

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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY TAPPERSON and THOMAS ANDREW BOYD

Appeal No. 1999-1456
Application No. 08/864,750

ON BRIEF

Before FLEMING, LALL and BLANKENSHIP, **Administrative Patent Judges.**

FLEMING, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 2 through 12 and 14. Claims 13 and 15 have been objected to. Claim 1 has been canceled.

The invention relates to a distributed control system for controlling material flow within an industrial process. In particular, the invention relates to accessing field devices in a distributed control system and providing redundant

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wireless access to such field devices remotely using wireless transceivers.

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Independent claim 2 is reproduced as follows:

2. A distributed control system for controlling material flow within an industrial process, comprising:

a plurality of industrial process control field devices for sensing or altering material flow within the industrial process;

central control means connected via a primary hardwired communication link to the industrial process control field devices to communicate first signals between the central control means and the industrial process control field devices;

a first transceiver;

a second transceiver connected to at least one of the industrial process control field devices, the first and second transceivers providing redundant two-way wireless communications of second signals between the first transceiver and the second transceiver.

The Examiner relies on the following reference:

Clark et al. (Clark) 5,666,530 Sep. 9, 1997

Claims 2 through 12 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Appellants admitted prior art in view of Clark.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the brief and answer for the respective details thereof.

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OPINION

We will not sustain the rejection of claims 2 through 12 and 14 under 35 U.S.C. § 103.

The Examiner has failed to set forth a **prima facie** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. **In re Sernaker**, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." **Para-Ordnance_Mfg. v. SGS Importers Int'l, Inc.**, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), **cert. denied**, 519 U.S. 822 (1996), **citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.**, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), **cert. denied**, 469 U.S. 851 (1984).

On page 6 of the brief, Appellants argue that the admitted prior art nor Clark teach or suggest a redundant

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wireless communication path to a remote industrial process control field device. On page 7 of the brief, Appellants argue that one would not have reason to employ Clark's wireless communication path to access industrial control process devices in a distributed control system of the admitted prior art.

We note that Appellants' claim 2 recites "first and second transceivers providing redundant two-way wireless communications." Furthermore, we note that Appellants' claim 8 recites "a second wireless transceiver for connection to the first and second industrial process control field devices, to provide redundant two-way wireless communications."

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." **In re Fritch**, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), **citing In re Gordon**, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). It is further established that "[s]uch a suggestion may come from the nature

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of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem." **Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.**, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), **citing In re Rinehart**, 531 F.2d 1048, 1054, 189 USPQ 143, 149 (CCPA 1976)(considering the problem to be solved in a determination of obviousness). The Federal Circuit reasons in **Para-Ordnance Mfg. Inc. v. SGS Importers Int'l Inc.**, 73 F.3d 1085, 1088-89, 37 USPQ2d 1237, 1239-40 (Fed. Cir. 1995), **cert. denied**, 519 U.S. 822 (1996), that for the determination of obviousness, the court must answer whether one of ordinary skill in the art who sets out to solve the problem and who had before him in his workshop the prior art, would have been reasonably expected to use the solution that is claimed by the Appellants. However, "[o]bviousness may not be established using hindsight or in view of the teachings or suggestions of the invention." **Para Ordnance Mfg. Inc. v. SGS Importers Int'l Inc.**, 73 F.3d at 1087, 37 USPQ2d at 1239, **citing W.L. Gore & Assocs., Inc. v. Garlock, Inc.**, 721 F.2d at 1551, 1553, 220 USPQ at 311, 31213.

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In addition, our reviewing court requires the PTO to make specific findings on a suggestion to combine prior art references. **In re Dembiczak**, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999).

We note that the admitted prior art, figure 1, shows a distributed control system within an industrial control process comprising a plurality of industrial process control field devices and a central control means connected by a primary hardwire communication link to the industrial process control field devices. However, the admitted prior art does not teach or suggest a first and second transceiver connected to the industrial process control field devices for providing a redundant two-way wireless communication.

Upon our close review of Clark, we find that Clark is not concerned with controlling an industrial process. Furthermore, we note that Clark is not concerned with providing redundant communication links. In column 2, lines 36-45, Clark states that their invention is concerned with providing a small hand held computer system capable of operating personal information management type software such as calendars, telephone directories, and schedule, as well as

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simplified versions of application software. In column 2, lines 45-58, Clark further emphasizes that their invention is concerned with a small hand held computer which includes personal type computing software. We fail to find that Clark teaches or suggests using his hand held computer system to control a distributed control system for controlling material flow within an industrial process. Furthermore, Clark does not suggest or teach the use of the system to provide redundant two-way wireless communication for such a system. Therefore, we find that the Examiner has failed to show that one of ordinary skill in the art would have been reasonably expected to use the Clark system for automatic synchronization of common files between portable computer and a host computer to provide a redundant two-way wireless communication for a distributed control system for controlling material flow within an industrial process.

In view of the foregoing, we have not sustained the rejection of claims 2 through 12 and 14 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

REVERSED

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