

***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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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***Ex parte*** FREDERICK F. KAZMIERCZAK,  
MICHAEL K. ANDREWS and  
MICHAEL RAFFETTO

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Appeal No. 96-3898  
Application 08/420,441<sup>1</sup>

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ON BRIEF

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Before HAIRSTON, KRASS and FLEMING, *Administrative Patent Judges*.

FLEMING, *Administrative Patent Judge*.

***DECISION ON APPEAL***

This is a decision on appeal from the final rejection of claims 1 through 4, 6, 7, 17 through 19 and 22, all of the claims pending in the present application. Claims 5, 8 through 16, 20 and 21 have

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<sup>1</sup> Application for patent filed April 10, 1995. According to appellants, this application is a continuation of Application No. 08/222,088, filed April 4, 1994, now abandoned.

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been amended.

The invention relates to a device for clamping discs to a hub in a disc drive.

The independent claim 1 is reproduced as follows:

1. A data disc support assembly for supporting at least one high capacity data disc relative to a head so data on a surface of the disc is accessible by the head, the head having a head height, wherein the high capacity data disc is for use with a disc drive in a portable computer, the support assembly comprising:

a hub having first and second axial ends and a flange extending from the second axial end, the flange supporting the data disc; and

a clamp connected to the hub to rigidly connect the data disc to the hub, the clamp being a thermally responsive clamp connected to the hub by a thermal shrink fit, the clamp having a first generally annular portion contacting the data disc and a second generally annular portion extending radially away from the hub beyond the first annular portion and being spaced from the data disc by a distance greater than the head height.

The Examiner relies on the following references:

Barton et al. (Barton) (UK Patent Application)	2,023,257	Dec. 28, 1979
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Appellants' admitted prior art

Claims 1 through 4, 6, 7, 17 through 19 and 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Appellants' admitted prior art and Barton.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the brief and answer for the respective details thereof.

***OPINION***

We will not sustain the rejection of claims 1 through 4, 6, 7, 17 through 19 and 22 under 35 U.S.C. § 103.

The Examiner has failed to set forth a *prima facie* case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. *In re Sernaker*, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." *Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 117 S.Ct. 80 (1996) *citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Appellants argue on pages 8 through 10 of the brief that the admitted prior art and Barton fail to suggest the Examiner's proposed modification. Appellants argue at best the admitted prior art suggests that in order to engage the hub with increased-inward forces, the cross-sectional area symmetrically along the axis for the heat shrink clamp must be increased. Appellants argue that Barton teaches a

clamp connected to the hub with a screw connection in which the clamp engages the hub with a force parallel to the axis of the hub. Appellants argue that the overhang does not, in and of itself, provide additional force. Appellants point out that the overhang's purpose is to provide space for the sinking of a screw head. Appellants argue that there would be no reason to modify the admitted prior art as proposed by the Examiner.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), *citing In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." *Para-Ordnance Mfg.*, 73 F.3d at 1087, 37 USPQ2d at 1239, *citing W. L. Gore*, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13.

We fail to find any suggestion in the prior art to modify the admitted prior art to provide a clamp being a thermally responsive clamp connected to the hub by a thermal shrink fit, in which the clamp has a second generally annular portion extending radially away from the hub beyond the first annular portion and being spaced from the data disc by a distance greater than the head height to obtain Appellants' claimed invention. Upon a careful review of Barton, we find that the purpose of the overhang shown in Figures 3, 5, 6 through 8 is not for providing additional

inward force to hold the clamp onto the hub. Barton discloses on page 3, lines 42-52, that the clamp is not held by a shrink fit but by a leaf spring 44 pressed against the top of the groove 46 to urge the mounting ring downwardly against the ledge 40 on the spindle. Barton further discloses that the leaf spring 44 is held in place by a screw 48 that screws into a threaded hole formed in the mounting ring. Barton is silent as to the overhang, but from Barton Figure 5, it is clear that the purpose of the overhang is not to provide additional force but only to accommodate the screw 48. We find no suggestion to use Barton's overhang which purpose is to provide space for a screw head to modify a shrink fit clamp when a shrink fit clamp does not require a screw or a space for a screw head.

Therefore, we have not sustained the rejection of claims 1 through 4, 6, 7, 17 through 19 and 22 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

***REVERSED***

KENNETH W. HAIRSTON )  
Administrative Patent Judge )  
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) BOARD OF PATENT  
ERROL A. KRASS )  
Administrative Patent Judge ) APPEALS AND  
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) INTERFERENCES  
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MICHAEL R. FLEMING )  
Administrative Patent Judge )

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