

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

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte Terri J. Brownfield

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Appeal No. 2003-0524  
Application No. 09/593,816

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ON BRIEF

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Before KIMLIN, PAWLIKOWSKI and MOORE, Administrative Patent Judges.  
MOORE, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-8. Claims 9-13 stand withdrawn as directed to non-elected subject matter. Thus, only claims 1-8 are before us on this appeal.

REPRESENTATIVE CLAIM

The appellant has indicated (Brief, page 3) that the claims will stand or fall together. Accordingly, all the claims will stand or fall together, and we select claim 1, the broadest independent claim as representative of all of the claims on appeal. Note In re Dance, 160 F.3d 1339, 1340 n.2, 48 USPQ2d 1635, 1636 n.2 (Fed. Cir. 1998); In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137

(Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Claims 1 and 5 are illustrative of the subject matter on appeal and read as follows:

1. A carrier member for seating a device having a plurality of solder terminal[s], the carrier member comprising:

a substrate having a plurality of landing pads thereon; and

a plurality of leads on the substrate which are in electrical communication with the landing pads on the substrate; wherein at least one of the plurality of landing pads has a depression therein adapted for seating at least one of the solder terminals on the device.

5. The carrier member of claim 1, wherein the plurality of landing pads comprise eutectic solder.

#### The References

In rejecting the claims under 35 U.S.C. § 103(a), the examiner relies upon the following references:

Glenn et al. (Glenn) (filed Jul. 07, 1999)	6,228,676 B1	May 08, 2001
Saitoh (filed Apr. 14, 1999)	6,291,775 B1	Sep. 18, 2001

Applicant's Admitted Prior Art, figure 1, pages 1 and 2 (AAPA)

#### The Rejections

Claims 1-4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Saitoh in view of AAPA.

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Claims 5-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Saitoh and AAPA as applied to claim 1, further in view of Glenn.

#### The Invention

The invention relates to a carrier member for seating a semiconductor device. The carrier member comprises a substrate with a plurality of landing pads. At least one of the landing pads has a depression therein which is adapted for seating at least one of the solder terminals on the device. (Appeal Brief, page 3, last line - page 4, line 3).

#### The Rejection of Claims 1-4 Under 35 U.S.C. § 103(a)

The examiner has found that Saitoh teaches a carrier member for seating a device having a plurality of solder terminals, the carrier member comprising a substrate having a plurality of landing pads thereon. The examiner interprets the elements having depressions located above elements 1 as being landing pads. The examiner has also found that Saitoh teaches a plurality of leads on the substrate which are in electrical communication with the landing pads on the substrate, wherein at least one of the plurality of landing pads has a depression therein adapted for seating at least one of the solder terminals on the device. (Examiner's Answer, page 4, lines 5-10).

The examiner states that, as it is clear from figure 2 that the terminals seating in the depressions of the landing pads are solder terminals, the claimed structure would have been obvious over Saitoh alone. (Examiner's Answer, page 4, lines 10-12). Alternatively, the examiner notes that AAPA teaches solder terminals in figure 1. The examiner then alternatively concludes that it would have been obvious to use solder terminals in Saitoh's device to obtain good electrical contact between the chip and the landing pad. (Examiner's Answer, page 4, lines 13-17).

On the other hand, the appellant urges that there is no factual basis to support the Examiner's determination that the landing pad is the portion above element 1 (Appeal Brief, page 5, lines 2-4).

We agree with the appellant. The examiner's rejection appears to be founded on the assumption that the trapezoidally shaped portion containing what appears to be a depression is a part of the landing pad on the substrate. It is clear from a reading of Saitoh that the lands (illustrated as non bonded in Figure 10) are the lower, rectangular portion, and that the upper portion which the examiner refers to as containing a depression is not a part of the landing pad. Consequently, we disagree with the examiner that a teaching of the claimed depression exists in Saitoh. We therefore reverse this rejection.

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The Rejection of Claims 5-8 Under 35 U.S.C. § 103(a)

Claim 5 recites the limitation that the bonding pads comprise eutectic solder. The examiner has found that Glenn discloses eutectic solder bonding pads, and the appellant urges that Glenn does not cure the argued deficiencies in the combination of AAPA and Saitoh. We agree with the appellant. As claims 5-8 depend from claim 1, and we have reversed that rejection for the reasons stated above, we consequently reverse this rejection as well.

Summary of Decision

The rejection of claims 1-4 under 35 U.S.C. § 103(a) over Saitoh and AAPA is reversed.

The rejection of claims 5-8 under 35 U.S.C. §103(a) over Saitoh and AAPA in view of Glenn is reversed.

**REVERSED**

EDWARD C. KIMLIN )  
Administrative Patent Judge )  
)  
)  
) BOARD OF PATENT  
BEVERLY A. PAWLIKOWSKI )  
Administrative Patent Judge ) APPEALS AND  
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) INTERFERENCES  
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JAMES T. MOORE )  
Administrative Patent Judge )

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