

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAKAO MATSUI and KENJI OGASAWARA

Appeal No. 1998-0696
Application No. 08/444,664

ON BRIEF

Before KRASS, JERRY SMITH, and FLEMING, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 9, the only claims remaining in the application.

The invention is directed to a system and method of positioning a magnetoresistive head for reading and writing information from and to a disk.

Representative independent claim 1 is reproduced as follows:

1. A method of positioning a magnetoresistive head for reading and writing information from and to a disk, the magnetoresistive head including a magnetoresistive read element and a write element, the write element being spaced a predetermined distance from the read element, the disk including at least one track having at least one servo area for storing servo information for identifying a track location, at least one identification area for storing sector information for identifying a sector, and at least one data area for writing or reading data information, the method comprising the steps of:

(a) obtaining a position error signal from the servo area;

(b) adjusting said position error signal by adding a first offset amount when said write element is writing information on said disk;

(c) adjusting said position error signal by adding a second offset amount when said read element is reading data from said disk,

wherein said first and second offsets are non-zero in magnitude and of opposite directions; and

(d) positioning said magnetoresistive head on said disk in response to the adjusted position error signal.

The examiner relies on the following references:

Hanson 1995	5,436,773	Jul. 25, (filed Jun. 10, 1994)
European Patent Application 1992 Brown et al. (Brown)	479,703	Apr. 8,

In addition, the examiner relies on admitted prior art [APA] as specifically set forth at page 2, lines 8-10, of the instant specification.

Claims 1 through 9 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner cites APA and Hanson with regard to claims 4 and 7 through 9, adding Brown to this combination with regard to claims 1 through 3, 5 and 6.

Reference is made to the brief and answer for the respective positions of appellants and the examiner.

OPINION

We reverse.

It is our view that the examiner has failed to establish a prima facie case of obviousness with regard to the instant claimed subject matter.

Independent claim 4 requires a method step of "providing a range equidistant from the center of the servo area in which a read element moves during a read, a write, or a format operation on said disk." Independent claim 7 requires, inter alia, "a range where said read element can move relative to said track is equally distant from the center of said track."

The examiner admits that APA, which essentially says only that a magnetoresistive head is typically provided with a reproduction element and a recording element, does not limit the movement of the reproduction element to a range extending equally distant from the center of the track, which is, of course, appellants' improvement over the prior art.

The examiner relies on Hanson to provide for such a teaching, citing, specifically, Hanson's recitation of causing a "readback sensitivity profile to be mirrored about the sensor center..." [abstract of Hanson, the examiner also cites column 3, lines 60-65 of Hanson]. The examiner reasons that since the servo bursts of Hanson are symmetrically displaced to opposite sides of the track center, it would have been obvious to apply this teaching to APA in order to have provided a "more uniform, wider linear MR region" [answer-page 4].

We fail to follow the examiner's reasoning. Hanson is concerned with increasing head sensitivity by reversing bias current direction dependent on the position of a given burst pattern with respect to the center of the servo pattern and does not appear to be concerned at all with the problem of the instant claimed invention which is to limit the range of motion of the read element to be equidistant from the track center when the magnetoresistive head is reading, writing or formatting. Although appellants make this argument, as well as point to specific claim limitations which are believed not suggested by the applied references [brief, pages 8-10], the examiner's response is merely to state [answer-page 7] that "[i]f two places are 'mirrored' about a central location, they are equally distant from each other" and that the examiner relies on APA for the claimed range of motion limitations. The examiner's response is not persuasive to us that the skilled artisan would have been led, from Hanson's teaching of reversing current flow in a magnetoresistive head to correct for the head's asymmetric response, to modify APA to provide for a range of motion of the read element to be equidistant from the center of the track during the three functions of

reading, writing and formatting. While it is unclear just what part of APA the examiner allegedly relies on for a teaching of the claimed range of motion limitations, we find nothing in the instant specification which suggests that the prior art provided for the read element to be equidistant from the center of the track during reading, writing and formatting.

Accordingly, we will not sustain the rejection of claims 4 and 7 through 9 under 35 U.S.C. 103.

With regard to claims 1 through 3, 5 and 6, the dependent claims falling with claim 1, the examiner further relies on Brown for a teaching of adding first and second offsets in opposite directions, to a position error signal dependent on mode. However, we agree with appellants that Brown appears to be concerned with a different type of "offset" than are appellants. Brown is concerned with correcting for track misregistration by compensating for differences of a skew angle between the write and read elements with respect to the servo pattern whereas appellants are adding different offset values, depending on whether a read or write [or offset operation in claim 2] operation is taking place, in order to adjust the

position error signal, the position error signal having been obtained from the servo area.

The examiner never explains just what portions of Brown are being relied on for the teaching of adding a first offset amount during a write operation and adding a second offset amount during a read operation wherein the two offsets are non-zero in magnitude and of opposite directions. The mere reference, at page 5 of the answer, to Figure 7 of Brown is insufficient to establish obviousness of the instant claimed subject matter. Later, at page 8 of the answer, in response to appellants' arguments, the examiner points to column 3, lines 45-50 of Brown. While this section of Brown mentions the calculation of distance and the summing of this distance with a read/write centerline offset so that an actual repositioning distance can be determined, we are at a loss as to how this disclosure relates to the language of instant claim 1 and the examiner has not applied this disclosure to the specific claim language. Accordingly, we find that the examiner has not established a prima facie of obviousness with regard to the subject matter of claim 1.

The examiner's decision rejecting claims 1 through 9 under
35 U.S.C. 103 is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JERRY SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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