

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RALPH A. MOSHER, T. EDWIN FREEMAN, THEODORE LOVALLO, DAMODAR
M. PAI, JOHN F. YANUS, TIMOTHY J. FULLER, MARKUS R. SILVESTRI, GERALD M.
FLETCHER, ANTONIO DeCRESCENTIS, IHOR W. TARNAWSKJ

Appeal No. 2005-1451
Application No. 09/833,546

ON BRIEF

Before PAK, TIMM, and DELMENDO, *Administrative Patent Judges*.
TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1 and 3-25. Claim 26, the only other pending claim, has been withdrawn by the Examiner pursuant to a restriction requirement. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

INTRODUCTION

The claims are directed to an endless seamed flexible belt. The belt has a seam formed by interlocking mating elements, i.e., a puzzle cut seam (specification, p. 9, ll. 6-7), and the seam includes an adhesive including an alcohol-soluble polyamide such as a polyamide with methoxy, ethoxy, or hydroxy pendant groups (specification, p. 15, l. 15 to p. 16, l. 17). Typical commercially available alcohol-soluble polyamides suitable for use include Luckamide[®] 5003 from Dai Nippon Ink, CM4000[®] and CM8000[®] from Toray Industries, Ltd., Nylon[®] 8, and other N-methylene methoxy pendant polyamides (specification, p. 16, ll. 17-23). Claim 1 is illustrative of the subject matter on appeal:

1. An endless seamed flexible belt comprising a first end and a second end, each of the first end and the second end comprising a plurality of mutually mating elements which join in an interlocking relationship to form a seam, the belt comprising a substrate and the seam comprising an adhesive comprising an alcohol-soluble polyamide.

As evidence of unpatentability, the Examiner relies upon the following prior art references:

Sakakibara et al. (Sakakibara)	5,663,283	Sep. 03, 1997
Parker et al. (Parker)	5,721,032	Feb. 27, 1998
Fuller et al. (Fuller)	6,096,470	Aug. 01, 2000

Landis et al., "Handbook of Thermoset Plastics" 2nd Ed., (1998) p. 426

Claims 1 and 3-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Parker in view of Fuller and further in view of Sakakibara and the Handbook of Thermoset Plastics.

For substantially the reasons articulated by Appellants in their Brief and Reply Brief, we reverse. Because it is not clear that all the evidence relevant to patentability has been considered by the Examiner, we remand the application to the Examiner for further search and consideration. Our reasons follow.

OPINION

The examiner bears the initial burden of presenting a prima facie case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). To satisfy this burden, the examiner must establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). We conclude that, in the present case, the Examiner has not provided the necessary factual basis to support the conclusion that it would have been obvious to one of ordinary skill in the art to modify the endless seamed flexible belt of Parker as proposed.

The Examiner relies upon Parker for the generic teaching of using a polyamide adhesive in a puzzle cut seam. Because Parker does not further specify that useful polyamides include alcohol-soluble polyamides, the Examiner relies upon the disclosure of alcohol-soluble polyamides in Fuller. As pointed out by the Examiner, Fuller describes the use of alcohol-

soluble polyamides in the same field of endeavor as Parker, namely, for the production of flexible electrophotographic imaging members (Answer, pp. 3-4). But the fact that Fuller is directed to forming such imaging members does not provide the required factual basis to support the Examiner's conclusion of obviousness. This is because the teachings in Parker and Fuller relied upon by the Examiner are not sufficiently related such that a suggestion to make the modification advanced by the Examiner would have been apparent to one of ordinary skill in the art. In Parker, polyamide is described as suitable as a seam strength enhancing material (Parker, col. 9, ll. 9, ll. 35-38). The polyamide, in strip form, is placed in contact with the puzzle cut seam and melted into the seam with heat and pressure (Example 1, col. 9, ll. 44-60). The purpose of the strength enhancing material is to fill the kerr spaces between the two sides of the puzzle cut seam member to form a bonded joint (col. 9, ll. 5-41) as shown in Figure 11. In contrast, the alcohol-soluble polyamide of Fuller is applied as an overcoating layer atop a multi-layer imaging member. The overcoating layer is applied to protect an underlying photoconductive layer (Fuller, col. 3, ll. 1-4). In this application, the overcoat layer serves a different purpose and solves a different problem than the heat and/or pressure bonded strip of strength enhancing material of Parker. The Examiner has not provided sufficient evidence indicating that one of ordinary skill in the art would have understood the alcohol-soluble polyamide of Fuller as having the properties necessary to serve as the strength enhancing material of Parker.

As neither Sakakibara nor the Handbook of Thermoset Plastics is relied upon by the Examiner in a manner that cures the deficiencies of Fuller, we need not discuss those references here. We conclude that the Examiner has failed to establish a *prima facie* case of obviousness with respect to the subject matter of claims 1 and 3-25.

The above being said, the specification indicates that alcohol-soluble polyamides were commercially available under the tradenames Luckamide[®] 5003 (Dia Nippon Ink), CM4000[®] and CM8000[®] (Toray Industries, Ltd.), and Nylon[®] 8 (specification, p. 16, ll. 17-20). The commercial purposes for which these materials were sold at the time of the invention is relevant to the patentability of the subject matter on appeal, but such information is not of record. An important question is whether the conventional uses known at the time of the invention would have suggested to one of ordinary skill in the art the selection of the commercially available alcohol-soluble polyamides for use in the polyamide strip of Parker. To answer that question, documentation as to the conventional uses at the time of invention is required. We hereby remand the application to the Examiner to allow the Examiner to perform the relevant search for such documentation and, if the Examiner finds it appropriate, to direct a requirement for information under 37 CFR § 1.105 to Appellants regarding documentation of commercial uses known to them of alcohol-soluble polyamides discussed in their specification. Such documents would include product data sheets, trade catalogs, and advertising materials. We remand to further allow the Examiner to perform the appropriate review of all the evidence and to act accordingly in light of that evidence.

CONCLUSION

To summarize, the decision of the Examiner to reject claims 1 and 3-25 under 35 U.S.C. § 103(a) is reversed and this application is remanded for further action not inconsistent with the discussion above.

This remand to the examiner pursuant to 37 CFR § 41.50(a)(1) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)) is *not* made for further consideration of a rejection. Accordingly, 37 CFR § 41.50(a)(2) does not apply.

REVERSED AND REMANDED

CHUNG K. PAK)
Administrative Patent Judge)
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) BOARD OF PATENT
CATHERINE TIMM) APPEALS
Administrative Patent Judge) AND
) INTERFERENCES
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ROMULO H. DELMENDO)
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