



UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HO-JEONG MOON
and KYU-JIN LEE

Appeal 2008-005829
Application 10/121,515
Technology Center 2800

Decided:¹ July 22, 2009

Before JAMES T. MOORE and ALLEN R. MacDONALD, *Vice Chief Administrative Patent Judges*, and ADRIENE LEPIANE HANLON, TERRY J. OWENS, and MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

COLAIANNI, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1 through 19, which are all of the claims pending in the above-identified application. We have jurisdiction pursuant to 35 U.S.C. § 6.

We REVERSE.

STATEMENT OF THE CASE

The subject matter on appeal is directed to a multi-chip package. (Claims 1 and 19). The Examiner rejects claims 1-19 under 35 U.S.C. § 103(a) over Kunii² (JP 06-268113, published Sept. 22, 1994) in combination with Schulman (US 5,750,926, published May 12, 1998), Goto³ (WO 90/16141, published Dec. 27, 1990), and/or Carr (US 3,289,046, published Nov. 29, 1966).⁴

² Our reference to Kunii is to the translation thereof prepared for the U.S. Patent and Trademark Office by Akiko Smith (PTO 2007-5542, July 20, 2007).

³ Our reference to Goto is to the translation thereof prepared for the U.S. Patent and Trademark Office by FLS, Inc. (PTO 08-2828, March 2008).

⁴ The Examiner states that "Sono et al. (U.S. 5,703,398) *could be used* as a primary reference . . ." (Ans. 3, FN 1) (emphasis added). However, it is clear that Sono is not positively included in the statement of rejection as the Examiner makes no other reference to Sono in the Answer. Therefore, we will not consider this reference in determining the propriety of the Examiner's rejection. *See In re Hoch*, 428 F.2d 1341, 1342 n.3 (CCPA 1970) ("[W]here a reference is relied on to support a rejection, whether or not in a 'minor capacity,' there would appear to be no excuse for not positively including that reference in the statement of the rejection.").

ISSUE

Have Appellants shown reversible error in the Examiner's determination that Kunii teaches a multi-chip package having the feature "the heat dissipater is not mechanically coupled to an entire portion of said first and second surfaces" recited in claims 1 and 19 within the meaning of 35 U.S.C. § 103(a)? We decide this issue in the affirmative.

RELEVANT FINDINGS OF FACT (FF)

1. The originally filed drawings, namely Figures 3, 4, and 5, illustrate a heat dissipater 30 that is not mechanically coupled to an entire portion of the first surface 25 and is not mechanically coupled to an entire portion of the second surface 29 of a substrate 20 (Spec. ¶¶ [0024]; [0025]; [0028]).
2. The Examiner states that Kunii teaches a substrate having "only a portion of one of its surfaces . . . connected while the other surface has its entire portion connected." (Ans. 8-9). The Examiner states that "[m]echanical coupling is simply a bond adherence between materials, which is achieved . . . [via heat-dissipating member] 10 . . . [and fibrous metal material] 11." (Ans. 8).
3. Examiner does not direct us to any teaching or suggestion in Schulman regarding this disputed claim feature.

PRINCIPLE OF LAW

During examination, "claims . . . are to be given their broadest reasonable interpretation consistent with the specification, and . . . claim language should be read in light of the specification as it would be

interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

ANALYSES AND CONCLUSIONS

We begin by noting that claims 1 and 19 require multi-chip packages having the feature "the heat dissipater is not mechanically coupled to an entire portion of said first and second surfaces." Giving this claim feature its broadest reasonable interpretation consistent with the Specification, we determine that this claim feature requires that a heat dissipater is not mechanically coupled to an entire portion of each of the first surface *and* the second surface of the substrate. This is a reasonable interpretation in light of the Specification since the originally filed drawings, namely Figures 3, 4, and 5, illustrate a heat dissipater 30 that is not mechanically coupled to an entire portion of each first surface 25 *and* second surface 29 of the substrate 20. (FF 1).

The Examiner alleges that

the claim only precludes the entire surface of both the first and second surfaces from being entirely coupled. . . . [and that] the claim also encompasses other embodiments like that disclosed in Kunii where only a portion of one of its surfaces is connected while the other surface has its entire portion connected.

(Ans. 8-9).

We disagree because the Examiner's claim construction is inconsistent with the Specification as discussed above.

Since one of Kunii's entire surfaces is mechanically coupled to a heat dissipater, we cannot agree with the Examiner that Kunii meets this disputed claim feature. (FF 2). Moreover, the Examiner does not direct us to any

teaching or suggestion in Schulman regarding this disputed claim feature.
(FF 3).

Thus, it follows that Appellants have shown reversible error in the Examiner's determination that Kunii teaches a multi-chip package having the feature "the heat dissipater is not mechanically coupled to an entire portion of said first and second surfaces" recited in claims 1 and 19 within the meaning of 35 U.S.C. § 103(a).

Because the Examiner relies on Kunii to satisfy the disputed feature in each rejection on appeal, we reverse all of the § 103 rejections made by the Examiner.

ORDER

In summary, all of the rejections made by the Examiner are reversed.
Accordingly, the Examiner's decision is reversed.

REVERSED

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