

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 49

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SATORU TOKUI

Appeal No. 96-2203
Application 08/160,463¹

HEARD: May 5, 1999

Before BARRETT, DIXON and BARRY, **Administrative Patent Judges.**

DIXON, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the Examiner's final rejection of claims 1-13, which are all of the claims pending in this application.

¹ Application for patent filed December 2, 1993. According to appellant, this application is a continuation of Application Serial No. 07/802,539, filed December 5, 1991, now abandoned.

BACKGROUND

The present invention is directed to a serial data network having a computer, a plurality of peripheral units and a single series transmission line connection for sending data and control information between the computer and the peripheral units. The computer may clear identification codes for the peripheral units and perform initialization of the identification codes for the units. The codes are set sequentially, but may be any code, so any sequence of identification codes may be set. The first peripheral unit in the series transmission line receives the first identification code sent by the computer and stores this code as its own identification. Subsequent identification codes are passed to the next peripheral unit in series. Each peripheral unit keeps only the first identification code it receives and passes all others onto the next unit in series. Once the units are initialized, instructions are sent using these assigned address identification codes of each unit.

Claim 1 is representative of the claimed invention and reproduced below:

1. A data transfer control system for controlling transmission of serial command data to a plurality of units connected in series, said system having an identification code initializing system for assigning each unit a unique identification code, said initializing system comprising:

said plurality of units connected in series, each of said units having separate input and output ports and each output port is connected to

the input port of an immediately successive unit in the series connection;

computer means for transmitting to respective units in a sequential manner identification setting command data including an exclusive identification code, said computer means is connected by only a single line to a first unit of said plurality of units connected in series; and

means, at each of the plurality of units, for receiving an identification code included in first-received identification setting command data as an identification code of an associated unit without transferring the received identification code to an immediately following unit, and for transferring subsequently received identification setting command data to an immediately following unit so that said immediately following unit will have an identification code included in the transferred identification setting command data.

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

Allen et al. (Allen)	4,667,287	May 19, 1987
Fadem	5,090,013	Feb. 18, 1992
		(effective filing date Aug. 05, 1986)
Dixon et al. (Dixon)	5,175,822	Dec. 29, 1992
		(filing date Jun. 19, 1989)
Dorfe et al. (Dorfe)	5,204,669	Apr. 20, 1993
		(filing date Aug. 30, 1990)

Claims 1, 3 and 4 stand rejected under 35 U.S.C. § 103 as being unpatentable over

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Dorfe in view of Fadem. Claim 2 stands rejected under 35 U.S.C. § 103 as being unpatentable over Dorfe in view of Fadem and Dixon. Claims 5-8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Allen in view of Dorfe and Fadem. Claims 9-13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Dorfe in view of Fadem, Dixon and Allen.

Rather than reiterate the conflicting viewpoints advanced by the Examiner and the appellant, we make reference to the Briefs² and Answer³ for the details thereof.

OPINION

After a careful review of the evidence before us, we disagree with the Examiner that claims 1, 3 and 4 are properly rejected under 35 U.S.C. § 103; we will reverse this rejection of claims 1, 3 and 4. We disagree with the Examiner that claim 2 is properly rejected under 35 U.S.C. § 103; we will reverse this rejection of claim 2.

We disagree with the Examiner that claims 5-8 are properly rejected under 35 U.S.C. §

² Appellant filed an Appeal Brief on January 4, 1996, Paper No. 38. We will refer to this Appeal Brief as simply the Brief. Appellant filed a Reply Brief on April 1, 1996, Paper No. 40. We will refer to this Reply Brief as simply the Reply.

³ The Examiner responded to the Brief with an Examiner's Answer mailed, January 30, 1996, Paper No. 39. We will refer to this Examiner's Answer as simply the Answer.

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103; we will reverse this rejection of claims 5-8 . We disagree with the Examiner that claims 9-13 are properly rejected under 35 U.S.C. § 103; we will reverse this rejection of claims 9-13.

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. **See In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See In re Lintner**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the

relevant teachings of the references to arrive at the claimed invention. **See In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

CLAIMS 1, 3 AND 4

With respect to the rejection of claims 1, 3 and 4, we do not find that the Examiner has set forth a *prima facie* case of obviousness in the rejection of claims 1, 3 and 4. The Examiner has set forth that Dorfe does not teach the limitation that the “computer means is connected by only a single line to first unit of said plurality of units connected in series.” (See Answer at page 4.) The Examiner states that

the above feature is [sic: was] well known to one of ordinary skill in the art at the time the invention was made as evidenced by Fadem. The reference to Fadem teaches the feature in Fig.1. It would be [sic: have been] obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Dorfe et al. to implement the above feature of Fadem because both the prior art systems are analogous to set up I/O device identification, Dorfe et al. shows serial data transfer mechanism (see Fig. 1, element 22) and the above feature of Fadem would increase the efficiency and reliability of the [sic] Dorfe’s system by cutting down extra hardware, i.e., eliminating extra lines for the control and data and replacing by [sic: with] a twisted pair (Fig. 1, element 16) The twisted pair of Fadem can be considered as a single line.” (See Answer at page 4.)

