

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT D. ALLEN, RICHARD A. DAY, DONALD H. GLATZEL,
WILLIAM D. HINSBERG, JOHN R. MERTZ, DAVID J. RUSSELL,
and GREGORY M. WALLRAFF

Appeal No. 95-4203
Application 07/793,889¹

ON BRIEF

Before DOWNEY, JOHN D. SMITH and GARRIS, Administrative Patent Judges.

DOWNEY, Administrative Patent Judge.

¹Application for November 18, 1991. According to the appellants the application is a continuation-in-part of Application 07/632,032, December 21, 1990; which is a continuation of Application 07/318,536, filed March 3, 1989, now U.S. Patent No. 5,026,624, issued June 25, 1991; which is a continuation-in-part of Application 07/292,173, filed December 30, 1988, now U.S. Patent No. 4,940,651, issued July 10, 1990.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-24. Claims 25-42 remaining in the application are drawn to a non-elected invention and accordingly are not before us.

The subject matter on appeal is directed to photoimageable cationically polymerizable epoxy based coating material.²

In their brief, appellants have grouped (1) claims 1, 2, 4-16 and 17-20 together (2) claim 3 on its own and (3) claims 21-24 together. However, appellants did not present any arguments why the claims as grouped are separately patentable. The examiner has correctly noted appellants' failure in the examiner's answer (page 2) and appellants have not challenged the examiner's position by way of petition under 37 CFR § 1.181. Accordingly, we will decide the appeal and decline to consider the patentability of the claims separately in reaching our decision. Ex parte Schier, 21 USPQ2d 1016, 1019 (Bd. Pat. App. & Int. 1991); Ex parte Ohsumi, 21 USPQ2d 1020, 1022 (Bd. Pat. App. & Int. 1991). Having found that all the claims stand or fall together, we direct our attention to claim 1 which is illustrative of the invention and reads as follows:

² Appellants state on page 10 of their amended brief that "None of the references teach a 28 to 57% [sic] polyol resin and a 43-72% tetrabromo resin as recited in claim 21. This singular statement does not constitute an argument in support of the group claims 21-24 vis-a-vis the obviousness rejection made by the examiner.

1. A photosensitive cationically polymerizable epoxy based imaging system comprising:

an epoxy based resin system having solids comprising between about 10% and about 90% by weight of a polyol resin having a molecular weight between 60,000 to about 130,000;

between about 10% and about 90% by weight of a brominated epoxy resin of a low molecular weight;

from about 0.1 to about 15 parts by weight of a cationic photoinitiator capable of initiating polymerization in said epoxidized resin system upon exposure to actinic radiation;

said resin system being further characterized by having an absorbance of light in the 330 to 700 nm region of less than 0.1 for a 2 mil thick film.

The references relied upon by the examiner are:

Crivello	4,138,255	Feb. 6, 1979
Santorelli	4,578,425	Mar. 25, 1986
Bauer	4,693,961	Sep. 15, 1987

I.

Claims 1-24 stand rejected under 35 U.S.C. § 112, first paragraph, for lack of description of the claimed molecular weight range of 60,000 - 130,000.

The specification discloses molecular weight ranges of 40,000 -130,000 and 60,000-90,000. The examiner concedes that the claimed range is within the disclosed ranges in the instant specification, however he contents that the range of 60,000-130,000 is not.

We reverse this rejection. 35 U.S.C. § 112 does not require that the invention claimed be described in ipsis verbis in order to satisfy the description

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requirement. In re Lukach, 442 F.2d 967, 969, 169 USPQ 795, 796 (CCPA 1971). The examiner argues lack of literal support for the claimed molecular weight range and provides no reasons why a description not in ipsis verbis is insufficient. The examiner also argues that the claimed range was deemed by appellants to be critical. However, the examiner does not provide any evidence to support this argument. In our view, the disclosure of molecular weight ranges of 40,000 - 130,000 and 60,000 - 90,000 is sufficient to establish that the range of 60,000 - 130,000 is part of appellants' invention. In re Blaser, 556 F.2d 534, 538, 194 USPQ 122, 125 (CCPA 1977); In re Eickmeyer, 602 F.2d 974, 981-982, 202 USPQ 655, 662-663 (CCPA 1979); In re Wertheim, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976).

