

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOSEPH S. STAM, JOH H. BECHTEL,
SPENCER D. REESE, JOHN K. ROBERTS,
WILLIAM L. TONAR, G. BRUCE POE,
and DOUGLAS J. NEWHOUSE

Appeal 2008-1729
Application 11/231,230
Technology Center 2600

Decided: July 15, 2008

Before JOSEPH F. RUGGIERO, MAHSHID D. SAADAT,
and KEVIN F. TURNER, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of claims 1-21, which are all of the claims pending in this application. An oral

hearing on this appeal was conducted on June 19, 2008. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellants' invention relates to a vehicle equipment control system including an image sensor having an array of pixels and a controller which receives at least one image from the image sensor and at least one input over a vehicle bus. The controller generates a vehicle equipment control signal as a function of at least a portion of the at least one image and the at least one input. (Specification 3-6).

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

1. A vehicle equipment control, comprising:
an image sensor having an array of pixels; and
a controller configured to receive at least a portion of at least one image acquired by said image sensor and to receive at least one input over a vehicle bus, wherein said controller is further configured to generate a vehicle equipment control signal as a function of said at least a portion of at least one image and of said at least one input.

The Examiner relies on the following prior art references to show unpatentability:

Slotkowski	US 5,182,502	Jan. 26, 1993
Schofield	US 5,796,094	Aug. 18, 1998
O'Farrell	US 5,798,575	Aug. 25, 1998

Claims 1-5, 7-14, and 16-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schofield in view of O'Farrell.

Claims 6, 15, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schofield in view of O'Farrell and further in view of Slotkowski.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs and Answer for the respective details. Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived [see 37 C.F.R. § 41.37(c)(1)(vii)].

ISSUES

(i) Under 35 U.S.C. § 103(a), with respect to appealed claims 1-5, 7-14, and 16-20, would one of ordinary skill in the art at the time of the invention have found it obvious to combine Schofield and O'Farrell to render the claimed invention unpatentable?

(ii) Under 35 U.S.C. § 103(a), with respect to appealed claims 6, 15, and 21, would one of ordinary skill in the art at the time of the invention have found it obvious to modify the combination of Schofield and O'Farrell by adding the teachings of Slotkowski to render the claimed invention unpatentable?

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in

Appeal 2008-1729
Application 11/231,230

Graham v. John Deere Co., 383 U.S. 1, 17 (1966). “[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Furthermore,

“ . . . there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007)(quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting *KSR*, 127 S. Ct. at 1739). “One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *KSR*, 127 S. Ct. at 1742.

ANALYSIS

With respect to the Examiner’s 35 U.S.C. § 103(a) rejection of appealed independent claims 1, 9, and 17 based on the combination of Schofield and O’Farrell, Appellants’ arguments in response assert a failure to set forth a *prima facie* case of obviousness since the Examiner has not established a proper basis for the proposed combination of references.

Initially, according to Appellants (App. Br. 18-24; Reply Br. 2-3), the Examiner has not provided any rationale why a skilled artisan would replace the alleged single light sensor of O'Farrell with the image pixel array of Schofield.

It is apparent, however, from a reading of Appellants' arguments that Appellants have misinterpreted the Examiner's stated position. The Examiner is not applying Schofield's pixel array teachings to O'Farrell but, rather, it is O'Farrell's vehicle bus teachings that are being applied to Schofield.

Further, Appellants' arguments to the contrary notwithstanding, the Examiner has clearly stated (Ans. 4-5) a rationale for the proposed modification of Schofield, i.e., the minimization of hardware cost and increased flexibility resulting from the use of bidirectional serial communication links over a vehicle bus as taught at column 8, lines 33-37 of O'Farrell. It is our view that the ordinarily skilled artisan would have recognized and appreciated that the vehicle bus features described by O'Farrell would have served as an obvious enhancement to the vehicle equipment control system of Schofield. According to *Leapfrog*, when a combination of familiar elements according to methods known to the skilled artisan achieves a predictable result, it is likely to be obvious.

We further find to be unpersuasive Appellants' contention (App. Br. 18) that the subject matter of O'Farrell, which is allegedly directed to a non-image sensor based vehicle control system is non-analogous to the image-based sensor control system of Schofield. We note that the test for non-analogous art is first whether the art is within the field of the inventor's endeavor and, if not, whether it is "reasonably pertinent to the problem with

which the inventor was involved.” *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979). “A reference is reasonably pertinent if, even though it may be in a different field” of endeavor, it logically would have commended itself to an inventor's attention in considering his problem “because of the matter with which it deals.” *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

Our review of the disclosures of Schofield and O’Farrell finds it apparent that both of the applied references are directed to vehicle equipment control systems. Further, contrary to Appellants’ contention, O’Farrell in fact discloses an image-based vehicle control environment. For example, O’Farrell, at column 6, lines 15-24, suggests that the exterior and interior mirror assemblies are image transfer devices which utilize a “solid-state imaging array.” Additional image-based sensor device teachings are provided at column 9, lines 23-39 of O’Farrell. Accordingly, we find no error in the Examiner’s finding that the ordinarily skilled artisan would have logically consulted the teachings of O’Farrell in attempting to solve problems associated with the control of vehicle equipment such as in Schofield.

In view of the above discussion, since the Examiner’s prima facie case of obviousness has not been overcome by any convincing arguments from Appellants, we sustain the Examiner’s 35 U.S.C. § 103(a) rejection, based on the combination of Schofield and O’Farrell, of independent claims 1, 9, and 17, as well as dependent claims 2-5, 7, 8, 10-14, 16, and 18-20 not separately argued by Appellants.

Turning to a consideration of the Examiner’s 35 U.S.C. § 103(a) rejection of dependent claims 6, 15, and 21 in which the Slotkowski reference has been added to the combination of Schofield and O’Farrell to

Appeal 2008-1729
Application 11/231,230

address the sensitivity switch and instrument panel control features of these claims, we sustain this rejection as well. Appellants have made no separate arguments as to the patentability of these claims and instead have relied upon the previous arguments attacking the Examiner's proposed combination of Schofield and O'Farrell, which arguments we found to be unpersuasive as discussed *supra*.

CONCLUSION

In summary, we have sustained the Examiner's 35 U.S.C. § 103(a) rejections of all of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-21 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2006).

AFFIRMED

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