

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEPHEN J. AMURO and PAUL J. GIORGIO

Appeal No. 97-2979
Application No. 08/219,553¹

ON BRIEF

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 1-7. The appellants filed an amendment after final rejection on April 25, 1996, which was entered. We reverse.

¹ The application, entitled "Non-intrusive SCSI Status Sensing System," was filed March 29, 1994.

BACKGROUND

The appellants' invention is a Small Computer System Interface (SCSI) controller. It automatically and non-intrusively interrogates the status of peripheral devices, i.e., SCSI targets, to which it is connected. The controller also stores status data returned by the targets. The stored status data are available to a plurality of host processors also connected to the controller.

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

1. A non-intrusive SCSI status sensing system comprising:

a controller having operating means for initiating and transmitting non-intrusive status requests and for receiving and storing ATTENTION DATA and PM DATA responses to said non-intrusive status requests; and

a plurality of SCSI targets with each of said SCSI targets connected to said controller for receiving said non-intrusive status requests from said controller and having generating and transmitting means for generating and transmitting said ATTENTION DATA and PM DATA responses to said controller on receiving said nonintrusive status requests.

(Appeal Br. at 8.)

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 1-3. 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, and SCSI targets. (Examiner's Answer 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. The controller stores information such as Exception Status Block (PM data) in a Mailbox for the I/O adaptor corresponding to Queue Descriptor for each target device (see columns 5-8, polling on column 14, lines 64 et seq.). Fischer teaches the basic structure of the inventive system for claims 1-3, but doesn't provide all of the details of SCSI operation attributed to the various elements as 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 [sic] 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. at 4-5.)

The examiner reasons, "[s]ince Fischer suggests SCSI operation in accordance with the ANSI standard, the artisan would have ben [sic, been] motivated to implement SCSI operation in accordance with this standard." (Id. at 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 elements as claimed by the Applicant."

(Id.) 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 apparatus disclosed and claimed by Applicant in claims 1-3 to operate 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.)

In response, the appellants argue that the references do not mention the controller as recited in claim 1. Responding to the examiner's reliance on pages 194-197 of ANSI, they assert that Appendix C of ANSI does not address the claimed controller for the following reasons.

The host adapter of the SCSI standard refers to the logic that interfaces from the host memory to the SCSI bus. In Appellants' system, controller 10 interfaces from host processors 22a-n to SCSI bus 26 (see FIG. 1). The SCSI standard host adapter acts as a "peripheral's gateway into host memory" (see page 194, second paragraph). While the SCSI host adapter assures data integrity and proper performance of the I/O subsystem, it does not initiate status requests, but merely passes on any such requests initiated by the host to the peripheral. It does not take action of its own, rather it awaits a command from the host to select the proper peripheral or target. Once selection is complete, the "host adapter is simply an 'arm' of the target used to reach into host memory" (see page 195, fifth full paragraph). Nowhere in Appendix C is the host adapter described as initiating status requests, independent of a command from the host. Therefore, it would not have been obvious to use Fischer in combination with the

SCSI standard to obtain such a result as disclosed by Appellants. (Reply Br. at 4-5.)

We agree with the appellants' explanation. The examiner fails to identify a controller in the references that initiates status requests. For the foregoing reasons, the examiner failed to show that Fischer and ANSI teach or would have suggested a controller as in independent claim 1 and its dependent claims. 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 1-3 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 1-6 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)	
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