

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 CHRISTOPHER WARD,
and ROBERT NORMAN HURST

Appeal No. 2003-1373
Application No. 09/430,631

ON BRIEF

Before THOMAS, HAIRSTON, and MACDONALD, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 7, 10, 11, 13 through 16, 18 through 22, 24 and 25. Claims 8, 9, 12, 17, 23 and 26 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

The disclosed invention relates to a method for generating a transition stream for transitioning from a first transport stream to a second transport stream in a substantially seamless manner.

Claims 1 and 18 are the only independent claims on appeal, and they read as follows:

1. A method for generating a transition stream for transitioning from a first transport stream to a second transport stream in a substantially seamless¹ manner, said method comprising the steps of:

decoding a portion of said first transport stream including at least a target out-frame representing a last image frame of said first transport stream to be presented;

decoding a portion of said second transport stream including at least a target in-frame representing a first image frame of said second transport stream to be presented;

processing, using a pixel domain process, at least one of said decoded image frames²; and

encoding a plurality of said decoded image frames, including said target out-frame and said target in-frame, to produce said transition stream.

18. A method for generating a transition stream for transitioning from a first transport stream to a second transport stream in a substantially seamless manner, said method comprising the steps of:

¹ A "substantially seamless" manner is not the same as a "seamless" manner (brief, pages 3, 12 and 13). It is noted that this phrase is not repeated in the body of the claim.

² It appears that this step is bypassed since the last step of this method claim performs an encoding operation on the decoded image frames.

Appeal No. 2003-1373
Application No. 09/430,631

decoding a portion of said first transport stream including at least a target out-frame representing a last image frame of said first transport stream to be presented, said decoded portion including non-video data associated with at least one decoded image frame of said first transport stream:

decoding a portion of said second transport stream including at least a target in-frame representing a first image frame of said second transport stream to be presented, said decoded portion including non-video data associated with at least one decoded image frame of said second transport stream;

encoding a plurality of said decoded image frames, including said target out-frame and said target in-frame, to produce said transition stream; and

inserting, into said transition stream, said extracted³ non-video data.

The references relied on by the examiner are:

Perkins et al. (Perkins)	5,859,660	Jan. 12, 1999
Chen et al. (Chen)	5,917,830	June 29, 1999
Wee et al. (Wee)	6,104,441	Aug. 15, 2000
		(filed Apr. 29, 1998)

Claims 1 through 7, 10, 11, 13, 15, 18 through 22 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wee in view of Perkins.

Claims 14, 16 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wee in view of Perkins and Chen.

³ This term lacks antecedent basis.

Appeal No. 2003-1373
Application No. 09/430,631

Reference is made to the briefs (paper numbers 8 and 10), an early Office Action (paper number 3) and the answer (paper number 9) for the respective positions of the appellants and the examiner.

OPINION

We have carefully considered the entire record before us, and we will reverse the obviousness rejections of claims 1 through 7, 10, 11, 13 through 16, 18 through 22, 24 and 25.

The examiner is of the opinion (paper number 3, pages 2 and 3) that Wee discloses all of the method steps of claims 1 and 18 except for "a well known pixel domain process and a well known steps of inserting into the transition stream, an extracted non-video (audio) data." According to the examiner (paper number 3, page 3), "Perkins et al disclose the well known pixel domain processing to provide a special or other processing effect (Col. 5, lines 53-67 and Col. 6, lines 1-12) and a well known steps of inserting into the transition stream, an extracted non-video (audio) data (Col. 10, lines 28-43) as specified in claim[s] 18-20." The examiner concludes (paper number 3, page 3) that "it would have been obvious to a person of ordinary skill in the relevant art employing a method for generating a transition stream as taught by Wee et al to incorporate the well known concept of pixel domain process[ing] and inserting non-video (audio) data as

taught by Perkins et al for providing a special or other processing effect as specified."

Appellants' disclosure indicates (specification, page 32, lines 9 through 11) that "pixel domain processing" is used for special effects. A noted special effect is the insertion of a monochrome black frame between two images (specification, page 32, lines 22 through 24). As indicated supra, claim 1 includes a step of "using a pixel domain process." Although appellants acknowledge (brief, pages 7 and 10 through 12) that Perkins discloses a black frame that is inserted into a first transport stream, they argue (brief, page 11), however, that "[s]uch a single inserted black-I frame is neither a decoded frame from the first transport stream or the second transport stream nor is it one of the decoded image frames that are subsequently encoded to produce the claimed transition stream." With respect to claim 18, appellants argue (brief, page 23) that Perkins does not disclose "decoding relevant non-video data from a first and second transport stream and later inserting said information into the transition stream."

We agree with appellants' arguments. Perkins clearly discloses (Figure 5; column 9, line 15 through column 10, line 24) that the black I-frame is inserted at the slice point in the first stream prior to a decoding step. As correctly argued by

appellants, the insertion step followed by a decoding step in Perkins is opposite to the decoding step followed by an insertion step in claim 1. Turning to claim 18, Perkins recognizes that audio data (i.e., non-video data) sometimes trails a video frame⁴ (column 10, lines 28 through 42). Notwithstanding Perkins' recognition of the audio lag problem, Perkins does not decode such non-video data in each of the streams, and then insert the decoded non-video data back into the transition stream. As correctly argued by appellants (brief, page 23), Perkins uses null packets in place of the audio data (column 10, lines 36 through 42).

In summary, the obviousness rejection of claims 1 through 7, 10, 11, 13, 15, 18 through 22 and 24 is reversed because the examiner has not presented a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

The obviousness rejection of claims 14, 16 and 25 is reversed because the teachings of Chen do not cure the noted shortcomings in the teachings of Wee and Perkins.

⁴ Appellants' disclosure (specification, page 28, lines 5 through 8) recognizes the same problem.

Appeal No. 2003-1373
Application No. 09/430,631

DECISION

The decision of the examiner rejecting claims 1 through 7, 10, 11, 13 through 16, 18 through 22, 24 and 25 under 35 U.S.C. § 103(a) is reversed.

REVERSED

JAMES D. THOMAS)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
KENNETH W. HAIRSTON)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
ALLEN R. MACDONALD)	
Administrative Patent Judge)	

KWH/lp

Appeal No. 2003-1373
Application No. 09/430,631

MOSER, PATTERSON & SHERIDAN, LLP
SARNOFF CORPORATION
595 SHREWSBURY AVENUE
SUITE 100
SHREWSBURY, NJ 07702