

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 14

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte JAY D. SWOPE

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Appeal No. 2004-1052  
Application No. 09/848,132

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ON BRIEF

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Before FRANKFORT, NASE, and BAHR, Administrative Patent Judges.  
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 15 to 27, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention is directed to a multiple-pulley accessory drive system for an automobile; and more specifically, to an accessory drive belt for such an accessory drive system. The invention was specifically developed to address the need for an accessory drive belt capable of relatively easy installation by stretching the drive belt over the pulleys of the multiple-pulley accessory drive system, where this drive belt maintains sufficient tension throughout the design life of the drive system (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Semin et al. (Semin)	3,643,518	Feb. 22, 1972
Winninger et al. (Winninger)	6,033,331	March 7, 2000

Claims 15 to 19 and 22 to 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Winninger.

Claims 15 to 17, 19, 22 to 24 and 26 stand rejected under 35 U.S.C. § 103 as being unpatentable over Winninger.

Claims 20, 21, 26 and 27 stand rejected under 35 U.S.C. § 103 as being unpatentable over Winner in view of Semin.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (Paper No. 10, mailed October 7, 2003) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 9, filed July 11, 2003) and reply brief (Paper No. 11, filed November 12, 2003) for the appellant's arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

#### **The anticipation rejection**

We will not sustain the rejection of claims 15 to 19 and 22 to 25 under 35 U.S.C. § 102(b) as being anticipated by Winner.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

Claim 15, the only independent claim subject to this rejection, reads as follows:

A multiple-pulley accessory drive system for an automobile, comprising:  
a drive pulley driven by an automobile engine;  
at least one accessory pulley operatively coupled to an accessory drive shaft, the drive pulley and accessory pulley having a nominal drive length therebetween; and  
an endless drive belt engaged between the drive pulley and the accessory pulley, the drive belt including an endless band of rubber composite material having a plurality of circumferentially extending and axially aligned cords formed therewithin;  
wherein the endless drive belt has a tensile modulus in the range of approximately 7000 N/mm/mm (1575 lbf/in/in) to approximately 10,000 N/mm/mm (2250 lbf/in/in).

In the anticipation rejection before us in this appeal, the examiner determined (answer, pp. 3-5) that claim 15 was readable on the belt and pulley system disclosed in the BACKGROUND OF THE INVENTION section of Winninger.<sup>1</sup> The examiner asserts (answer, p. 5) that a tensile modulus of approximately 7000 N/mm/mm converts to approximately 6.8 daN/% of elongation per belt width centimeter per strand and that approximately 10,000 N/mm/mm converts to approximately 8.5 daN/% of elongation per belt width centimeter per strand. Lastly, the examiner concludes (answer, p. 5) that the claimed tensile modulus range of approximately 7000 N/mm/mm to approximately 10,000 N/mm/mm (i.e., approximately 6.8 daN/% of elongation per belt width centimeter per strand to approximately 8.5 daN/% of elongation per belt width centimeter per strand) encompasses the 5.5 daN/% of elongation per belt width centimeter per strand

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<sup>1</sup> That section provides:

The Applicant markets striated belts with V-shaped teeth, the so-called adapted-modulus belts, said belts comprising polyamide 6.6 twisted strands and being intended for electric household appliances, such as linen washers and dryers.

Such belts have a stress-elongation diagram, which characterizes their modulus of elasticity and the average slope of which, between 1% and 10% of elongation, is substantially equal to 5.5 daN/% of elongation, per belt width centimeter and per strand.

Said belts are mounted, with a fixed distance between axes, by tensioning them and, once positioned, by releasing them (the so-called automatic mounting process or "snap-on").

Anyway, belts of this type but usable for automotive applications are not on the market at the present time.

As a matter of fact, the use of twisted strands in a striated belt intended for automotive applications, so as to transmit power between an engine and a receiving device, such as an alternator, means a number of problems, especially owing to the acyclic property of the engine output curve, said acyclic feature being sharper for four-cylinder engines than for six- or eight-cylinder engines and being quite greater in diesel engines than in gasoline engines.

taught by the specific belt disclosed in the BACKGROUND OF THE INVENTION section of Winner.

Claim 15 is not anticipated by the belt and pulley system disclosed in the BACKGROUND OF THE INVENTION section of Winner for the following two reasons. First, the 5.5 daN/% of elongation per belt width centimeter per strand taught by the specific belt disclosed in the BACKGROUND OF THE INVENTION section of Winner is not encompassed within approximately<sup>2</sup> 7000 N/mm/mm (i.e., approximately 6.8 daN/% of elongation per belt width centimeter per strand) since 5.5 daN/% of elongation per belt width centimeter per strand is not close to or nearly the same as 6.8 daN/% of elongation per belt width centimeter per strand. Second, the drive pulley around which the specific belt disclosed in the BACKGROUND OF THE INVENTION section of Winner is mounted is not disclosed as being driven by an automobile engine as required by claim 15. In that regard, we agree with the appellant (reply brief, pp. 1-2) that Winner's statement that "[a]nyway, belts of this type but usable for automotive applications are not on the market at the present time" does not necessary indicate that the specific belt disclosed in the BACKGROUND OF THE

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<sup>2</sup> The American Heritage Dictionary, Second College Edition, (1982) defines "approximate" as "to come close to; be nearly the same as."

