

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TIMOTHY FORD and STEPHANE GASCON

Appeal 2008-1728
Application 11/227,388
Technology Center 2800

Decided: September 9, 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 1-6 and 8, which are all of the claims pending in this application. Claim 7 has been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Appellants' invention relates to a microcontroller electronic circuit power supply which includes a battery, a battery receiving compartment, and a power conversion circuit. A positive power is supplied to the microcontroller electronic circuit, along with an indication of the polarity of the battery, regardless of the orientation of the battery in the battery compartment. (Spec. ¶ 006).

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

1. A power supply for supplying DC power to an electronic circuit comprising at least one microcontroller, the supply comprising:
 - a battery comprising a positive terminal and a negative terminal;
 - a battery receiving compartment; and
 - a power conversion circuit comprising first and second terminals and a power output for supplying power to the electronic circuit;

wherein when said battery is placed within said compartment in a first orientation said positive terminal is in contact with said first terminal and said negative terminal is in contact with said second terminal and a positive power from said battery is supplied to the electronic circuit together with an indication to the microcontroller of the positive polarity of the voltage between said first and second terminals and wherein when said battery is placed within said compartment in a second orientation said positive terminal is in contact with said second terminal and said negative terminal is in contact with said first terminal and a positive power from said battery is supplied to the electronic circuit together with an indication to the

¹ This is the correct version of appealed claim 1 as it appears in the amendment filed June 8, 2007 which, as indicated at page 3 of the Answer, has been entered by the Examiner.

microcontroller of the negative polarity of the voltage between said first and second terminals.

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

Marsocci	US 4,517,555	May 14, 1985
Killion	US 5,623,550	Apr. 22, 1997

Claims 1-6 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Marsocci in view of Killion.

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)].

ISSUE

Under 35 U.S.C. § 103(a), with respect to appealed claims 1-6 and 8, would one of ordinary skill in the art at the time of the invention have found it obvious to combine Marsocci and Killion 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 *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 claim 1 based on the combination of Marsocci and Killion, Appellants assert (App. Br. 8-11; Reply Br. 1-3) that the Examiner has failed to set forth a *prima facie* case of obviousness since a proper basis for the proposed combination of references has not been established. After

reviewing the arguments of record from Appellants and the Examiner, we are in general agreement with Appellants' position as stated in the Briefs.

In setting forth a rationale for the proposed combination of Marsocci and Killion, the Examiner has relied (Ans. 5) on the alleged "functional equivalence" of the dedicated polarity DC source and polarity switch S of Marsocci and the battery polarity connection correction circuitry of Killion. We agree with Appellants (Reply Br. 2), however, that the Examiner has not established on the record before us that the reversed battery connection feature of Killion would be recognized in the prior art as functionally equivalent to the polarity switch/DC power source arrangement of Marsocci. While we do not dispute the Examiner's contention (Ans. 9) that power supplies for smoke detector apparatus, such as described by Marsocci, were known to include central power supplies as well as batteries, this does not serve to establish the functional equivalence of a reversed battery connection circuit, such as in Killion, with the DC power source/polarity switch combination of Marsocci.

Further, aside from a failure to provide sufficient evidence to support the assertion of functional equivalence of the structures disclosed by Marsocci and Killion, we find no other articulated line of reasoning by the Examiner which would establish a basis for the proposed combination of references. Our review of the disclosure of Killion reveals that, at best, Killion discloses that a positive power will be supplied across load 135 regardless of whether a user has properly inserted battery 25 with the correct polarity. Marsocci, on the other hand, discloses a power supply/polarity switch combination which can be operated by a user to establish a different

circuit path to thereby enable a different mode of operation for the smoke detector alarm 7.

We simply find no convincing rationale provided by the Examiner as to why the skilled artisan would look to the reversed battery polarity connection teachings of Killion to improve or solve any problems associated with a user operated mode changing polarity switch/power source combination such as disclosed by Marsocci. Given the above discussed deficiencies in the applied prior art, we fail to see how and in what manner the disclosure of Marsocci might have been modified by Killion to arrive at the features set forth in appealed independent claim 1. In our view, given the disparity of problems addressed by the applied prior art references, and the differing solutions proposed by them, any attempt to combine them in the manner proposed by the Examiner could only come from Appellants' own disclosure using hindsight reconstruction.

In view of the above discussion, since we are of the opinion that the proposed combination of references set forth by the Examiner does not support the obviousness rejection, we do not sustain the rejection of independent claim 1, nor of claims 2-6 and 8 dependent thereon.

Appeal 2008-1728
Application 11/227,388

CONCLUSION

In summary, we have not sustained the Examiner's 35 U.S.C. § 103(a) rejection of any of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-6 and 8 is reversed.

REVERSED

eld

GOUDREAU GAGE DUBUC
2000 MCGILL COLLEGE
SUITE 2200
MONTREAL QC H3A 3H3 CA CANADA