

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KAZUHIRO SUZUKI and SATOSHI MITSUHASHI

Appeal No. 2000-0193
Application No. 08/627,010

HEARD: December 13, 2001

Before FLEMING, LALL, and BLANKENSHIP, Administrative Patent Judges.

BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-19, 21, and 22, which are all the claims remaining in the application.

We reverse.

BACKGROUND

The invention is directed to a method and apparatus for compressing a motion picture. Representative claim 1 is reproduced below.

1. A picture compression apparatus comprising:
 - means for compression input picture data for a first frame;
 - basic compression ratio setting means for setting the basic compression ratio in compressing the input picture data for said first frame by said compression means;
 - means for designating an area in the first frame input picture;
 - designated area importance setting means for setting the importance in compressing the input picture data for said first frame corresponding to the area designated by said designation means;
 - compression ratio modifying means for modifying the basic compression ratio based upon the importance for said designated area as set by said designated area importance setting means; and
 - automatic follow-up means for automatically following an object in a second frame which is positioned within said designated area of said first frame thereby applying said modified compression ratio to said object, even if said object is positioned differently in said frame.

The examiner relies on the following references:

Graf	4,109,145	Aug. 22, 1978
Scorse et al. (Scorse)	5,128,776	Jul. 7, 1992
Ligtenberg	5,333,212	Jul. 26, 1994
Tsukagoshi	5,351,083	Sep. 27, 1994
Mack et al. (Mack)	5,434,567	Jul. 18, 1995

Appeal No. 2000-0193
Application No. 08/627,010

Claims 1-3, 5, 10-14, 16, 21, and 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ligtenberg and Tsukagoshi.

Claims 4 and 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ligtenberg, Tsukagoshi, and Graf.

Claims 6, 8, 17, and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ligtenberg, Tsukagoshi, and Mack.

Claims 7, 9, and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ligtenberg, Tsukagoshi, Mack, and Scorse.

We refer to the Final Rejection (mailed Nov. 28, 1997) and the Examiner's Answer (mailed Nov. 9, 1998) for a statement of the examiner's position and to the Brief (filed Sep. 25, 1998) and the Reply Brief (filed Jan. 6, 1999) for appellants' position with respect to the claims which stand rejected.

OPINION

The section 103 rejection of independent claims 1 and 12, in view of the combined teachings of Ligtenberg and Tsukagoshi, is set forth on pages 5 and 6 of the Answer. Appellants' position, as set forth in the Brief and Reply Brief, is that the combination is not well founded. Additionally, as expanded in the Reply Brief, appellants allege that the combination would not have suggested the claimed feature of applying the modified

compression ratio to an object in a second frame, even if the object is positioned differently in the second frame.

The examiner's position, as developed on pages 10 through 13 of the Answer, is that the "follow-up" function required by the claims is suggested by Tsukagoshi. "The reference of Tsukagoshi is used for at least the conventional and well known 'automatic follow-up' feature for keeping the same compression ratio regardless of position, which is exactly what Tsukagoshi does, so that this feature is anticipated." (Answer at 10.)

We find appellants' arguments to be persuasive. First, Ligtenberg is directed to selecting portions of static (JPEG) images for compression of the portions at different compression ratios from that generally selected for the image as a whole (e.g., cols. 7-8). Tsukagoshi, on the other hand, is concerned with motion pictures; in particular, motion adaptive quantization (e.g., Abstract and col. 10, ll. 11-39). Absent hindsight of appellants' invention, in our opinion the artisan would not have looked to the teachings of Tsukagoshi to improve upon the invention of Ligtenberg. As the references themselves disclose, there are disparate concerns in the compression of static pictures as opposed to the compression of motion pictures, and a scheme for compression of a static image would not necessarily relate to schemes for compressing images in motion.

Moreover, Tsukagoshi teaches using different quantization in fast motion regions as opposed to the quantization in slow motion regions. See, e.g., col. 10, ll. 28-33. We agree with appellants that the teaching is in direct opposition to the requirements of instant

Appeal No. 2000-0193
Application No. 08/627,010

claims 1 and 12, and thus could not have suggested the claim limitations as purported by the rejection. If an object is positioned differently in a subsequent frame -- that is, the object is in motion -- Tsukagoshi's suggested motion adaptive quantization would lead to the determination of a different quantization for the object with respect to the remainder of the image, rather than using the modified compression ratio set in the first frame, based upon the importance of an area in that first frame. Appellants' claims require that the same "modified compression ratio" be applied to the object, based upon the importance of an area in the first frame, even if the object is positioned differently in the second (subsequent) frame.

We therefore cannot sustain the rejection of claim 1 or 12 under 35 U.S.C. § 103 as being unpatentable over Ligtenberg and Tsukagoshi. Nor can we sustain the rejection of claims 2, 3, 5, 10, 11, 13, 14, 16, 21, and 22, depending therefrom. The additional rejections, relying on the further teachings of Graf, Mack, and Scorse also cannot be sustained. The references of Graf, Mack, and Scorse do not remedy the deficiencies we have identified in the rejection applied against base claim 1 or 12.

Appeal No. 2000-0193
Application No. 08/627,010

CONCLUSION

The rejection of claims 1-19, 21, and 22 is reversed.

REVERSED

MICHAEL R. FLEMING)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
PARSHOTAM S. LALL)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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)	
HOWARD B. BLANKENSHIP)	
Administrative Patent Judge)	

Appeal No. 2000-0193
Application No. 08/627,010

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE-10TH FL.
NEW YORK NY 10151