The Examiner argues that Fadem teaches “daisy chained” connections and it would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Dorfe with Fadem with a serial protocol. (See Answer at pages 10-11.) Appellant argues that Fadem does not teach the use of a serial connection of the network, therefore the Examiner has not set forth a *prima facie* case of obviousness. (See Brief at pages 6-8 and Reply at page 2.) We agree with appellant. A review of Fadem shows that the twisted pair which connects the units in a “daisy chained” (col. 4, lines 4-5) fashion actually connects the units in parallel. (See Figure 5, far right side.)

Therefore, the Examiner has not provided any evidence of the single line connecting the series connected units. Furthermore, the increase of efficiency and reliability asserted by the Examiner, above, are merely conclusions not based upon the teachings of the references relative to the claimed invention.

Appellant argues that Dorfe does not teach the computer transmitting the identification setting command data including the identification code. (See Brief at page 11). We agree. Dorfe discloses the manipulation of the identification codes by the units rather than the mere transmission thereof to subsequent units. (See col. 2, line 59 - col. 3, line 3.) Assuming arguendo that the prior art references are properly combined, the prior art does not teach or fairly suggest the claimed invention.

With respect to appellant's argument concerning the significant advantages of the claimed invention (See Brief at page 12), the Examiner states that interpreting the claim in this manner would amount to reading limitations from the specification into the claimed invention. (See Answer at page 11.) We disagree with the Examiner and agree with the appellant. The advantages asserted by appellant merely emphasize the difference between the prior art references and the invention as set forth in the language of the claims. (See Reply at pages 3-4.)

CLAIM 2

The Examiner relies upon the teachings of Dixon to teach the resetting or clearing of the identification codes in claim 2. (See Answer at page 6.) Dixon does teach this feature generally along with the assigning of addresses, but Dixon teaches a SCSI bus and a configuration bus connected to a master device having a processor. (See Fig. 1, cols. 3, 6 and 8.) The master assigns the addresses to the various units. The processors in the units control the forwarding of assignment information to subsequent units. The units confirm their proper addressing with the master via the bus. Clearly, Dixon does not remedy the deficiency in the *prima facie* case of obviousness set forth by the Examiner.

CLAIMS 5-8

The Examiner relies upon Allen to teach “a plurality of units connected in series (cluster modules of Fig. 3)...” (See Answer at page 6.) Appellant argues that Allen is directed to a bi-directional packet network with multiple lines. (See Brief at page 16.) We agree. Allen discloses multiple redundant paths for enhanced reliability, thereby not using a single line for the serial transmission. (See col. 2.) The Examiner addresses the forwarding of the packet to the appropriate location if it is not identified by the cluster module. The controller in the cluster module compares the destination and determines if it should be sent to the next cluster. (See Answer at page 7; Allen at col. 8, lines 25-50.) Again, the Examiner has not provided a *prima facie* case concerning the initialization of the identification codes as set forth in language of independent claims 5 and 7.

CLAIMS 9-13

Appellant relies upon the prior discussion and arguments concerning Dorfe, Fadem, Dixon and Allen. (See Brief at pages 16-17.) Again, we agree with appellant that the combination of the references does not teach the claimed invention as set forth in independent claims 9 and 12 as discussed above concerning claims 1-8. (See Brief at pages 16-17.)

Therefore, it is clear that the prior art applied against the claims does not teach or fairly suggest the claimed invention as set forth in claims 1, 5, 7, 9, and 12 regarding the series connection of a plurality of units, and initialization thereof by a computer via a single line to a first unit of the serially connected units.

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the Examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the Examiner is not sufficient to establish a *prima facie* case of obviousness with respect to claims 1, 5, 7, 9 and 12. Accordingly, we will not sustain the Examiner's rejection of independent claims 1, 5, 7, 9, and 12 under 35 U.S.C. § 103.

Since not all the limitations of independent claims 1, 5, 7, 9, and 12 are suggested by the applied prior art, we cannot sustain the Examiner's rejection of appealed claims 2-4, 6, 8, 10, 11 and 13 which depend therefrom, under 35 U.S.C. § 103.

We will not sustain the rejection of claims 1-13 under 35 U.S.C. § 103.

CONCLUSION

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To summarize, the decision of the Examiner rejecting claims 1-13 under 35 U.S.C.
§ 103 is reversed.

REVERSED

LEE E. BARRETT)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
JOSEPH L. DIXON)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
)	
LANCE LEONARD BARRY)	
Administrative Patent Judge)	

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Sughrue, Mion, Zinn, MacPeak & Seas
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3202