

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ULRICH BEESE

Appeal No. 2002-1409
Application 09/381,444

HEARD: March 20, 2003

Before WARREN, WALTZ and DELMENDO, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

We have carefully considered the record in this appeal under 35 U.S.C. § 134, including the opposing views of the examiner, in the answer, and appellant, in the brief and reply brief, and based on our review, find that we cannot sustain the rejection of appealed claims 24 through 26,¹ all of the claims in the application, under 35 U.S.C. § 103(a) as being unpatentable over Model et al. (Model), Solomon et al. (Solomon) and Dubin et al. (Dubin) in view of Khait and Hampton.²

In order to establish a *prima facie* case of obviousness, the examiner must show that some objective teaching, suggestion or motivation in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in this art would have led that person to

¹ See the amendment of February 7, 2003 (Paper No. 10).

the claimed invention as a whole, including each and every limitation of the claims, without recourse to the teachings in appellant's disclosure. *See generally, In re Rouffet*, 149 F.3d 1350, 1358, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *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 requirement for objective factual underpinnings for a rejection under § 103(a) extends to the determination of whether the references can be combined. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002), and cases cited therein.

On this record, we must agree with appellant (e.g., reply brief, page 11, first full paragraph) that the examiner has not made out a *prima facie* case of obviousness with respect to the claimed invention. We find that Model would have reasonably suggested to one of ordinary skill in this art³ that "4,2',4'-trichloro-2-hydroxy-diphenyl ether," which is specified in the appealed claims as "2,4, 4'-trichloro-2'-hydroxy-diphenyl ether" and is also known commercially as Irgasan® DP 300 and Triclosan, can be used to impart antimicrobial properties to molded plastic articles, including those prepared by injection molding (e.g., col. 1, lines 15-36; col. 4, lines 24-35; col. 6, lines 27-39; col. 18, lines 21 and 27; and Examples X through XII; specification, page 3, first full paragraph). Similarly, we find that Dubin would have reasonably suggested to one of ordinary skill in this art that 2,2'-thiobis (4,6-dichlorophenol) and 2,2'-methylenebis-(3,4,6-trichloro) phenol, which are specified in the appealed claims as 3,5,3',5'-tetrachloro-2,2'-dihydroxydiphenyl sulfide and 3,5,6,3',5',6'-hexachloro-2,2'-dihydroxydiphenylmethane, respectively, can be used to impart antimicrobial properties to molded articles, including those prepared by extrusion, and indeed, used "for the production of any item on which micro-organisms might be passed or where they come in contact with the surface of the plastic material" (e.g., col. 1, lines 18-30 and 46-69; col. 2, lines 17-23; col. 2, line

² Answer, pages 3-5.

³ It is well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in this art would have reasonably been expected to draw therefrom, *see generally, In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed.

50, to col. 3, line 31; col. 3, lines 32-44; col. 4, lines 1-3; col. 5, line 68, to col. 6, line 32). We find that Hampton discloses a molded refuse receptacle which is intended as a container for handling household waste material, and that the walls of the receptacle would come into contact with such waste even in view of the plastic liner to be used therewith through ordinary household use. We further find that such waste would ordinarily contain or attract microorganisms commonly found in the household, including those listed in each of Model and Dubin.

Consequently, we are of the opinion that the combination of Model, Dubin and Hampton would have reasonably suggested to one of ordinary skill that the incorporation of the antimicrobial phenols disclosed in Model and in Dubin into plastic materials used to prepare the *molded* receptacle of Hampton would reasonably result in imparting antimicrobial properties to the surfaces of the receptacle.

However, as appellant points out, the appealed claims require that the *molding* of the container for handling household waste material be prepared by *coextruding* inner and outer layers for the molded container wherein the phenol is associated with the “inner co-extruded layer.”⁴ The examiner relies on Solomon to show that the *co-extruded* inner layer of medical articles, including “tubing, bags and connectors” for body tissues and fluids, can contain antimicrobial material (e.g., col. 2, lines 33-60; col. 3, line 48, to col. 4, line 8). We find that this reference does not disclose that the coextruded layers are then molded to form an article.⁵

Therefore, the difficulty that we have with the examiner’s position is that it is not based on any evidence which establishes that, *prima facie*, one of ordinary skill in this art would have combined coextrusion *and* molding steps to prepare a molded article, such as the receptacle of Hampton. Accordingly, in the absence of such evidence, the examiner has failed to make out a

Cir. 1992), presuming skill on the part of this person. *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985).

⁴ We point out that appealed claims 24 and 26 specify that the phenol is “applied *on* a co-extruded layer” (emphasis supplied) while the basis for such language in the application as originally filed, that is, cancelled original claims 11 and 12, reads “applied *as* a co-extruded layer onto at least part of the surfaces containing plastic, particularly on the inner surface” (emphasis supplied). The examiner should consider this matter upon any further prosecution of the appealed claims subsequent to the disposition of this appeal.

⁵ A discussion of *Khait* is not necessary to our decision.

prima facie case of obviousness with respect to all of the elements which constitute the claimed invention as a whole, and accordingly, we reverse the ground of rejection.

The examiner's decision is reversed.

Reversed

CHARLES F. WARREN)	
Administrative Patent Judge)	
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THOMAS A. WALTZ)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
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