



# 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.
14/837,320	08/27/2015	Sean J. Lawrence	01.P83155	8112
119829	7590	09/01/2020	EXAMINER	
Green, Howard, & Mughal LLP 5 Centerpointe Dr. Suite 400 Lake Oswego, OR 97035			TARKO, ASMAMAW G	
			ART UNIT	PAPER NUMBER
			2482	
			NOTIFICATION DATE	DELIVERY MODE
			09/01/2020	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):

docketing@ghmip.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* SEAN J. LAWRENCE

---

Appeal 2019-002967  
Application 14/837,320  
Technology Center 2400

---

Before JEAN R. HOMERE, CARL W. WHITEHEAD JR., and  
ADAM J. PYONIN, *Administrative Patent Judges*.

PYONIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the  
Examiner's rejection. We have jurisdiction under 35 U.S.C. § 6(b).  
We REVERSE.

---

<sup>1</sup> We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Intel Corporation. Appeal Brief 1.

## STATEMENT OF THE CASE

### *Introduction*

The claimed subject matter is directed to large group of pictures (GOP) file streaming to wireless displays. Specification, Title. Claims 1–20 are pending; claims 1, 10, and 18 are independent. *See* pages 2–7 of Response to Notification of Non-Compliant Appeal Brief, filed November 13, 2018. Claims 5–7 and 14–16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Final Action 7. Claim 1 is reproduced below for reference (emphasis added):

1. An image frame display source apparatus, comprising:
  - an audio/video (AV) pipeline to access an encoded video stream from a storage device, the encoded video stream comprising a group of pictures (GOP) including a plurality of inter-predicted frames and a first intra-predicted frame;
  - one or more processors to modify the encoded video stream with *a selective transcoding of only a subset of the inter-predicted frames in the GOP, the selective transcoding including a transcoding of a first subset of the inter-predicted frames into second intra-predicted frames* that are inserted among others of the inter-predicted frames encoded according to the GOP; and
  - a physical layer device to communicate the modified encoded video stream through a transmission protocol.

### *References and Rejections*

The Examiner relies on the following prior art:

Name	Reference	Date
Coban	US 2010/0329338 A1	Dec. 30, 2010
Ammu	US 2011/0069757 A1	Mar. 24, 2011

Claims 1–4, 8–13, and 17–20 are rejected under 35 U.S.C. § 103 as being unpatentable over Ammu and Coban. Final Action 4.

### ANALYSIS

The Examiner finds the combination of Ammu and Coban teaches or suggests the limitations of claim 1:

Ammu in view of C[o]ban ha[s] all the elements of the claims. Ammu changes the P frames into an I frame<sup>[2]</sup> (pre-processing not transcoding), C[o]ban shows the transcoding of one type of frame into another types of frame. The teachings of Ammu and C[o]ban can be combined with a known techni[que] (programming) that is obvious to person of having ordinary skilled in the art and the combination will yield a predictable result which is the transcoding of a P frame in[to] an I frame.

Answer 13; Ammu Figs. 5–9, ¶¶ 81–87; Coban ¶¶ 8–11.

Appellant argues the Examiner’s rejection is in error because the Examiner provides “no basis to transcode only a subset of inter-predicted frames of a GOP into second intra-predicted frames that are inserted among others of the inter-predicted frames.” Appeal Brief 11. According to Appellant, “[e]ven if Ammu is applied after first encoding . . . and the frames then re-encoded according to the new GOP, that technique and any system designed to perform such a technique would be different from the subject matter presently claimed,” because “all encoded frames would be first decoded, then the GOP rubric changed, and then all frames re-encoded according to the new GOP rubric.” Reply Brief 4.

---

<sup>2</sup> A “GOP . . . compris[es] many inter-predicted frame (P-frames) between intra-predicted frames (I-frames).” Specification 2:30–31.

We are persuaded the Examiner errs. Claim 1 recites “a selective transcoding of only a subset of the inter-predicted frames.” As explained by Appellant’s Specification, selective transcoding will transcode “only a portion or subset of the inter-predicted frames in the GOP,” which “may be more efficient . . . and provide better quality than conventional (i.e., non-selective) transcoding algorithms.” Specification 8:23–30. The Examiner does not address the selective transcoding language of claim 1. Rather, the Examiner’s combination explicitly requires transcoding all frames. *See* Answer 11 (Finding the combination of Ammu and Coban “would simply require the same analysis to be done after encoding and then re-encoding the frame set (Transcoding).”). For at least this reason, we are persuaded the Examiner’s rejection is in error. *See In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970) (“All words in a claim must be considered in judging the patentability of that claim against the prior art.”).

We also agree with Appellant that the references do not teach or suggest the recited “transcoding of a first subset of the inter-predicted frames into *second intra-predicted frames that are inserted among others of the inter-predicted frames.*” Reply Brief 5. Ammu, as cited by the Examiner, teaches a method of generating new sets of GOPs (Ammu Figs. 7, 9) and compares these results with conventional methods of generating sets of GOPs (Ammu Figures 5, 6, 8). *See* Answer 14; Ammu ¶¶ 82–86 (describing each new intra-predicted frame (I frame) location is based on, inter alia, distance to other intra-predicted frames). The Examiner does not explain why one of ordinary skill would modify Ammu to *insert* second intra-predicted frames *among frames of a GOP*, as required by claim. *See* Final Action 5; Answer 13. Absent sufficient rationale, the Examiner’s rejection

relies on impermissible hindsight. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.”). Thus, we find the Examiner’s rejection is in error for this additional reason.

We do not sustain the Examiner’s obviousness rejection of independent claim 1 and the dependents thereon. Independent claims 10 and 18 are commensurate in scope to independent claim 1 and are rejected for the reasons discussed above; thus, we do not sustain the rejection of these claims, and the claims depending thereon.

#### DECISION SUMMARY

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1-4, 8-13, 17-20	103	Ammu, Coban		1-4, 8-13, 17-20

REVERSED