g.*, Spec. ¶ 29). Independent method claim 4 is illustrative of the invention and is reproduced below, with bracketed lettering and emphases added to disputed portions of the claim.

4. A method comprising:
  - receiving a plurality of requests to record a content asset,
  - wherein the content asset comprises a plurality of segments;

determining a segment from the plurality of segments to store at a first storage;

receiving a copy of the segment from a second storage;

and

[A] causing, based on the copy of the segment received from the second storage, a plurality of copies of the segment to be generated and stored in the first storage, [B] *wherein a quantity of the plurality of copies of the segment is a quantity of the plurality of requests to record the content asset*, and [C] wherein each copy of the plurality of copies of the segment is associated *with a respective user of a plurality of users*.

Appeal Br. 16, Claims Appendix (emphases and bracketed lettering added).

#### EXAMINER'S REJECTIONS

The Examiner rejected claims 4–13 and 21–27 under 35 U.S.C. § 103 as being unpatentable over the same base combination of Lemus et al. (US 2015/0350701 A1; published Dec. 3, 2015 and filed May 28, 2014)(hereinafter, “Lemus”), Yasrebi et al. (US 2008/0086750 A1; published April 10, 2008), and Makishima et al. (US 2003/0133453 A1; published July 17, 2003)(hereinafter, “Makishima”). Final Act. 6–24; Ans. 4–22.

#### ANALYSIS

We have reviewed Appellant's arguments in the Briefs (Appeal Br. 3–14; Reply Br. 1–16), the Examiner's rejections (Final Act. 6–24; Ans. 4–22), and the Examiner's response to Appellant's arguments (Ans. 22–26). Appellant's arguments have persuaded us of error in the Examiner's

rejection of all of the disputed claims under 35 U.S.C. § 103.

Appellant presents several arguments asserting the Examiner's rejections of independent claims 4 and 21, each relying upon the same base combination of Lemus, Yasrebi, and Makishima, is in error (Appeal Br. 3–14; Reply Br. 1–16). The issue presented by these arguments is whether or not the Examiner erred in finding the base combination of Lemus, Yasrebi, and Makishima teaches or suggests the segmenting process recited in limitations A–C of independent claim 4, and as commensurately recited in remaining independent claim 21.

The Examiner's conclusion of obviousness is based on the interpretations that (i) claims 4 and 21, and specifically limitation A recited in claim 4 and similarly recited in claim 21, do not require the first and second storage elements to be at different location, and broadly allow the storage elements to be within the same device or storage area (*see* Ans. 23); and (ii) claims 4 and 21, and specifically limitation C recited in claim 4 and similarly recited in claim 21, do not require a one-to-one relationship of each copy of a segment with a different user (i.e., a copy of a segment may be associated with only one user, or several users) (*see* Ans. 24–25).

With regard to the Examiner's first interpretation as to limitation A, the purpose of Appellant's invention, efficient management of content for delivery using multiple storage elements (*see* Fig. 1, linear storage 120, recording storage 128, archive storage 130; Spec. ¶¶ 19–29), would be frustrated by storing content in two different memory cells of the very same storage unit as the Examiner reasons.

In addition, in rejecting independent claims 4 and 21, the Examiner makes the confusing findings that (i) limitation A is met by the combination

of Lemus and Yasrebi (Final Act. 6–7); (ii) limitation B is met by the combination of Lemus, Yasrebi, and Makishima (Final Act. 6–8); and (iii) limitation C is met by the combination of Lemus and Yasrebi (Final Act. 6–7). The Examiner’s conclusions of obviousness are all based on the finding that Yasrebi teaches or suggests a content asset may be a plurality of segments (*see* Final Act. 7 citing Yasrebi ¶¶ 17, 52, 53). The portions of Yasrebi cited by the Examiner describe first and second portions of media content being downloaded to users in different manners depending on the technical capabilities of the user device employed (e.g., where the devices differ in their storage capacity, such as a cell phone, laptop computer, or set-top box) (*see* Yasrebi ¶¶ 17, 52, 53). In other words, Yasrebi only teaches sending content to *a single user* of multiple devices. In this light, and in view of the Examiner’s improper interpretation of limitation A as covering multiple user devices of a single user, Appellant’s arguments that the cited art does not disclose generating and storing plural copies of a segment as recited in limitation A of claim 4 (Appeal Br. 3–5; Reply Br. 2–3), are persuasive. In addition, we also find Appellant’s arguments regarding the lack of motivation to combine Lemus with Yasrebi (Reply Br. 3–5) persuasive.

With regard to the Examiner’s second interpretation as to limitation C, the broadest reasonable interpretation in view of the Specification is that each copy of a segment be associated with different users. This is because the purpose of Appellant’s invention is to deliver content, including segments, to plural different users more efficiently by operating on segments copies that are sent to plural different requesting users (*see* Spec. ¶¶ 22–29). One of ordinary skill in the art would not reasonably understand the plurality

of requests for content recited in limitation B to be from one and the same user, but from different users. In this light, Appellant's arguments that the cited art does not disclose associating each copy of the segment with a respective user of a plurality of users as recited in limitation C of claim 4 (Appeal Br. 7–9; Reply Br. 9–10), are persuasive.

Appellant's arguments have persuaded us of error in the Examiner's rejection of independent claims 4 and 21, and the claims which depend thereupon. Accordingly, we do not sustain the Examiner's rejections of independent claims 4 and 21, or dependent claims 5–13 and 22–27, based upon the combination of Lemus, Yasrebi, and Makishima.

CONCLUSION

We reverse the Examiner’s rejections of claims 4–13 and 21–27 under 35 U.S.C. § 103.

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
4, 11	103	Lemus, Yasrebi, Makishima		4, 11
5, 13	103	Lemus, Yasrebi, Makishima, Winter et al. <sup>2</sup>		5, 13
6–9	103	Lemus, Yasrebi, Makishima, Adimatyam et al. <sup>3</sup>		6–9
10, 12, 21, 26, 27	103	Lemus, Yasrebi, Makishima, Luby et al. <sup>4</sup>		10, 12, 21, 26, 27
22	103	Lemus, Yasrebi, Makishima, Luby, Winter		22
23–25	103	Lemus, Yasrebi, Makishima, Luby, Adimatyam		23–25
<b>Overall Outcome</b>				4–13, 21–27

REVERSED

---

<sup>2</sup> US 5,862,342; issued Jan. 19, 1999 (hereinafter, “Winter”).

<sup>3</sup> US 2014/0153904 A1; published June 5, 2014 (hereinafter, “Adimatyam”).

<sup>4</sup> US 2011/0231569 A1; published Sept. 22, 2011 (hereinafter, “Luby”).