

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte GANG-BOCK LEE

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Appeal No. 1999-0009  
Application No. 08/648,386

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HEARD: May 24, 2001

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Before FLEMING, LALL, and BARRY, Administrative Patent Judges.  
BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appellant's appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-31. We affirm-in-part.

BACKGROUND

The invention at issue in this appeal controls a facsimile ("fax") machine. A fax machine prints image data received via a telephone line or produced by scanning a document. The machine includes a toner hopper, which must be replaced when the toner held therein is consumed.

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When an ample portion of the back of a document bears a dark color and the document is "reversely" transmitted or copied, i.e., when the back is transmitted or copied, a fax machine will print the document substantially in black. Accordingly, its toner is quickly consumed, requiring replacement of the toner hopper sooner than expected.

According to the appellant's invention, when image data received by a fax machine contain more than a sequential number of lines of black data during a facsimile or copying operation, one of two operations is performed. First, printing of the image data is stopped, and a print stop message is printed or displayed. Second, a quarter of a page is printed as black data, and the rest of the page is printed as white data. Both operations conserve toner.

Claim 1, which is representative for our purposes, follows:

1. A method of stopping a print operation in a facsimile system, said method comprising the steps of:

determining whether a ring signal has been received;

performing a protocol when said step of determining determines that said ring signal has been

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received to receive facsimile transmitted image data;

storing said image data in a memory;

determining whether the stored image data contains a predetermined number of sequential lines of black data; and

stopping the print operation and displaying a print stop message, when said predetermined number of sequential lines of black data has been determined to have been stored in said memory.

The prior art of record applied in rejecting the claims follows:

Sakata	4,992,884	Feb. 12, 1991
Nakatsuma	5,335,085	Aug. 2, 1994
Horiuchi et al. (Horiuchi)	5,420,693	May 30, 1995 (filed Apr. 1, 1992)
Uetama et al. (Uetama)	5,493,421	Feb. 20, 1996 (filed July 16, 1993).

Claims 1, 7, and 8 stand rejected under 35 U.S.C. § 103(a) as being obvious over Uetama in view of Horiuchi. Claim 2 stands rejected under § 103(a) as being obvious over Uetama in view of Horiuchi further in view of Nakatsuma. Claim 3 stands rejected under § 103(a) as being obvious over Uetama in view of Horiuchi further in view of Sakata. Claims 4-6 and 9-22 stand rejected

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under § 103(a) as being obvious over Uetama in view of Horiuchi

further in view of Sakata even further in view of Nakatsuma.<sup>1</sup>  
Claims 24-31 stand rejected under § 103(a) as being obvious over  
Uetama in view of Sakata and Nakatsuma. Rather than reiterate  
the arguments of the appellant or examiner in toto, we refer the  
reader to the briefs and answer for the respective details  
thereof.

#### OPINION

In deciding this appeal, we considered the subject matter on  
appeal and the rejections made by the examiner. Furthermore, we  
duly considered the arguments and evidence of the appellant and  
examiner. After considering the record, we are persuaded that  
the examiner erred in rejecting claims 1-8, 10, 16, 18, 21, and  
23-31 but are not persuaded that he erred in rejecting claims 9,  
11-15, 17, 19, 20, and 22. Accordingly, we affirm in-part.

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<sup>1</sup>Although the examiner mistakenly omits Sakata from his  
statement of the rejection, (Examiner's Answer at 4), the record  
as a whole evidences that the claims rejection includes the  
reference.

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We begin by noting the following principles from In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993).

In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).... "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Also, the references represent the level of ordinary skill in the art. See In re GPAC Inc., 57 F.3d 1573, 1579, 35 USPQ2d 1116, 1121 (Fed. Cir. 1995) (finding that the Board of Patent Appeals and Interference did not err in concluding that the level of ordinary skill was best determined by the references of record); In re Oelrich, 579 F.2d 86, 91, 198 USPQ 210, 214 (CCPA 1978) ("[T]he PTO usually must evaluate ... the level of ordinary skill solely on the cold words of the literature."). Of course, "[e]very patent application and reference relies to some extent upon knowledge of persons skilled in the art to complement that [which is] disclosed ....'" In re Bode, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977) (quoting In re Wiggins, 488 F.2d 538,

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543, 179 USPQ 421, 424 (CCPA 1973)). Those persons "must be presumed to know something" about the art "apart from what the references disclose." In re Jacoby, 309 F.2d 513, 516, 135 USPQ

317, 319 (CCPA 1962). With these principles in mind, we consider the obviousness of the following claims:

- claims 1-8 and 23-31
- claims 9, 11-15, 17, 19, 20, and 22
- claim 10
- claims 16, 18, and 21.

