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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes details for application 13/701,115 and examiner THIRUGNANAM, GANDHI.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ULRICH GRIES, PETER GEORG BAUM, MICHAEL ARNOLD,  
and WALTER VOESSING

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Appeal 2016-000209  
Application 13/701,115  
Technology Center 2600

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Before MARC S. HOFF, STEPHEN C. SIU, and NORMAN H. BEAMER,  
*Administrative Patent Judges.*

SIU, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 11, 13–16, 18–21, 23–25, and 28–31. We have jurisdiction under 35 U.S.C. § 6(b).

The disclosed invention relates generally to audio signal watermarking. Spec 1:13–14. Independent claim 11 reads as follows:

11. A method for providing a watermarked and compression decoded audio or video signal derived from a watermarked audio or video signal that was compression encoded, said method comprising the steps:

low bit rate encoding and transferring of the watermarked audio or video signal and retrieving a watermark signal, so as to provide the watermark signal separated from the low bit rate encoded and unwatermarked audio or video signal, whereby low

bit rate is defined as a bit rate at which the watermark signal does not survive said low bit rate encoding;

decoding said retrieved watermark signal and transferring related watermark payload data;

receiving and encoding said transferred related watermark payload data so as to reconstruct said watermark signal;

receiving and low bit rate decoding said low bit rate encoded audio or video signal, thereby embedding said reconstructed watermark signal, so as to provide a decoded yet still watermarked audio or video signal.

The Examiner rejects claims 28–31 under 35 U.S.C. § 112, second and sixth paragraphs; claims 11, 16, 21, and 31 under 35 U.S.C. § 103(a) as unpatentable over Wells (US 2006/0133644 A1; publ. June 22, 2006) and Levy (US 2008/0279536 A1; publ. Nov. 13, 2008); and claims 13–15, 18–20, 23–25, and 28–30 under 35 U.S.C. § 103(a) as unpatentable over Wells, Levy, and Szczerba (US 2010/0023335 A1; publ. Jan. 28, 2010).

#### ISSUE

Did the Examiner err in rejecting claims 11, 13–16, 18–21, 23–25, and 28–31?

#### ANALYSIS

##### 35 U.S.C. § 112, sixth paragraph — claims 28–31

The Examiner finds that the “encoders/decoders, in claims 26–30, are considered to invoke 112, sixth paragraph.” Final Act. 4. Appellants “do not agree that U.S.C. § 112(f) or pre-AIA 35 U.S.C. § 112, Sixth Paragraph, interpretations are required.” App. Br. 13. We agree with Appellants.

Claim 31 recites an encoder “which low bit rate encodes [a] . . . signal and . . . removes a watermark,” a decoder “configured to decode [the] . . . signal,” an encoder “configured to receive . . . payload data [and] encode [the] . . . payload data,” and a decoder “which receives said low bit rate encoded . . . signal [and] decodes it.” The terms “encoder” and “decoder” provide a sufficient recitation of structure in the context of the present claims because, at least, the terms are not “generic structural term[s] such as ‘means,’ ‘element,’ or ‘device,’ nor [are they] coined term[s] lacking a clear meaning, such as ‘widget’ or ‘ram-a-fram.’” *Personalized Media Comm., LLC v. Int’l. Trade Comm’n*, 161 F.3d 696, 704 (Fed. Cir. 1998) (holding that claim terms that are non-generic and have a well-known meaning to those of skill in the art (such as the term “detector”) are considered to be a sufficient recitation of structure for the purposes of 35 U.S.C. § 112, sixth paragraph). In the present case, the claim terms “encoder” and “decoder” have “well-known meaning[s] to those of skill in the electrical arts” and “does convey to one knowledgeable in the art a variety of structures known as” (*id.* at 704–05) “encoders” or “decoders.”

The Examiner erred in finding that claims 28–31 are subject to 35 U.S.C. § 112, sixth paragraph.

