

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 10

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte WILLIAM J. GRANDE, WILLIAM MEY,  
THOMAS M. STEPHANY and THOMAS N. TOMBS

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Appeal No. 1999-0427  
Application 08/782,272

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ON BRIEF

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Before JERRY SMITH, RUGGIERO and LALL, 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 1-37, which constitute all the claims in the application. An amendment after final rejection was filed on February 17, 1998 but was denied entry by the examiner.

The disclosed invention pertains to an electrographic

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printing method and apparatus for forming a toner image on a recording medium. More particularly, the invention uses a print head which defines an array of microchannels for forming a plurality of parallel lines of developer in the microchannels.

Representative claim 1 is reproduced as follows:

1. Electrographic printing apparatus for forming a toner image on a recording medium, comprising:

a) a magnetic brush having a rotatable magnetic core and a stationary outer shell;

b) a developer supply for supplying a magnetic developer powder to the magnetic brush;

c) a print head on the outer shell, the print head defining an array of microchannels for forming a plurality of parallel lines of developer in the microchannels, the microchannels being at least 10 times longer and at least twice as deep as they are wide and including means for selectively transferring developer from the lines to a receiver; and

d) a receiver electrode arranged in spaced relation to the array of microchannels to define a recording region through which the receiver can be moved.

The examiner relies on the following references:

Masuda et al. (Masuda)	4,875,060	Oct. 17, 1989
Tange	5,030,974	July 09, 1991
Nakayama et al. (Nakayama) (Japanese Kokai)	4-141459	May 14, 1992

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Claims 1-37 stand rejected under 35 U.S.C. § 112, first paragraph, as being based on an inadequate disclosure. Claims 1-9, 14-18, 20-24, 26, 27, 32 and 33 also stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Tange in view of Nakayama. Claims 34-37 also stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Tange in view of Nakayama and further in view of Masuda.

Rather than repeat the arguments of appellants or the examiner, we make reference to the brief 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 obviousness relied upon by the examiner as support for the prior art rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record

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before us, that the specification of this application adequately supports the claimed invention under 35 U.S.C. § 112. We are also of the view that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-9, 14-18, 20-24, 26, 27 and 32-37. Accordingly, we reverse.

Appellants have indicated that for purposes of this appeal the claims will all stand or fall together as a single group [brief, page 2]. Consistent with this indication appellants have made no separate arguments with respect to any of the claims on appeal. Accordingly, all the claims before us will stand or fall together. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Therefore, we will consider the rejections against independent claim 1 as representative of all the claims on appeal.

We consider first the rejection of claims 1-37 under the first paragraph of 35 U.S.C. § 112. The rejection states:

Claims 1-37 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in

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such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention [answer, third page].

This rejection relates to the written description requirement of 35 U.S.C. § 112. Specifically, the examiner focuses on the recitation in claim 1 that the microchannels are at least 10 times longer and at least twice as deep as they are wide. The examiner notes that the specification indicated that the microchannels could be 50-200 microns deep, 6,000-30,000 microns long and have a width of 42 microns. The examiner indicates that no specific relationship of length, height and width is disclosed. The examiner notes that the relationships recited in claim 1 encompass dimensions which are outside of the ranges described in the specification.

Appellants argue that the length and depth ratio limitations were added to the claims to avoid the disclosure of Nakayama. Appellants also argue that the original claims had no restrictions on the length or depth ratios with respect to width so that the original claims supported any length or depth ratio, and the amended claims merely restrict the language of the original claims [brief, pages 2-3].

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The purpose of the written description requirement is to ensure that the applicants convey with reasonable clarity to those skilled in the art that they were in possession of the invention as of the filing date of the application. For the purposes of the written description requirement, the invention is "whatever is now claimed." Vas-cath, Inc. v. Mahurkar, 935 F.2d 1555, 1564, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). The key fact in this case is that the claimed length to width ratio and depth to width ratio include values which are within the ranges originally disclosed in the specification, but also include values which fall outside of the originally disclosed range. Thus, even though appellants disclosed values of length, depth and width which fall within the ranges now claimed, the rejection is based on the fact that the claimed range is broader than the disclosed range, and thereby, includes values not originally disclosed.

As noted above, the proper question to consider is whether appellants' original specification would have suggested that they were in possession of the invention now being claimed. The original specification merely noted a range of dimensions of manufactured microchannels which had

been found to be acceptable in tests for practicing the invention [page 7]. As noted by the examiner in the prior art rejection, the specification does not assign any criticality to these disclosed ranges. In fact, it appears to us that the most critical dimension of the print head is the space between the adjacent channels so that they do not interfere with each other. The length of the microchannel would appear to be least relevant to the practice of the invention and only determines the length of a line of developer that can be transferred to a receiver. Thus, the fact that the claimed channel length to width ratio includes lengths which are much smaller or larger than the disclosed range appears inconsequential to us. The original specification indicates that higher walls are preferred within the tested range. Once again, the fact that the claimed depth to width ratio includes depth values larger than the disclosed range does not indicate lack of compliance with 35 U.S.C. § 112. The artisan reading the specification of this application would not have looked to the disclosed exemplary ranges as establishing a limit on the dimensions of the microchannels.

In summary, our view of the original specification is

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that it set forth exemplary ranges for the dimensions of the microchannels, but the specification does not indicate that the dimensions should be otherwise limited in any manner to practice the invention. Therefore, we do not sustain the examiner's rejection of claims 1-37 as being based upon an inadequate written description under the first paragraph of 35 U.S.C. § 112.

We now consider the rejections 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 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

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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 not to make in the brief have not been  
considered [see 37 CFR

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§ 1.192(a)].

With respect to representative, independent claim 1, the examiner indicates how he combines the teachings of Tange and Nakayama to support the rejection [answer, fourth-fifth pages]. This rejection makes no mention of the dimensions recited in claim 1. Appellants argue that the recitation that the grooves in the claimed print head are at least 10 times longer and twice as deep as they are wide clearly distinguishes the claimed invention from the applied prior art. The examiner acknowledges that Nakayama is silent as to the dimensions of the channels and that Figures 5-9 of Nakayama would appear to support appellants' arguments. Nevertheless, the examiner finds that drawing dimensions are not necessarily drawn to scale, and that appellants have disclosed no criticality for the claimed dimensions. The examiner also notes that the claimed dimensions achieve the same result as the relative magnetic permeabilities of Nakayama [answer, seventh-ninth pages].

We will not sustain either of the examiner's rejections of the claims under 35 U.S.C. § 103 because the examiner has failed to establish a prima facie case of

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obviousness. The examiner has not established that the applied prior art teaches or suggests the dimensional relationships specifically recited in the claims. The fact that the applied prior art may achieve a result similar to the claimed invention is not relevant to the question of obviousness. The examiner has essentially ignored certain limitations of the claimed invention and shifted the burden to appellants to show criticality of these limitations. As noted above, however, the examiner has the initial responsibility to demonstrate how the claimed invention is taught or suggested by the applied prior art. The examiner has failed to satisfy this responsibility in this case.

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In summary, we have not sustained any of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-37 is reversed.

REVERSED

	)	
JERRY SMITH	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
PARSHOTAM S. LALL	)	
Administrative Patent Judge	)	

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