

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board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. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KENNETH W. MOULDING
and JOHN B. HUGHES

Appeal No. 1999-1455
Application 08/753,556

ON BRIEF

Before THOMAS, JERRY SMITH, and GROSS, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 7 through 10, which constitute all the claims remaining in the application.

Claim 7 is reproduced below:

7. A MOS transistor having a channel comprised of first and second parallel segments, the first segment having a first width and a first length, and the second segment having a second width and a second length, wherein the first and second lengths are different, and the first and second widths are different.

Appeal No. 1999-1455
Application 08/753,556

The following references are relied on by the examiner:

Okuzumi (Japanese Patent) 62-147779¹ July 1, 1987

Runyan et al. (Runyan), Semiconductor Integrated Circuit Processing Technology, pp. 40-41, 162, Addison-Wesley Publishing Co. (1990).

Claims 8 through 10 stand rejected under the second paragraph of 35 U.S.C. §112. Additionally, claims 7 through 10 stand rejected under 35 U.S.C. §103. As evidence of obviousness, the examiner relies upon Okuzumi in view of Runyan.

Rather than repeat the positions of the appellants and the examiner, reference is made to the briefs and the answer for the respective details thereof.

OPINION

We reverse both rejections of all claims on appeal and institute a new ground of rejection under the second paragraph of 35 U.S.C. § 112 of all claims on appeal.

Turning first to the rejection of claims 8 through 10 under the second paragraph of 35 U.S.C. § 112, the examiner's view is that there is no way to determine what is meant by the recitation of a "prescribed minimum" channel length or width of these

¹ Our understanding of this reference is based upon a translation provided by the Scientific and Technical Information Center of the Patent and Trademark Office. A copy of the translation is enclosed with this decision.

claims. The examiner believes that one cannot determine the dimensions required by these claims and whether the length is a minimum grid size according to the design process or the finished device.

We reverse this rejection because the entire discussion of the written description of the invention is based upon relative sizes known in the art and externally determined to this scope of the claims on appeal. The appellants' views expressed at the top of page 7 of the principal brief on appeal indicating that the term "prescribed" as well as the terms "predetermined" and "preselected" are conventionally used and understood by the artisan as conventional claim drafting terms. The chip or circuit designer is the one who determines the preselection which may be arbitrary. What is significant of the disclosed and claimed invention in claims 8 through 10 is not that there is a prescription or predetermined minimum channel length or width, but that the respective lengths or widths are determined as being respective integer multiples of this prescribed or predetermined minimum channel width or depth. Appellants are permitted to recite this feature in terms of relative values. No actual dimensions are intended other than those that the artisan would ordinarily ascribe. Therefore, since the questioned terminology is consistent with the disclosed invention as well as reasonably defines what the artisan would have understood the subject matter to pertain to, that is, its metes and bounds, the rejection must be reversed.

We also reverse pro forma the rejection of claims 7 through 10 under 35 U.S.C. § 103. Our detailed study of the disclosed and claimed invention as well as the positions of the appellants and the examiner since the entry into the file of claims 7 through 10, leads us to conclude that the actual subject matter is so subject to conflicting views that the subject matter of the claims on appeal is indefinite and subject to speculation. Our pro forma reversal of the rejection of claims 7 through 10 under 35 U.S.C. § 103 should not be construed as a reversal of this rejection on the merits.

We reverse the outstanding rejection under 35 U.S.C. 103 because the subject matter encompassed by the claims on appeal must be reasonably understood without resort to speculation. Presently, speculation and conjecture must be utilized by us and by the artisan inasmuch as the claims on appeal do not adequately reflect what the disclosed invention is. Note In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962). Note also In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Speculation and conjecture must be exercised by us and by the artisan in determining the true scope of meaning of the term “segments” in the claim and particularly the recitation of them as being “parallel.” The brief description of Figure 2 at the bottom of page 2 of the disclosed invention states that this figure “shows a second resolution grid whereby the transistor is split into two narrower segments connected in parallel.” The Figure 3 brief description below it at lines 29 and 30 indicates that each such segment has

