

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. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM G. HARTMAN,
THOMAS C. EPPLE, ROGER H. MANN
and EDWARD I. SUN

Appeal No. 2001-1698
Application 08/864,176

ON BRIEF

Before WARREN, OWENS and PAWLIKOWSKI, *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 appellants, in the brief and reply brief, and based on our review, find that we cannot sustain the rejection of appealed claims 1 through 10, 34, 35, 40, 41 and 44 under 35 U.S.C. § 103(a) as being unpatentable over Schwarz in view of either of Komiya et al. (Komiya)¹ or Leonard et al. (Leonard), and further in view of Cohrs et

¹ Komiya was cited as “Toppan” in the answer (page 3). The examiner cited this Japanese patent document *per se (id.)* and a translation thereof prepared from the USPTO by Diplomatic Language Services, Inc. in March, 1996 is in the record. However, the examiner applies an abstract of this document in the stating the ground of rejection (answer, page 4). While the abstract is a different document than the Japanese patent document, we find no evidence in the

al. (Cohrs) and Raabe et al. (Raabe), and of claims 11 through 20, 37, 38, 42 and 43² under 35 U.S.C. § 103(a) as being unpatentable over Mages in view of Sands and Schwarz, further in view of either of Komiya or Leonard, and still further in view of Cohrs and Raabe.³

It is well settled that 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 the claimed invention as a whole, including each and every limitation of the claims, without recourse to the teachings in appellants' 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).

There is no dispute that a multilayer adhesive tape comprising a multilayer carrier containing a core layer, a skin layer on one or both sides of the core layer and an adhesive layer on opposing faces of the multilayer carrier which can be produced by the method of appealed claim 1⁴ corresponds to a multilayer adhesive tape disclosed in Schwarz. Indeed, Schwarz discloses a multilayer carrier containing at least one elastic layer, which can be foamed, and at least one plastic layer (e.g., col. 2, line 63, to col. 3, line 8). *Compare* Schwarz Figs. **1** and **2** (col. 3, line 51, to col. 4, line 23) with specification Fig. **1** (page 6). As pointed out by the examiner, the method of making the multilayer adhesive tape from two different commercially available tapes, one containing an elastomeric foamed plastic layer and the other containing PVC plastic layer, taught in Schwarz (e.g., col. 2, line 63, to col. 3, line 8) is not the method of appealed claim 1.

record that the abstract is not available prior art. We have considered the translation in reviewing the grounds of rejection.

² See, e.g., the amendment of July, 1999 (Paper No. 24). Appealed claims 1 through 20, 34, 35, 37, 38 and 40 through 44 are all of the claims in the application.

³ Answer, pages 4-7.

⁴ Appellants state in the brief that “[a]ll of the appealed claims will stand or fall together” (page 4). Thus, we have considered appealed claim 1 in deciding this appeal. 37 CFR § 1.192(c)(7)(2000).

We find that one of ordinary skill in this art would have known that a multilayer adhesive tape containing an adhesive layer on both sides thereof, such as that of Schwarz, can be formed by coextruding the layers of the multilayer carrier using the method taught in Leonard (e.g., col. 2, line 59, to col. 5, line 8, and col. 7, line 18, to col. 10, line 25).⁵ Indeed, Leonard teaches that the core or backing layer of the multilayer carrier can be “foamed” plastic material, including foamed polyolefins and polyurethanes, while the skin or intermediate layer of the multilayer carrier can be plastic material (e.g., col. 6, lines 10, 13-14 and 31-59). The foamed plastic core or backing of the multilayer carrier of Leonard corresponds to the foamed plastic layer taught in Schwarz. *Compare* Leonard Fig. 2 (col. 4, line 43, to col. 5, line 8) with Schwarz Figs. 1 and 2 (col. 3, line 51, to col. 4, line 23).

Appellants submit that there is no suggestion in the applied references for coextruding a void containing core or backing layer and a void-free skin or intermediate layer (brief, pages 5-7). The difficulty we have with appellants’ argument is that Leonard teaches that this carrier layer can be a foamed plastic and thus would inherently contain the “voids” described and claimed for the foamed core or backing layer prepared by the claimed method encompassed by appealed claim 1 (specification, e.g., page 6, line 29, to page 7, line 2) while the plastic material of the adjacent skin or intermediate layer(s) would not contain such “voids.” We find that Leonard does not disclose any method of preparing the foamed plastic layer. However, we agree with the examiner that Cohrs would have taught one of ordinary skill in this art that expandable, volatile fluid foaming agent containing thermoplastic synthetic resinous monocellular microspheres can be combined with matrix forming synthetic resins, including e.g., polyolefins and other elastomeric polymers, to provide synthetic resinous foam and the composition of resin and microspheres can be extruded in conventional manner using conventional extrusion equipment (cols. 1-3 and Table I). Indeed, Cohrs discloses

the steps of the method comprising admixing the microspheres and matrix forming material, heat plastifying the matrix material and mechanically working the mixture to form a matrix about the microspheres without causing expansion thereof, subsequently passing the mixture into a zone of lower pressure wherein the microspheres expand to

