

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DIETER GULDENFELS

Appeal No. 2003-1285
Application 09/751,513

ON BRIEF

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

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 17, which are all of the claims pending in this application.

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Appellant's invention is directed to a drive sprocket for driving a modular belt having a plurality of belt modules (claims 1-8), a conveying apparatus including a modular belt and the above-noted drive sprocket (claims 9-16), and a method of driving a modular belt with the drive sprocket (claim 17). Independent claims 1, 9, 16 and 17 are representative of the subject matter on appeal and a copy of those claims may be found in the Appendix to appellant's brief.

The sole prior art reference of record relied upon by the examiner is:

Horton	5,921,379	Jul. 13, 1999
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Claims 1 through 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Horton.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejection, we refer to the final rejection (Paper No. 7, mailed July 10, 2002) and the examiner's answer (Paper No. 11, mailed January 30,

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2003) for a complete exposition of the examiner's position and to appellant's brief (Paper No. 10, filed December 31, 2002) for the arguments thereagainst.

OPINION

Having carefully reviewed the anticipation issues raised in this appeal in light of the record before us, we have come to the conclusion that the examiner's rejection of the appealed claims under 35 U.S.C. § 102(b) will be sustained with regard to claims 1, 2 and 4 through 8, but not with regard to claims 3 and 9 through 17. Our reasoning in support of these determinations follows.

In rejecting claims 1 through 17 under 35 U.S.C. § 102(b) the examiner specifically directs us to Figure 6 of the Horton patent, urging (final rejection, page 2) that we note driving surfaces (86) and (87) of the sprocket (84) shown therein. The examiner then makes the following observations concerning the drive sprocket of Figure 6:

The fact that the sprocket always has both driving surfaces means that the sprocket inherently will drive both the center rib and the link ends contrary to the impression

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given by the use of "Alternatively" in the detailed description. Note figure 6 shows simultaneous driving by both surfaces.

While appellant appears to be in agreement with the examiner that the drive sprocket (84) seen in Figure 6 of the Horton patent includes a plurality of rows of teeth having driving surfaces (86) and (87) thereon, appellant strongly contends that Figure 6 does not show the "simultaneous driving by both surfaces" as asserted by the examiner in the final rejection and concludes that "[b]ecause Horton does not disclose the simultaneous engagement of the first center driving surface with the rib and the engagement of the second link end driving surface with the link end of the same belt module, Horton does not anticipate claims 1-17" (brief, page 5).

We agree with appellant that there is no teaching or suggestion in the Horton patent of a conveying apparatus and method like that defined in claims 9 through 17 on appeal, because Horton does not show or teach 1) a drive sprocket having a plurality of teeth disposed around its perimeter wherein said teeth are constructed in the manner required in claims 9 through 17 on appeal and disposed "such that one of the first surfaces on

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a first tooth engages one of the ribs on a first belt module and one of the second surfaces on a second tooth simultaneously engages one of the link ends on the first belt module" (emphasis added) (claim 9), 2) "means for engaging the modular belt such that each belt module is simultaneously engaged by a center driving surface and a link end driving surface on the engaging means" (emphasis added) (claim 16), or 3) the step of engaging a drive sprocket with a modular belt "such that each belt module is simultaneously driven by a first tooth in a first tooth pair and a second tooth in a second pair of teeth adjacent to the first pair" (emphasis added) (claim 17).

The examiner's assertion of inherency in the final rejection and further assertion that the showing in Figure 6 of Horton "makes clear that the two arrangements can be used simultaneously" (answer, page 3) are simply not supported by any disclosure or showing in the Horton patent and, in our view, are based entirely on speculation and conjecture on the examiner's part. It is well settled that inherency may not be established by probabilities or possibilities, but must instead be "the natural result flowing from the operation as taught." See In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). In

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the present case, the examiner's theory of simultaneous engagement is clearly not the natural result flowing from the operation of the driving sprocket (84) as taught in Horton. In fact, as appellant has pointed out in the brief (page 6), Horton specifically refers to the use of driving surfaces (87) to engage the connecting members (74, 75) of the belt modules therein as being an alternative to the use of the driving surfaces (86) to engage undercut portions (88, 89) on the ends of the hinge elements (col. 6, lines 34-57).

Since the examiner has not demonstrated that all the limitations of appellant's independent claims 9, 16 and 17 are found in Horton, either expressly or under principles of inherency, it follows that the examiner has not established a *prima facie* case of anticipation, and that the examiner's rejection of claims 9, 16 and 17 under 35 U.S.C. § 102(b) will not be sustained. It likewise follows that the examiner's rejection of dependent claims 10 through 15 under 35 U.S.C. § 102(b) relying on Horton will not be sustained.

As for the examiner's rejection of independent claim 1 under 35 U.S.C. § 102(b) based on Horton, we will sustain that rejection because claim 1 does not include the requirement for

simultaneous engagement or driving as set forth in the claims discussed above and as argued by appellant in the brief. Claim 1 is directed to the drive sprocket *per se* and merely defines a sprocket having a plurality of teeth disposed around its perimeter and disposed such that one of the first surfaces on a first tooth engages one of the ribs on a first belt module and one of the second surfaces on a second tooth engages one of the link ends on the first belt module. Figure 6 of Horton clearly shows such a drive sprocket for driving a modular belt. The drive sprocket (84) of Horton includes a plurality of teeth disposed around its perimeter and disposed such that one of the first surfaces (87) on a first tooth engages one of the ribs or connecting members (74, 75) on a first belt module and one of the second surfaces (86) on a second tooth engages one of the link ends (e.g., 88) on the first belt module, depending on which of the alternative drive arrangements is selected. Nothing in claim 1 on appeal requires the first belt module to be engaged at two different points by two different teeth at the same time.

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Since appellant has made no separate argument for patentability as to any of claims 2 and 4 through 8 in the brief, we consider that those claims will fall with claim 1 from which they depend.

Dependent claim 3 further limits the drive sprocket of claim 1 by requiring that the plurality of teeth be arranged in pairs and disposed "such that one of the first surfaces on a first tooth in a first pair engages one of the ribs on a first belt module and one of the second surfaces on a second tooth in a second pair simultaneously engages one of the link ends on the first belt module." As we indicated in our discussions above, this aspect of appellant's claimed invention is not found in Horton, either expressly or under principles of inherency. Accordingly, the examiner's rejection of claim 3 under 35 U.S.C. § 102(b) will not be sustained.

In light of the foregoing, the decision of the examiner to reject claims 1 through 17 under 35 U.S.C. § 102(b) based on Horton is affirmed as to claims 1, 2 and 4 through 8, but not with regard to claims 3 and 9 through 17. Thus, the decision of the examiner 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

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES E. FRANKFORT)	
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