

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte MARY R. HABLE, KAM W. LAW, CHRISTOPHER J. ZWETTLER,  
R. GALEN McCREA JR., DAVID P. SMITH and JEFFREY W. McCUTCHEON

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Appeal No. 1997-2686  
Application 08/346,635

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ON BRIEF

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Before THOMAS, JERRY SMITH and FRAHM, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-18, which constituted all the claims in the application. An amendment after final rejection was filed on June 10, 1996 and was

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entered by the examiner. This amendment canceled claims 1, 16 and 18 and added claims 19 and 20. Therefore, this appeal now involves the rejection of claims 2-15, 17, 19 and 20.

The disclosed invention pertains to a drive belt for use in a belt driven tape cartridge. More particularly, the invention relates to a belt having a layer of high stiffness material and a layer of low stiffness material.

Representative claim 15 is reproduced as follows:

15. A belt driven tape cartridge comprising

a belt drive roller;

a pair of belt guide rollers;

a pair of hubs on which is wound a length of magnetic tape, thereby forming a tape pack; and

a drive belt entrained around the drive roller, the pair of guide rollers, and the tape pack, whereby rotation of the drive roller causes the drive belt to transfer the magnetic tape from one hub to the other, wherein the drive belt comprises a layer of a high stiffness material adjacent to the tape pack and a layer of a low stiffness material further away from the tape pack.

The examiner relies on the following references:

Von Behren	3,692,255	Sep. 19, 1972
Newell	4,396,465	Aug. 02, 1983
Habegger	4,752,282	June 21, 1988
Balloni et al. (Balloni)	5,057,177	Oct. 15, 1991
Eggebeen et al. (Eggebeen)	5,131,891	July 21, 1992

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As a result of the amendment after final rejection noted above, the following rejections were set forth in the examiner's answer:

1. Claims 15, 2, 9-12, 14 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Eggebeen in view of Von Behren.

2. Claims 3-6 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Eggebeen in view of Von Behren and further in view of Newell.

3. Claims 7, 8, 19 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Eggebeen in view of Von Behren and further in view of Habegger.

4. Claim 13 stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Eggebeen in view of Von Behren and further in view of Balloni.

Rather than repeat the arguments of appellants or the

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examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 2, 5-15, 17, 19 and 20. We reach the opposite conclusion with respect to claims 3 and 4.

Accordingly, we affirm-in-part.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine,

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837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument

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and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

We consider first the rejection of claims 15, 2, 9-12, 14 and 17 based on the teachings of Eggebeen and Von Behren. These claims stand or fall together [brief, page 7]. With respect to representative, independent claim 15, the examiner cites Eggebeen as teaching a drive belt for belt driven tape cartridges having a layer of high stiffness material and a layer of low stiffness material. Von Behren teaches the conventional components of a belt driven tape cartridge. The examiner asserts the obviousness of using the Eggebeen two-layer belt in the Von Behren conventional cartridge. The

examiner also observes that the "adjacent" and "further away" recitations of claim 15 are met by use of the Eggebeen belt in the Von Behren cartridge [answer, pages 6-7].

Appellants argue that Eggebeen has no teaching of inserting the two-layer belt such that the layer of high stiffness material is adjacent to the tape pack and the low stiffness material is further away from the tape pack [brief, pages 7-8]. Appellants also argue that Eggebeen teaches that a two-layer belt is less desirable than a belt having a blend of polymers in a single layer [*id.*, page 8]. Finally, appellants argue that the examiner's interpretation of "adjacent" is

unreasonable as it directly contradicts the teaching throughout the specification [*id.*, page 9].

With respect to appellants' second argument, we agree with the examiner that Eggebeen's teaching that a single layer of blended materials is preferable to two laminated layers does not repudiate Eggebeen's teaching that two-layer belts had been successfully used. With respect to appellants' first and third arguments noted above, we agree with the examiner

that the claim does not sufficiently distinguish from the Eggebeen belt operating in the Von Behren cartridge.

The examiner's position is basically that when one looks at the entire path of the drive belt, there are points at which the layer having high stiffness would be nearer to the tape pack and points where the layer having low stiffness would be nearer to the tape pack. For example, in appellants' Figure 1, drive belt 18 has the layer of high stiffness material closer to the tape pack at the point of contact with the tape pack, but the layer of low stiffness is closer to the tape pack at the points between the guide rollers 22 and 24. Thus, regardless of which way the Eggebeen belt is inserted into the Von Behren cartridge, there are points within the cartridge where the limitations of

claim 15 are satisfied. The examiner's position is simply that claim 15 fails to limit the invention to what was disclosed as the intended invention. Since appellants could amend the claim to properly define the invention, we agree with the examiner that the broadest reasonable interpretation of the present claims covers an invention which is suggested

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by the collective teachings of Eggebeen and Von Behren. Therefore, we sustain the rejection of claims 15, 2, 9-12, 14 and 17.

We now consider the rejection of claims 3-6 based on the teachings of Eggebeen, Von Behren and Newell. Claims 5 and 6 were grouped with claim 15 and have not been separately argued [brief, page 7]. Therefore, we sustain the rejection of these claims for reasons discussed above. With respect to claims 3 and 4, appellants' argument that Newell does not overcome the deficiencies of Eggebeen and Von Behren is not persuasive because there are no deficiencies in Eggebeen and Von Behren as discussed above. However, appellants also argue that the thickness ratios of the layers in Newell are the opposite from the ratios set forth in these claims [brief, page 11]. The examiner simply asserts that it would have been obvious to one of ordinary skill in the art to determine the optimal value of the thickness ratio of the two layers by routine experimentation [answer, page 12].

We agree with appellants that the specific ratios recited in claims 3 and 4 are not suggested by the applied

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prior art and are not the result of routine experimentation and optimization as alleged by the examiner. The fact that the applied prior art discloses ratios opposite to those set forth in the claimed invention suggests that the claimed ratios are not the result of routine experimentation or optimization. The examiner has supplied no evidence on this record in support of his conclusion. Therefore, we do not sustain the rejection of claims 3 and 4 as set forth by the examiner.

We now consider the rejection of claims 7, 8, 19 and 20 based on the teachings of Eggebeen, Von Behren and Habegger. Many of appellants' arguments with respect to these claims were considered and discussed above. Appellants also argue that there is nothing in Habegger which would suggest the addition of a layer of damping material intermediate the high stiffness and low stiffness materials [brief, page 13]. The examiner responds that the damping layer suggested by Habegger is sufficient to suggest the obviousness of this feature as broadly recited in the claims [answer, page 13].

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We agree with the examiner that the intermediate layers of Habegger are damping layers within the broad meaning of that term. We also agree with the examiner that the collective teachings of the applied prior art would have suggested the obviousness of adding damping layers to the two-layer belt of Eggebeen. Therefore, we sustain the rejection of claims 7, 8, 19 and 20.

We now consider the rejection of claim 13 based on the teachings of Eggebeen, Von Behren and Balloni. Appellants' only argument with respect to this rejection is that Balloni does not overcome the deficiencies of Eggebeen and Von Behren as discussed above. Since we have found no deficiencies in the examiner's application of Eggebeen and Von Behren, we sustain the examiner's rejection of claim 13.

In summary, the examiner's rejection of all pending claims under 35 U.S.C. § 103 has been sustained with respect to claims 2, 5-15, 17, 19 and 20, but has not been sustained with respect to claims 3 and 4. Therefore, the decision of the examiner rejecting claims 2-15, 17, 19 and 20 is affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
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	)	
	)	
JERRY SMITH	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
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	)	
ERIC FRAHM	)	
Administrative Patent Judge	)	

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