

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte RICHARD A. HAYES

---

Appeal No. 95-0311  
Application No. 07/976,846<sup>1</sup>

---

ON BRIEF

---

Before WINTERS, SOFOCLEOUS and GRON, Administrative Patent Judges.

SOFOCLEOUS, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 to 11, all the claims remaining in the application.

The subject matter on appeal relates to a composition consisting essentially of a polyacetal and an amine light

---

<sup>1</sup> Application for patent filed November 16, 1992. According to appellant, this application is a continuation-in-part of Application No. 07/722,456, filed June 27, 1991, now abandoned.

Appeal No. 95-0311  
Application No. 07/976,846

stabilizer. Appellant (see the Reply Brief (Paper No. 15))

urges



Appeal No. 95-0311  
Application No. 07/976,846

The references relied upon by the examiner are:

Murayama et al. (Murayama)	4,241,208	Dec. 23, 1980
Ikenaga et al. (Ikenaga)	4,730,015	Mar. 8, 1989
Karrer et al. (Karrer)	2 074 564	Nov. 4, 1981

(Great Britain patent application)  
In the final rejection, mailed April 16, 1993, claims 1

to 4 and 6 to 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being obvious over Murayama, and claims 1 to 11 were rejected under 35 U.S.C. § 103 as being unpatentable over Murayama in view of Ikenaga and appellant's admission on page 5, lines 20 to 26 of the specification. This appeal ensued and appellant filed his Brief (Paper No. 8). In response to the Brief, the Examiner's Answer (Paper No. 9) entered new grounds of rejection, including an objection to dependent claims 3 to 5, 10, and 11, which multiply depend from claims 1 and 2. In response to the Answer, appellant filed a Reply Brief, including an amendment to the claims (Paper No. 10). Thereafter, the examiner forwarded the application to the Board. On July 16, 1998, the application was remanded to the examiner for further action. As a result of the remand, the

Appeal No. 95-0311  
Application No. 07/976,846

examiner notified appellant that the amendment would not be entered because the amendment was not submitted in a separate paper and that if the amendment were submitted in a separate paper, the amendment would be entered and the objection to the claims would be withdrawn. On September 17, 1996, appellant filed an amendment (Paper No. 14) and a Reply Brief (Paper No. 15). Upon receipt of the Reply Brief, the examiner issued a Supplemental Examiner's Answer (Paper No. 16), superseding the original Answer. The rejections<sup>2</sup> before us are as follows:

Claims 1, 3/1, 4/1, 5/1, 6, 8, 10/1 and 11/1 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being obvious over Murayama.

Claims 2, 3/2, 4/2, 5/2, 7, 9, 10/2 and 11/2 stand rejected under 35 U.S.C. § 103 as being unpatentable over Murayama in view of Karrer, Ikenaga and appellant's admission.

After carefully considering appellant's arguments presented in the Brief (Paper No. 8) and the Reply Brief

---

<sup>2</sup> We have restated each rejection to set forth the multiply dependent claims as grouped by the Examiner and Appellant. Compare page 2 of the Supplemental Answer with page 1 of the Reply Brief.

Appeal No. 95-0311  
Application No. 07/976,846

(Paper No. 15) and the examiner's arguments in the Supplemental Examiner's Answer (Paper No. 16), we find that we cannot sustain the rejection of claims 2, 3/2, 4/2, 5/2, 7, 9, 10/2 and 11/2, but we will sustain the rejection of claims 1, 3/1, 4/1, 5/1, 6, 8, 10/1 and 11/1 as being anticipated by or, in the alternative, as being obvious in view of Murayama. We add the following for emphasis.

With respect to the rejection of claims 1, 3/1, 4/1, 5/1, 6, 8, 10/1 and 11/1 on the ground of anticipation, Murayama describes within the meaning of 35 U.S.C. § 102(b) the combination of polyacetals with an effective stabilizing amount of a piperidine derivative having formula (I). See column 2, line 13, to column 2, line 41. A preferred piperidine derivative is 170, "1,3,8-triaza-3-octyl-8-acetyl-7,7,9,9,-tetramethyl-spiro[4,5]decane-2,4-dione." See column 16, lines 21-22.

