

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASARU FUJII and MINORU TANAKA

Appeal No. 97-0203
Application No. 08/162,893¹

ON BRIEF

Before KRASS, RUGGIERO, and FRAHM, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 and 3-18, all of the claims pending in the present application. Claim 2 has been canceled. An amendment filed

¹ Application for patent filed December 8, 1993.

Appeal No. 97-0203
Application No. 08/162,893

concurrently with the Appeal Brief was approved for entry by the Examiner.

The disclosed invention relates to a measurement device and method employing optical fiber communication and having measuring devices located at plural spaced locations along a conveyor belt. Appellants indicate at page 2 of the specification that information to be measured is translated into optical signals using a photocoupler and a signal processor having a serial interface.

Claim 1 is illustrative of the invention and reads as follows:

1. A measurement device for use in a production line for acquiring data on objects travelling along a conveyor belt, said measurement device being located at each of a plurality of spaced locations along said conveyor belt and comprising:

a measuring unit located at each of said spaced locations along said conveyor belt for acquiring data on each of said objects travelling along said conveyor belt and for generating signals indicative of said data;

a signal processing unit located at each of said spaced locations along said conveyor belt and connected to a respective measuring unit, said signal processing unit for processing signals obtained from said measuring unit and having a serial interface and a photocoupler connected to said serial interface of said signal processing unit for converting processed signals into optical information signals; and

Appeal No. 97-0203
Application No. 08/162,893

optical fibers for interconnecting the photocouplers in the signal processing units to each other and for conducting the optical information signals between signal processing units.

The Examiner relies on the following references:

White et al. (White) 1990	4,972,494	Nov. 20,
Epstein 1992	5,146,357	Sep. 08,

Claims 1 and 3-18 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over White in view of Epstein. Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Brief and Answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support of the rejection and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Brief along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

Appeal No. 97-0203
Application No. 08/162,893

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1 and 3-11. We reach the opposite conclusion with respect to claims 12-18. Accordingly, we affirm-in-part.

As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an Examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could

Appeal No. 97-0203
Application No. 08/162,893

have made but chose not to make in the Briefs have not been considered [see 37 CFR § 1.192(a)].

With respect to independent claims 1, 8, and 10, the Examiner, as the basis for the obviousness rejection, seeks to modify the product inspection system of White which utilizes electrical cabling and interfaces rather than optical fibers and coupling devices as claimed. To address this deficiency, the Examiner turns to Epstein for a teaching of utilizing optical communication devices to provide coupling between data stations in a communications system. In the Examiner's line of reasoning (Answer, pages 3 and 4), the skilled artisan would be motivated to modify the electrical cabling system of White by utilizing optical communication devices to avoid drawbacks such as noise in electrical communication devices in view of the teachings of Epstein.

In making the obviousness rejection, the Examiner, therefore, has pointed out the teachings of White and Epstein, has reasonably indicated the perceived differences between the prior art and the claimed invention, and has provided reasons as to how and why White and Epstein would have been modified and/or combined to arrive at the claimed invention (Answer,

Appeal No. 97-0203
Application No. 08/162,893

page 4). In our view, regardless of the ultimate accuracy of the Examiner's position, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has at least satisfied the burden of presenting a prima facie case of obviousness. That is, the rejection would be sustained if Appellants chose not to respond to the rejection on the merits. The burden is, therefore, upon Appellants to come forward with evidence or arguments which persuasively rebut the Examiner's prima facie case of obviousness.

In response, Appellants argue the Examiner's failure to establish a prima facie case of obviousness by asserting that Epstein does not teach a communication system which utilizes the claimed optical fibers. In Appellants' view, Epstein teaches only the use of optical coupling devices which are inserted on either end of conventional metallic line conductors.

Upon careful review of the applied references in light of the arguments by Appellants and the Examiner, we are in agreement with the Examiner's stated position in the Answer. In our opinion, the cited portion of Epstein (column 4, lines 53-61) relied on by the Examiner provides a clear and explicit

Appeal No. 97-0203
Application No. 08/162,893

teaching of using optical communication and fiber optic cables to overcome difficulties with conventional electrical cabling and interfaces. As the Examiner noted (Answer, page 7), Epstein, in the illustrated embodiment, chose to utilize optical couplers only rather than replace existing cable for economic reasons. It is our opinion, however, that this fact does not devalue Epstein's clear and unambiguous suggestion of using fiber optic cables as part of an optical communication system to overcome isolation and noise problems associated with electrical cabling. Accordingly, the Examiner's 35 U.S.C. § 103 rejection of independent claims 1, 8, and 10 is sustained.

We also sustain the Examiner's obviousness rejection of dependent claims 3-7, 9, and 11. As to these dependent claims, the Examiner has either pointed to where the claimed limitations exist in the applied references or indicated how and why such limitations could reasonably be inferred to exist by the skilled artisan. "In considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw

Appeal No. 97-0203
Application No. 08/162,893

therefrom." In re Preda, 401 F. 2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

We do, however, reach the opposite conclusion with respect to dependent claims 12-18. We note that the relevant portion of dependent claim 12, upon which claims 13-16 further depend, recites:

comprising a conveyor controller having a photocoupler coupled to said control computer by an optical fiber, said conveyor controller controlling movement of said conveyor belt.

In addressing this claim limitation, the Examiner generally points to the various position controllers along the conveyor belt in White. Our review of White, however, does not reveal any such conveyor controller. To the contrary, the disclosure of White at column 4, lines 37-52 indicates the intention to provide synchronization between the package to be inspected and the package inspection system independent of conveyor movement. Further, we agree with Appellants that even assuming, arguendo, that disclosure of a conveyor controller could be inferred from the teachings of White, there remains

Appeal No. 97-0203
Application No. 08/162,893

no disclosure of a conveyor with a photocoupler connection to a control computer by an optical fiber as claimed.

As to dependent claims 17 and 18, Appellants are correct in asserting that, although the Examiner grouped these claims together with claims 12-16 in making the obviousness rejection, claims 17 and 18 are in fact method claims which are dependent on method claim 10. Since the Examiner has not addressed the particulars of these claims we are constrained, on the record before us, to agree with Appellants' contention that the Examiner has failed to establish a prima facie case of obviousness with respect to these claims which relate to the method step of transmitting optical information. In view of the above discussion, we cannot sustain the Examiner's obviousness rejection of dependent claims 12-18.

In summary, the Examiner's 35 U.S.C. § 103 rejection is sustained with respect to claims 1 and 3-11 but is not sustained with respect to claims 12-18. Accordingly, the decision of the Examiner rejecting claims 1 and 3-18 is affirmed-in-part.

Appeal No. 97-0203
Application No. 08/162,893

No period for taking any subsequent action in connection
with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	
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)	BOARD OF PATENT
JOSEPH F. RUGGIERO)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
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ERIC FRAHM)	
Administrative Patent Judge)	

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Appeal No. 97-0203
Application No. 08/162,893

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Appeal No. 97-0203
Application No. 08/162,893

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APJ KRASS

APJ FRAHM

DECISION: AFFIRMED-IN-PART
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s): _____

Prepared: July 18, 2000

Draft Final

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OB/HD GAU

PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT