

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

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APR 30 1997 UNITED STATES PATENT AND TRADEMARK OFFICE

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GEORGE H. REDLICH, GARY L. WILLINGHAM
and JOHN S. CHAPMAN

Appeal No. 94-0736
Application 07/784,852¹

ON BRIEF

Before KIMLIN, ELLIS and McFARLANE, Administrative Patent Judges.
KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-8, 12, 16 and 17. Claims 9-11, 13-15 and 18, the other claims

¹ Application for patent filed October 30, 1991. According to appellants, this application is a continuation-in-part of Application 07/625,265, filed December 10, 1990, now abandoned.

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remaining in the present application, stand withdrawn from consideration pursuant to a restriction requirement. Claim 1 is illustrative:

1. Antimicrobial composition comprising (A) a 3-isothiazolone compound, and (B) a water soluble polymeric carrier which is solid at room temperature, said carrier functioning to stabilize said 3-isothiazolone against chemical decomposition at room temperature and at applications temperature, said composition being solid at room temperature.

The examiner relies upon the following references as evidence of obviousness:

Costerton	4,542,169	Sept. 17, 1985
Millar	4,552,591	Nov. 12, 1985

Appellants' claimed invention is directed to an antimicrobial composition comprising a 3-isothiazolone compound and a water soluble polymeric carrier. The polymeric carrier is solid at room temperature, as is the antimicrobial composition. According to appellants, the water soluble polymeric carrier functions to stabilize the 3-isothiazolone against decomposition at room temperature and at temperatures of application.

Appealed claims 4, 6, 7 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Costerton. Appealed

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claims 1-8, 12, 16 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Millar.

We have carefully reviewed the respective positions advanced by appellants and the examiner. In so doing, we find that the prior art applied by the examiner fails to establish a prima facie case of obviousness for the claimed composition. Accordingly, we will not sustain the examiner's rejections.

We consider first the rejection over Costerton. Appellants appropriately urge that Costerton does not teach or suggest a solid composition comprising the claimed isothiazolone compound and a water soluble polymeric carrier. Costerton discloses a water-insoluble elastomer, such as polyurethane or polypropylene, having an isothiazolone compound incorporated therein or coated thereon. The examiner appreciates that "Costerton is different in teaching insoluble carriers" (page 3 of Answer), but states, nonetheless, that Costerton teaches polypropylene or polyurethane carriers and "[a]pplicant specifically claims polypropylene or polyurethane polymers as carriers (claim 4)." However, appellants do not claim polypropylene but, rather, "polymers and

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copolymers of ethylene oxide and propylene oxide." Also, appellants do not claim polyurethane polymers, per se, but specify "polyurethane polymers having alternating hydrophobic and hydrophilic moieties" that are water soluble. In addition to the examiner's recognition that Costerton teaches insoluble carriers, the examiner has not refuted appellants' reasonable argument that it is well known that biomedical devices of the type disclosed by Costerton, i.e., those used for joint replacement, cardiac valves, etc., must not be water soluble.

The examiner also contends that it would have been obvious to composite the claimed antimicrobial compound with a water soluble polymeric carrier "because Costerton teaches that the antibacterial effect of isothiazolone compositions increases with increasing water solubility of the composition (column 6, lines 37-43)." (Page 3 of Answer.) However, Costerton discloses that compound 1 reported in TABLE B "is the most active under these conditions of test," and it can be seen from TABLE A that compound 1 is decidedly less soluble in water than compounds 2 and 4. Moreover, notwithstanding any relationship between the

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antibacterial effect of various isothiazolone compounds and their solubility in water, we do not find that such establishes the obviousness of formulating a composition comprising an isothiazolone compound and a water soluble polymeric carrier.

We also agree with appellants that Millar does not teach or suggest the claimed composition. Millar expressly discloses a composition of isothiazolones adsorbed on particulate materials such as diatomaceous earth, silica, metal oxides such as alumina, bauxite, magnesia, iron oxides and the like (column 2, lines 43 et seq.). There is simply no disclosure in the reference of employing an isothiazolone in composition with a water soluble polymeric carrier. The carboxymethylcellulose polymers, polysaccharides and polyacrylamides disclosed at column 3, lines 32 et seq. of Millar are components of oil field water or oil field fluid polymers that are treated with the isothiazolone adsorbed composition of Millar (column 3, lines 44-49).

The examiner also maintains that "[i]t is well settled that claiming an unpatentable compound in combination with a carrier does not render the combination patentable if it would be obvious

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in the prior art to utilize a carrier with the compound. Ex parte Douos et al. (POBA 1968) 163 USPQ 667." (Page 5 of Answer.) However, the Board decision relied upon by the examiner also cites In re Pieroh et al., 319 F.2d 248, 138 USPQ 238 (CCPA 1963) which states that claims to a composition comprising a known compound and a carrier cannot be disposed of on a summary basis. Our predecessor review court set forth the following reasoning at 319 F.2d at 251, 138 USPQ at 241:

In many instances very slight physical or chemical changes may be sufficient to avoid such a rejection. For example, very slight changes may be responsible for imparting new properties to the "old compound" and such changes may create a patentable new "composition of matter." It is not sufficient to support such a rejection to rely upon some "rule" which asserts that a known compound "cannot be made patentable merely by adding thereto conventional adjuvants or carriers" as here urged by the solicitor. Each situation must be analyzed in the light of the particular facts disclosed in the record. Cf. Old Town Ribbon and Carbon Co. v. Columbia Ribbon and Carbon Co., 159 F.2d 379, 72 USPQ 57. See also In Riden et al., 50 CCPA 1411, 318 F.2d 761, 138 USPQ 112.

In the present case, the appealed claims do not recite simply an isothiazolone compound and a carrier but, rather, a particular class of carriers, viz., water soluble polymers.

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In conclusion, based on the present record, we are
constrained to reverse the examiner's rejections.

REVERSED

Edward C. Kimlin

EDWARD C. KIMLIN)
Administrative Patent Judge)

Joan Ellis

JOAN ELLIS)
Administrative Patent Judge)

) BOARD OF PATENT
) APPEALS AND
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