

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* BETTINA STEINMANN, ADRIAN SCHULTHESS and MAX HUNZIKER

---

Appeal No. 1996-3320  
Application No. 08/342,955<sup>1</sup>

---

ON BRIEF

---

Before, KIMLIN, WARREN, and KRATZ, *Administrative Patent Judges*.  
KRATZ, *Administrative Patent Judge*.

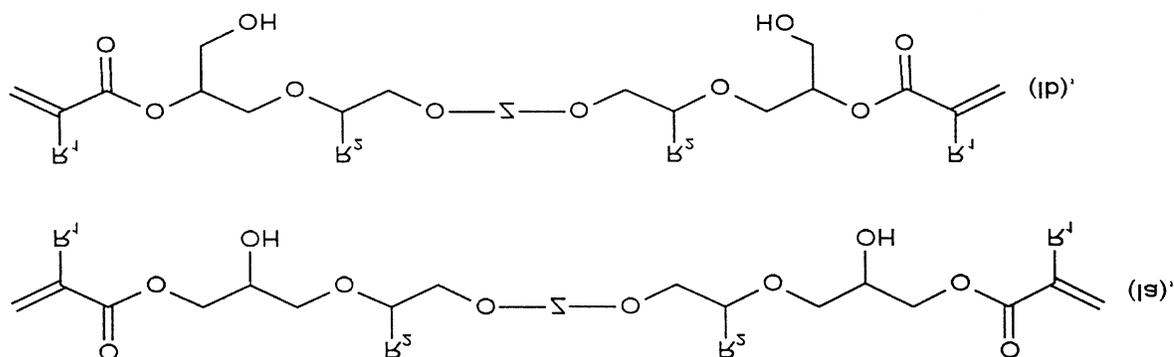
DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 8-12 and 14-18, which are all of the claims pending in this application.

---

<sup>1</sup> Application for patent filed November 21, 1994. According to appellants, this application is a continuation of Application 08/006,444, filed January 21, 1993, now abandoned.

The appellant's invention relates to a photosensitive composition including hydroxyl group containing acrylates and/or methacrylates of formula Ia or Ib (specification, pages



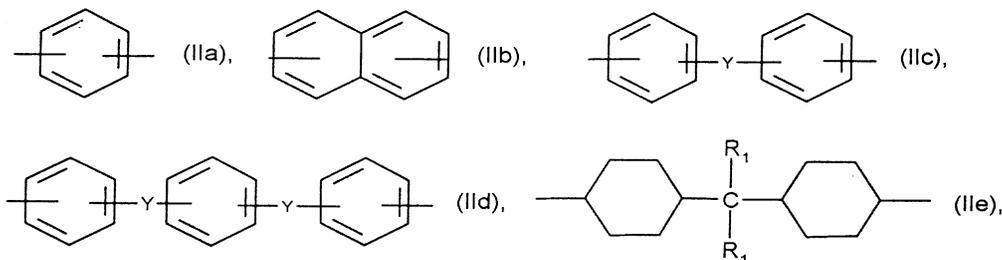
2-4). An

understanding of the invention can be derived from a reading of exemplary claim 8, which is reproduced below.

8. A photosensitive composition consisting essentially of (a) 5-65% by weight of a compound of formula(Ia) or (Ib),

wherein the substituents R<sub>1</sub> are each independently of the other hydrogen or methyl, R<sub>2</sub> is an unsubstituted C<sub>1</sub>-C<sub>20</sub>alkyl group or a C<sub>1</sub>-C<sub>20</sub>alkyl group which is substituted by one or more than one substituent selected from the group consisting of hydroxy, C<sub>6</sub>-C<sub>14</sub>aryl and halogen, an unsubstituted phenyl group or a phenyl group which is substituted by one or more than one substituent selected from the group consisting of C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy or halogen, or is a radical of formula -CH<sub>2</sub>-OR<sub>3</sub>, wherein R<sub>3</sub> is an

unsubstituted C<sub>1</sub>-C<sub>20</sub>alkyl group or a C<sub>1</sub>-C<sub>20</sub>alkyl group which is substituted by one or more than one substituent selected from the group consisting of hydroxy, C<sub>6</sub>-C<sub>14</sub>aryl and halogen, an unsubstituted phenyl group or a phenyl group which is substituted by one more than one substituent selected from the group consisting of C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy and halogen, or is a C<sub>2</sub>-C<sub>6</sub>alkenyl group, a C<sub>2</sub>-C<sub>20</sub>acyl group or an unsubstituted cyclohexylcarbonyl group or a cyclohexylcarbonyl group which is substituted by one or more than one substituent selected from the group consisting of C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy and halogen,  
Z is a group of formulae (IIa)-(IIe)



wherein Y is a direct bond, C<sub>1</sub>-C<sub>6</sub>alkylene, -S-, -O-, -SO-, -SO<sub>2</sub>- or -CO-, and R<sub>1</sub> is hydrogen or methyl, and wherein the aromatic and cycloaliphatic rings of formulae (IIa)-(IIe) are unsubstituted or substituted by one or more than one substituent selected from the group consisting of C<sub>1</sub>-C<sub>6</sub>alkyl, chloro and bromo,

(b) 15-70% by weight of one or more than one bifunctional acrylate or methacrylate having a molecular weight in the range from 150 to 450 and differing from the compound of formula(Ia) or (Ib)

(c) 0-40% by weight of one or more than one monomeric polyfunctional acrylate or methacrylate having a functionality of not less than 3 and a molecular weight of not more than 600,

(d) 0-10% by weight of at least one monofunctional acrylate or methacrylate,

(e) 0-10% by weight of N-vinylpyrrolidone or N-vinylcaprolactam,

(f) 2-10% by weight of at least one photoinitiator, and

(g) 0-60% by weight of at least one urethane acrylate or methacrylate having a functionality of 2-4 and a molecular weight in the range from 500-10000,

such that the sum of the amounts of components(a) to (g) together is 100% by weight.

