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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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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***Ex parte*** TAKUJI SHIBATA, NORIO SAITO and YUTAKA SODA

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Appeal No. 1997-0447  
Application No. 08/231,513

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ON BRIEF

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Before KRASS, RUGGIERO, and DIXON, **Administrative Patent Judges**.  
DIXON, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-6, which are all of the claims pending in this application.

We REVERSE.

## BACKGROUND

The appellants' invention relates to a magnetic reluctance effect magnetic head, the magnetic head having a specific orientation and spacing of the electrodes relative to the upper magnetic pole to reduce variations in the required bias current to account for variations in the manufacturing of the head. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A magnetic reluctance effect magnetic head having a magnetic reluctance effect element in which a forward side electrode is stacked on at least the surface of the magnetic reluctance effect element facing a magnetic recording medium, and in which an upper magnetic pole for conducting a bias magnetic field is stacked on said forward side electrode for facing the magnetic reluctance effect element,

wherein the improvement resides in that

a connecting length L1 between the magnetic reluctance effect element and the forward side electrode is shorter than a facing length L2 over which the upper magnetic pole and the magnetic reluctance effect element face each other via a magnetic gap G.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Tanabe et al. (Tanabe)	5,218,497	Jun. 08, 1993
Shibata et al. (Shibata)	5,247,413	Sep. 21, 1993

Claims 1 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Shibata. Claims 2-5 stand rejected under 35 U.S.C. § 103 as being unpatentable

Appeal No. 1997-0447  
Application No. 08/231,513

over Shibata in view of Tanabe.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 10, mailed Mar. 26, 1996) for the examiner's reasoning in support of the rejections, and to the appellants' brief (Paper No. 9, filed Feb. 20, 1996) for the appellants' arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. **See In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See In re Lintner**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the

Appeal No. 1997-0447  
Application No. 08/231,513

claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. **See In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. **See In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), **cert. denied**, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. **See, e.g., Grain Processing Corp. v. American Maize-Products Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the appellants. Obviousness cannot be

Appeal No. 1997-0447  
Application No. 08/231,513

established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. The extent to which such suggestion must be explicit in, or may be fairly inferred from, the references, is decided on the facts of each case, in light of the prior art and its relationship to the appellants' invention. As in all determinations under 35 U.S.C. § 103, the decision maker must bring judgment to bear. "It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. The references themselves must provide some teaching whereby the applicant's combination would have been obvious". **In re Gorman**, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (citations omitted). That is, something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. **See In re Beattie**, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); **Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co.**, 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984). In determining obviousness/nonobviousness, an invention must be considered "as a whole," 35 U.S.C. § 103, and claims must be considered in their entirety. **Medtronic, Inc. v. Cardiac**

Appeal No. 1997-0447  
Application No. 08/231,513

**Pacemakers, Inc.**, 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is not sufficient to establish a *prima facie* case of obviousness with respect to claim 1. Accordingly, we will not sustain the examiner's rejection of claim 1 under 35 U.S.C. § 103.

The examiner has recognized that the prior art to Shibata does not teach the improvement claimed in the language of claim 1. (See answer at page 3.) We agree with the examiner that Shibata does not teach or disclose "a connecting length L1 between the magnetic reluctance effect element and the forward side electrode is shorter than a facing length L2 over which the upper magnetic pole and the magnetic reluctance effect element face each other via a magnetic gap G" as set forth in claim 1. The examiner maintains that the improvement would have been obvious to skilled artisans and provides a line of reasoning therefore. (See answer at pages 3-4.) Appellants argue that Shibata teaches the width of the electrical contact with the MR element to be greater than the width of the gap which is contrary to the claimed

Appeal No. 1997-0447  
Application No. 08/231,513

invention and that Shibata teaches nothing which would have motivated skilled artisans to reduce the width as claimed. (See brief at page 5.) We agree with appellants.

Furthermore, the examiner maintains that the extended portion of the upper magnetic pole would provide improved shielding. (See answer at page 4.) Appellants argue that Shibata does not teach or suggest making the upper magnetic pole with an extended portion. (See brief at page 5.) We agree with appellants. Moreover, appellants argue that there is no apparent reason why shielding would be improved or the flux more stable. **Id.**

We agree with appellants that the examiner has proffered conclusions with respect to modifications which are not convincing to modify the invention of Shibata absent some specific evidence or motivation together with a supporting line of reasoning to do so. In our view, the examiner has attempted to reconstruct the claimed invention from a proposed modification to the prior art to Shibata based upon hindsight reconstruction. Therefore, we will not sustain the rejection of independent claim 1 nor dependent claim 6.

With respect to dependent claims 2-5, the examiner has not relied upon the teachings of Tanabe to teach or suggest the improvements recited in the language of claim 1, and from our review of Tanabe, we find that Tanabe does not teach or suggest what is lacking in Shibata with respect to the language of claim 1. Since Tanabe

Appeal No. 1997-0447  
Application No. 08/231,513

does not remedy the deficiencies in Shibata, we will not sustain the rejection of claims 2-5.

**CONCLUSION**

To summarize, the decision of the examiner to reject claims 1-6 under 35 U.S.C. § 103 is reversed.

REVERSED

ERROL A. KRASS	)	
Administrative Patent Judge	)	
	)	
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	)	
	)	BOARD OF PATENT
JOSEPH F. RUGGIERO	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
JOSEPH L. DIXON	)	
Administrative Patent Judge	)	

vsh

Appeal No. 1997-0447  
Application No. 08/231,513

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