

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 41

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHOJI TSUTAKI
and HIROSHIGE YAMAKI

Appeal No. 96-3612
Application 08/161,869¹

HEARD: August 5, 1999

Before URYNOWICZ, HAIRSTON and BARRY, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 12 through 19 and 24 through 27. After submission of the brief, the examiner objected to claims 15 and 19 as being dependent upon a rejected base claim, and notified appellants that these claims would be allowable if rewritten in independent form

¹ Application for patent filed December 6, 1993. According to appellants, the application is a continuation of Application 07/808,638, filed December 17, 1991, now abandoned.

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including all of the limitations of the base claim and any intervening claims (Answer, pages 1, 2, 13 and 14).

Accordingly, claims 12 through 14, 16 through 18 and 24 through 27 remain before us on appeal.

The disclosed invention relates to a magnetic head assembly, and to a method for manufacturing the same. The magnetic head has a die-molded rotatable head base formed from a conductive resin material. An outer surface of the head base defines a housing envelope for a head chip buried therein.

Claim 12 is illustrative of the claimed invention, and it reads as follows:

12. A magnetic head comprising:
a die-molded rotatable head base formed from a conductive resin material and presenting an outer surface defining a housing envelope formed in said head base, said head base having an aperture therethrough generally defining an axis of rotation thereof; and
a head chip comprising a magnetic substance and having at least a portion thereof buried within said housing envelope so that said magnetic substance is in contact with said outer surface defining said housing envelope in a manner which secures said head chip to said head base, said housing envelope formed in said head base defining a relative position of said head chip with respect to said axis of rotation of said head base.

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The references relied on by the examiner are:

Crow	4,237,603	Dec. 9, 1980
Fujioka et al. (Fujioka)	4,509,084	Apr. 2, 1985
Nakanishi	4,939,606	Jul. 3, 1990
Gleissner et al. (Gleissner)	5,084,798	Jan. 28, 1992
Wright	5,115,299	May 19, 1992
Ogi ² (Japanese patent application)	2-161605	Jun. 21, 1990.

Claims 12, 14, 16 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Fujioka in view of Ogi and Nakanishi.

Claims 24 through 26 stand rejected under 35 U.S.C. § 103 as being unpatentable over Fujioka in view of Ogi, Nakanishi and Crow.

Claims 12, 14, 16 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ogi in view of Fujioka and Nakanishi.

² A copy of the translation of this reference is attached.

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Claims 24 through 26 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ogi in view of Fujioka, Nakanishi and Crow.

Claims 13 and 17³ stands rejected under 35 U.S.C. § 103 as being unpatentable over Fujioka in view of Ogi, Nakanishi and Gleissner.

Claims 13 and 17 stands rejected under 35 U.S.C. § 103 as being unpatentable over Ogi in view of Fujioka, Nakanishi and Gleissner.

Claim 27 stands rejected under 35 U.S.C. § 103 as being unpatentable over Fujioka in view of Ogi, Nakanishi and Wright.

Claim 27 stands rejected under 35 U.S.C. § 103 as being unpatentable over Ogi in view of Fujioka, Nakanishi and Wright.

Reference is made to the briefs and the answers for the respective positions of the appellants and the examiner.

OPINION

³ Claim 17 was not listed in the grounds of rejection (Answer, pages 3 through 13). Since this claim is directed to the same conductive resin material recited in claim 13, we have listed claim 17 with claim 13.

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All of the rejections are reversed because the applied references neither teach nor would have suggested to one of ordinary skill in the art a die-molded rotatable head base formed from a conductive resin material.

We agree with the examiner that "Fujioka discloses a rotary magnetic head comprising plural head chips (44,94) buried within the housing envelopes (figures 5, 10, and 14) of a head base (41), wherein the head chips and head base may be formed from different materials (column 6 - lines 49 to 62)," and that "Fujioka does not expressly disclose the head base as being formed from die-molded conductive resin" (Answer, pages 3 and 4). We also agree with the examiner that "Ogi discloses a rotary magnetic head [translation, page 6] comprising a head base formed from a resin" (Answer, page 4). With respect to the examiner's statement (Answer, page 4) that "Nakanishi discloses a rotary magnetic head assembly formed from molded plastics (column 7 - lines 26 to 29, column 8 - line 48), including conductive plastics (column 7 - lines 61 and 62)," we find that Nakanishi only discloses conductive plastic grounding parts 5A and 5B (Figure 13) that are formed on the

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plastic winding drum 2 (column 7, lines 59 through 63) for the purpose of dissipating the static electricity created by friction between the magnetic tape 12 and the drum 2 (column 8, lines 3 through 11). No other portion of the winding drum assembly is made from conductive plastics.

Appellants argue (Substitute Brief, pages 11 and 12)

that:

It is clear that none of Fujioka, Ogi or Nakanishi even remotely suggest, either alone or in combination, the provision of a magnetic head having a die-molded head base formed from a conductive resin material, and which has a housing envelope defined by a conductive resin surface that contacts the magnetic substance of a head chip in the manner which secures the head chip to the base as claimed. The Examiner has chosen simply to make unsupported general arguments as to why it would be obvious to use conductive resins in the field of magnetic heads, but has not addressed any of the specific claim limitations.

We agree. Even if we assume for the sake of argument that it would have been obvious to one of ordinary skill in the art to combine the teachings of Fujioka, Ogi and Nakanishi, the combined teachings would still not have a head base formed from a "conductive resin material" with a head chip buried within a housing envelope portion of the head base.

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Based upon the foregoing, the obviousness rejections of claims 12, 14, 16 and 18 based upon the teachings of Fujioka, Ogi and Nakanishi are reversed.

The obviousness rejections of claims 24 through 26 are reversed because the injection molding teachings of Crow do not cure the noted shortcomings in the teachings of Fujioka, Ogi and Nakanishi.

The obviousness rejections of claims 13 and 17 are reversed because the carbon fiber reinforced polyamide teachings of Gleissner do not cure the noted shortcomings in the teachings of Fujioka, Ogi and Nakanishi.

The obviousness rejections of claim 27 are reversed because the chip carrier teachings of Wright do not cure the noted shortcomings in the teachings of Fujioka, Ogi and Nakanishi.

DECISION

The decision of the examiner rejecting claims 12 through 14, 16 through 18 and 24 through 27 under 35 U.S.C. § 103 is reversed.

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REVERSED

STANLEY M. URYNOWICZ, JR.)	
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)	BOARD OF PATENT
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Administrative Patent Judge)	APPEALS AND
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