

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VILMOS BANKUTI
and
ALAN CHAGNON

Appeal No. 1999-2584
Application No. 08/562,988

ON BRIEF

Before HAIRSTON, RUGGIERO, and LALL, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the Examiner's rejection of claims 7-12, which are the only claims remaining in the application. Claims 1-6 have been canceled.

The claimed invention relates to a MOSFET package including a gate node, a source node, and a drain node. A resistance is

Appeal No. 1999-2584
Application No. 08/562,988

connected between the gate node and the source node, such resistance providing for continuous discharge of voltage accumulated on the gate-source capacitance.

Claim 7 is illustrative of the invention and reads as follows:

7. An electrically protected MOSFET consisting essentially of:

a MOSFET device having a gate node, a source node and a drain node; and

a resistance connected between the gate node and the source node.

The Examiner relies on the following prior art:

Phipps et al. (Phipps) EP 0 372 820 A2 Jun. 13, 1990
(published European patent application)

Claims 7-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Phipps.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Brief (Paper No. 20) and Answer (Paper No. 21) for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support of the rejection, and the evidence of obviousness

Appeal No. 1999-2584
Application No. 08/562,988

relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Brief along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the Examiner has not established a prima facie case of obviousness with respect to claims 7-12. Accordingly, we reverse.

We also use our authority under 37 CFR § 1.196(b) to enter a new ground of rejection of claims 7-11. The basis for these conclusions will be set forth in detail below.

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, 1074, 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,

Appeal No. 1999-2584
Application No. 08/562,988

17-18, 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 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

Appeal No. 1999-2584
Application No. 08/562,988

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).

It is apparent from the line of reasoning in the Answer that the Examiner has interpreted the language "consisting essentially of" in appealed independent claim 7 as excluding any elements not specified in the claim. It is also apparent that the Examiner has recognized that the Phipps reference, besides disclosing a resistance connected between a gate node and a source node of a MOSFET device as claimed by Appellants, also includes a series of zener diodes connected between the drain node and the gate node. As the basis for the 35 U.S.C. § 103(a) rejection, the Examiner asserts (Answer, pages 4 and 5) the obviousness to the skilled artisan of modifying the semiconductor device structure of Phipps by either eliminating the zener diode drain-gate clamp or by moving it to a separate external package.

After reviewing the disclosure of the Phipps reference in light of the arguments of record, we are in agreement with

Appeal No. 1999-2584
Application No. 08/562,988

Appellants that proper motivation has not been set forth for the Examiner's proposed modification so as to establish a prima facie case of obviousness. The intended purpose of the zener diodes in Phipps is to protect the MOSFET by clamping the sustaining voltage lower than the avalanche voltage in order to dissipate any "fly-back" energy resulting from the switching of the inductive load (Phipps, page 3, right column, lines 29-44). We agree with Appellants (Brief, page 4) that, since any removal of the zener diodes would render the Phipps device unsatisfactory for its intended purpose, there exists no suggestion or motivation to make the proposed modification. See In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

We further find no support on the record for the Examiner's suggestion that Phipps' zener diodes could be moved to a separate circuit package. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make

Appeal No. 1999-2584
Application No. 08/562,988

the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992).

Accordingly, since the Examiner has not established a prima facie case of obviousness, the 35 U.S.C. § 103 rejection of appealed claims 7-12 is not sustained.

Rejection under 37 CFR § 1.196(b)

We make the following new ground of rejection using our authority under 37 CFR § 1.196(b). Claims 7-11 are rejected under 35 U.S.C. § 102(b) as being anticipated by Phipps which, as illustrated in Figure 2, discloses a power MOSFET device with the requisite resistance 29 connected between the gate node 20 and source node 21. In making this rejection, we have construed the transitional phrase "consisting essentially of" in claim 7 as equivalent to the open-ended term "comprising" which does not exclude any additional elements such as the drain-gate zener diodes in Phipps.¹ In our view, the zener

¹ In contrast to claim 7, independent claim 12 utilizes the closed-ended transitional phrase "consisting of" which excludes any elements not present in the claim.

Appeal No. 1999-2584
Application No. 08/562,988

diodes in Phipps, which operate to dissipate inductive energy through a drain-gate clamping technique, do not materially affect the basic and novel characteristics of Appellants' invention which involves a discharge of electrostatic build up between the gate and source nodes. Our review of the record reveals no evidence presented by Appellants to satisfy their burden of showing that the introduction of Phipps' zener diodes would materially change the characteristics of Appellants' invention. See In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) and PPG Indus., Inc. v. Guardian Indus. Corp., 156 F.3d 1351, 1354, 48 USPQ2d 1351, 1353-54 (Fed. Cir. 1998).

In summary, we have reversed the Examiner's 35 U.S.C. § 103(a) rejection of claims 7-12. We have entered a new ground of rejection against claims 7-11 under 37 CFR § 1.196(b).

As indicated supra, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b). 37 CFR § 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

Appeal No. 1999-2584
Application No. 08/562,988

37 CFR § 1.196(b) also provides that the appellant,
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 (37
CFR § 1.197(c)) as to the rejected claims:

Appeal No. 1999-2584
Application No. 08/562,988

(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

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)

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	
)	BOARD OF PATENT
JOSEPH F. RUGGIERO)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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)	
PARSHOTAM S. LALL)	
Administrative Patent Judge)	

JFR:hh

Appeal No. 1999-2584
Application No. 08/562,988

Appeal No. 1999-2584
Application No. 08/562,988

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