

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 43

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHINYA MATSUDA, NORIYUKI OKISU and HIROSHI NAGASHIMA

Appeal No. 2001-0877
Application 08/530,434

ON BRIEF

Before JERRY SMITH, GROSS and BARRY, 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 final rejection of claims 1-33 and 35. Claim 34 was indicated by the examiner to be allowable. In response to the filing of appellants' appeal brief, the examiner withdrew the rejection of claims 28-30 and 35 [answer, page 2]. Therefore, this appeal is directed to the rejection of claims 1-27 and 31-33.

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The disclosed invention pertains to a document reading apparatus such as a photocopier. The invention particularly relates to the copying of documents such as books which do not lay flat when placed on the document table. The invention uses a measured height of the document and a measured outline of the document to improve the image of the document.

Representative claim 1 is reproduced as follows:

1. An image reading apparatus comprising:

a document table on which a document is placed, the image on the document to be read facing away from the document table;

an image reading means which reads out an image of the document placed on the document table;

a height detecting means which detects a height of the document placed on the document table;

an outline measuring means which measures an outline of the document placed on the document table; and

an examining means which examines a size of the document based on the height of the document detected by the height detecting means and the outline of the document measured by the outline measuring means.

The examiner relies on the following references:

Davidson et al. (Davidson)	4,654,706	Mar. 31, 1987
Okisu et al. (Okisu)	5,194,729	Mar. 16, 1993
Katou et al. (Katou)	5,206,771	Apr. 27, 1993
Siegel	5,276,530	Jan. 04, 1994
Matsuda et al. (Matsuda)	5,416,609	May 16, 1995
Wolff et al. (Wolff)	5,497,236	Mar. 05, 1996
		(filed June 23, 1993)

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Takahashi et al. (Takahashi)	5,583,662	Dec. 10, 1996 (filed Apr. 19, 1994)
Fujii et al. (Fujii)	5,585,926	Dec. 17, 1996 (filed Dec. 07, 1992)

The admitted prior art described in appellants' specification.

The following rejections are on appeal before us:

1. Claims 1, 2 and 7 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Fujii.

2. Claims 1, 2, 7, 31 and 33 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art.

3. Claims 3-6, 8-11 and 22-26 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art and further in view of Wolff.

4. Claim 12 stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art and further in view of Takahashi.

5. Claims 13 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art and Takahashi and further in view of Katou.

6. Claims 15-17 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art and further in view of Davidson.

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7. Claim 20 stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art and Davidson and further in view of Okisu.

8. Claims 18, 19 and 27 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art and Davidson and further in view of Wolff.

9. Claim 32 stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Siegel in view of the admitted prior art and further in view of Matsuda.

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 rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. 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 rejections and arguments in rebuttal set forth in the examiner's answer.

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It is our view, after consideration of the record before us, that the rejection of claims 1 and 2 as anticipated by the disclosure of Fujii is supported by the evidence, but the rejection of claim 7 is not supported by the evidence. We are also of the view, however, that none of the other rejections as formulated by the examiner are supported by the applied prior art. Accordingly, we affirm-in-part.

We consider first the rejection of claims 1, 2 and 7 under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Fujii. Anticipation is established only when a single prior art 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 Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

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The examiner has indicated how he finds anticipation of these claims [answer, pages 3-4]. With respect to claim 1, appellants argue that the "outline" recited in claim 1 "means the line which connects the intersection points of the document table and the lines connecting the document edge and the lens" [brief, pages 20-21]. Appellants argue that the size of the document is not measured in Fujii nor is there any disclosure of examining the size of a document based on its height and the outline of the document. The examiner responds that the height profile calculated by Fujii meets the recitation of an outline as recited in claim 1. The examiner also responds that Fujii clearly uses the height and the height profile to examine the size of the document as claimed [answer, page 16]. Appellants respond that the term outline as used in claim 1 must be interpreted in light of the disclosure and is not met by the height profile of Fujii. They note that Fujii cannot accurately determine the size of the document since it does not take into account the skewing of the document from a predetermined position [reply brief, pages 2-5].

We will sustain the examiner's rejection of claim 1 for essentially the reasons noted by the examiner in the rejection and in the response to arguments section of the answer. With respect to the meaning of the term "outline," we agree with the

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examiner that the height profile calculated in Fujii constitutes an outline of the document. The specification does not establish any special definition for the term "outline." In fact, the specification, in describing Figure 9, refers to an actual outline and an outline of the document image picked up by the apparatus. Thus, the specification suggests that there are several possible outlines of a document. The use of the term outline in the specification appears to be entirely consistent with the general meaning of that term. Therefore, the height profile of the document as calculated in Fujii constitutes the measurement of an outline as recited in claim 1.