We begin with claims 1-8 and 23-31.

#### I. Claims 1-8 and 23-31

The examiner alleges, "[s]ince Uetama serves the same purpose as that served by the claimed invention, i.e., stop or omit printing the unwanted excess data, it would have been obvious ... to applied [sic] the idea of Uetama to avoid printing excess black data, since black and blank are the two opposition conventions used in image printing and having too much of any kind of the two means the whole document image will not be properly printed." (Final Rejection at 3.) The appellant argues, "Uetama's performs the omission of printing of the sequential

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blank lines when a predetermined number of blank lines have been **received not stored in the image memory** ...." (Reply Br. at 10.)

Claims 1-8 and 23 specify in pertinent part the following limitations: "determining whether the stored image data contains

a predetermined number of sequential lines of black data; and stopping the print operation and displaying a print stop message, when said predetermined number of sequential lines of black data has been determined to have been stored in said memory."

Similarly, claims 24-31 specify in pertinent part the following limitations: "said central processing means determining whether said memory means contains a predetermined number of sequential lines of black data; and said central processing means controlling said print means for preventing said print means from performing a normal print operation when said predetermined number of sequential lines of black data has been determined to have been stored in said memory." Accordingly, claims 1-8 and 23-31 require inter alia preventing a facsimile machine from printing when a predetermined number of sequential lines of black data have been stored in its memory.

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The examiner fails to show a teaching or suggestion of the limitations in the prior art of record. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995) (citing W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721

F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983). "It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (citing In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991)). "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." Id. at 1266, 23 USPQ2d at 1784 (citing In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

Here, although Uetama teaches "[a] facsimile apparatus capable of economizing the recording paper[,]'" col. 1, ll. 8-9,

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the reference does not prevent the apparatus from printing when a predetermined number of sequential lines of black data have been stored in its memory. To the contrary, Uetama prints marginal, compressed data when a predetermined number of sequential lines of blank data have been received by the apparatus. Specifically, "in the case where a predetermined number of lines of total blank line data is [sic] received successively, subsequently successive

total blank line data are not printed but what is called the marginal portion is printed by compression. As a consequence, the unrequired [sic] marginal portion in the original is deleted for printing, thereby conserving the amount of recording paper consumption." Col. 4, ll. 27-33. The addition of Horiuchi, Sakata, and Nakatsuma does not cure the defect of Uetama.

Because Uetama prints marginal, compressed data when a predetermined number of sequential lines of blank data have been received, we are not persuaded that the teachings from the prior art would appear to have suggested the limitations of "determining whether the stored image data contains a predetermined number of sequential lines of black data; and stopping the print operation and displaying a print stop message,

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when said predetermined number of sequential lines of black data has been determined to have been stored in said memory" or "said central processing means determining whether said memory means contains a predetermined number of sequential lines of black data; and said central processing means controlling said print means for preventing said print means from performing a normal print operation when said predetermined number of sequential lines of black data has been determined to have been stored in

said memory." Therefore, we reverse the rejection of claims 1, 7, and 8 as being obvious over Uetama in view of Horiuchi; the rejection of claim 2 as being obvious over Uetama in view of Horiuchi further in view of Nakatsuma; the rejection of claim 3 as being obvious over Uetama in view of Horiuchi further in view of Sakata; the rejection of claims 4-6 as being obvious over Uetama in view of Horiuchi further in view of Sakata even further in view of Nakatsuma; and the rejection of claims 24-31 as being obvious over Uetama in view of Sakata and Nakatsuma. We proceed to claims 9, 11-15, 17, 19, 20, and 22.

## II. Claims 9, 11-15, 17, 19, 20, and 22

The appellant fails to argue against the rejection of claims

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9, 11-15, 17, 19, 20, and 22. At oral hearing, moreover, his representative confirmed that the rejection of independent claims 9 and 15 were not argued in the briefs. Accordingly, the appellant has not shown error in the rejection. Therefore, we affirm the rejection of claims 9, 11-15, 17, 19, 20, and 22 as being obvious over Uetama in view of Horiuchi further in view of Sakata even further in view of Nakatsuma. We proceed to claim 10.

