

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NOBUHIRO HAYASHI

Appeal No. 1999-0170
Application No. 08/588,020

ON BRIEF

Before RUGGIERO, LALL, and BLANKENSHIP, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-24. An amendment filed January 8, 1998 after final rejection, which canceled claims 11, 12, 18, and 19, was approved for entry by the Examiner. Accordingly, the rejection of claims 1-10, 13-17, and 20-24 is before us on appeal.

The claimed invention relates to a data reproducing apparatus for reproducing data from a magnetic disk in which

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plural tracks having data recorded thereon are concentrically or spirally formed on a recording surface of the disk.

Address information specifying the tracks is recorded on the corresponding tracks by changing a direction of magnetization in a circumferential direction of the disk. In a terminal region of the address information, terminal information is also formed by magnetization in a predetermined direction.

Claim 1 is illustrative of the invention and reads as follows:

1. A magnetic disk having plural tracks for recording data concentrically or spirally formed on a recording surface thereof,

wherein address information for specifying the tracks is recorded on the corresponding tracks as a direction of magnetization in a circumferential direction of the disk, so that a first polarity in a first circumferential direction of the disk represents a one, and an opposite polarity in an opposite circumferential direction of the disk represents a zero, of the address information corresponding to a Grey code between neighboring tracks, and wherein terminal information magnetized in a predetermined direction is recorded in a terminal region of the address information.

The Examiner relies on the following prior art:

Duffy et al. (Duffy)	5,262,907	Nov. 16, 1993
Fisher	5,384,671	Jan. 24, 1995

(filed Dec. 23, 1993)

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Emori	5,442,499	Aug. 15, 1995 (filed Jan. 25, 1994)
Kuromiya et al. (Kuromiya)	5,585,989	Dec. 17, 1996 (filed Nov. 23, 1994)

Claims 1-10, 13-17, and 20-24 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the Examiner offers Duffy in view of Emori with respect to claims 1 and 5, adds Fisher to the basic combination with respect to claims 2-4, 8, and 13-17, and adds Kuromiya to the basic combination with respect to claims 3, 6, 7, and 9. With respect to claims 10 and 20-24, both Fisher and Kuromiya are added to the basic combination of Duffy and Emori.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Brief and Answer for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support of the rejection and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in

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reaching our decision, Appellant's arguments set forth in the Brief along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill

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in the art the obviousness of the invention as set forth in claims 1-10, 13-17, and 20-24. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion, or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044,

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1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S.
825

(1988); Ashland Oil, Inc. v. Delta Resins & Refractories,
Inc.,

776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert.
denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v.

Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed.
Cir. 1984). These showings by the Examiner are an essential
part

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of complying with the burden of presenting a prima facie case
of

obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24
USPQ2d

1443, 1444 (Fed. Cir. 1992).

With respect to independent claims 1, 6, 15, and 22, the Examiner, as the basis for the obviousness rejection, applies against the appealed claims various combinations of the Duffy, Kuromiya, and Fisher references, each of which are directed to recording device structures. As recognized by the Examiner, these references do not disclose Appellant's claimed feature of having terminal information ". . . recorded in a terminal region of the address information," a specific recitation of which is present in each of the independent claims on appeal. To address this deficiency, the Examiner turns to Emori and, in particular, Emori's illustrations in Figures 7 and 11(a) and accompanying description at column 7, lines 1-49. According to the Examiner (Answer, page 4), Emori provides a teaching of terminal information, which the Examiner has identified as the illustrated "timing pattern," being recorded in the terminal region of the address information. The

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Examiner asserts the obviousness to the skilled artisan of
modifying the applied prior art " . . . to

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include the teachings of Emori, motivation being to detect servo information more precisely even when noises are included as set forth in col. 3, lines 28-30 of Emori." (Id.)

In response, Appellant asserts a failure of the Examiner to establish a prima facie case of obviousness since all the claim limitations are not taught or suggested by the prior art. In making this assertion, Appellant, rather than attacking the combinability of Emori with the other applied references, instead contends that, contrary to the Examiner's interpretation, Emori does not provide a disclosure of terminal information recorded in a terminal region of the address information as required by each of the appealed independent claims. In particular, Appellant argues (Brief, page 4) that Emori's timing pattern, which the Examiner identifies as the terminal information, is at the end of the AGC field, not at the end of the Grey code zone which contains Emori's address information.

After reviewing the disclosure of the Emori reference, in light of the arguments of record, we are in agreement with Appellant's position as stated in the Brief. Our interpretation of the disclosure of Emori coincides with that

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of Appellant, i.e., the timing bit terminal information is located at the end of the AGC field as illustrated in Emori's Figure 7. We are persuaded by Appellant's contention (Brief, page 4) that, since Emori provides a clear disclosure that the check code pattern containing the address information and the timing pattern are formed in separate zones, there is no basis for the Examiner's conclusion that Emori's timing pattern is located in the terminal portion of the address information region.

We have taken note of the Examiner's argument (Answer, page 15) that contends that Emori's timing pattern appears after the track address just as Appellant's disclosed terminal information. We do not find such argument to be persuasive. While there is no doubt that Emori's timing pattern appears after the address information, it is equally true that, as discussed supra, such timing pattern terminal information is not in the terminal region of the address information as required by the claims on appeal.

Since all of the claim limitations are not taught or suggested by the applied prior art, it is our opinion that the Examiner has not established a prima facie case of obviousness

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with respect to appealed independent claims 1, 6, 15, and 22.

Accordingly, the Examiner's 35 U.S.C. § 103 rejection of

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independent claims 1, 6, 15, and 22, as well as claims 2-5, 7-10, 13, 14, 16, 17, 20, 21, 23, and 24 dependent thereon, is not sustained. Therefore, the decision of the Examiner rejecting claims 1-10, 13-17, and 20-24 is reversed.

REVERSED

JOSEPH F. RUGGIERO)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
PARSHOTAM S. LALL)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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HOWARD B. BLANKENSHIP)	
Administrative Patent Judge)	

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