

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* GERALD H. NEGLEY

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Appeal 2008-1738  
Application 10/818,619  
Technology Center 2800

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Decided: July 18, 2008

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Before EDWARD C. KIMLIN, CHARLES F. WARREN, and  
THOMAS A. WALTZ, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 21 and 23-29. Appellant is not appealing the Examiner's rejection of claims 15-17, 19, 20 and 22, as set forth in the final rejection and repeated in the Answer. Claims 21 and 23 are illustrative:

21. The method of Claim 15, wherein forming the via comprises:
- forming the via such that the via and the first electrical contact are offset with respect to each other.
23. A method of forming a light-emitting device, comprising:
- forming an active region on a first substrate;
- forming a via between first and second opposing surfaces in a second substrate;
- forming a contact plug in the via; and
- transferring the active region from the first substrate to the second substrate so as to be disposed on the first surface.

The Examiner relies upon the following references in the rejection of the appealed claims:

Nunoue	5,905,275	May 18, 1999
Teraguchi	6,201,265 B1	Mar. 13, 2001
Kwak	6,657,237 B2	Dec. 2, 2003

Appellant's claimed invention is directed to a method of forming a light-emitting device comprising an active region on a first surface of a substrate, a contact plug in a via formed between the opposing surfaces of the substrate, a first electrical contact on the active region, and a second electrical contact on the second surface of the substrate that is coupled to the active region by the contact plug. Claim 21 recites that the via and the first electrical contact are offset with respect to each other. The method of independent claim 23 entails transferring an active region on a first substrate to a second substrate which contains a via and a contact plug therein.

Appealed claim 21 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Teraguchi.<sup>1</sup> Appealed claim 28 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Teraguchi in view of Kwak. Also, appealed claims 23-27 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Teraguchi in view of Nunoue.

We consider first the Examiner's § 102 rejection of claim 21. It is the Examiner's position that Figure 32 of Teraguchi depicts electrode 8a offset with respect to the via which contains electrode 49. Appellant, in response, submits the following:

The claim language does not state that the via and first electrical contact are **partially** offset, but states that the via and first electrical contact are offset with respect to each other, i.e., they do not overlap each other. Because the first electrode 49 and the second electrode 8a shown in FIG. 32 of Teraguchi substantially overlap with each other, they are not offset with respect to each other.  
(Reply Br. 2, third para., emphasis added).

We agree with the Examiner that Appellant's argument is not germane to the claimed subject matter. Appellant's Specification does not state that the definition for the claim term "offset" is completely offset with no overlap. The Specification simply discloses that "the via may be formed so that the via and the first electrical contact 235 are offset from one another" (page 7, lines 20-21). Accordingly, inasmuch as claim language must be

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<sup>1</sup> The statement of the § 102 rejection in the Examiner's Answer does not include claim 21. However, the body of the Examiner's rejection includes the rejection of claim 21 and Appellant's Brief acknowledges the § 102 rejection of claim 21 and presents an argument against such rejection. Consequently, the Examiner's omission in the statement of the rejection is considered harmless error.

given its broadest reasonable interpretation during prosecution, we concur with the Examiner that claim 21 encompasses methods wherein the via and the first electrical contact are formed partially offset with respect to each other in an overlapping relationship. Hence, we will sustain the Examiner's § 102 rejection of claim 21.

The Examiner's rejection of claims 23-29 is another matter. Claim 23 requires that the active region on a first substrate is transferred to a second substrate that comprises a via and a contact plug formed therein. The Examiner acknowledges that "Teraguchi does not disclose transferring the active region 3-7 from the first substrate 1 to the second substrate so as to be disposed on the first surface" (Ans. 5, last para.). The Examiner relies upon Nunoue for the obviousness of modifying "Teraguchi's device with the teaching of Nunoue et al. to provide a second substrate in order to cleave the device easily" (Ans., sentence bridging pages 5-6). However, as pointed out by Appellant, such a modification of Teraguchi does not result in the claimed method. Placing the second substrate 26 of Nunoue on the device of Teraguchi does not result in transferring an active region from Teraguchi's substrate to a second substrate comprising a contact plug in a via. Substrate 26 of Nunoue contains no via or plug within the via. Since neither Teraguchi nor Nunoue teaches or suggests transferring an active layer to a substrate having a via and contact plug therein, there is no factual basis to support the Examiner's legal conclusion of obviousness of the claimed subject matter. Accordingly, we will not sustain the Examiner's § 103 rejections of claims 23-29. The Examiner's additional citation of Kwak against claim 28, which depends upon claim 23, does not remedy the deficiency of the combined teachings of Teraguchi and Nunoue.

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Since Appellant does not argue the Examiner's final rejection of claims 15-17, 19 and 20 under § 102 over Teraguchi, and the final rejection of claim 22 under § 103 over Teraguchi in view of either Kwak or Nunoue, both repeated in the Answer, we will summarily affirm these rejections.

In conclusion, based on the foregoing, the Examiner's § 102 rejection of claims 15-17 and 19-21 is sustained, as is the § 103 rejection of claim 22. However, the Examiner's § 103 rejection of claims 23-29 is reversed. Accordingly, the Examiner's decision rejecting the appealed claims is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(effective Sept. 13, 2004).

**AFFIRMED-IN-PART**

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