

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte FRANCIS J. O'BRIEN Jr.

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Appeal No. 97-2757  
Application No. 08/412,260<sup>1</sup>

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ON BRIEF

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Before URYNOWICZ, HAIRSTON and BARRETT, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 7 and 10. In an Amendment After Final (paper number 7), claim 10 was amended. As a result of the amendment, the examiner withdrew the indefiniteness rejection of claim 10 (paper number 8). Thus, claims 1 and 7 remain before us on appeal,

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<sup>1</sup> Application for patent filed March 28, 1995.

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and claims 2 through 6 and 8 through 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The disclosed invention relates to a signal processing system and method.

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

1. A signal processing system comprising:

transducer means for receiving an analog signal, the analog signal including a noise component and possibly also an information component, and generating in response a digital signal;

a noise likelihood determination sub-system for receiving said digital signal and for generating a random noise assessment that the digital signal comprises solely random noise,; and

an information processing sub-system for receiving said

digital signal and for processing it to extract said information component if the noise likelihood determination subsystem determines that the random noise assessment indicates that the digital signal does not comprise solely random noise.

The reference relied on by the examiner is:

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Norman  
1977

4,063,180

Dec. 13,

Claims 1 and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Norman.

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

OPINION

The obviousness rejection of claims 1 and 7 is sustained.

The examiner's grounds of rejection (Answer, page 4) are as follows:

Norman discloses an information processing subsystem (data processing channel 34); a noise likelihood determination subsystem (delay pulse & command generator and noise detector 18,22) for receiving signal and for generating an inhabit [sic, inhibit] signal (random noise assessment) to indicate that the pulse (signal) is noise and to inhabit [sic, inhibit] a data processing channel from processing the pulse (signal) as claimed in claim 1 (see fig. 1, the abstract and column 3, line 65 to column 4, line 2). Regarding the particular limitation i.e. the A/D converter (transducer), such limitation is well known in the art of communications and would have been obvious lacking any criticality or showing by applicant.

In response to appellant's arguments that the "Norman patent merely distinguishes between different types of pulses, in particular, a start pulse and a noise pulse, *not* between

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data and noise" (Brief, page 5), and that the Norman patent does not generate a random noise assessment that the digital signal comprises "*solely random noise*" (Brief, page 6), the examiner states (Answer, pages 4 and 5) that:

In response to the first argument, the start pulse is part of the data. "Each train of pulse[s] typically includes a start pulse [12] followed by a series of data pulses [14]" (column 2, lines 31-37)[.] Thus, the comparison is between the data and the noise.

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In response to the second argument, see for example the abstract lines, 16-20 and column 3, line 65 to column 4, line 2. It clearly states that a signal (an inhahit [sic, inhibit] signal) is generated to indicate that the incoming signal is solely noise and that the data processing channel is inhibited from processing the signal. The only pulses which will be accepted for processing are those which have been first identified by the initial start pulse. Furthermore, even though Norman is silent whether the noise is a random noise or not, it is clear from the drawing the noise is not a continues [sic, continuous] noise. Therefore it is a random noise. Thus, the noise assessment (an inhabit [sic, inhibit] signal) that is generated by the noise detection circuit is to indicate that the detected signal is *solely random noise*.

Norman shows (Figure 2A) that the start pulse 12 is part of the input data pulses, and he specifically states (column 1, lines 54 through 58) that the "circuit . . . receives data characters, each of which begins with a start pulse," and that the "circuit receives . . . trains of data pulses, each train including a start pulse" (column 1, lines 63 through 67). Thus, the examiner correctly concluded that the start pulse is part of the data in Norman, and that Norman distinguishes between data and noise.

Appellant's argument (Brief, page 7) that Norman "does not suggest making the noise assessment while receiving a data stream" is directly refuted by Figure 2 of Norman's drawing.

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We agree with the examiner that the noise signal in Norman (Figure 2E) is a "random" noise pulse. Appellant's arguments (Brief, pages 6 and 7) to the contrary notwithstanding, the claims on appeal do not preclude Norman's method of making a random noise determination.

Appellant's argument (Brief, page 7) that "the system described in the Norman patent does not *enable* an information processing sub-system to operate if a random noise assessment indicates that the digital signal does not comprise solely random noise" is in error because Norman's system is only inhibited if a noise pulse is detected.

#### DECISION

The decision of the examiner rejecting claims 1 and 7 under 35 U.S.C. § 103 is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

STANLEY M. URYNOWICZ, Jr.	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
KENNETH W. HAIRSTON	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
LEE E. BARRETT	)	
Administrative Patent Judge	)	

jrg

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**JENINE GILLIS**

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Serial No. 08/412,260

Judge HAIRSTON

Judge URYNOWICZ

Judge BARRETT

Received: 12/21/98

Typed: 12/21/98

DECISION: AFFIRMED

Send Reference(s): Yes No  
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Remanded: Yes No

Brief or Heard

Group Art Unit: 2734

Index Sheet-2901 Rejection(s): \_\_\_\_\_

Acts 2: \_\_\_\_\_

Palm: \_\_\_\_\_

Mailed: Updated Monthly Disk (FOIA): \_\_\_\_\_

Updated Monthly Report: \_\_\_\_\_

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