With respect to the alternative rejection of claims 1, 3/1, 4/1, 5/1, 6, 8, 10/1 and 11/1 under 35 U.S.C. § 103, we find no error in the examiner's determination that the claims would have been prima facie obvious over Murayama. Murayama, column 1, lines 15 to 25; column 2, lines 21 to 41; and column

Appeal No. 95-0311  
Application No. 07/976,846

7, lines 32 to 37; teaches that certain piperidine derivatives can stabilize synthetic polymers, including polyacetals, against photo-and thermal-deterioration. At column 10, lines 17 to 30, Murayama describes a small genus of preferred compounds and exemplifies numerous compounds within this genus, including compound 170, a species within the scope of the genus recited in claim 1. At column 24, lines 38 to 53, Murayama teaches that the compounds can be incorporated into synthetic resins in an amount ranging from 0.01 to 5.0% by weight, and example 25, appearing at column 39, lines 23 to 30, teaches the incorporation of similar compounds into polyacetal. A prima facie case of obviousness having been made, the burden shifts to appellant to rebut the case.

Appellant relies upon a showing which is set forth in Table I<sup>3</sup> on page 8 of the Brief. With respect to this showing, the examiner states on page 6 of his Supplemental Answer (Paper No. 16):

Appellant's comparative showings have been fully considered, but have not been found persuasive to overcome the rejection in that they are not considered to be a back-to-back comparison based upon the closest

---

<sup>3</sup> Table II compares the compounds embraced by claim 2 with those of the prior art.

Appeal No. 95-0311  
Application No. 07/976,846

prior art composition. Again see example 25, test compound 39 of the patent.

We take this to mean that the comparisons are not side by side and do not consider the closest prior art compounds.

Appellant's Table I measures thermal stabilization of various prior art compounds in polyacetal as compared to appellant's compound, 0.30 acetylated 1A, which is 1,3,8-triaza-3-dodecyl-8-acetal -7,7,9,9-tetramethyl-spiro [4,5]decane-2,4-dione.<sup>4</sup> Appellant has tabulated his results as the time necessary to achieve a 3.0 wt% CH<sub>2</sub>O loss at 259EC. On the other hand, Murayama, example 25, appearing at column 39, lines 21 to 45, in particular Table 9, tabulates his results with respect to his compounds as the percent reduction in weight at 222EC after 30 minutes. Since appellant has not tabulated his results in the same manner as Murayama's Table 9, the results are not side by side comparisons from which we can ascertain whether appellant's representative compound exhibits any unexpected results over any of the compounds listed in example 25, which compounds would be expected to

---

<sup>4</sup> This compound differs in one respect from compound 170 of Murayama in that in the 3 position of Murayama's compound has octyl whereas appellant's compound has dodecyl.

Appeal No. 95-0311  
Application No. 07/976,846

perform in a similar manner with Murayama's compound 170. Certainly, appellant could have, and should have, tabulated his results in the same manner as Murayama so that it could be ascertained whether any unobvious results have been obtained. Furthermore, appellant could have, and should have, compared a representative claimed compound with the closest prior art compounds illustrated in example 25 of Murayama. Consequently, appellant has not sustained his burden of proof to rebut the prima facie case of obviousness.

Adverting to the rejection of claims 2<sup>5</sup>, 3/2, 4/2, 5/2, 7, 9, 10/2 and 11/2, we cannot sustain this rejection because the combined references (Murayama, Karrer, and Ikenaga) do not show an acetylated hindered amine light stabilizer as defined by formula II of claim 2. Although appellant acknowledges on page 5, lines 6 to 8, of the specification that a hindered amine light stabilizer, where R is C<sub>12</sub>, is commercially available, the examiner has not explained why it would have been obvious to substitute this particular hindered amine

---

<sup>5</sup> We note that R in claim 2 is not defined. It is evident from the specification, page 2, line 17, and the brief that the definition of R is the same as that in claim 1. The informality can be corrected, when the application is returned to the examiner.

Appeal No. 95-0311  
Application No. 07/976,846

light stabilizer for any of the stabilizers disclosed in the combined references.

For the foregoing reasons, the rejection of claims 1, 3/1, 4/1, 5/1, 6, 8, 10/1 and 11/1 is affirmed and the rejection of claims 2, 3/2, 4/2, 5/2, 7, 9, 10/2 and 11/2 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

SHERMAN D. WINTERS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
MICHAEL SOFOCLEOUS	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
TEDDY S. GRON	)	
Administrative Patent Judge	)	

clm

Appeal No. 95-0311  
Application No. 07/976,846

Lisa J. Moyles  
E. I. du Pont de Nemours & Co.  
Legal Patents  
Wilmington, DE 19898