

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte KEVIN W. ANDRESEN  
and KOK S. CHEN

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Appeal No. 1998-2725  
Application 08/473,651

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ON BRIEF

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Before JERRY SMITH, LALL and BLANKENSHIP, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 19 and 20. Claims 3, 4, 6, 8, 9 and 13-18 have been cancelled. Claims 1, 2, 5, 7, 10-12, 21 and 22 have been indicated to contain allowable subject matter. An amendment after final rejection was filed on October 30, 1997, and was entered by the examiner.

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The disclosed invention pertains to a method for producing an image containing multiple objects. More particularly, the invention is directed to a technique for improving the efficiency with which overlapping images are rendered on a display device.

Representative claim 19 is reproduced as follows:

19. A method for producing an image containing multiple objects, comprising the following steps:

storing data in a first memory which describes the area covered by each of plural objects in the image;

retrieving data from said first memory that describes the area covered by a first object and storing said data in a second memory;

retrieving data from said first memory that describes the area covered by a second object;

determining whether there is a common area of intersection for the areas covered by said first and second objects;

modifying the data stored in said second memory to remove the common area of intersection from the description of the area covered by said first object;

rendering the modified data stored in said second memory that describes the area covered by the first object;  
and

generating an image in accordance with the rendered data.

The examiner relies on the following references:

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Seki et al. (Seki)                      5,075,876                      Dec. 24, 1991

Foley et al. (Foley), Computer Graphics: Principles and Practice, 2nd Edition, 1990, by Addison-Wesley Publishing Company, Inc., pages 9-15.

Claims 19 and 20 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Seki in view of Foley.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of

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ordinary skill in the art the obviousness of the invention as set forth in claims 19 and 20. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the

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examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

Claims 19 and 20 are argued as a single group by appellants [brief, page 4]. The examiner indicates how he perceives the invention of claims 19 and 20 to be obvious over the collective teachings of Seki and Foley [answer, pages 4-5]. Appellants argue that there is no teaching or suggestion

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in Seki of removing data from a memory which describes a portion of an object that is covered by another object. According to appellants, the disclosure of Seki explicitly teaches against the removal of such data from memory [brief, pages 7-9]. The examiner responds that the modifying step of claims 19 and 20 is broad enough to be met by the flags used in Seki to identify visible and hidden portions of an object to be displayed [answer, pages 6-7]. Appellants reiterate their position that the processing technique of Seki does not function to remove any portion of the description of the area that is covered by an object from memory [reply brief].

Our analysis must appropriately begin with a consideration of the scope of the appealed claims. Appellants and the examiner obviously disagree on the meaning to be attached to the modifying step of claims 19 and 20. The step in question appears in the claims as follows:

modifying the data stored in said  
second memory to remove the common  
area of intersection from the  
description of the area covered by  
said first object.

Appellants argue that this recitation requires that a portion of the description of an area be removed from memory which is

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contrary to a fundamental purpose of Seki. The examiner interprets the step much more broadly and finds the setting of flags corresponding to data in Seki as meeting the modifying step of claims 19 and 20.

Although the examiner is correct to note that these appealed claims should be given their broadest reasonable interpretation during prosecution, we do not agree with the examiner that the modifying step of claims 19 and 20 can be interpreted in the manner proposed by the examiner. The modification recited in the appealed claims is to remove data (the common area of intersection) from the description of the area covered by said first object. The description of the area corresponds to the data which identifies the extent of this area. Thus, the claim recites that a portion of this identifying data is removed from the second memory, that is, a lesser area of identifying data remains in this memory.

We agree with appellants that the technique taught by Seki does not teach or suggest this step. Seki is concerned with avoiding the problem that original figures cannot be displayed (restored) after conventional hidden line processing [column 1, lines 33-36]. Seki overcomes this problem by not

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eliminating any of the descriptions of areas covered by objects during the course of processing. Seki simply indicates that certain areas will be visible or hidden by the use of flags, but Seki never removes any of the data descriptive of the area covered by an object. Therefore, the modifying step as recited in claims 19 and 20 is not taught or suggested by Seki. Foley provides nothing to overcome this deficiency in Seki.

Since the examiner has failed to properly address all the limitations of claims 19 and 20, the examiner has failed to establish a prima facie case of the obviousness of these claims. Therefore, the decision of the examiner rejecting claims 19 and 20 is reversed.

REVERSED

JERRY SMITH )  
Administrative Patent Judge )  
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HOWARD B. BLANKENSHIP	)	
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