

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VIATCHESLAV PRONKINE

Appeal No. 2004-0943
Application No. 09/460,930

ON BRIEF

Before KRASS, OWENS, and SAADAT, *Administrative Patent Judges*.
OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from the final rejection of claims 1-9, which are all of the claims in the application.

THE INVENTION

The appellant claims a method and apparatus for filtering decoded data by deriving filter coefficients based on run-length codes of each of a first encoded picture block and a neighboring encoded picture block, and using those filter coefficients for filtering decoded picture data of the first and neighboring

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picture blocks. Claim 1, which claims the method, is illustrative:

1. A method of improving the visual perception of a picture, the picture being derived from a decoded picture signal comprised of blocks of quantized coefficient data produced by encoding an input picture signal, the method comprising:

decoding first picture data representing a first encoded picture block being of an $n \times m$ sized group of pixels and decoding neighboring picture data representing a neighboring encoded picture block being of an $n \times m$ sized group of pixels;

obtaining the run-length codes of each of the first encoded picture block and the neighboring encoded picture block;

deriving filter coefficients based on the run-length codes of each of the first encoded picture block and the neighboring encoded picture block;

providing the filter coefficients, the decoded first picture data and the neighboring picture data to an adaptive filter for filtering the decoded picture data of the first and neighboring picture blocks;

filtering the decoded picture data of the first and neighboring picture blocks; and

producing an outputted filtered picture signal.

THE REFERENCE

Moronaga et al. (Moronaga) 5,229,864 Jul. 20, 1993

THE REJECTIONS

The claims stand rejected as follows: claims 1-7 and 9 under 35 U.S.C. § 102(b) as anticipated by Moronaga, and claim 8 under 35 U.S.C. § 103 as obvious over Moronaga.

OPINION

We reverse the aforementioned rejections.

The appellant's independent claims, i.e., claims 1 and 5, require deriving filter coefficients based on run-length codes of a first encoded picture block and a neighboring encoded picture block.

The examiner argues that "[f]ig. 2 of Moronaga '864 shows the output (50), which is a run-length code, being inputted to input terminal 10 (fig. 1)" (answer, page 5). Output terminal (50) in Moronaga's figure 2 is from Huffman coding section 48 (col. 3, lines 51-58). Hence, that figure does not disclose run-length coding.

The examiner argues that Moronaga discloses "obtaining the run-length codes of each of the first and neighboring encoded picture block (i.e., [sic] fig. 2, col. 3, lines 36+)" (answer, page 3), and that Moronaga's "filter coefficient select (26) derives filter coefficients based on the run-length coded data (please see figs. 1 and 2, and col. 3, lines 51+, where in [sic] Huffman

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codes are run-length and col. 4, lines 22+, and 57+)” (answer, page 5). The portion of Moronaga relied upon by the examiner which discloses the data coding technique is the following (col. 3, lines 45-55):

A Huffman coding section **48** codes the normalized data to produce Huffman codes. Specifically, as shown in FIG. 7, the normalized data are scanned **14a** [in a] zig-zag direction and a block by block manner and fed to the Huffman coding section **48**. Considering the fact that zero often appears continuously in normalized transform coefficients, the Huffman coding section **48** determines the amount in which data whose value is zero appears continuously, i.e., run-lengths of zeros and the amplitudes of non-zeros, and transforms them to Huffman codes.

Moronaga refers to the continuous runs of zeroes in the normalized transform coefficients as run-lengths of zeroes. The coding of the data, however, is by Huffman coding, not run-length coding.

“Anticipation requires that every limitation of the claim in issue be disclosed, either expressly or under principles of inherency, in a single prior art reference.” *Corning Glass Works v. Sumitomo Elect. U.S.A., Inc.*, 868 F.2d 1251, 1255-56, 9 USPQ2d 1962, 1965 (Fed. Cir. 1989). Because the examiner has not established that Moronaga discloses, either expressly or

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inherently, using run-length codes, the examiner has not carried the burden of establishing a *prima facie* case of anticipation of the inventions claimed in the appellant's claims 1-7 and 9.

As for claim 8, the examiner presents no argument as to how Moronaga would have fairly suggested using run-length codes to one of ordinary skill in the art. The examiner, therefore, has not established a *prima facie* case of obviousness of the invention claimed in the appellant's claim 8.

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DECISION

The rejections over Moronaga of claims 1-7 and 9 under 35 U.S.C. § 102(b) and claim 8 under 35 U.S.C. § 103 are reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
TERRY J. OWENS)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
MAHSHID SAADAT)	
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