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SUGHRUE MION, PLLC
2000 PENNSYLVANIA AVENUE, N.W.
SUITE 900
WASHINGTON, DC 20006

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FEREJA, SAMUEL D	

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KEIICHI CHONO, YUZO SENDA, JUNJI TAJIME, HIROFUMI AOKI, and KENTA SENZAKI

Appeal 2018-006949
Application 15/146,005
Technology Center 2400

Before CARL W. WHITEHEAD JR., JASON V. MORGAN, and PHILLIP A. BENNETT, *Administrative Patent Judges.*

BENNETT, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1–3. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] 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 NEC Corporation. Appeal Br. 2.

RELATED APPEAL

Appellant does not identify any related appeal. Appeal Br. 3. However, this appeal is closely related to Appeal No. 2018-002891, which was previously decided on May 2, 2018, and involved similar claims and rejections.

CLAIMED SUBJECT MATTER

The claims are directed to a video decoding device in which the pulse code modulation ("PCM") block size information is embedded in a bitstream, and the embedded information is used to ensure the signaling of a PCM header is limited to a predetermined size. Spec. ¶¶ 35, 42. By limiting the signaling in this way, the quality of compressed video can be maintained, while still providing guarantees regarding processing time. *Id.* Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A video decoding device comprising:
> one or more processors, the one or more processors configured to:
> extract PCM block size information from a bitstream, the PCM block size information indicating a threshold to be used at a subsequent PCM header parsing process;
> compute the threshold based on the PCM block size information;
> execute the parsing process of parsing a PCM header from the bitstream with respect to an encoded block, only when a block size of the encoded block is equal to or less than the computed threshold;
> parse transformed data of an image in the bitstream based on the PCM header; and
> decode by PCM decoding PCM data of the image in the bitstream based on the PCM header.

Appeal Br. 14 (Claims Appendix).

REJECTIONS

Claims 1–3 stand rejected[2] on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1 of co-pending Application No. 13/881,467 in view of Jung et al. (US 2011/0038412 A1) ("Jung") and Lee et al. (US 2011/0069900 A1) ("Lee"). Final Act. 4–8. Appellant does not challenge this rejection, and we therefore summarily affirm this rejection.

Claims 1–3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jung and Lee. Final Act. 8–11.

ISSUE

Has the Examiner erred in finding Jung and Lee teach or suggest parsing a PCM header "only when a block size of the encoded block is equal to or less than the computed threshold," as recited in each of the claims?

ANALYSIS

In rejecting the claims under 35 U.S.C. § 103(a), the Examiner finds Jung generally teaches the limitations of the claims except that it is not specific to PCM decoding. The Examiner relies on Lee to show that PCM decoding was known, and that it would have been obvious to apply PCM to Jung's decoding techniques. Final Act. 8–10. Relevant to this issue, the Examiner finds Jung teaches "execute the parsing process of parsing a header from the bitstream with respect to an encoded block, only when a

[2] The claims were provisionally rejected for obviousness-type double patenting. The co-pending application has now issued as U.S. Patent No. 10,154,267. Consequently, the double-patenting rejection is no longer a provisional rejection.

block size of the encoded block is equal to or less than the computed threshold." Final Act. 8–9 (citing Jung ¶¶ 118, 124). More specifically, the Examiner finds Jung teaches extracting "information about a maximum size (Threshold) of a coding unit of a current picture from a header corresponding to the current picture [of] an SPS," i.e., a Sequence Parameter Set. Ans. 10 (citing Jung ¶ 110).

Appellant argues the Examiner has erred because in Jung "there is no way to determine a threshold (i.e., the 8×8 unit) unless at least a maximum size is extracted from a header or a Sequence Parameter Set (SPS)." Appeal Br. 10. Appellant argues "that Jung fails to disclose or suggest that a header is parsed from the bitstream 'only when a block size of the encoded block is equal to or greater than the computer threshold,' <u>because the threshold cannot be determined unless and until a header is parsed or extracted</u>." *Id.* Appellant further argues the Examiner's reliance on a maximum size decoding unit as the recited "threshold" is incorrect because the recited "threshold" requires that the PCM header be parsed "only when a block size of the encoded block is equal to or less than the computed threshold." *Id.*

We are persuaded by Appellant's arguments. Jung teaches "information about a maximum size of the coding unit . . . and information about a maximum depth may be inserted into a Sequence Parameter Set (SPS) or a header of a bitstream." Jung ¶ 105. In order to obtain this encoding information, information extractor 220 parses the header or SPS to "extract information about a maximum size of a coding unit of a current picture from a header corresponding to the current picture or an SPS." Jung ¶ 110. However, the *only* reference in Jung to parsing the header of the bitstream is made in the context of extracting, i.e., obtaining the maximum

size of the coding unit of the current picture. *Id.* Because the parsing of the header occurs for the express purpose of obtaining and computing the recited "threshold," and because Jung describes no other instance during which the bitstream header is parsed, we agree that Jung fails to teach or suggest parsing the PCM header "only when a block size of the encoded block is equal to or greater than the computed threshold," as recited in each of the independent claims. Accordingly, we are persuaded the Examiner has erred in rejecting Appellant's claims, and we do not sustain the rejection under 35 U.S.C. § 103(a).

CONCLUSION

We affirm the non-statutory obviousness-type double patenting rejection of claims 1–3.

We reverse the Examiner's rejection of claims 1–3 under 35 U.S.C. § 103(a).

Because we have affirmed at least one ground of rejection for each claim on appeal, we affirm the Examiner's decision to reject the claims. 37 C.F.R. § 41.50(a)(1).

DECISION SUMMARY

Claims Rejected	**35 U.S.C. §**	**References/Basis**	**Affirmed**	**Reversed**
1–3	N/A	non-statutory obviousness-type double patenting	1–3	
1–3	103(a)	Jung, Lee		1–3
Overall Outcome			1–3	

TIME PERIOD FOR RESPONSE

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