

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MAKOTO FURUHASHI,
MASAYOSHI TANAKA,
MASAKAZU SUZUOKI and TEIJI YUTAKA

Appeal No. 1999-0587
Application 08/414,803

HEARD: MARCH 20, 2001

Before THOMAS, KRASS and BARRY, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1 through 15. Since the examiner has withdrawn the rejection of claims 2 through 8, 10 through 12, 14 and 15, at page 2 of the answer, the only claims remaining on appeal are claims 1, 9 and 13.

Representative claim 1 is reproduced below:

1. An image generation apparatus wherein draw commands are transferred to a drawing device which generates an image in a frame buffer by drawing sequentially in accordance with said drawing commands, said drawing device comprising:

a read means for reading pixel data of an image which has been previously drawn from said frame buffer;

a mixing circuit for mixing the pixel data read from said frame buffer with pixel data of a corresponding position where a next drawing operation is to be performed in a specified mixing ratio;

a write means for writing mixed pixel data in the corresponding pixel position in said frame buffer;

a mixing ratio memory for storing a plurality of said mixing ratio; and

a selection means for selecting the mixing ratio to be supplied to said mixing circuit from said mixing ratio memory according to mixing ratio selection information in said draw command.

The following references are relied on by the examiner:

Evangelisti et al. (Evangelisti)	4,823,281	Apr. 18, 1989
Kirk	5,335,318	Aug. 2, 1994 (filed June 10, 1992)

Claims 1, 9 and 13 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Evangelisti in view of Kirk.

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief and reply brief as well as the answer for the respective positions of the appellants and the examiner.

OPINION

In view of the teachings and suggestions of the applied prior art and the examiner's reasoning in the answer, we sustain the rejection of claims 1, 9 and 13 on appeal.

The focus of the dispute between the examiner and the appellants is best summarized by the discussion at the bottom of page 2 of the reply brief. There, appellants note that the prior art used drawing commands which contain mixing ratio information. On the other hand, the applied prior art is alleged not to teach or suggest the feature of the drawing command containing mixing ratio selection information rather than the mixing ratios themselves. Appellants' Figure 11 and the discussion associated therewith at pages 3 and 4 of the specification as filed indicates that the prior art did utilize drawing commands which contain the mixing ratios themselves which are stored in the memory 26. The claims on appeal reflect the drawing command structure of Figure 1 including the index command utilizing the index memory 107 to in turn provide a select signal to the mixing ratio table memory 106 which stores itself the respective mixing ratios. This structure reflects the language of each independent claim on appeal relating to the drawing command containing the selection information (rather than the ratios themselves).

Appellants' comments in the reply brief at page 2 misstate the language of the independent claims on appeal by urging that the claimed invention does not require that the mixing ratio information is not stored within each command and that the drawing commands only contain mixing ratio selection information. The actual language of each independent claim on appeal is not so restrictive.

There is no dispute between the examiner and the appellants regarding the claim read means, mixing circuit and write means of representative claim 1 on appeal. Even a brief review of Evangelisti and the substance of the abstract at least indicate that these are taught in this reference. In any event, such is known in the admitted prior art Figure 11 any way. Figure 1 and Figure 4C of Evangelisti show the sequencer SEQ being fed from the host computer's data bus where the sequencer SEQ in turn sequences the micro control memory U in accordance with the sequencing operation commands depicted in Figures 5A-B. These reflect the nature of the operation commands to effect the actual source and designation pixel operations reflected in Figures 6 through 8, generally noted by the examiner. The Figure 9 embodiment in Evangelisti shows a modified processing element (MPE).

The so-called PERAM is a random access memory storing predetermined data associated within each processing element PE of the various figures of this reference. In

accordance with the various command information just discussed, operations are performed upon the pixels in accordance with various attributes to be attributed to them. This attribute information relates to the extent of pixel transparency and/or translucency, color and Z values. In association with the discussion related to Figures 6 through 9 beginning at the bottom of column 4 of this reference to the end of the patent, there is indicated that in effect the various draw commands associated with the respective pixels can set forth relationships between the pixels and attributes associated with the respective pixels such as to encompass the broadly recited mixing ratio selection of the claims on appeal. It thus appears that the PERAM also may be analogous to the claimed mixing ratio memory such that the commands from the sequencer SEQ and micro control memory U are in effect the claimed mixing ratio selection information in the drawing commands as claimed.

We thus conclude that Evangelisti in his own words does teach the claimed mixing ratios selection information even though, as the examiner notes in the statement of the rejection at pages 3 and 4 of the answer, this reference does not explicitly use the same words to express the same feature. The examiner then in turn properly relies upon Kirk which, even in the abstract, indicates that control data associated with controlling the operation of the mixer circuit 8 in Figure 1, for example, feeds it control information for generating display pixel data comprised of a combination of proportions of the data in the

color data stores 4, 5, and 6, the color proportions being effectively “commanded” or selected by the control data stored in the alpha store 7. The discussion of this operation is more explicit at column 3.

Thus, we are unpersuaded by appellants' brief and reply brief that the applied prior art does not teach or suggest that a drawing command may include information relating to the selectability of particular ratios or proportions of features associated with pixel information to be operated upon.

Finally, because both references teach in their own way that command information may in effect identify whether a fully transparent or a fully opaque mixing operation will be performed upon pixels read from a buffer memory before being operated upon and placed back into memory, we remand this application to the examiner to reconsider the application of the applied prior art to the other claims that have been deemed to be allowable at page 2 of the answer as noted earlier in this opinion.

In conclusion, the decision of the examiner rejecting claims 1, 9 and 13 is affirmed and this application is remanded to the examiner for further proceedings consistent with this opinion.

Appeal No. 1999-0587
Application 08/414,803

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

This application, by virtue of its “special” status, requires an immediate action.
Manual of Patent Examining Procedure (MPEP) § 708.01(d)(7th ed., July 1998).

AFFIRMED AND REMANDED

James D. Thomas)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
Errol A. Krass)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
Lance Leonard Barry)	
Administrative Patent Judge)	

Appeal No. 1999-0587
Application 08/414,803

JDT/cam

Appeal No. 1999-0587
Application 08/414,803

Lerner, David, Littenberg, Krumholz & Mentlik, LLP
600 South Avenue West
Westfield, NJ 07090