35 U.S.C. § 112, second paragraph — claims 28–31

The Examiner rejects claims 28–31 under 35 U.S.C. § 112, second paragraph as indefinite because, according to the Examiner, the Specification fails to provide sufficient structure for the claim terms

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“encoder” or “decoder” under 35 U.S.C. § 112, sixth paragraph. *See* Final Act. 4–6, Ans. 3–5. Appellants argue that the Specification discloses “several **specific** algorithms and encoders/decoders which one of ordinary skill in the art would know are configured to perform [the claimed] functions.” App. Br. 14. As Appellants point out, the Specification discloses “encoding/decoding is e.g. an AAC+, Unified Speech and Audio coder, CELP, MPEG4 Parametric Audio, SBR Parametric Stereo (PS), or mp3PRO encoding/decoding.” Spec. 5–6. The Examiner does not explain sufficiently how the specifically disclosed encoding/decoding differs from an “algorithm” that provides structure corresponding to the recited functions.

In any event, having decided that claims 28–31 are not subject to 35 U.S.C. § 112, sixth paragraph (*see* above discussion), we disagree with the Examiner that claims 28–31 are indefinite under 35 U.S.C. § 112, second paragraph.

35 U.S.C. § 103(a) Obviousness — claims 11, 13–16, 18–21, 23–25, and 28–31

Claim 11 recites low bit rate encoding and transferring of the watermarked audio or video signal and retrieving a watermark signal, so as to provide the watermark signal separated from the low bit rate encoded and unwatermarked audio or video signal, whereby low bit rate is defined as a bit rate at which the watermark signal does not survive said low bit rate encoding. Hence, claim 11 requires encoding a watermarked audio or video signal at a bit rate at which a retrieved watermark signal does not survive the encoding. Claims 16, 21, and 31 recite similar features.

The Examiner finds that “Wells paragraph 17 covers all types of ‘open or proprietary methods of compression of audio-video data’, which covers the subset of low-bit encoding in applicant’s claim.” Ans. 6. We agree with the Examiner that the cited portion of Wells discloses that “one or more encoding (or compression) standards” may be used to encode the data stream. Wells ¶ 17. However, the cited portion of Wells does not disclose encoding data at a bit rate at which the watermark signal does not survive said low bit rate encoding, as recited in claim 11 (and claims 16, 21, and 31). Instead, Wells discloses that the encoder includes “block 132 [of the encoder that is] configured to analyze an audio-video data stream . . . to determine watermark appropriate information . . . for the . . . data stream” (Wells ¶ 24) and “block 134 [of the encoder that is] configured to communicate the watermark appropriate information . . . for embedding in a bit stream” (Wells ¶ 5), and “block 136 [of the encoder that is] configured to encode the . . . data sequence including any watermark appropriate information and present the encoded data in a bit stream.” Wells ¶ 26. In other words, Wells discloses an encoder that creates appropriate watermark information and embeds and encodes the watermark information in the data stream. Hence, the watermark information of Wells “survives” the encoding. The Examiner does not demonstrate sufficiently that Wells also discloses encoding a signal such that the watermark does *not* survive.

To make up for this deficit, the Examiner finds that “Levy, Claim 9 discloses a low-bit rate compression.” Ans. 6. However, the Examiner does not indicate where Levy also discloses encoding at a (low) bit rate at which

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the watermark signal does not survive said low bit rate encoding, as recited in claim 11 (and claims 16, 21, and 31). In fact, the Examiner does not indicate where Levy discloses that a watermark signal does not survive encoding at all. Instead, Levy discloses explicitly “audio and video compression codecs” in which “the codec selects a bit rate at which the watermark survives.” Levy ¶ 38. The Examiner does not adequately explain how it would have been obvious to one of ordinary skill in the art to have utilized a bit rate such that the watermark does *not* survive in view of the explicit disclosure of Levy that a bit rate is selected such that the watermark “survives” and (like Wells) does not appear to disclose even one example in which a bit rate is selected such that the watermark does *not* survive, as required by claim 11 (and claims 16, 21, and 31).

Claims 13–15, 18–20, 23–25, and 28–30 depend from one of claims 11, 16, 21, or 31. The Examiner does not indicate that Szczerba makes up for the deficits of the combination of Wells and Levy. The Examiner erred in rejecting claims 11, 13–16, 18–21, 23–25, and 28–31 as obvious over Wells and Levy.

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SUMMARY

We reverse the Examiner's rejection of claims 11, 16, 21, and 31 under 35 U.S.C. § 103(a) as unpatentable over Wells and Levy; claims 13–15, 18–20, 23–25, and 28–30 under 35 U.S.C. § 103(a) as unpatentable over Wells, Levy and Szczerba; and claims 28–31 under 35 U.S.C. § 112, second (and sixth) paragraph as indefinite.

REVERSED