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

Bagga 1981	4,284,574	Aug. 18,
Lucey 1993	5,180,757	Jan. 19,
		(filed May 16, 1991)
Nawata et al. (Nawata) 1993	5,215,863	Jun. 01,
		(filed Oct. 11, 1991)
Flynn et al. (Flynn) 1993	5,229,252	Jul. 20,
		(filed Oct. 21, 1991)

Claims 8, 9, 12, 14, 17, and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lucey in view of Bagga. Claims 8-12 and 14-18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lucey in view of Bagga further in view of Flynn and Nawata.

#### OPINION

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. In so doing, we find ourselves in agreement with appellants' basic contention that the applied prior art fails to establish a *prima facie* case of obviousness of the claimed subject matter. Accordingly, we will not sustain the examiner's rejection.

At the outset, we note that the examiner has the initial burden of presenting a *prima facie* case of obviousness based on the disclosure of the applied prior art. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

According to the examiner, Lucey discloses "...a radiation curable composition comprising A) 1-70 wt% of a monomer of vinyl ester acrylate monomers... **and/or** B) 0-70 wt% of a prepolymer which can be selected to be conventional epoxy diacrylates... and C) a photoinitiator..." (answer, page 3). The examiner acknowledges that Lucey does not teach a composition containing an acrylate of the herein claimed formula Ia or Ib (answer, page 4).

The examiner notes that the epoxides of the type disclosed by Bagga (a secondary reference relied upon by the examiner) are used by appellants in making appellants' compound of formula Ia or Ib which compound is employed in appellants' claimed composition (answer, page 4). However, the examiner acknowledges that Bagga "does not disclose the making of acrylated epoxides from the disclosed" epoxides of Bagga (answer, page 4).

Nonetheless, in the examiner's view, "... it would have been obvious to one skilled in the art to use the generic

composition as disclosed in the Lucey reference and to replace or use as the epoxide component for making the acrylated polymer/monomer, the epoxide of the Bagga reference to improve the flexibility and lower the viscosity, as taught by Bagga (answer, page 4).

We cannot subscribe to the examiner's position regarding the combined references' teachings as reproduced above. In our view, the examiner has not furnished an adequate evidentiary foundation from which a conclusion of obviousness can be reached. In this regard, we do not find that the use of an acrylate of formula Ia or Ib as claimed herein would have been reasonably suggested for use in the composition of Lucey and would have been rendered obvious within the meaning of 35 U.S.C. § 103 by the teachings of Lucey taken together with Bagga. In particular, the examiner has acknowledged, and we agree, that Bagga does not disclose an acrylate of formula Ia or Ib let alone any suggestion of such an acrylate as being useful for a resin composition as disclosed by Lucey. While Lucey does teach that the prepolymer for use in their composition may be selected from a variety of listed types of acrylates, Lucey does not teach or suggest the use of an acrylate of formula Ia or Ib in

their composition as acknowledged by the examiner. We do not find this general teaching of using an acrylate prepolymer in Lucey sufficiently specific to suggest the use of an acrylate of formula Ia or Ib as claimed herein in their composition notwithstanding that Bagga may disclose a starting material which could have been used for making such a compound. The evidentiary record furnished by the examiner does not suggest any convincing reason(s) to acrylate the epoxide of Bagga for use as a component in the composition of Lucey.

The Flynn and Nawata references are additionally relied upon by the examiner to support the examiner's viewpoint regarding the obviousness of using a mixture of monomer components in the composition of Lucey, but do not cure the above-noted deficiency in the examiner's rejection.

The mere fact that the prior art may be modified to reflect features of the claimed invention does not make the modification obvious unless the desirability of such modification is suggested by the prior art. The claimed invention cannot be used as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious. See In re Fritch, 972

F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Accordingly, on this record, the rejection fails for lack of a sufficient factual basis upon which to reach a conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

Because we reverse on the basis of failure to establish a prima facie case of obviousness, we need not reach the issue of the sufficiency of appellants' showing of alleged unexpected results. See In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987).

Accordingly, the rejections of claims 8, 9, 12, 14, 17, and 18 under 35 U.S.C. § 103 as being unpatentable over Lucey in view of Bagga, and the rejection of claims 8-12 and 14-18 under 35 U.S.C. § 103 as being unpatentable over Lucey in view of Bagga further in view of Flynn and Nawata cannot be sustained.

CONCLUSION

Based on the present record, we are unpersuaded that the examiner has met the initial burden of establishing a prima facie case of obviousness of the claimed composition. The decision of the examiner is reversed.

REVERSED

EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
CHARLES F. WARREN	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
PETER F. KRATZ	)	
Administrative Patent Judge	)	

PFK/jlb

Appeal No. 1996-3320  
Application No. 08/342,955

Page 11

Michael W. Glynn  
CIBA-GEIGY Corporation  
Patent Department  
520 White Plains Road  
P.O. Box 2005  
Tarrytown, NY 10591-9005