

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** KENJI KUNIHARA, YOICHI SHINDO,  
HIROMI MOJIKAWA, TADASHI UMEGAKI, and  
SATORU NAGANO

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Appeal No. 1998-2969  
Application No. 08/317,818

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ON BRIEF

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Before JERRY SMITH, FLEMING, and DIXON, **Administrative Patent Judges**.  
DIXON, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1, 3-5, and 7. Claims 8 and 9 have been indicated as allowable by the examiner and claim 2 has been canceled. Claim 6 has unknown status.<sup>1</sup>

We REVERSE.

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<sup>1</sup> We note that the examiner indicated in the final rejection that claim 6 was rejected on the cover sheet, but this claim was not addressed in the final rejection or the answer. Therefore, we do not address it in our decision.

## BACKGROUND

The appellants' invention relates to a resin-sealed laser diode device. The two light-emitting end faces of the diode having two layers thereon, an end-face protecting film and an end-face breakage preventing film of organic silicone resin. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A resin-sealed laser diode device, comprising:
    - a laser diode chip having front and rear light-emitting end faces through which a laser beam from an active layer is emitted forwardly and backwardly;
    - end-face protecting films protecting said light-emitting end faces;
    - a lead frame supporting said chip through a supporting substrate;
    - a sealing resin sealingly isolating said chip from outside air; and
    - an end-face breakage preventing film of organic silicone resin low in an absorption coefficient to a band of wavelengths of said laser beam, for preventing said sealing resin near said light-emitting end faces from being damaged by said laser beam,
- wherein said organic silicone resin is like rubber and contains dimethyl polysiloxane, and wherein said end-face protecting films contain silicon dioxide at least at a surface in contact with said organic silicone resin.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

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Wada et al. (Wada)	EP 0 366 472	May 02, 1990
Amano et al. (Fuji Electronic <sup>2</sup> )	EP 0 484 887	May 13, 1992

Claims 1, 3, 5, and 7 stand rejected under 35 U.S.C. § 102 as being anticipated by Fuji Electronic or in the alternative under 35 U.S.C. § 103 over Fuji Electronic.

Claims 1, 3, and 5 stand rejected under 35 U.S.C. § 102 as being unpatentable over Amano or in the alternative under 35 U.S.C. § 103 over Amano. Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over either Fuji Electronic or Amano. The examiner's answer includes a new grounds of rejection. Claims 1-3<sup>3</sup> stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent 5,335,385 in view of Wada.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 16, mailed Mar. 12, 1997) for the examiner's reasoning in support of the rejections, and to the appellants' brief (Paper No. 15, filed Sep. 12, 1996) and reply brief (Paper No. 17, filed May 9, 1997) for the appellants' arguments thereagainst.

### **OPINION**

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<sup>2</sup> The examiner uses the name Fuji Electronic to refer to this document even though the assignee is Fuji Electric Co. We will refer to it by the same name as the examiner for consistency.

<sup>3</sup> We note that claim 2 has been canceled prior to the rejection. Therefore we do not address this claim.

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

**35 U.S.C. §§ 102 and 103**

Appellants argue that the examiner has not set forth a **prima facie** case of anticipation or obviousness wherein the prior art applied against the claims teaches or suggests only the end face breakage preventing layer and does not teach or suggest the use of two layers (protection film and breakage prevention film) on the end light emitting faces. (See brief at page 6-11.) We agree with appellants. The examiner argues that SiO<sub>2</sub> is taught at column 7 of Fuji Electronic to provide improved benefits. The examiner also discusses that native oxides are inherently grown on semiconductor material surfaces and that these oxides would form a protecting layer. (See answer at pages 2-3.) We find that this is speculation on the part of the examiner which is not supported by the disclosure in the prior art. It appears the examiner is

relying upon the presence of SiO<sub>2</sub> to improve adhesion and native oxides to establish that the prior art of Amano and Fuji Electronic contain both a protecting and breakage preventing films. We disagree with the examiner. Amano and Fuji Electronic clearly state that the SiO<sub>2</sub> is dispersed in a solvent and forms a "slurry" which forms the

breakage preventing layer. (See Fuji Electronic at col. 7.) This slurry forms only one layer and not two layers as the examiner maintains. Appellants argue the native oxides are not formed as the examiner alleges in the answer. (See reply brief at pages 1-3.) The examiner has not responded to appellants' arguments, and the examiner has provided no support for the position advanced in the answer. Therefore, we accept appellants' rebuttal to these unsupported statements by the examiner. Therefore, we cannot sustain the rejection of claims 1, 3, 5, and 7 under 35 U.S.C. §§ 102 and 103. Similarly, we cannot sustain the rejection of claim 4 under 35 U.S.C. § 103 based upon Fuji Electronic or Amano alone.

#### **OBVIOUSNESS-TYPE DOUBLE PATENTING**

Here, the examiner has not set forth an element by element comparison of the claims of the patent to those of the application. Therefore, the examiner has not set forth a **prima facie** case, and we will not sustain the rejection. Furthermore, as discussed above, with respect to the rejection under 35 U.S.C. § 102/103, the disclosure of Amano does not teach or suggest the claimed invention, therefore it should follow that Amano does not claim the same invention as recited in claims 1 and 3, and we cannot sustain the rejection under obviousness-type double patenting.

#### **CONCLUSION**

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To summarize, the decision of the examiner to reject claims 1, 3-5, and 7 under 35 U.S.C. § 102/3 is reversed, and the decision of the examiner to reject claims 1 and 3 under obviousness-type double patenting is reversed.

**REVERSED**

JERRY SMITH	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
MICHAEL R. FLEMING	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
JOSEPH L. DIXON	)	
Administrative Patent Judge	)	

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