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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YING CHEN
and
YE-KUI WANG

Appeal 2017-005524
Application 13/689,605
Technology Center 2400

Before CARLA M. KRIVAK, HUNG H. BUI, and
JON M. JURGOVAN, *Administrative Patent Judges*.

KRIVAK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 1–40, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ Appellants identify the real party in interest as Qualcomm Incorporated.

STATEMENT OF THE CASE

Appellants' invention is directed to methods and devices "for separately processing depth and texture components of video data" using "a supplemental enhancement information message that applies when processing [a] view component of the video data" and "a nested supplemental enhancement information message that applies in addition to the supplemental enhancement information message when processing the depth component of the view component" (Abstract).

Claims 1, 11, 21, and 31 are independent. Independent claim 1, reproduced below, is exemplary of the subject matter on appeal.

1. A method of processing video data including a view component comprising a depth component and a texture component, the method comprising:
 - determining a supplemental enhancement information message that applies when processing the view component of the video data; and
 - determining a nested supplemental enhancement information message that applies to the depth component of the view component in addition to the supplemental enhancement information message, wherein the supplemental enhancement information message sets the scope for the nested supplemental enhancement information message and is separate from the nested supplemental enhancement information message.

REFERENCES and REJECTIONS²

(1) The Examiner rejected claims 1–8, 11–18, 21–28, and 31–38 under 35 U.S.C. § 103(a) based upon the teachings of Tian (WO 2010/096189 A1; published Aug. 26, 2010) and Hannuksela (US 2008/0013620 A1; published Jan. 17, 2008).

(2) The Examiner rejected claims 9, 10, 19, 20, 29, 30, 39, and 40 under 35 U.S.C. § 103(a) based upon the teachings of Tian, Hannuksela, and Jeon (US 2010/0111183 A1; published May 6, 2010).

ANALYSIS

With respect to claim 1, the Examiner finds Tian teaches “a supplemental enhancement information message that applies when processing the view component of the video data,” wherein “the supplemental enhancement information message . . . is separate from the nested supplemental enhancement information message” that “applies to the depth component of the view component,” as claimed (Final Act. 9–10; Ans. 11–12). Particularly, the Examiner finds Tian’s Table 8 discloses “a message designated as ‘three_dv_format(payloadSize)’ that constitutes *a SEI* [supplemental enhancement information] *message* for a view component,” and “a message designated as ‘depth_present_flag[3dv_view_id]’ that constitutes *a nested SEI message* for a depth component,” as required by

² Claims 1–40 were rejected under 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement (Final Act. 7–8). However, this rejection was withdrawn in the Examiner’s Advisory Action (mailed Nov. 19, 2015), and is no longer pending on appeal (Advisory Act. 2).

claim 1 (Ans. 11 (emphases added) (citing Tian 24:29–32, 26:13–16, Table 8)). The Examiner finds Tian’s SEI messages are “separate” as required by claim 1 because “depth_present_flag[3dv_view_id]” has “a different name” and “is subordinate to” the “three_dv_format(payloadSize)” message in Tian’s Table 8 (Ans. 11). We do not agree.

We agree with Appellants that Tian does not teach or suggest a view component’s SEI message “is separate from” a depth component’s nested SEI message that “applies to the depth component of the view component in addition to the [view component’s SEI] message,” as recited in claim 1 (App. Br. 9–11).³ As Appellants explain, Tian’s “Table 8 represents **a single supplemental enhancement message**” that “includes two separate *syntax elements*”—the “‘depth_present_flag[3dv_view_id]’ syntax element” and the “‘three_dv_format(payloadSize)’ syntax element” indicating the “SEI message name” (App. Br. 9–10 (citing Tian 24:31–32, Table 8); Reply Br. 4–5). That is, Tian’s “depth_present_flag[3dv_view_id]” and “three_dv_format(payloadSize)” are merely “*syntax elements* [that] are part of the **same** SEI message,” not separate SEI messages as required by claim 1 (Reply Br. 5; *see also* Tian 24:8–26 (describing syntax elements in a SEI message)).

As recognized by Appellants, Tian never states, nor would a person of ordinary skill in the art understand, that the syntax elements of a single SEI message represent different SEI messages (Reply Br. 5). An “SEI message” is a term of art designating a type of network abstraction layer (NAL) unit

³ The Appeal Brief citations are to the brief filed on March 23, 2016.

(*see* Spec. ¶¶ 64–65).⁴ The Examiner’s interpretation of the claimed term “nested supplemental enhancement information message” as reading on Tian’s “depth_present_flag” syntax element is unduly broad (Ans. 11–12).

Hannuksela does not make up for the above-noted deficiencies of Tian. Hannuksela at most discloses a scalable nesting SEI message containing a nested SEI message; however, Hannuksela does not teach or suggest a nested *SEI message that applies to the depth component* of the view component *in addition to the separate SEI message that applies to the view component*, as required by claim 1 (App. Br. 11 (citing Hannuksela ¶ 41)).

The Examiner does not use the additional teachings of Jeon to cure the above-noted deficiencies of Tian and Hannuksela. Thus, for the reasons set forth above, we do not sustain the Examiner’s rejection of independent claim 1, independent claims 11, 21, and 31, argued for substantially the same reasons as claim 1, and claims 2–10, 12–20, 22–30, and 32–40 dependent therefrom (App. Br. 12–13).⁵

⁴ Appellants’ Specification describes “parameter set NAL units may be transmitted on a different channel than *other NAL units, such as Supplemental Enhancement Information (SEI) NAL units. SEI NAL units (referred to as SEI messages)* may contain information that is not necessary for decoding the coded pictures samples from video coding layer (VCL) NAL units, but may assist in processes related to decoding, display, error resilience, and other purposes” (*see* Spec. ¶¶ 64–65 (emphasis added)).

⁵ In the event of any further prosecution, the Examiner may wish to consider a rejection of independent claims 11 and 21, under 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA), first paragraph, as a single means which is non-enabling for the scope of the claim. *See* MPEP § 2164.08(a). *See also In re Hyatt*, 708 F.2d 712, 714–15 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held

DECISION

The Examiner's decision rejecting claims 1–40 is reversed.

REVERSED

non-enabling for the scope of the claim because the specification disclosed at most only those means known to the inventor); *Ex parte Rodriguez*, Appeal No. 2008-000693 (BPAI October 1, 2009) (precedential) (discussing functional claiming and scope of enablement). In particular, claim 11 recites “a processor” for various functional purposes; thus the claim comprises, at best, a single means because the claimed “processor” is a nonce word that fails to have a sufficiently definite meaning as the name for a particular structure capable of performing the recited functions. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015). Similarly, claim 21 recites “means” for various functional purposes but recites no particular structure to perform the claimed “determining,” and does not indicate that multiple “means” are required “for determining.”

Additionally, the Examiner may also wish to consider a rejection of independent claims 1, 11, 21, and 31, under 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA), first paragraph, as being incomplete as these claims are missing essential steps or necessary structural cooperative relationships describing a use for the “supplemental enhancement information message” and “nested supplemental enhancement information message.” *See* MPEP § 2164.08(c). *See also In re Mayhew*, 527 F.2d 1229 (CCPA 1976). In particular, claims 1, 11, 21, and 31 merely recite “determining” SEI messages without indicating how these messages are used for “processing [the] video data” recited in these claims.