We also agree with the examiner that appellants' arguments related to size are not commensurate in scope with the claimed invention. As noted by the examiner, claim 1 does not recite that the size of the document is computed, but rather, claim 1 recites that the size of the document is examined. The use of the height and height profile in Fujii means that the size of the document is examined. More specifically, we agree with the examiner that the height of the document in Fujii is detected at points X1, X2, X3, etc., and an outline of the document is measured by the interpolated spline data. This height and interpolation data represents the size of the document and

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relates to an examination of size as claimed. Since all the recitations of claim 1 can be found within the disclosure of Fujii, we sustain this rejection of claim 1.

With respect to separately argued claim 2, appellants argue that Fujii does not determine an outline in order to calculate the size of the document [brief, pages 23-24]. The examiner responds that the height profile of Fujii constitutes an outline determined by detecting an edge of the document.

We will also sustain the examiner's rejection of claim 2. The height profile of Fujii constitutes an outline as discussed above with respect to claim 1. Since the height profile is obtained by measuring the top edge of the book on the table, we find that the edge detection of claim 2 is fully met by the disclosure of Fujii.

With respect to separately argued claim 7, appellants argue that Fujii does not disclose that the document height is corrected in accordance with the position of the document. According to appellants, there is no document position recognizing means in Fujii [brief, pages 24-27]. The examiner disagrees and responds that Figures 6a, 6b and 8 of Fujii show the document position relative to a reference plane [answer, page 17]. Appellants respond that Fujii does not include a disclosure

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that the document height is corrected in accordance with document position [reply brief, pages 6-7].

We will not sustain the rejection of claim 7. We agree with appellants that Fujii does not have a document position recognizing means for using a detected document position to correct for the height of the document as measured by the height detecting means. The Fujii device operates on the assumption that a document has been properly placed against some reference edge for copying. The portions of Fujii relied on by the examiner fail to support the examiner's findings that Fujii teaches the height correction means as recited in claim 7.

We now consider the various rejections made by the examiner under 35 U.S.C. § 103. 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

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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 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

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not to make in the brief have not been considered and are deemed to be waived by appellants [see 37 CFR § 1.192(a)].

We consider first the rejection of claims 1, 2, 7, 31 and 33 based on Siegel and the admitted prior art. Although each of independent claims 1, 7 and 31 recites that the image on the document is to be read facing away from the document table and Siegel has the image on the document facing the document table, the examiner finds that it would have been obvious to the artisan to have the document in Siegel face the other direction because it would be easier to place the document on the table in this manner. The examiner also notes that the admitted prior art discloses copying images placed in this direction. The examiner finds that Siegel teaches the claimed height measurements in the same manner as Fujii which was discussed above [answer, pages 5-7].

With respect to claims 1 and 2, appellants argue that since Siegel relates to an apparatus in which the document is placed face down, Siegel is fundamentally different from the claimed invention and would not be considered in solving a problem related to copiers in which the document is placed face up. Appellants argue that there is no reason to combine Siegel with the admitted prior art which relates to face up copying

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[brief, pages 27-28]. The examiner responds that it would have been obvious to combine the teachings of Siegel and the admitted prior art because they both relate to copying images from books and the face up direction is easier for placement and for the prevention of damage to the book [answer, pages 17-18]. Appellants respond that the examiner has failed to consider the claimed invention as a whole [reply brief, pages 7-8].

We will not sustain any of the examiner's obviousness rejections which are all fundamentally based on the teachings of Siegel and the admitted prior art because we agree with appellants that there is no proper motivation for changing the book copying device of Siegel so that the image on the book faces away from the document table. Siegel discloses a copier in which the book is placed face down on the document table. Such a copier is designed so that all the optical components are included within the cabinet of the copier below the document table. We agree with appellants that a copier which requires that documents or books be placed face up is fundamentally different from face down copiers and requires a completely different principle of operation. The examiner's motivation for changing the operation of the Siegel copier is not persuasive because, under the examiner's reasoning, there would be no basis

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to ever have face down copying since face up copying would preserve the integrity of books. Obviously, the art has continued to use face down copying because of the advantages apparently obtained through face down copying. There is no teaching or suggestion on the record before us to modify the copier of Siegel to use face up copying except to reconstruct the claimed invention in hindsight. Since we agree with appellants that the modification of Siegel proposed by the examiner is not suggested by the admitted prior art, all the obviousness rejections before us fail.

In summary, the rejection of claims 1, 2 and 7 under 35 U.S.C. § 102(e) is sustained with respect to claims 1 and 2, but is not sustained with respect to claim 7. The rejection of claims 1-27 and 31-33 under 35 U.S.C. § 103 is not sustained. Therefore, the decision of the examiner rejecting claims 1-27 and 31-33 is affirmed-in-part.

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

AFFIRMED-IN-PART

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Administrative Patent Judge)	
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ANITA PELLMAN GROSS)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
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