⁵ We point out here that contrary to the examiner’s findings, Komiya coextrudes the pressure-sensitive adhesive layer and its release layer, separately extrudes the single base layer, and then combines these layers in a press-roll (abstract; translation, e.g., pages 2, 4 and 7-8).

form a plurality of hollow, generally monocellular particles within the matrix and cooling the mixture below the heat plastifying temperature. [Col. 1, lines 37-46.]

We find that the mechanism of the action of the microspheres described by Cohrs is the same as that specified in appealed claim 1. In view of the teaching of Leonard that the foamed layer can be formed by coextrusion with the plastic material layer(s) and the teachings of Cohrs that the resin containing the microspheres can be extruded in conventional manner, we are not persuaded that a mixture of a matrix resin containing the microspheres cannot be coextruded by appellants' mere argument that Cohrs "is limited to extrusion of a single resin charge" because it "contains no teachings in respect to coextrusion of multiple resin charges" (reply brief, page 1).

We further find that, as appellants point out, the combined teachings of Schwarz, Leonard and Cohrs do not address "the smoothing and leveling step of the claimed method" (brief, pages 5, 6-7 and 8-9; see also reply brief, pages 2-3). While the examiner submits an argument in this respect relying on Schwarz and Raabe,⁶ we find that the use of a plastic skin or intermediate layer on one or both sides of a foamed plastic core or backing layer of the multilayer carrier was known to one of ordinary skill in this art from Schwarz and Leonard.

Thus, the issue here is whether the coextrusion of the plastic for the skin or intermediate layer(s) and the mixture forming the foamed plastic core or backing layer through a die as taught to one of ordinary skill in this art by Leonard would *inherently* result in a "smoothing or leveling" of the core layer by the skin layer as specified in appealed claim 1. *Compare* specification, page 12, lines 5-8, and page 12, line 26, to page 13, line 21, from which it is apparent that there is no additional step of smoothing or leveling of the skin layer subsequent to the coextruded layers exiting the extruder die. We note in this respect the disclosure that "[t]he shaped skin and core charges are joined just prior to exiting through die opening 24a in a known manner" (id., page 12, lines 6-8).

⁶ We agree with appellants (brief, e.g., pages 6, 8 and 10-11; reply brief, pages 2-3) that the method of forming a plastic backed adhesive tape for applying to a foamed plastic article taught by Raabe is not combinable with Schwarz, Leonard and Cohrs. Indeed, the plastic backed tape applied to the foamed plastic article would not have been considered by one of ordinary skill in this art with respect to a multilayer adhesive tape containing a foam layer as shown in Schwarz and Leonard.

This issue has not been addressed by the examiner and responded to by appellants. *See, e.g., In re King*, 801 F.2d 1324, 1326-28, 231 USPQ 136, 138-39 (Fed. Cir. 1986); *In re Best*, 562 F.2d 1252, 1254-56, 195 USPQ 430, 432-34 (CCPA 1977).

We further find that there is no indication in this record whether the multilayer adhesive tape prepared by the process taught by Leonard, in which “[a]t least one of the backing and adhesive layers is not mutually coextensive,” can be used as “a mounting tape for detachably-mounting a flexible printing plate to a printing press plate holder,” which is required of the tape prepared by the claimed method encompassed by appealed claim 1, or if one of ordinary skill in this art would have modified the process of Leonard so as to produce such a tape. *See, e.g., In re Stencel*, 828 F.2d 751, 754-55, 4 USPQ2d 1071, 1073 (Fed. Cir. 1987).

Accordingly, in view of these two outstanding issues, we find that on this record, the examiner has not established that the claimed methods encompassed by appealed claim 1 and by appealed claim 11, respectively, would have been *prima facie* obvious as a whole over the combined teachings of Schwarz, Leonard and Cohrs, and of Mages, Sands, Schwarz, Leonard and Cohrs.

The examiner’s decision is reversed.

Reversed

CHARLES F. WARREN)	
Administrative Patent Judge)	
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TERRY J. OWENS)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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BEVERLY A. PAWLIKOWSKI)	
Administrative Patent Judge)	

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Suite 1200
Cleveland, OH 44114-1484