II.

Claims 1-24 stand rejected under 35 U.S.C. § 103 as unpatentable over Bauer in view of Santorelli and Crivello.

After careful consideration of the arguments of appellants and the examiner and of the record before us, we find ourselves in agreement with examiner that appellants' claimed invention would have been obvious to one of ordinary skill in the art at the time of appellants' invention over the applied prior art. Accordingly, the aforementioned rejection will be affirmed.

Bauer teaches epoxy mixture photopolymerizable compositions containing products of epichlorohydrin and bisphenol A, photoinitiator, and other conventional additives. Bauer's epoxy resin has a molecular weight of 20,000 to 60,000 (column 1, line 59). This molecular weight touches the claimed range of between 60,000 to about 130,000. Bauer also teaches the use of brominated epoxies at column, 2, lines 43-47 (see also Example 4 at column 7). Bauer does not teach the use of a cationic photoinitiator. Crivello teaches an epoxy photopolymerizable compositions containing products of epichlorohydrin and bisphenol A are polymerized with cationic photoinitiators. It is the examiner's position that one of ordinary skill in this art would have found it obvious to cationically cure the Bauer epoxy resin mixture with a reasonable expectation of success.³ We agree.

Appellants argue that Bauer is deficient because he lacks a teaching to use a cationic photoinitiator for his epoxy resin system, he includes free radical initiator in his system and he employs a epoxy resin having a molecular wight of 20,000 -60,000. Appellants also argue That Crivello dose not teach combining specific epoxy resins of the claimed invention with the Crivello photoinitiator. Lastly, they argue that there is no suggestion to combine Crivello's cationic photoinitiator with Bauer's free radical polymerization system. We do not find appellants' argument persuasive. Initially we note

³ A discussion of Santorelli is not necessary of our decision.

that Bauer broadly teaches the addition of a photoinitiator to his epoxy system. He teaches that these substances are known and he then identifies various compounds as examples. This list, in our view, is exemplary and not-limited to those compounds named. Bauer's epoxy resin materials, like that of Crivello, include epichlorohydrin-bisphenol A products and are useful in photoimaging systems (See Bauer column 4, lines 11-21 and examples 1-14 and Crivello column 5, lines 20-25 and example 7). Hence, in our view there is ample motivation to employ any and all known photoinitiators, inclusive of Crivello's cationic photoinitiators, for epoxy resin materials from the teachings of the applied prior art with the reasonable expectation of success. Appellants' view that it is required that a second reference suggest the modification of the first reference is without merit. The suggestion to modify the art to produce the claimed invention need not be expressly stated in one or all of the references used to show obviousness. "Rather the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.d. 413, 425, 208 USPO 871,881 (CCA 1981) Appellants' argument that Bauer includes a free radical initiator in his epoxy system is not persuasive. The instant claims by virtue of the term "comprising" do not exclude the addition of a free radical initiator. *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981). As noted previously, the upper end of

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Bauer's epoxy resin molecular weight touches that of appellants' claimed lower end and thus Bauer employs an epoxy resin within the scope of the claims.⁴

Based on the foregoing, we agree with the examiner's conclusion that one having ordinary skill in the art would have found the claimed subject matter prima facie obvious within the meaning of 35 U.S.C. § 103. Appellants advance no arguments with respect to objective evidence of nonobviousness. In re Johnson, 747 F.d 1456, 1460, 223 USPQ 1260, 1263 (Fed. Cir. 1984).

In summary, the 35 U.S.C. § 112 rejection is reversed and the 35 U.S.C. § 103 rejection is affirmed .

⁴ Bauer's teaching of an epoxy resin of molecular weight of 20,000 to 60,000 is sufficiently close to a claimed molecular weight range of "greater than 60,000..." to have rendered the claimed molecular weight prima facie obvious. Titanium Metals Corp v. Banner, 778 F.d 775, 782-783, 227 USPQ 773, 779 (Fed. Cir. 1985).

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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

MARY F. DOWNEY)	
Administrative Patent Judge)	
)	
JOHN D. SMITH))BOARD OF PATENT
Administrative Patent Judge)) APPEALS AND
))
BRADLEY R. GARRIS))INTERFERENCES
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