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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes application details for 14/387,965 and 95683, inventor Faqir Zarrar Yousaf, attorney Leydig, Voit & Mayer, Ltd., examiner RYAN, PATRICK A, art unit 2426, and notification date 02/25/2020.

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* FAQIR ZARRAR YOUSAF,  
PAULO FERRER LOUREIRO and MARCO LIEBSCH

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Appeal 2018-007085  
Application 14/387,965  
Technology Center 2400

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Before JEAN R. HOMERE, JASON V. MORGAN, and  
NABEEL U. KHAN, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE<sup>1</sup>

Pursuant to 35 U.S.C. § 134(a), Appellant appeals from the  
Examiner's decision to reject claims 1–7, 9, 12, 13, 17–19, and 22–24.<sup>2</sup>

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<sup>1</sup> We refer to the Specification, filed Sept. 25, 2014 (“Spec.”); the Final Office Action, mailed Aug. 24, 2017 (“Final Act.”); the Appeal Brief, filed Jan. 17, 2018 (“Appeal Br.”); the Examiner’s Answer, mailed May 2, 2018 (“Ans.”); and the Reply Brief, filed June 28, 2018.

<sup>2</sup> We use the word “Appellant” to refer to “Applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies NEC Europe Ltd. as the real party-in-interest. Appeal Br. 1.

Claims App'x. Claims 8, 10, 11, 14–16, 20, and 21 have been cancelled. *Id.*  
We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

## II. CLAIMED SUBJECT MATTER

According to Appellant, the claimed subject matter relates to a method and system for non-invasively exploiting trick play functions during delivery of streaming video content. Spec. 3:5–8, 15–25. In particular, upon receiving a user's request to fast forward or rewind a portion of video content streaming to the user device, a server determines from the metadata in the request and other metadata from other contemporaneous user requests popularity for segments in the streaming video content. *Id.* at 8:22–32. Upon designating the video segment as being popular, and classifying the video segment as skipping forward or skipping backward, the server streams the popular video segment at a higher rate than other video segments of the streaming video content. *Id.* at 11:1–25.

Claims 1 and 22 are independent. Claim 1, reproduced below with disputed limitation emphasized in *italics*, is illustrative of the claimed subject matter:

1. A method for non-invasively exploiting trick play functions during delivery of streaming video content, comprising:
  - receiving, by a server, a user request for streaming video content from a provider via a network;
  - streaming, by the server, the streaming video content to a user device, wherein streaming the streaming video content to the user device includes delivering the streaming video content while the user device plays the streaming video content;
  - during streaming of the streaming video content to the user device, receiving, by the server, a user request from the

user device corresponding to skipping forwards or backwards with respect to the streaming video content;

*determining, by the server, from metadata in the user request received during the streaming of the streaming video content to the user device, and from metadata from other user requests received during streaming of the streaming video content to other user devices, content popularity for segments of the streaming video content, wherein determining the content popularity fix segments of the streamlining video content further comprises:*

*classifying the user request received during the streaming of the streaming video content to the user device as a forward-skip or reverse-skip event based on whether metadata of the user request received during the streaming of the streaming video content to the user device indicate skipping forwards or backwards, respectively; and*

*designating a segment of the streaming video content corresponding to at least a predetermined amount of reverse-skip events as being a popular segment; and streaming, by the server, the segment of the streaming video content designated as a popular segment at a higher rate than other segments of the streaming video content.*

Appeal Br. 11 (Claims Appendix).

### III. REFERENCES

The Examiner relies upon the following references.<sup>3</sup>

<b>Name</b>	<b>Number</b>	<b>Filed</b>	<b>Publ'd/Issued</b>
Xu	US 2006/0037057 A1	May 24, 2004	Feb. 16, 2006
Hunt	US 2009/0158326 A1	Sept. 5, 2008	June 18, 2009
Benn	US 2013/0110980 A1	Oct. 31, 2011	May 2, 2013

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<sup>3</sup> All reference citations are to the first named inventor only.

