

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JEFFREY A. WILCOX

Appeal No. 1999-1594
Application No. 08/491,467

ON BRIEF

Before KRASS, JERRY SMITH, and GROSS, Administrative Patent Judges.
GROSS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 25. In the Answer (page 4) the examiner withdrew the rejection of claims 2 through 6, 11 through 17, 20, and 22 through 25. Accordingly, claims 1, 7 through 10, 18, 19, and 21 remain before us on appeal.

Appellant's invention relates to a redundant peripheral device subsystem in which a controllable switch selectively isolates two peripheral device busses or joins them into a single peripheral device bus when a fault occurs in the controller coupled one of the two busses. Claim 1 is illustrative of the claimed invention, and it reads as follows:

Appeal No. 1999-1594
Application No. 08/491,467

1. A redundant peripheral device subsystem in a computer system, comprising:

first and second peripheral device controllers;

first and second peripheral device busses coupled to the first and second peripheral device controllers, respectively; and

a first controllable switch, coupled between the first and second peripheral device busses, for selectively isolating the first and second peripheral device busses or joining the first and second peripheral device busses into a single peripheral device bus.

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

Graber et al. (Graber)	4,456,965	Jun. 26, 1984
Allen et al. (Allen)	4,663,706	May 05, 1987

Claims 1, 7 through 10, 18, 19, and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Allen in view of Graber.

Reference is made to the First Office Action (Paper No. 2, mailed February 21, 1997), the Examiner's Answer¹ (Paper No. 11,

¹ We note that the examiner (Answer, page 3) refers us to the Final Office Action (Paper No. 4) for the rejection of the claims. However, the Final Rejection in turn refers us to the First Office Action of February 21, 1997 for an explanation of the rejection, contrary to MPEP § 1208, which states:

Examiners may incorporate in the answer their statement of the grounds of rejection merely by reference to the final rejection (or a single other action on which it is based, MPEP § 706.07). Only those statements of grounds of rejection appearing in a single prior action may be incorporated by reference. An examiner's answer should not refer, either directly or indirectly, to more than one prior Office action. Statements of grounds of rejection appearing in actions other than the aforementioned single prior action should be quoted in the answer. The page and paragraph of the final action or other single prior action which

Appeal No. 1999-1594
Application No. 08/491,467

mailed July 10, 1998), and the Supplemental Examiner's Answer (Paper No. 14, mailed August 20, 1998) for the examiner's complete reasoning in support of the rejections, and to appellant's Brief (Paper No. 10, filed June 4, 1998), Reply Brief (Paper No. 13, filed August 3, 1998), and Supplemental Reply Brief (Paper No. 15, filed September 25, 1998) for appellant's arguments thereagainst.

OPINION

We have carefully considered the claims, the applied prior art references, and the respective positions articulated by appellant and the examiner. As a consequence of our review, we will reverse the obviousness rejection of claims 1, 7 through 10, 18, 19, and 21.

The examiner admits (First Office Action, page 2) that Allen lacks the claimed switch between the first and second busses for selectively isolating the busses or joining them into a single bus. The examiner asserts (First Office Action, pages 2-3) that:

Graber teaches the selective isolation or connection of system buses (see Abstract). It would have been obvious to one of ordinary skill in the art to modify Allen to include the switches of Graber to isolate or connect the 12(n) bus to the 14(n+1). This modification would have been obvious because one of ordinary skill would have wanted to improve upon the fault-tolerance of the Allen system. Allen provides

it is desired to incorporate by reference should be explicitly identified. (Underlining ours for emphasis)

Appeal No. 1999-1594
Application No. 08/491,467

motivation for this modification in that he provides a redundant communication path so that communication may be continue in spite of a hardware failure. With such a desire in mind, one of ordinary skill would have wanted to further improve the Allen system by having a simple inexpensive way of maintaining communication in the event that the primary cluster controllers (18b and 18c, for example) fail leaving any particular cluster without connection to the ring configuration.

Allen discloses redundant peripheral device controllers each connected to a separate peripheral device bus for maintaining communications even if one of the controllers fails. Graber (column 2, lines 39-46) teaches splitting of system busses for allowing simultaneous data transfer on each of the split busses.

Although the examiner argues that it would have been obvious to include Graber's switches to isolate or connect the 12(n) bus to the 14(n+1) bus, we find no suggestion in either reference for connecting Allen's busses as claimed. In fact, Allen specifically provides separate, redundant busses. Further, Graber does not relate to a fault tolerance, and, therefore, cannot provide the motivation or suggestion for modifying the fault-tolerance of Allen's system, as proposed by the examiner. Therefore, the examiner has failed to establish a *prima facie* case of obviousness, and we cannot sustain the rejection of claims 1, 7 through 10, 18, 19, and 21 over Allen in view of Graber.

Appeal No. 1999-1594
Application No. 08/491,467

CONCLUSION

The decision of the examiner rejecting claims under
35 U.S.C. § 103 is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
JERRY SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
ANITA PELLMAN GROSS)	
Administrative Patent Judge)	

AG/RWK

Appeal No. 1999-1594
Application No. 08/491,467

DAVID N CARACAPPA
91 HAPGOOD ROAD
WINCHENDON, MA 01475-1870