

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(2) is not binding precedent of the Board.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 JAMES C. COPELAND,
HOWARD I. ADLER and WELDON D. CROW

Appeal No. 96-1447
Application 08/028,764¹

ON BRIEF

Before WARREN, OWENS and SPIEGEL, *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 refusing to allow claims 15 through 20 and 48 through 65 as amended subsequent to the final rejection.²

We have carefully considered the record before us, and based thereon, find that we cannot sustain the grounds of rejection of the appealed claims either under 35 U.S.C. §§ 102(b) or 103

¹ Application for patent filed March 9, 1993. According to appellants, this application is a continuation of application 07/653,687, filed February 11, 1991, now abandoned, which is a division of application 07/399,870, filed August 29, 1989, now United States Patent 4,996,073, issued February 26, 1991.

² Amendment of November 14, 1994 (Paper No. 17).

or under 35 U.S.C. § 103, both ground of rejection based on Adler³ (answer, pages 6-7 and 8-9). It is well settled that anticipation under § 102 is a question of fact, based on the limitations in the claims, and that in order to make out a *prima facie* case of anticipation, the examiner must point out where each and every element of the claimed invention, arranged as required by the claims, is found in a single prior art reference, either expressly or under the principles of inherency. See generally *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1457, 221 USPQ 481, 485 (Fed. Cir. 1984). It is equally well settled that the examiner may satisfy his burden of establishing a *prima facie* case of obviousness under § 103 by showing some objective teachings or suggestions in the prior art taken as a whole or that knowledge generally available to one of ordinary skill in the art would have led that person to combine the relevant teachings of the applied prior art in the proposed manner to arrive at the claimed invention, including each and every limitation of the claims, without recourse to the teachings in appellant's disclosure. See generally *In re Oetiker*, 977 F.2d 1443, 1447-48, 24 USPQ2d 1443, 1446-47 (Fed. Cir. 1992) (Nies, J., concurring); *In re Fine*, 837 F.2d 1071, 1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988); *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531-32 (Fed. Cir. 1988). The examiner has failed to make out a *prima facie* case under either statutory provision.

As pointed out by appellants in their brief filed August 7, 1995 (Paper No. 24) and reply brief, the teaching in Adler of a membrane fragment containing agar in a petri dish which is used as the culture medium *per se*, that is, without the addition of solution (e.g., col. 3, lines 23-42, and col. 5, lines 8-16), does not provide a description the claimed invention within the meaning of § 102(b) and would not have motivated one of ordinary skill in this art to incorporate the membrane fragments into a solution contact surface⁴ within the meaning of § 103. Indeed, with

³ Adler and the additional reference "Lafourcade," relied on in the second ground of rejection, are listed at page 4 of the answer. The examiner also lists Hitzman, which reference was relied on by the examiner along with the Arkles et al. and Adler et al. references of record in a ground of rejection withdrawn on appeal (answer, page 9).

⁴ We find that one of ordinary skill in this art would reasonably have determined from appellants' specification at page 17, lines 18-25, that the claim language "solution contact surface comprising a sufficient amount of isolated oxygen scavenging membrane fragments" of the independent appealed claims, e.g., claim 1, would include incorporation of the membrane

respect to the latter statutory provision, we observe that while Adler would have reasonably suggested to one of ordinary skill in this art that the addition of membrane fragments to “many industrial fermentation processes” (col. 6, lines 1-3) which can contain “ethanol” (col. 4, line 67), such addition would have been directly into the medium (e.g., col. 4, lines 62-64). The examiner has failed to provide evidence and/or scientific reasoning in the record explaining why one of ordinary skill in this art would have modified this teaching of Adler by incorporating the membrane fragments into a solution contacting surface of a fermentation vessel.⁵ Thus, it is manifest that the only direction to appellants’ claimed invention as a whole on the record before us is supplied by appellants’ own specification. *Fine, supra; Dow Chem., supra.*

fragments into the solution contact surface. *In re Morris*, 127 F.3d 1048, 1054-56, 44 USPQ2d 1023, 1027-29 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). Our reference to the specification is with respect to the substituted specification, filed January 19, 1994 (Paper No. 14), entered by the examiner as set forth in the final rejection of May 11, 1994 (Paper No. 15). See also page 3 of the answer. The objection with respect to the substitute specification (answer, page 3) is petitionable and not subject to review on appeal. Manual of Patent Examining Procedure § 706.01 (7th ed., July 1998; 700-9).

⁵ In this respect, the disclosure at ,e.g., col. 12, lines 29-31, of United States Patent 5,240,853, to Copeland et al., maturing from an application filed March 7, 1989, should be considered in any further prosecution of the appealed claims before the examiner. The ‘853 patent was made of record in the advisory action of December 19, 1994. We observe that United States Patent 5,482,860, not of record, which matured from an application that is a division of the application from which the ‘853 patent matured, indeed claims an apparatus in which “membrane fragments” are “immobilized in the reactor chamber” (e.g., claim 1).

The examiner's decision is reversed.

Reversed

CHARLES F. WARREN
Administrative Patent Judge

TERRY J. OWENS
Administrative Patent Judge

CAROL A. SPIEGEL
Administrative Patent Judge

)
)
)
)
)
) BOARD OF PATENT
) APPEALS AND
) INTERFERENCES
)
)
)

Appeal No. 96-1447
Application 08/028,764

1100 Superior Avenue, Suite 700
Cleveland, OH 44114-2518