

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte PAUL J. GIORGIO and STEPHEN J. AMURO

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Appeal No. 97-2982  
Application No. 08/219,554<sup>1</sup>

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ON BRIEF

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Before HAIRSTON, JERRY SMITH, and BARRY, Administrative Patent Judges.

BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the final rejection of claims 1 through 5. The appellants filed an amendment after final rejection on April 25, 1996, which was entered. We reverse.

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<sup>1</sup> The application, entitled "Method of Retrieving and Storing Computer Peripheral Data," was filed March 29, 1994.

BACKGROUND

The appellants' invention is a method for interfacing a plurality of host processors to a plurality of Small Computer System Interface (SCSI) peripheral devices, i.e., SCSI targets, via a single SCSI initiator. When a host processor requests status data, i.e., ATTENTION DATA, from a target, the data are written to a memory from which the processor can read the requested data. The memory contains separate address spaces for each processor. The requested data are replicated. A separate copy of the data is stored at each of the address spaces so that the data are available independently to each processor. The separate copies are essential so that a processor can clear its copy of ATTENTION DATA without disturbing the other processors' copies of the same ATTENTION DATA.

Claim 1, which is representative for our purposes, follows:

1. A method of providing any of a plurality of host processors ATTENTION DATA on any of a plurality of SCSI targets through a controller, said controller including a host adapter, microprocessor, only one SCSI initiator, and memory, with said memory



Claims 1 through 5 stand rejected under 35 U.S.C. § 103 as obvious over Fischer in view of ANSI. (Examiner's Answer at 3.) Rather than repeat the arguments of the appellants or examiner in toto, we refer the reader to the appeal and reply briefs and the examiner's answers for the respective details thereof.

#### OPINION

In reaching our decision in this appeal, we considered the subject matter on appeal and the rejection and evidence advanced by the examiner. We also considered the appellants' and examiner's arguments. After considering the record before us, it is our view that the evidence and level of skill in the art would not have suggested to one of ordinary skill in the art the invention of claims 1 through 5. Accordingly, we reverse.

We begin our consideration of the obviousness of the claims by recalling that in rejecting claims under 35 U.S.C. §

103, the patent examiner bears the initial burden of establishing a prima facie case of obviousness. A prima facie case is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. If the examiner fails to establish a prima facie case, an obviousness rejection is improper and will be overturned. In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). With this in mind, we analyze the examiner's rejection.

The examiner begins the rejection by observing that Fischer describes a system comprising host processors; a controller, which is "a SCSI initiator," (Examiner's Answer at 3); and SCSI targets. (Id. at 4.) Next, the examiner describes the reference as follows.

Fischer on column 2, lines 35-59, describes how the processors and targets communicate between each other. There is a Mailbox or storage means given to each processor modules (see column 4, lines 53-62) and I/O adaptors with Queue Descriptors for each I/O device in the Mailboxes (see columns 5-7) for storing ATTENTION DATA (see Module Attention and Device Attention on columns 7-8 and 29, line 45 et

seq.) when a UNIT ATTENTION condition exists. The commands to be sent and received between the hosts and targets such as ATTENTION DATA, CHECK CONDITION, giving a warning, resending the warning, REQUEST SENSE, getting the sense key, checking UNIT ATTENTION are SCSI standard commands which are followed by Fischer as shown on column 24, lines 53-54. Fischer teaches the environment in which the inventive method is executed, but doesn't provide all of the details of SCSI operation claimed by the Applicant. Fischer describes that when the controller detects an error during a device operation the Queue Descriptor which is in memory for each device is checked as shown on column 32, lines 42-64. Fischer describes that EACH HOST has memory allocated for EACH TARGET for SCSI commands. The commands to be sent and received between the hosts and targets such as ATTENTION DATA, CHECK CONDITION, giving a warning, resending the warning, REQUEST SENSE, getting the sense key, checking UNIT ATTENTION are SCSI standard commands. (Id.)

The examiner reasons, "[s]ince Fischer suggests SCSI operation in accordance with the ANSI standard, the artisan would have been [sic, been] motivated to implement SCSI operation in accordance with this standard." (Id. at 4-5.)