#### IV. REJECTIONS

The Examiner rejects the claims on appeal as follows:

1. Claims 1–7, 9, 12, 13, 17–19, and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Benn and Hunt. Final Act. 5–13.<sup>4</sup>
2. Claims 23 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Benn, Hunt, and Xu. Final Act. 14–15.<sup>5</sup>

#### V. ANALYSIS

##### *1. Claims 1–7, 9, 12, 13, 17–19, and 22*

Appellant argues that the Examiner erred in finding that the combination of Benn and Hunt teaches or suggests a server non-invasively exploits trick play functions from metadata in a user request and from the metadata from other user requests received during the streaming of the video content to determine the content popularity for segments thereof, as recited in independent claim 1. Appeal Br. 4. In particular, Appellant argues Ben only discloses a client device recording trick play functions in already downloaded video content, which it communicates to a server. *Id.* at 4–5 (citing Benn ¶¶ 17–22, 27, 31–38). According to Appellant, the disputed

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<sup>4</sup> Although the statement of the rejection omits claim 22, the corpus of the rejection discusses claim 22 as being rejected over the cited combination. Final Act. 11–13.

<sup>5</sup> Although the statement of the rejection omits Hunt, because dependent claims 23 and 24 incorporate the limitations of base claim 22, which was rejected over the combination of Benn and Hunt, these base references similarly apply to the rejection of claims 23 and 24.

limitations require that the server ascertain the nature of the trick play function in a non-invasive manner during streaming of the video content, whereas Benn's client intrusively records and communicates to the server the nature of the trick play function after the video streaming is complete. *Id.* Further, Appellant argues that "Benn has the additional disadvantage of requiring new [signaling] protocols to be incorporated into the client and server and requiring the client to send additional messages to the server specifically relating to the trick play functions performed during local playback." *Id.* at 6 (citing Benn ¶ 20). Furthermore, Appellant argues that although Hunt discloses performing trick and play operations during the streaming of video content, it does not cure the noted deficiencies of Benn requiring the client to record and communicate trick play operations to the server. *Id.* 6–7 (citing Hunt ¶¶ 101, 102).

Appellant's arguments are unpersuasive of reversible Examiner error. As an initial matter, we agree with the Examiner that the disputed claim limitations do not preclude a client device from recording and communicating the trick play operations to a server for processing. Ans. 4.

Benn discloses as a user is viewing a downloaded movie, the user may perform trick play operations (e.g., fast forward, rewind) on certain video segments, which are recorded such that the locations thereof are later transmitted to the server, or alternatively *are sent to the server as the operations are being performed*. Benn ¶ 20. Benn also discloses that the server uses the received location information to speed up downloading the corresponding video segments associated therewith. *Id.* ¶ 21. We agree with the Examiner that Benn's disclosure of a server processing received location information *as the operations are being performed* to speed up

corresponding video content associated therewith teaches the server performing a non-invasive exploitation of trick play functions from metadata in a user request determines the content popularity for segments, and speeding up the downloading thereof. Ans. 4. We further agree with the Examiner that Hunt's disclosure of *processing the trick play operations during the streaming of video content* would complement Benn's processing of the trick plays as they are being performed to predictably result in the server processing the trick play operations during video streaming to determine popular video segments associated therewith, and to subsequently stream those video segments at a faster rate. Ans. 4 (citing Hunt ¶ 101). Because the combination of Benn and Hunt teaches the disputed limitations, we are not persuaded of reversible error in the Examiner's obviousness rejection of claim 1.

Regarding the rejection of claims 2–7, 9, 12, 13, 17–19, and 22, because Appellant has either not presented separate patentability arguments or has reiterated substantially the same arguments as those previously discussed for patentability of claim 1 above; claims 2–7, 9, 12, 13, 17–19, and 22 fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2017).

## 2. *Claims 23 and 24*

Regarding claims 23 and 24, Appellant reiterates the same arguments previously raised for independent claim 1. Appeal Br. 8. Appellant further argues that Xu does not cure the alleged deficiencies of Benn and Hunt. *Id.* As discussed above, we find no such deficiencies in the proposed combination of Benn and Hunt for Xu to remedy. Accordingly, we are not persuaded of reversible error in the Examiner's rejection of claims 23 and 24.

VI. CONCLUSION

We affirm the Examiner's obviousness rejections of claims 1-7, 9, 12, 13, 17-19, and 22-24 under 35 U.S.C. § 103.

DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>References</b>	<b>Affirmed</b>	<b>Reversed</b>
1-7, 9, 12, 13, 17-19, 22	103	Benn, Hunt	1-7, 9, 12, 13, 17-19, 22	
23, 24	103	Benn, Hunt, Xu	23, 24	
<b>Overall Outcome</b>			1-7, 9, 12, 13, 17-19, 22-24	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED