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Timothy M. Honeycutt Attorney at Law 37713 Parkway Oaks Ln. Magnolia, TX 77355			SALERNO, SARAH KATE	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SETH PREJEAN, DALES KENT, RONNIE BRANDON,
GAMAL REFAI-AHMED, MICHAEL Z. SU, MICHAEL BIENEK,
JOSEPH SIEGEL, and BRYAN BLACK

Appeal 2015-005087
Application 12/860,256
Technology Center 2800

Before BRADLEY R. GARRIS, KAREN M. HASTINGS, and
JENNIFER GUPTA, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1–12 and 21–24. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We REVERSE.

¹ Advanced Micro Devices, Inc., and ATI Technologies ULC are stated to be the real parties in interest (App. Br. 4).

Claim 1 is illustrative of the appealed subject matter (emphasis added to identify disputed limitation):

1. A method of manufacturing, comprising:
 - applying a thermal interface tape to a side of a semiconductor wafer including at least one semiconductor chip, the at least one semiconductor chip having plural front side interconnects *and plural backside interconnects*, the thermal interface tape being positioned on the at least one semiconductor chip over the backside interconnects; and
 - singulating the at least one semiconductor chip from the semiconductor wafer with at least a portion of the thermal interface tape still attached to the semiconductor chip.

App. Br. 30 (Claims Appendix).

Independent claims 8 and 21 are also drawn to methods that include a step of applying a thermal interface tape to a semiconductor chip having plural front side interconnects and plural backside interconnects such that the tape is positioned over the backside interconnects, corresponding to the disputed limitation of “plural backside interconnects” in claim 1.

The Examiner rejected claims 1 and 21 under 35 U.S.C. § 102(b) as being anticipated by Lu (U.S. 2008/0001268 A1, published Jan. 3, 2008). The Examiner also maintains the grounds of rejection under 35 U.S.C. § 103 as listed on pages 15 and 16 of the Appeal Brief (*see* also Ans. 2–8); but the only dispute in this case is whether Lu identically discloses “plural backside interconnects” as required in each of the claims.

PRINCIPLES OF LAW

[U]nless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing

claimed and, thus, cannot anticipate under 35 U.S.C. § 102.

Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1371 (Fed. Cir. 2008).

“[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification.” *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1256 (Fed. Cir. 2007) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). *See also In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (The scope of the claims in patent applications is not determined solely on the basis of the claim language, but upon giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art.) (citations omitted); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (“[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” (Citation omitted)).

ANALYSIS

Appellants argue that the Examiner has not shown how Lu identically discloses “plural backside interconnects” as required by the disputed claims. A preponderance of the evidence supports Appellants’ position.

Appellants urge that one of ordinary skill in the art would not consider the backside metallurgy layer 240 (BSM) of Lu “plural backside interconnects” as required by the claims (App. Br. 18–26). Appellants state that in light of the Specification, one of ordinary skill in the art would understand that “plural backside interconnects” are multiple spaced apart interconnect structures such as illustrated by I/O pads 100 and 105 (Spec. ¶¶ 28 and 35; Fig. 2; App. Br. 22).

Contrary to the Examiner's position that "plural backside interconnects" encompasses Lu's continuous BSM layer because it may comprise multiple layers (Ans. 9), we conclude that the plain meaning of "plural backside interconnects" requires multiple (more than one) spaced apart interconnect structures as defined and described in the Specification. The Examiner has not adequately explained how one of ordinary skill would have considered Lu's BSM layer to be plural interconnects. Thus, on this record, Lu's BSM layer falls short of being "plural backside interconnects" as required by the claims when properly interpreted in light of the Specification. Therefore, we agree with Appellants that the Examiner has taken an unreasonably broad interpretation of the aforementioned claim limitation when considered in light of the Specification for the reasons explained in the Appeal Brief and, in doing so, erred in finding that Lu discloses the claimed subject matter of a semiconductor chip having "plural backside interconnects." As such, we cannot sustain the anticipation rejection based on Lu as applied to independent claims 1 and 21.

Accordingly, the Examiner's 35 U.S.C. § 102 rejection of claims 1 and 21 is reversed.

The Examiner fails to rely upon any evidence that the other applied prior art teaches or suggests the use of "plural backside interconnects" as claimed.² Thus, the Examiner's 35 U.S.C. § 103 rejections of the remaining claims are also reversed.

² The Board relies on the involved parties to focus the issues and decides those issues based on facts and arguments presented by the involved parties. *See Ex Parte Frye*, 293 F. 1013 (BPAI 2010 (precedential)). While the Board is authorized to enter a new ground of rejection, this authority is

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DECISION

The Examiner's decision is reversed.

ORDER

REVERSED

discretionary. See 37 C.F.R. § 41.77(b). We decline to consider the obviousness of providing plural backside interconnects as an alternative to the BSM layer of Lu since the issue is not before us.