

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(2) is not binding precedent of the Board.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. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SCOTT W. CAMERON
and ALEX ALEGRE DE LA SOUJEOLE

Appeal No. 1997-3973
Application No. 08/366,561

ON BRIEF

Before HAIRSTON, BARRETT and LEVY, Administrative Patent
Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection¹ of claims
1 through 4, 6 through 16, 18, 19, 21 through 24 and 26
through 29.

¹ The examiner mistakenly identified claims 1 through 29
as the finally rejected claims (paper number 13).

The disclosed invention relates to an integrated circuit for interfacing to a disk drive having at least one magnetoresistive sensing element. The disclosed invention also relates to a method for sensing voltages from the magnetoresistive sensing element.

Claims 1 and 19 are illustrative of the claimed invention, and they read as follows:

1. An integrated circuit for interfacing to a disk drive having at least one magnetoresistive sensing element, comprising:

a current generator connected to drive a bias current across said magnetoresistive sensing element;

connections for transferring the AC voltage on said magnetoresistive sensing element through one or more coupling capacitors, to provide a differential AC voltage signal;

a preamplifier connected to receive and amplify said differential AC voltage signal;

a shorting switch connected to selectably short out said differential voltage signal at the inputs to said preamplifier; and

logic connected to activate said shorting switch for a limited time when said current generator turns on, said logic consisting of a one-shot connected to be activated by transitions, on a read/write mode-select line, from a state which indicates write mode to a state which indicates read mode;

whereby said shorting switch discharges the DC

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potential which appears on said differential AC voltage
signal when said current generator is first turned on.

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19. A method for sensing voltages from a magnetoresistive sensing element comprising the steps of:

(a) providing a bias current to said magnetoresistive sensing element during read modes, but not during at least some write mode;

(b) coupling the AC component of voltage on said magnetoresistive sensing element out, through one or more coupling capacitors, to differential input connections of a differential preamplifier stage; and

(c) shorting together said inputs of said preamplifier stage, for a limited time, each time a current generator switches on and initiates the providing of bias current upon a transition from write mode to read mode.

The references relied on by the examiner are:

Tagiri	5,229,719	Jul. 20, 1993
Heyl et al. (Heyl)	5,424,678	Jun. 13, 1995
		(filed Feb. 2, 1994)

Claims 1 through 4, 6 through 16, 18, 19, 21 through 24 and 26 through 29 stand rejected under the first paragraph of 35 U.S.C. § 112 because Figures 5 and 6A through 6D "are not relevant to the claimed invention," "the discussions thereof are of insufficient detail to be otherwise useful," and "serve no purpose but to obfuscate the claimed invention" (Answer, page 4).

Claims 7 through 10, 12, 19 and 27 through 29 stand

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rejected under 35 U.S.C. § 103 as being unpatentable over
appellants' admitted prior art Figure 1 in view of Heyl or
Tagiri.

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

OPINION

All of the rejections are reversed.

Turning first to the lack of enablement rejection, appellants argue (Reply Brief, page 2) that:

By any measure, the inclusion of Figs. 5 and 6A-6D detracts in no way from the admittedly useful, clear, concise, and sufficient disclosure presented in connection with Figs. 1-4. The Examiner has presented no example of how anything in the disputed figures obscures the remaining disclosure or "the actual claimed invention."

We agree with appellants' argument. No matter the basis for a lack of enablement rejection, the burden of proof initially lies with the examiner to make a sufficient showing. Stated differently, the examiner has to provide more than a mere statement that the additional figures "obfuscate the claimed invention." In view of the lack of any showing by the examiner, we agree with appellants that too much disclosure, as opposed to too little disclosure, does not detract from the disclosure "presented in connection with Figs. 1-4." Thus, the lack of enablement rejection of claims 1 through 4, 6 through 16, 18, 19, 21 through 24 and 26 through 29 is

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reversed.

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Turning to the obviousness rejection, appellants acknowledge (Brief, page 17) that it is known to short the inputs to an amplifier with a switch. Notwithstanding the amplifier shorting knowledge in the art, appellants argue (Brief, page 20) that "[t]he claims all contain clearly patentable distinctions over the prior art." With respect to claims 7 through 10 and 12, we agree with appellants' argument (Brief, page 20) that the applied references fail to teach that the "shorting switch 'is connected to logic responsive to initiation of read conditions to short out, for a period, said input connections when full bias current is restored to said magnetoresistive sensing element after having been reduced thereon . . .'" With respect to claims 19 and 27, we also agree with appellants' argument (Brief, page 20) that the applied references fail to teach "the step of 'shorting together said inputs of said preamplifier stage, for a limited time, each time a current generator switches on and initiates the providing of bias current upon a transition from write mode to read mode.'" With respect to claims 28 and 29, we likewise agree with appellants' argument (Brief, page 20) that the applied references fail to teach the ultimate limitation

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in claim 28 which is "means

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for shorting together the inputs of the amplifier stage upon the initiation of the DC bias, to discharge DC voltage from the inputs, for a pulse time that is shorter than the saturation time the amplifier stage is subject to based on said characteristics without shorting, whereby read mode operations are enabled promptly after the pulse time."

In summary, the obviousness rejection of claims 7 through 10, 12, 19 and 27 through 29 is reversed.

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DECISION

The decision of the examiner rejecting claims 1 through 4, 6 through 16, 18, 19, 21 through 24 and 26 through 29 under the first paragraph of 35 U.S.C. § 112 is reversed, and the decision of the examiner rejecting claims 7 through 10, 12, 19 and 27 through 29 under 35 U.S.C. § 103 is reversed.

REVERSED

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KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
LEE E. BARRETT))
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
STUART S. LEVY)	
Administrative Patent Judge)	

KWH:hh

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