

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 46

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TRUNG T. DOAN, RANDHIR P. S. THAKUR and YAUH-CHING LIU

Appeal No. 1999-1548
Application No. 08/859,629

ON BRIEF

Before KRASS, DIXON and BARRY, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

SUPPLEMENTAL DECISION

This decision is supplemental to our previous decision of September 27, 2001.

In that decision, we reversed the examiner's rejection of claims 53-98 under 35 U.S.C. § 112, second paragraph, and remanded the case to the examiner for additional arguments, relative to the rejection of claims 53-98 under 35 U.S.C. § 103, regarding the meaning to be given "planarization" layers and to submit specific showings of the coefficients of thermal expansion of the materials shown in the applied references in order to demonstrate that the coefficients of thermal expansion of such

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materials are, or are not, as claimed.

In response to our remand, appellants submitted Paper No. 44, a request for reconsideration, contending that this Board has “sufficient information to render a decision” regarding the rejections under 35 U.S.C. § 103. More specifically, appellants contend that the term “planarization” is defined adequately “in view of its common usage in the semiconductor arts.” Appellants further contend that this Board can adequately assess the file history to determine whether the examiner has established a prima facie case of obviousness within the meaning of 35 U.S.C. § 103.

The examiner’s response [Paper No. 45] is to agree with appellants’ remarks “in its entirety.”

Thus, neither the examiner nor appellants has deemed it advisable or necessary to respond to our remand in any substantive manner so as to further explain their positions and aid in our deliberation. Accordingly, we make our decision on the evidence, or lack thereof, before us.

With regard to the examiner’s position that Kuecher discloses a “first planarization layer” 5, a barrier film 6 and a “second planarization layer” 9, our review of Kuecher shows that layers 5 and 9 appear quite flat and, hence, constitute “planarization layers” in our view. We note that appellants were given an opportunity to explain to us why these layers should not be considered “planarization layers” and appellants could not or would not do so, preferring, instead, to rely on “common usage”

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of the term, without defining what that would be, and specifically telling this Board that it has “sufficient information to render a decision.” Accordingly, we hold that Kuecher discloses the “planarization layers,” as claimed.

Further, since we have no credible arguments from appellants regarding the “planarization layers” in Samata, Maeda and/or Hishida, we hold that these references also disclose “planarization layers,” as interpreted by the examiner.

Next, claims 60, 65, 82 and 93, and claims dependent therefrom, include the limitation that the planarization layers and the barrier layer have first, second and third coefficients of thermal expansion and that these coefficients of thermal expansion are different from one another, wherein the third coefficient of thermal expansion (of the barrier layer) is smaller than the first and second coefficients of thermal expansion (of the planarization layers).

Moreover, independent claim 75 recites that the planarization layers have first and second “reflow temperatures” and that the barrier film isolates the first planarization layer from the second planarization layer “at a temperature greater than at least one of said first and second reflow temperatures.”

The examiner’s position is that these claim recitations are “merely recitations of the same materials, in functional form, i.e. thermal expansion and reflow temperatures of these same materials” [answer-page 10]. Such an explanation does not make the claim language, regarding the specific relationships between the coefficients of

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thermal expansion and the reflow temperatures, prima facie obvious, within the meaning of 35 U.S.C. § 103.

Although the examiner was given ample opportunity, in accordance with our remand, to identify exactly how the claimed terms are met by the applied references, e.g., that the references teach a second coefficient of thermal expansion being substantially smaller than the first and third coefficients of thermal expansion, the examiner could not, or would not, do so. Accordingly, even though appellants also refused our specific request to show that the coefficients of thermal expansion of the cited materials in the references and the reflow temperatures and the combination of layers in the applied references are not as claimed, the burden was on the examiner, in the first instance, to establish that the claimed subject was prima facie obvious. This, the examiner has not done with regard to the claims containing the coefficients of thermal expansion and reflow temperatures.

Accordingly, for the above reasons, we will not sustain the rejection of claims 60, 61, 65-85 and 93 under 35 U.S.C. § 103 but we will sustain the rejection of claims 53-59, 62-64, 86-92 and 94-98 under 35 U.S.C. § 103.

Further, as indicated in our previous decision, we have also not sustained the rejection of claims 53-98 under 35 U.S.C. § 112, second paragraph.

Accordingly, the examiner's decision is affirmed-in-part.

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

AFFIRMED-IN-PART

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOSEPH L. DIXON)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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LANCE LEONARD BARRY)	
Administrative Patent Judge)	

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MICHAEL G. FLETCHER
FLETCHER & ASSOCIATES
PO BOX 692289
HOUSTON, TX 77269-2289