INVENTION section of *Winninger* is known to be used mounted about a drive pulley driven by an automobile engine.

For the reasons set forth above, claim 15 is not anticipated by *Winninger*. Accordingly, the decision of the examiner to reject claim 15, and claims 16 to 19 and 22 to 25 dependent thereon, under 35 U.S.C. § 102(b) is reversed.

**The obviousness rejection based on *Winninger* alone**

We will not sustain the rejection of claims 15 to 17, 19, 22 to 24 and 26 under 35 U.S.C. § 103 as being unpatentable over *Winninger*.

With regard to independent claim 15, *Winninger's* specific belt disclosed in the BACKGROUND OF THE INVENTION section does not teach or suggest an endless drive belt having a tensile modulus in the range of approximately 7000 N/mm/mm (1575 lbf/in/in) to approximately 10,000 N/mm/mm (2250 lbf/in/in). To supply this omission in the teachings of *Winninger*, the examiner made a determination (answer, p. 3) that this difference would have been obvious to an artisan as a matter of engineering design choice. However, this determination has not been supported by any evidence that would have led an artisan to arrive at an endless drive belt having a tensile modulus in the range of approximately 7000 N/mm/mm (1575 lbf/in/in) to approximately 10,000

N/mm/mm (2250 lbf/in/in). A broad conclusory statement regarding the obviousness of modifying a reference, standing alone, is not "evidence." Thus, when an examiner relies on general knowledge to negate patentability, that knowledge must be articulated and placed on the record. See In re Lee, 277 F.3d 1338, 1342-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002). See also In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Without such evidence, we must reverse the decision of the examiner to reject claim 15 under 35 U.S.C. § 103.

Claim 26 reads as follows:

A two-pulley accessory drive system for an automobile, comprising:  
a drive pulley;  
an accessory pulley operatively coupled to an accessory drive shaft, the drive pulley and accessory pulley having a nominal drive length therebetween;  
and  
an endless drive belt engaged between the drive pulley and the accessory pulley, the drive belt including an endless band of rubber composite material having a plurality of circumferentially extending and axially aligned cords formed therewithin;  
wherein the endless drive belt has a tensile modulus of approximately 8500 N/mm/mm (1910 lbf/in/in); and  
wherein the circumferential length of the endless drive belt, before installation on the pulleys, is approximately 2.2% to approximately 2.3% lower than the nominal drive length between the drive pulley and the accessory pulley.

With regard to independent claim 26, Winninger's specific belt disclosed in the BACKGROUND OF THE INVENTION section does not teach or suggest an endless drive belt having a tensile modulus of approximately 8500 N/mm/mm (1910 lbf/in/in).

Once again, to supply this omission in the teachings of Winninger, the examiner made a determination (answer, p. 3) that this difference would have been obvious to an artisan as a matter of engineering design choice. However, this determination has not been supported by any evidence that would have led an artisan to arrive at an endless drive belt having a tensile modulus of approximately 8500 N/mm/mm (1910 lbf/in/in). Without such evidence, we must reverse the decision of the examiner to reject claim 26 under 35 U.S.C. § 103.

For the reasons set forth above, the decision of the examiner to reject claims 15 and 26, and claims 16, 17, 19, 22 to 24 dependent thereon, under 35 U.S.C. § 103 as being unpatentable over Winninger is reversed.

**The obviousness rejection based on Winninger and Semin**

We will not sustain the rejection of claims 20, 21, 26 and 27 under 35 U.S.C. § 103 as being unpatentable over Winninger in view of Semin.

We have reviewed the patent to Semin additionally applied in this rejection but find nothing therein which makes up for the deficiencies of Winninger discussed above with respect to claims 15 and 26. Accordingly, the decision of the examiner to reject

claims 20, 21, 26 and 27 under 35 U.S.C. § 103 as being unpatentable over Winner in view of Semin is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 15 to 19 and 22 to 25 under 35 U.S.C. § 102(b) is reversed and the decision of the examiner to reject claims 15 to 17, 19 to 24, 26 and 27 under 35 U.S.C. § 103 is reversed.

REVERSED

CHARLES E. FRANKFORT  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

JENNIFER D. BAHR  
Administrative Patent Judge

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