### III. Claim 10

The examiner alleges, "Nakatsuma teaches a facsimile apparatus that prints a message regarding the operation of the apparatus in response to a control signal to end the operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to print the printing stop or omission message of Uetama et al. in view of Horiuchi et al. and Sakata et al. on a paper, as taught by Nakatsuma, to allow viewing of the message by the operator at a later time." (First Action on Merits at 6.) The appellant argues, "[p]rinting any kind of message, such as a print stop message, would waste paper and thus defeat the purpose of Uetama." (Appeal Br. at 14.)

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Claim 10 specifies in pertinent part the following limitations: "further comprising a step of printing said print stop message." Accordingly, the claim requires inter alia printing a message to indicate that printing has been stopped.

The examiner fails to show a teaching or suggestion of the limitations in the prior art of record. As mentioned regarding the rejection of claims 1-8 and 23-31, Uetama prints marginal, compressed data when a predetermined number of sequential lines

of blank data have been received. Such data notify a user that blank line data have been omitted. Printing another message to that effect would be redundant. It would also waste paper, which would oppose Uetama's purpose of "economizing the recording paper." Col. 1, l. 9. The addition of Horiuchi and Sakata does not cure the defect of the proposed modification.

Because there is no evidence that printing a stop message would have been desirable in Uetama's fax apparatus, we are not persuaded that teachings from the prior art would have suggested the limitations of "further comprising a step of printing said print stop message." Therefore, we reverse the rejection of

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claim 10 as being obvious over Uetama in view of Horiuchi further in view of Sakata even further in view of Nakatsuma. We proceed to claims 16, 18, and 21.

#### IV. Claims 16, 18, and 21

The examiner alleges, "[i]t would have been obvious ... to output to the printer ... only a plurality of image data lines as black lines and the rest as white lines when the number of black lines is detected to exceed the predetermined number of lines as taught by Uetama et al. to reserve recording paper." (First

Action on Merits at 8.) The appellant argues, "Uetama teaches skipping the printing of a plurality of white lines, thus printing a the [sic] lines of image data not printed as black data as white data would result in a printing of a plurality of white lines would be contrary to the teachings of Uetama."

(Appeal Br. at 22.)

Claims 16 and 21 specify in pertinent part the following limitations: "printing a plurality of lines of image data stored in said memory as black data and the rest of the lines of image data stored in said memory as white data, when said predetermined

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number of sequential lines of black data has been determined to have been stored in said memory." Similarly, claim 18 specifies in pertinent part the following limitations: "printing a plurality of lines of image data stored in said memory as black data and the rest of the lines of image data stored in said memory as white data, when said predetermined number of sequential lines of black data has been determined to have been stored in said memory." Accordingly, claims 16, 18, and 21 require inter alia printing a plurality of lines of image data stored in a memory as black data and the rest of the lines stored

therein as white data when a predetermined number of sequential lines of black data have been stored in the memory.

The examiner fails to show a teaching or suggestion of the limitations in the prior art of record. As mentioned regarding the rejection of claim 10, Uetama prints marginal, compressed data when a predetermined number of sequential lines of blank data have been received. Such data notify a user that blank line data have been omitted. Printing black and white data to that effect would be redundant. It would also waste paper, which

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would oppose Uetama's purpose of "economizing the recording paper." Col. 1, l. 9. The addition of Horiuchi, Sakata, and Nakatsuma does not cure the defect of the proposed modification.

Because there is no evidence that printing black and white data would have been desirable in Uetama's fax apparatus, we are not persuaded that teachings from the prior art would have suggested the limitations of "printing a plurality of lines of image data stored in said memory as black data and the rest of the lines of image data stored in said memory as white data, when said predetermined number of sequential lines of black data has been determined to have been stored in said memory" or "printing

a plurality of lines of image data stored in said memory as black data and the rest of the lines of image data stored in said memory as white data, when said predetermined number of sequential lines of black data has been determined to have been stored in said memory." Therefore, we reverse the rejection of claims 16, 18, and 21 as being obvious over Uetama in view of Horiuchi further in view of Sakata even further in view of Nakatsuma.

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CONCLUSION

In summary, the rejection of claims 1-8, 10, 16, 18, 21, and 23-31 under 35 U.S.C. § 103(a) reversed. The rejection of claims 9, 11-15, 17, 19, 20, and 22 under § 103(a), however, is affirmed. Our affirmance is based only on the arguments made in the briefs. Arguments not made therein are neither before us nor at issue, but are considered waived.

No time for taking any action in connected with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART

