

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. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARIO GROSSA
and MANFRED SONDERGELD

Appeal No. 1997-1943
Application 08/254,335

ON BRIEF

Before DOWNEY, GARRIS and WARREN, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner finally rejecting claims 1 and 3 through 7.¹

We have carefully considered the record before us, and based thereon, find that we cannot sustain the ground of rejection of the appealed claims under 35 U.S.C. § 103 over Bauer set forth in the

¹ See specification, pages 17-18, and the amendment of February 23, 1996 (Paper No. 15).

answer (pages 4-7).^{2,3} The examiner finds that even though Bauer teaches that the photopolymerizable compositions have reduced adhesion to a support film when, *inter alia*, a polycaprolactone of average molecular weight of between about 1500 and 40,000 is contained therein, wherein an “average molecular weight of 15,000 is more effective than . . . [an] average molecular weight of 40,000” (e.g., col. 2, lines 22-47, and col. 3, lines 1-6), one of ordinary skill in this art would have employed a polycaprolactone having a weight average molecular weight of at least 50,000 in the compositions of reference with the reasonable expectation of successfully influencing the adhesion properties of the tonable, photosensitive composition “because of the teachings of Bauer that polycaprolactones are added to tonable, photosensitive compositions to reduce adhesion of the photosensitive composition to a support film” (answer, pages 4-5). The examiner does not address the limitations of claims 4 and 5 wherein the lower end of the range of the average molecular weight of the polycaprolactone is 70,000 and 100,000, respectively.

We have carefully considered the reasons advanced by the examiner for thus concluding that a *prima facie* case of obviousness has been made out over Bauer even though no evidence has been adduced on this record of the chemical properties that one of ordinary skill in this art would have reasonably expected of a polycaprolactone having an average molecular weight of 40,000 vis-à-vis one having an average molecular weight of 50,000. On this record, we must agree with appellants (reply brief, pages 2-3) that the examiner has not established a reasonable basis for his conclusion.

While Bauer may have disclosed that the molecular weight of polycaprolactone was a result effective variable, this teaching extends only up to a polycaprolactone having an average molecular weight of about 40,000, and thus we must look to the record to determine if it contains any indications that one of ordinary skill in this art would have reasonably determined that optimization of the average molecular weight of polycaprolactones used in the compositions of Bauer should be extended beyond the end of the range taught by the reference. *See In re Sebek*, 465 F.2d 904, 907, 175 USPQ 93, 95

² This references is listed at page 3 of the answer. We refer to these references in our opinion by the name associated therewith by the examiner.

(CCPA 1972) (“Where, as here, the prior art disclosure suggests the outer limits of the range of suitable values, and that the optimum resides within that range, and where there are indications elsewhere that in fact the optimum should be sought within that range, the determination of optimum values outside that range may not be obvious.”).

Here, we are of the view that Bauer would have led one of ordinary skill in this art away from optimizing the average molecular weight of polycaprolactones beyond the disclosed range by clearly teaching that “for a particular photopolymerizable composition[,] polycaprolactone of average molecular weight of 15,000 is more effective than polycaprolactone of average molecular weight of 40,000” (col. 3, lines 3-6). While the examiner alleges that an average molecular weight of 50,000 “is sufficiently close to about 40,000 that one of ordinary skill in this art would have a reasonable expectation of success in substituting polycaprolactone with a molecular weight of at least 50,000,” we find no scientific explanation and/or evidence in the record establishing that this person would have reasonably expected polycaprolactones thus differing by 10,000 average molecular weight to have the same or closely similar properties. *Cf. Titanium Metals Corp. v. Banner*, 778 F.2d 775,782-83, 227 USPQ 773, 779 (Fed. Cir. 1985) (“[T]he Russian article discloses two alloys having compositions very close to that of claim 3, which is 0.3% Mo and 0.8% Ni, balance titanium. The two alloys in the prior art have 0.25% Mo - 0.75% Ni and 0.31% Mo - 0.94% Ni, respectively. The proportions are so close that prima facie one skilled in the art would have expected them to have the same properties.”).

Furthermore, we find that the examiner has not cited any disclosure in Bauer which establishes that the term “about” used in disclosing the subject range therein would indeed extend that range to include an average molecular weight of 50,000. *Cf. Pall Corp. v. Micron Separations Inc.*, 66 F.3d 1211, 1217-18, 36 USPQ2d 1225, 1229 (Fed. Cir. 1995); *Eiselstein v. Frank*, 52 F.3d 1035, 1038-40, 34 USPQ2d 1467, 1470-71 (Fed. Cir. 1995).

Thus, on this record, we find that, at best, the examiner has made out a case that it would have been obvious to try a polycaprolactone having a higher average molecular weight than that disclosed by

³ This is a new ground of rejection (answer, page 2). Appellants filed a reply brief on February 18, 1997 (Paper No. 27) to which the examiner did not respond further in the supplemental answer (Paper No. 28).

Appeal No. 1997-1943
Application 08/254,335

Bauer which is not the standard for obviousness under § 103. *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988). Having determined that the examiner has failed to establish a *prima facie* case of obviousness, we need not review appellants' evidence of nonobviousness.

The examiner's decision is reversed.

Reversed

MARY F. DOWNEY)	
Administrative Patent Judge)	
)	
)	
)	
)	
BRADLEY R. GARRIS)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
CHARLES F. WARREN)	
Administrative Patent Judge)	

Appeal No. 1997-1943
Application 08/254,335

Frederick D. Strickland, Esq.
E.I. Du Pont de Nemours and Company
Legal - Patents
Wilmington, DE 19898