

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 38

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JIN H. AN

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Appeal No. 1997-3479  
Application 08/495,039

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ON BRIEF

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Before JERRY SMITH, HECKER 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 21 and 23-25, which constitute all the claims remaining in the application.

The invention pertains to the field of X-shaped read-only memory (ROM) semiconductor memory devices. More

particularly, the invention is directed to an improved arrangement of selectable ground lines and the materials for forming these selectable ground lines.

Representative claim 21 is reproduced as follows:

21. In an X-shaped ROM semiconductor memory device of the type including:

a plurality of elongated polysilicon word lines arranged in vertically spaced rows,

a plurality of horizontally spaced cell transistors electrically connected to the polysilicon word lines,

a plurality of elongated metal bit lines and elongated selectable ground lines alternately arranged in horizontally spaced columns between the cell transistors,

contact regions for connecting adjacent cell transistors, and a ground terminal;

the improvement characterized by said selectable ground lines including:

groups of adjacent odd and even polysilicon selectable ground lines,

a first and a second metal selectable ground line on opposite sides of each group of polysilicon selectable ground lines,

a first polysilicon interconnect line for interconnecting the odd polysilicon selectable ground lines of each group of polysilicon selectable ground lines to the first metal selectable ground line,

a second polysilicon interconnect line for interconnecting the even polysilicon selectable ground lines

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of each group of polysilicon selectable ground lines to the second metal selectable ground line, and

first and second driving transistors for connecting the first and second metal selectable ground lines, respectively, to the ground terminal.

The examiner relies on the following references:

Bertin et al. (Bertin)	4,603,341	July 29,
1986		

The admitted prior art disclosed in appellant's application.

Claims 21 and 23-25 stand rejected under 35 U.S.C. § 112, first and second paragraphs, as being based on an inadequate disclosure and/or for failing to particularly point out and distinctly claim the invention. Claims 21 and 23-25 also stand rejected under 35 U.S.C. § 103<sup>1</sup>. As evidence of obviousness the examiner offers Bertin in view of the admitted prior art.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs<sup>2</sup> and the answer for the respective details thereof.

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<sup>1</sup> This rejection was identified as a new ground of rejection in the examiner's answer.

<sup>2</sup> For purposes of this decision, we will refer to the interview summary record filed by appellant on July 14, 1997 as the reply brief.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner, the arguments in support of the rejections and the evidence of obviousness relied upon by the examiner as support for the obviousness rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's 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.

It is our view, after consideration of the record before us, that the disclosure in this application describes the claimed invention in a manner which complies with the requirements of 35 U.S.C. § 112. We are also of the view that the claims particularly point out the invention in a manner which also complies with 35 U.S.C. § 112. We are further of the view that the collective 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 21 and 23-25. Accordingly, we reverse.

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We consider first the rejection of claims 21 and 23-25 under 35 U.S.C. § 112. Although the rejection is nominally stated to be under both the first and second paragraphs of Section 112, it appears that the rejection is primarily directed to a question of enablement. The rejection is simply stated in two paragraphs on page 4 of the answer. The first paragraph is nothing more than a bare conclusion that the claims do not

satisfy the requirements of 35 U.S.C. § 112 with no explanation of any kind. The second paragraph states

Further, the present invention is supposed to be a ROM "layout", with some special arrangement of select lines, but the only "layout" figure that is supposed to represent the present invention, Figure 4, is identical to the prior art Figure 2, and shows no differences. The isolated "circuit diagrams" simply do not serve to disclose the present invention in a manner that can be understood.

Although these two paragraphs do not establish much of a rationale for the rejection, it appears to us that the examiner's rejection is based upon the enablement requirements of 35 U.S.C.

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§ 112. Appellant responds that the claimed invention is clearly supported by the disclosure and that the application as a whole would enable the artisan to make and use the claimed invention [brief, pages 4-11].

We agree with the position argued by appellant. The record in this application suggests that the original examiner had no understanding of the invention being disclosed and claimed. This can be seen by the examiner's reference to Figures 2 and 4 of the application. These figures do not reveal the "invention." The invention as set forth in the appealed claims is best represented by Figure 5 and the corresponding disclosure related to Figure 5. This figure and the disclosure show the invention to be in a specific arrangement of the selectable ground lines and in the materials making up the selectable ground lines. The examiner's assertion that the invention is the physical ROM layout of Figure 4 is contrary to the claims which recite a memory device having components arranged as shown in Figure 5.

The examiner's rejection not only demonstrates a complete lack of understanding of the invention, but it also

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fails to establish a prima facie case of unpatentability of the claimed invention under either the first or second paragraph of 35 U.S.C.

§ 112. Since we readily find the disclosure of this application and claims 21 and 23-25 to be in compliance with Section 112, we do not sustain this rejection of the claims.

We now consider the rejection of claims 21 and 23-25 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

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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 appellant have been considered in this decision. Arguments which appellant could

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have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

This rejection is set forth on pages 5-6 of the answer. In the rejection the examiner identifies how Bertin and the admitted prior art teach portions of the claimed invention. The claims are drafted in Jepson form. It is noteworthy that the rejection only identifies that the portions of the claims before the "improvement" are taught or suggested by Bertin and the admitted prior art. The rejection makes no effort to address the specific limitations of the claimed invention which form the improvement. To no one's surprise, appellant argues that the limitations of the claims appearing after the improvement are neither taught nor suggested by Bertin and the admitted prior art [reply brief].

We again agree with appellant. Since the examiner has ignored the key features of the claimed invention in making this rejection, the examiner has failed to establish a prima facie case of obviousness. Therefore, we do not sustain this rejection of the appealed claims.

In summary, we have not sustained either of the

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examiner's rejections of the appealed claims. Therefore, the decision of the examiner rejecting claims 21 and 23-25 is reversed.

REVERSED

JERRY SMITH	)	
Administrative Patent Judge	)	
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	)	
	)	
STUART N. HECKER	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
PARSHOTAM S. LALL	)	
Administrative Patent Judge	)	

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