

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANDRE KAUP

Appeal No. 2003-1692
Application No. 09/835,347

ON BRIEF

Before KRASS, FLEMING and BARRY, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-19.

The invention is directed to the coding and decoding of a digital picture, best illustrated by reference to representative independent claim 1, reproduced as follows:

1. A method for coding a digitized picture, the method which comprises:

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providing a digitized picture having pixels, the digitized picture having at least one picture object with associated object pixels located in the at least one picture object;

dividing the digitized picture at least partly into picture blocks;

determining the at least one picture object in the digitized picture;

determining at least one object picture block, the at least one object picture block being at least one picture block with at least one object pixel;

performing the step of determining the at least one object picture block such that a relative position of an edge of an object picture block of the digitized picture in relation to the digitized picture corresponds to a relative position of an edge of an object picture block of a chronologically preceding picture in relation to the chronologically preceding picture; and

coding the digitized picture by using the at least one object picture block.

The examiner relies on the following reference:

Yamaguchi et al. (Yamaguchi) 5,978,514 Nov. 2, 1999
(filed Oct. 1, 1997)

Claims 1-19 stand rejected under 35 U.S.C. § 102(e) as anticipated by Yamaguchi.

Reference is made to the briefs and answer for the respective positions of appellant and the examiner.

OPINION

Anticipation is established only when a single prior art

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reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

It is the examiner's position that Yamaguchi anticipates the instant claimed invention for the reasons set forth on page 4 of the answer. In particular, the examiner cites column 1, lines 18-25, column 2, lines 53-68, columns 18-19, and column 21, line 59 through column 22, line 18, of Yamaguchi for the claimed feature of

determining at least one object picture block, the at least one object picture block being at least one picture block with at least one object pixel;

performing the step of determining the at least one object picture block such that a relative position of an edge of an object picture block of the digitized picture in relation to the digitized picture corresponds to a relative position of an edge of an object picture block of a chronologically preceding picture in relation to the chronologically preceding picture...

Appellant's position is that, contrary to the examiner's

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opinion, Yamaguchi does not teach that a relative position of an edge of an object picture block with respect to the whole picture corresponds to a relative position of an edge of an object picture block with respect to a chronologically preceding picture. In particular, appellant urges that Yamaguchi does not disclose the way in which the image signal is divided into blocks.

We agree with appellant. Although an image signal is clearly broken up into blocks in Yamaguchi (see column 21, lines 22-24), it is not clear, from Yamaguchi's disclosure, exactly how these blocks are positioned with respect to the whole picture. As postured by appellant, since the image in Yamaguchi moves, the position of the image in the whole picture also moves, ever changing. Accordingly, it is reasonable to assume that the relative positions of the blocks of the image signal within the picture will change. Therefore, it does not appear that the relative positions of the blocks previously stored in Yamaguchi's motion-compensation circuit with respect to the whole picture correspond to the relative positions of the blocks of a current image with respect to the whole picture.

As stated by appellant, at pages 19-20 of the principal brief,

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Yamaguchi...**does not** contain any information about the relative positions of the blocks with respect to the whole picture. Therefore, it does not disclose the feature that at least one object picture block is determined such that a relative position of an edge of an object picture block in relation to the picture corresponds to a relative position of an edge of an object picture block in relation to a chronologically preceding picture.

The examiner's response is to cite Figures 20-23 and column 21, line 20 to column 22, line 18, of Yamaguchi, identifying an image signal 10 divided into blocks and a switch 210 for determining whether the block of the input predicted error signal 30 is an internal block, an external block or an edge block for further processing. The examiner concludes that this blocking of image data by Yamaguchi clearly reads on the "determining at least one object picture block, the at least one object picture block being at least one picture block with at least one object pixel" limitation, as claimed. Moreover, the examiner opines that

since the image data (i.e., frames) are being decomposed into blocks of data for simpler processing and compression, it is inherent that the blocks of data within Yamaguchi...must be processed in some orderly fashion and later combined so as to recombine coherent image frames for displaying purposes (answer-page 6).

Additionally, the examiner states that

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since edge blocks are determined within Yamaguchi...it is submitted that such motion compensation prediction of a current edge block within Yamaguchi...therefore corresponds to a relative position of an edge of a block of a chronologically preceding picture in relation to the chronologically preceding picture, i.e. a previous best matched edge block (answer-page 6).

Thus, it is the examiner's position that in the process of motion compensation predicting a current edge block in Yamaguchi, similar edge and content data for the current edge block is being searched in the previous frame, with relative positions of edges being taken into consideration within the current and previous frames, and so the motion compensation prediction of Yamaguchi provides the same determining the at least one object picture block such that a relative position of an edge of the object picture block corresponds to a relative position of an edge of an object picture block of a chronologically preceding picture in relation to the chronologically preceding picture, as claimed.

After careful consideration of the arguments advanced by both appellant and the examiner, we will not sustain the rejection of claims 1-19 under 35 U.S.C. § 102(e) because we find fault with the examiner's rationale.

While it is true that Yamaguchi is directed, like the instant invention, to coding and decoding of digitized pictures

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or images, and it is true that there is an overlap with regard to some of the processing in both Yamaguchi and the instant invention, we simply do not find disclosed in Yamaguchi the claimed feature of a relative position of an edge of an object picture block with respect to the whole picture corresponding to a relative position of an edge of an object picture block with respect to a chronologically preceding picture.

The examiner's reliance on Yamaguchi's teaching, at column 21, lines 59, through column 22, line 18, of a switch circuit 210 which determines as to whether the block of the input predicted error signal 30 is an internal block, an external block or an edge block, is misplaced. This recited determination as to which category a picture block of the image belongs is not a disclosure or suggestion of determining the position of the object picture block. We agree with appellant's position, at page 2 of the reply brief, that the switch circuit 210 in Yamaguchi processes an image already processed by motion compensation, i.e., "an image in which the positions of the picture blocks have already been determined." The operation of switch circuit 210 is directed to the coding of the digitized image, not to determining *position* of picture blocks. Rather, the determination of picture block *locations* in Yamaguchi is performed during the motion

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compensation process, yet the motion compensation process described in Yamaguchi is not specific as to the manner in which object picture blocks are determined. Thus, we would need to resort to speculation to conclude that Yamaguchi's motion compensation process includes a relative position of an edge of an object picture block with respect to the whole picture corresponding to a relative position of an edge of an object picture block with respect to a chronologically preceding picture.

A finding of anticipation under 35 U.S.C. § 102(e) may not be based on speculation.

Since we find no evidence, in Yamaguchi, of each and every element of the claims in issue, either expressly described or under principles of inherency, we will not sustain the rejection of claims 1-19 under 35 U.S.C. 102(e).

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The examiner's decision rejecting claims 1-19 under
35 U.S.C. § 102(e) is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	
MICHAEL R. FLEMING)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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)	
LANCE LEONARD BARRY)	
Administrative Patent Judge)	

EK/RWK

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