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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANCISCO BATISTA

Appeal No. 95-0063
Application No. 07/813,868[1]

ON BRIEF

Before WINTERS, WILLIAM F. SMITH and GRON, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal was taken from the examiner's decision rejecting claims 15 through 34, which are all of the claims remaining in the application.

Claims 15 and 25 are representative:

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[1] Application for patent filed December 20, 1991.

15. Method for the immobilization of an organic thiol compound, HS-R, in which R is an organic residue, to a water-insoluble polymer of non-polypeptide structure exhibiting a disulfide (-S-S-) group directly bound to a saturated carbon atom at each of its sulphur atoms, characterized in the steps that:

(i) said polymer is contacted with an oxidation agent in such an amount and of such a kind that it is capable of transforming said disulfide group (-S-S-) to an oxidized disulfide group capable of reacting with thiol groups, whereupon

(ii) the polymer obtained in step (i) exhibiting one or more oxidized disulfide groups is contacted with the organic thiol compound HS-R under conditions allowing reaction to the formation of one -S-S-R group and one $-SO_n(H)$ group per disulfide oxide group that undergoes the reaction where n is 1 or 2. [Emphasis added.]

25. Method for the immobilization of an organic thiol compound, HS-R, in which R is an organic residue, to a polymer exhibiting a disulfide (-S-S-) group directly bound to a saturated carbon atom at each of its sulphur atoms characterized in the steps that:

(i) said polymer is contacted with an oxidation agent in such an amount and of such a kind that it is capable of selectively transforming said disulfide group (-S-S-) to a $-S-SO_n-$ group where n is essentially 1 or 2, whereupon

(ii) the polymer obtained in step (i) exhibiting one or more $-S-SO_n-$ groups is contacted with the organic thiol compound HS-R under conditions allowing reaction to the formation of one -S-S-R group and one $-SO_n(H)$ group per $-S-SO_n-$ group that undergoes the reaction,

with the proviso that the polymer carrying the disulfide group is not a wool textile fiber. [Emphasis added.]

The reference relied on by the examiner is:

J. A. Maclaren et al. (Maclaren), "Partially Oxidised Disulphide Groups in Oxidised Wool - Reaction with Thiols," JSDC 564-67 (Nov. 1968).

As stated in the Examiner's Answer, page 2, the previously entered rejections under 35 U.S.C. § 112, first and second paragraphs, have been withdrawn. The issue remaining for review is whether the examiner erred in rejecting claims 15 through 34 under 35 U.S.C. § 103 as unpatentable over Maclaren. For the reasons set forth below, this rejection is reversed.

DISCUSSION

Maclaren discloses a method which bears close relationship to the method recited in claims 15 through 34, except that Maclaren's starting material is partially oxidized wool. Claims 15 through 24 preclude wool in view of the language "a water-insoluble polymer of non-polypeptide structure exhibiting a disulfide (-S-S-) group directly bound to a saturated carbon atom at each of its sulfur atoms." Likewise, the polymer in claim 32 is "insoluble in water and of non-polypeptide structure." Claims 25 through 31, 33 and 34 also preclude wool in view of the express proviso that "the polymer carrying the disulfide group is not a wool textile fiber." In sum, Maclaren's method and the claimed method are similar but Maclaren uses a partially oxidized

wool starting material whereas all of the appealed claims preclude a wool starting material.[2]

The examiner acknowledges the difference between Maclaren's method and the claimed method. According to the examiner,

> [t]he claimed process differs from this prior art process only in the choice of the polymer. However, it is the same process employing the same inventive concept of binding a desired organic compound to a carrier polymer and accomplishing the same desired result of immobilizing the desired organic compound. See In re Durden, 226 USPQ 359. [Examiner Answer, page 4, first full paragraph].

That analysis is flawed because the examiner does not adequately establish how a person having ordinary skill in the art would have arrived at the claimed subject matter as a whole, including appellant's non-wool starting materials, based on the teachings found in Maclaren. 35 U.S.C. § 103. The examiner is not at liberty to dissect the claims; to remove specific limitations; to redraft the claims as though they called for "a carrier polymer" broadly; and to hold that the redrafted method would have been obvious over Maclaren's disclosure of the same general process using a partially oxidized wool starting material. See In re

[2] With respect to the polymeric starting material, claims 25 through 31, 33 and 34 are broader than claims 15 through 24 and 32. The former claims preclude wool, but "read on" other polypeptide structures. The latter are restricted to polymers which are insoluble in water and have a non-polypeptide structure.

Ochiai, 71 F.3d 1565, 1571, 37 USPQ2d 1127, 1132-33 (Fed. Cir. 1995); In re Brouwer, 77 F.3d 422, 425-26, 37 USPQ2d 1663, 1666 (Fed. Cir. 1995).

The examiner's decision is reversed.

REVERSED

SHERMAN D. WINTERS Administrative Patent Judge	)	
WILLIAM F. SMITH Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
TEDDY S. GRON Administrative Patent Judge	)	

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