The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KURT P. WACHTLER,
DAVID N. WALTER,
and
LARRY J. MOWATT

Appeal No. 1998-0152
Application No. 07/966,645

ON BRIEF

Before THOMAS, KRASS, and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

ON REQUEST FOR REHEARING

Appellants request that we reconsider that part of our decision of September 30, 2000 wherein we sustained the rejection of claims 26-42, 44, 46-54, 56, 57 and 59-63.

Appellants first argue that Eichelberger “has nothing whatsoever to do with optical interconnects or the transmission or reception of optical energy in any form.”

(Request for Reconsideration-page 2). This argument is not persuasive since the examiner recognized this deficiency of Eichelberger and relied on Kornrumpf to supply the deficiency.

Appellants also take exception to the examiner's identification of a ceramic package 12 having a metal top 276 in Eichelberger because Eichelberger's disclosure identifies element 276 as a "ceramic lid." Appellants do not identify any particular claim to which they direct their argument. However, it is clear that independent claim 26 contains no limitation of a "metal top." With regard to dependent claim 58, where such a limitation is explicitly recited, we agreed with appellants (see page 9 of our decision) and reversed the rejection of claim 58.

Appellants argue that Eichelberger does not teach or suggest the claimed "cavity." However, as explained at page 4 of our decision, Eichelberger does refer to a prior art structure using "grooves or wells" for placement of integrated circuits. A "well" is a clear suggestion of a "cavity." Moreover, as indicated at page 5 of our decision, Kornrumpf clearly suggests, in columns 4-6, the use of a cavity into which an integrated circuit is placed.

Appellants argue that the examiner admits that Eichelberger does not teach or suggest the use of an optical receiver and/or transmitter facing away from the substrate. This is not a convincing argument because it was the examiner's contention that it is Kornrumpf that teaches the optical receiver positioned as claimed, making it irrelevant to the rejection that Eichelberger does not disclose the optical receiver/transmitter facing away from the substrate.

Finally, appellants argue that claim 26 requires forming a multilayer thin film overlay on the surface of the device <u>and</u> on a surface of the substrate adjacent and substantially parallel with the surface of the semiconductor device. However, the examiner explained, at pages 3-4 of the answer, how Eichelberger's multilayer thin film overlay 18, 19 meets this claim limitation and appellants' response was merely to contend that such was not shown by Eichelberger, without pointing out any error in the examiner's position. Now, appellants contend that this claim language "requires that both the surface of the semiconductor device . . . and the substrate surface . . . be parallel to each other and that the thin film extend over both of these parallel surfaces. No

such step is found in Eichelberger" (Request for Reconsideration-page 3).

Figure 1 of Eichelberger shows a thin film overlay 18 on the surface of the device 14 and on the surface 13 of substrate 12. While the surfaces of the device and the substrate in Figure 1 of Eichelberger are not "adjacent and substantially parallel," as claimed, the surfaces would be "adjacent and substantially parallel" if the device 14 were placed within a cavity in the substrate 12 rather than on the surface of substrate 12. Yet, as we explained in our decision, at pages 4-5, and herein, supra, both Eichelberger and Kornrumpf suggest that a semiconductor device may be placed in a cavity in a substrate wherein the surface of the device is substantially at the level of the substrate surface. Clearly then, it would have been obvious to the skilled artisan, within the meaning of 35 U.S.C. § 103, to have placed the device 14 of Eichelberger in a cavity within substrate 12, resulting in the thin film 18 being formed on the surface of the device and on the surface of the substrate adjacent and substantially parallel with the surface of the device.

Since nothing in appellants' Request for Reconsideration (Rehearing) of October 19, 2000 convinces us of any error in our decision of September 30, 2000, we grant appellants' request to the extent that we have reconsidered our decision but the request is denied with respect to making any changes therein.

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

DENIED

JAMES D. THOMAS Administrative Patent Judge	)	
ERROL A. KRASS Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ANITA PELLMAN GROSS Administrative Patent Judge	)	

EAK:hh

Ronald O. Neerings
TEXAS INSTRUMENTS, INC.
P.O. Box 655474, M/S 219
Dallas, TX 75265