Regarding ANSI, the examiner asserts, "[t]he SCSI standard teaches how a SCSI initiator works with just one memory unit connected to one host which is an equivalent

structure to that described by Applicant. See SCSI standard sections 6, 6.1.3, 7.1.1-3, 7.1.5-6, pp. 26, 51-71, 80-82, 185-186, 194-199, 208-209. The referenced sections teach the operation of the method as claimed by the Applicant." Despite this assertion, the examiner fails to map the complete claim language to the disclosures of Fischer and ANSI. He also neglects to indicate precisely what language is missing from any of the references.

The examiner ends the rejection by concluding that it would have been obvious to one of ordinary skill in the art at the time of the invention "to provide the method of operation in accordance with the ANSI SCSI standard [sic, standard] in the system described by Fischer, since Fischer leaves details of SCSI operation unsaid and explicitly suggests that the ANSI SCSI standard be followed." (Id. at 5.)

In response, the appellants emphasize that their invention "has a method for the erasure [of ATTENTION DATA] for only the requesting host processor." (Appeal Br. at 6.) "In the SCSI standard and in Fisher in view of the SCSI

standard," they submit, "the ATTENTION DATA would be cleared for all host processors." (Id.)

Regarding independent claim 1, we find that Fischer and ANSI fail to teach or to have suggested the clearing of ATTENTION DATA as claimed. The claim recites in pertinent part "clearing ... only the ATTENTION DATA for said one of said plurality of host processors from said one of said plurality of SCSI targets ...." (Id. at 9.) The appellants assert, "[t]he word only is critical." (Id. at 6.) They explain that the claim was amended specifically to recite this feature to differentiate the claim from the prior art. (Id.) Comparison of the claim language to Fischer and ANSI evidences that the references neither teach nor would have suggested the claimed clearing of ATTENTION DATA.

Fischer discloses interfacing a plurality of processors 20 to a plurality of I/O devices 42a-42c via an I/O adapter 22a and a main memory 26. Data transferred between the processors and devices are written to a memory in the reference's controller. Col. 4, ll. 14-20. The memory

employs Queue Descriptors to store data being transferred between the processors and devices. No more than one Queue Descriptor is allocated to each device. Col. 5, ll. 36-37. Because there is no more than a single Queue Descriptor for each device, the first processor of Fischer that clears certain data clears it for all the processors. Thus, a processor in Fischer cannot clear ATTENTION DATA without disturbing the same ATTENTION DATA for any other processor as claimed.

ANSI does not remedy this defect. The reference defines the Small Computer Interface Standard (SCSI) for attaching small computers together and to intelligent peripherals. Abs. A multiple initiator, multiple target configuration depicted in the reference interfaces a plurality of host computers to a plurality of targets via a plurality of controllers, i.e., initiators. Fig. 4-7. The appellants explained operations under ANSI as follows.

[O]nce a target's status is reported from the target through the initiator to the processor, that status information, normally stored in the target's controller, is cleared. If another processor were

to connect to the same initiator and request status information on the same target, that information would not be available. Thus, the prior art system of using one initiator for multiple processors is disadvantageous in that if one processor receives and subsequently clears all target status information, other processors connected to that initiator are unaware of any changes that may have been made in the target's status. (Spec. at 3.)

Thus, a computer in ANSI cannot clear ATTENTION DATA without disturbing the same ATTENTION DATA for any other computer as claimed.

For the foregoing reasons, the examiner failed to show that Fischer and ANSI teach or would have suggested clearing of ATTENTION DATA as in independent claim 1 and its dependent claims 2 through 5. Therefore, we find the examiner's rejection does not amount to a prima facie case of obviousness. Because the examiner has not established a prima facie case, the rejection of claims 1 through 5 over Fischer in view of ANSI is improper. Therefore, we reverse the rejection of the claims under 35 U.S.C. § 103.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 through 5 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
JERRY SMITH	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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LANCE LEONARD BARRY	)	
Administrative Patent Judge	)	

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