

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(2) is not binding precedent of the Board.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. 9

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GANGFENG CAI
AND ROBERT G. GASTINGER

Appeal No. 95-3400
Application 08/179,793¹

ON BRIEF

Before CAROFF, KIMLIN and OWENS, Administrative Patent Judges.
CAROFF, Administrative Patent Judge.

¹ Application for patent filed January 11, 1994.

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DECISION ON APPEAL

This decision on appeal relates to the final rejection of claims 1-14. The only other claims pending in the involved application, claims 15-23, stand withdrawn from consideration by the examiner pursuant to 37 CFR § 1.142(b) as being drawn to non-elected inventions and, thus, are not before us.

The claims are directed to a bulk polymerization process for producing a poly(thioether ether) by reacting at least one aliphatic C₂ - C₁₀ dithiol with diallyl ether.

Appellants acknowledge on page 2 of their brief that all of the claims on appeal stand or fall together. Accordingly, we will limit our consideration to claim 1, the broadest independent claim, which reads as follows:

1. A process for making a poly(thioether ether), said process comprising reacting diallyl ether with an aliphatic C₂-C₁₀ dithiol in a bulk polymerization process under free-radical conditions to produce a poly(thioether ether).

Claims 1-14 stand solely rejected under 35 U.S.C. § 112, first paragraph, for lack of an enabling disclosure, particularly with regard to disclosure of a practical utility for the polymeric products produced by the claimed process.

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We shall not sustain this rejection essentially for the reasons stated in appellants' brief.

It is incumbent upon the examiner, if he has any doubts as to enablement or utility of a claimed invention, to support his assertions with objective factual evidence or cogent technical reasoning. In re Armbruster, 512 F.2d 676, 677-78, 185 USPQ 152, 153 (CCPA 1975); In re Marzocchi, 439 F.2d 220, 223, 169 USPQ 367, 369 (CCPA 1971). The examiner's answer is totally lacking in this regard. Indeed, the examiner's assertions here are entirely speculative in nature. Therefore, we conclude that the examiner has failed to establish a prima facie case of nonenablement or lack of utility.

Moreover, we agree with appellant that the disclosure in their specification is sufficient to satisfy the first paragraph requirements of 35 U.S.C. § 112. Specifically, the specification includes a number of working examples and a clear statement on page 8 of utility as follows:

The poly(thioether ether)s and hydroxy-terminated poly(thioether ether)s of the invention contain no thermally sensitive S-S linkages or hydrolytically unstable -O-CH₂-O- groups. This feature makes the polymers of the invention attractive intermediates for formulating polyesters, polycarbonates, and polyurethanes, especially those applications for which thermal and hydrolytic stability are important concerns.

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This utility corresponds to the recognized utility of similar sulfur-containing polymers in the art as discussed in the "Background of the Invention" section of appellants' specification. To satisfy the enablement or utility requirement of the statute, an applicant need not teach or explain in detail that which is apparently known in the art. In re Howarth, 654 F.2d 103, 105-06, 210 USPQ 689, 691-92 (CCPA 1981).

As for the examiner's focus on a single nonexemplified embodiment of the claimed invention, e.g., use of 1,10-decanedithiol as a reactant, we again note that the examiner's comments regarding this embodiment are entirely speculative in nature. In any event, the statute does not necessarily require an appellant to exemplify or establish operability/utility for every single embodiment within the scope of the claims. In re Dinh-Nguyen, 492 F.2d 856, 858, 181 USPQ 46, 47-48 (CCPA 1974); In re Kamal, 398 F.2d 867, 872, 158 USPQ 320, 323-24 (CCPA 1968).

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For the foregoing reasons, the decision of the examiner is reversed.

REVERSED

MARC L. CAROFF)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
EDWARD C. KIMLIN)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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