a different length. The corresponding discussion of Figure 2 at the bottom of page 3 of the specification states that this figure “illustrates a refinement which can be used when at least one of the transistors can be divided into two or more narrower transistor segments connected in parallel.” This language is the basis of the recitation at the top of page 4 that the Figure 3 embodiment alters both width and lengths of each segment. The abstract at specification page 7, lines 8 through 10 thereof indicates that the transistor is “formed as two or more sub-transistors.” Originally filed claims 2 through 4 indicate that the transistor of claim 1 is “formed from a plurality of parallel connected sub-transistors.”

On the other hand, the examiner instituted the present rejection under 35 U.S.C. 103 in the final rejection on the basis of newly applied art for new claims presented after claims 1 through 6 had been canceled. Note the art rejection set forth in a simple form at the bottom of page 2 of the final rejection. The advisory action issued by the examiner on June 16, 1998 in response to appellants’ Response to the Final Rejection filed on June 1, 1998, states that with respect to this Request for Reconsideration of the final rejection “the claims do not require segments connected ‘in parallel,’ they require ‘parallel segments,’ which is taught by Okuzumi.”

The focus of the arguments presented by appellants in the brief and reply brief as to the issue under 35 U.S.C. § 103 emphasizes that the Figure 3 embodiment is intended to be claimed and “in which both the lengths and widths of each of the parallel connected

segments are altered" as expressed at the top of page 3 of the reply brief. Appellants' position at the middle of that page with respect to that embodiment states that the transistor is "divided into two or more non-contiguous channel segments that are connected in parallel."

These arguments presented in the brief and reply brief are consistent with the disclosed but not the claimed invention as emphasized by the examiner, for example, in the advisory action. There is no recitation in independent claim 7 that the first and second parallel segments are "connected in parallel." As such, there is ample room for the examiner to take the view as she has with respect to the art rejection. There is a similar basis for the appellants to allege that the mere recitation of the segments being in parallel has a basis in the disclosed invention. However, what is emphasized here is that the disclosed invention always disclosed the invention in terms of first and second "parallel connected" segments or more accurately that two transistors have been formed from one transistor where two narrower segments are "connected in parallel." The notion that the segments are not "connected in parallel" is apparently the key absent recitation the examiner has been focusing upon indirectly in the art rejection of record.

Therefore, rather than to attempt to interpret among the conflicting views of the word "parallel" as the examiner did in the answer, we find that the recitation in claim 7 and its respective dependent claims 8 through 10 is indefinite as expressed in the conflicting

Appeal No. 1999-1455
Application 08/753,556

views between the brief and reply brief, and the disclosed invention. As disclosed, the segments are not just merely parallel but they must be "connected in parallel." As such, the subject matter set forth in the claims on appeal does not particularly point out and distinctly claim what appellants regard as their invention. In effect, appellants have attempted by claims 7 through 10 to base their patentability determinations on the recitation of the segments being merely parallel. In doing so, the search for breadth has in effect yielded indefinite claims.

In view of the foregoing, we have reversed the outstanding rejection of claims 8 through 10 under the second paragraph of 112 on the merits and have pro forma reversed the rejection of claims 7 through 10 under 35 U.S.C. § 103. We have also instituted a rejection of claims 7 through 10 under the second paragraph of 35 U.S.C. § 112.

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

Appeal No. 1999-1455
Application 08/753,556

37 CFR § 1.196(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Appeal No. 1999-1455
Application 08/753,556

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

REVERSED
37 CFR § 1.196(b)

James D. Thomas)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
Jerry Smith)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
Anita Pellman Gross)	
Administrative Patent Judge)	

JDT/cam

Appeal No. 1999-1455
Application 08/753,556

Algy Tamoshunas
U.S. Philips Corporation
Intellectual Property Dept.
580 White Plains Road
Tarrytown, NY 10591