

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MOTOSHIGE IGARSHI

Appeal No. 2001-2530
Application No. 09/115,250

ON BRIEF

Before PAK, WARREN and KRATZ, Administrative Patent Judges.
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 16-18. Claim 19, which is the only other pending claim in this application, has been objected to by the examiner as depending from a rejected base claim but would be allowable if rewritten in independent form.

BACKGROUND

Appellant's invention relates to a semiconductor device including an MOS transistor. An understanding of the invention can be derived from a reading of exemplary claim 16, which is reproduced below.

16. A semiconductor device including a MOS transistor comprising:
a semiconductor substrate;
a gate insulating film on said semiconductor substrate;
a gate electrode in which an amorphous layer having a grain size of 0.05 μm or less is formed along the surface of or inside said gate electrode and/or along the side surfaces of said gate electrode; and
a conductor region which is formed in said semiconductor substrate by ion implantation after formation of said amorphous layer.

The sole prior art reference of record applied by the examiner in rejecting the appealed claims is:

Saida et al. (Saida)	5,866,930	Feb. 02, 1999 (filed Aug. 23. 1996)
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In addition, the examiner refers to the following references in responding to appellant's arguments:

Hseih	4,688,078	Aug. 18, 1987
Matsukawa et al. (Matsukawa)	5,172,196	Dec. 15, 1992
Jain et al. (Jain)	5,290,727	Mar. 01, 1994
Sandhu et al. (Sandhu)	5,506,166	Apr. 09, 1996

Claims 16-18 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Saida.

We refer to the brief and reply brief and to the answer for a complete exposition of the opposing viewpoints expressed by appellant and the examiner concerning the issues before us in this appeal.

OPINION

Having carefully considered each of appellant's arguments set forth in the brief and reply brief, appellant has not persuaded us of reversible error on the part of the examiner. Accordingly, we will affirm the examiner's rejection for substantially the reasons set forth by the examiner in the answer. We add the following for emphasis.

Appellant states that the "appealed claims stand or fall together . . ." (brief, page 3, item No. VII.). Consequently, we select claim 16 as the representative claim in deciding this appeal. See 37 CFR § 1.192(c)(7)(2000).

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d

1429, 1431 (Fed. Cir. 1997); accord Glaxo Inc. v. Novopharm Ltd., 52 F.3d 1043, 1047, 34 USPQ2d 1565, 1567 (Fed. Cir. 1995).

In the case before us, the examiner (answer, pages 3-5) has correctly determined that Saida discloses, either expressly or inherently, every limitation of representative claim 16. In particular, in the paragraph bridging pages 3 and 4 of the answer, the examiner properly explains how representative claim 16 reads on structure disclosed by Saida et al.

Appellant does not contest the examiner's determination that a MOS transistor reads on the EEPROM disclosed by Saida (see, e.g., drawing figures 9A-D), except for appellant's contention that the interpoly dielectric and control gate included in Saida's EEPROM are excluded by the language of claim 16.

During examination proceedings, claim language is given its broadest reasonable interpretation consistent with the specification as it would have been interpreted by one of ordinary skill in the art. See In re Graves, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995). When the transistional term "comprising" is used in a claim, such a term is interpreted as including not only the recited elements or components, but also other elements or components not recited. See Vehicular

Techs. v. Titan Wheel Int'l, Inc., 212 F.3d 1377, 1383, 54 USPQ2d 1841, 1845 (Fed. Cir. 2000).

Here, appealed claim 16, by virtue of using "comprising," does not exclude an interpoly dielectric and control gate as part of the claimed device. Nor is there any limiting definition in the specification for the claimed MOS transistor which would exclude the interpoly dielectric and control gate structure of Saida.

While we agree with appellant that claim 16 should be read in light of the specification in giving that claim its broadest reasonable interpretation, we do not agree that limitations with respect to problems being addressed, such as impurity diffusion, during manufacturing steps and purportedly solved as disclosed in the specification must be imported into the claims. As indicated above, the "MOS transistor" language of representative appealed claim 16 does not require a transistor that is limited to "a basic field effect transistor comprising a single gate electrode . . ." as argued by appellant (brief, page 6). Nor does it exclude the EEPROM disclosed by Saida.

Additionally, appellant's reference to another patent (U.S. Patent No. 4,868,619) at page 6 of the brief is noted. However, appellant has not fairly explained how U.S. Patent No. 4,868,619

buttresses the claim construction viewpoint that has been advanced in the briefs or otherwise supports appellant's position.

Moreover, representative claim 16 is not drawn to a particular method that involves a sidewall spacer formation etching step and a source/drain region formation step as discussed by appellant in the brief but rather to a semiconductor device.

On this record, appellant has not persuaded us of reversible error in the examiner's determination that representative claim 16 does not specify a transistor that differs structurally from the transistor of Saida.¹ Consequently, we shall affirm the examiner's stated rejection.

¹ See 37 CFR § 1.192(a)

CONCLUSION

The decision of the examiner to reject claims 16-18 under 35 U.S.C. § 102(e) as being anticipated by Saida is affirmed.

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

AFFIRMED

CHUNG K. PAK)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES F. WARREN)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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Appeal No. 2001-2530
Application No. 09/115,250

Page 8

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