

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DALLAS J. BERGH and PATRICK K. DUFFY

Appeal 2008-0664
Application 09/967,177
Technology Center 2800

Decided: June 6, 2008

Before KENNETH W. HAIRSTON, ANITA PELLMAN GROSS, and
ROBERT E. NAPPI, *Administrative Patent Judges*.

GROSS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's Final Rejection of claims 1 through 20, 23 through 28, and 34 through 38. The Examiner (Ans. 7) withdrew the rejections of claims 21, 22, and 29 through 33. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants' invention relates to a control circuit for suppressing leakage current for relays. *See generally* Spec. 2:9-13. Claim 34 is illustrative of the claimed invention, and it reads as follows:

34. A method for controlling a relay circuit, the method comprising:

controlling a conductive state of a solid state switch in series with a relay coil such that the relay coil is energized if a current level of an input control signal is above a predetermined input leakage current threshold level and is deenergized if the current level of the input control signal is below the predetermined input leakage current threshold level.

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

White	US 4,159,501	Jun. 26, 1979
Nevo	US 6,522,033 B1	Feb. 18, 2003 (filed Jul. 19, 2000)

Claims 1 through 20, 23 through 28, and 34 through 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Nevo.

We refer to the Examiner's Answer (mailed January 4, 2007) and to Appellants' Brief (filed September 26, 2006) and Reply Brief (filed March 9, 2007) for the respective arguments.

Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii). As Appellants rely on the same arguments for all of the claims, we, therefore, will treat the claims as a single group. We select independent claim 34 as representative to decide the appeal. *See* 37 C.F.R. § 41.37(c)(1)(vii). All of the rejected claims will therefore stand or fall with claim 34.

SUMMARY OF DECISION

As a consequence of our review, we will affirm the obviousness rejection of claims 1 through 20, 23 through 28, and 34 through 38.

OPINION

Appellants contend (App. Br. 7-11) that neither White nor Nevo discloses current that leaks into a control circuit, as recited in all of the claims, but instead disclose current leaking out of a system to ground. However, claim 34 does not recite current that leaks into a control circuit. Claim 34 recites that the relay coil is energized "if a current level of an input control signal is above a predetermined input leakage current threshold level." Claim 34 does not require that the control signal be input into a control circuit, as argued by Appellants. Further, "input leakage current" does not indicate to what the leakage current is input.

Nevo discloses (col. 4, ll. 19-35) that a person standing on the ground and touching switch contact 26 allows a small electric current to flow through resistors 24 and 25, which causes an imbalance between the voltages at inputs 20 and 22. That, in turn, makes the output of the voltage comparator go high such that the bipolar junction transistor conducts, thereby energizing the relay K. The threshold level of the input leakage current depends upon the values of resistors 16, 17, 24, and 25. *See* Nevo, col. 5, ll. 1-5. In other words, if a current level of a leakage current input to the resistors is above a predetermined threshold level, the conductive state of the solid state switch is changed and the relay coil is energized. We acknowledge that Nevo does not disclose that the relay coil is deenergized if the current level of the input signal is below the predetermined threshold.

However, it would have been obvious to deenergize the relay coil if the leakage current dropped lower than a threshold level so as to regain use of the appliance previously deactivated by the leakage current. Therefore, claim 34 would have been obvious over Nevo, with the teachings of White being cumulative. Accordingly, we will sustain the obviousness rejection of claim 34 and the claims grouped therewith, claims 1 through 20, 23 through 28, and 35 through 38.

ORDER

The decision of the Examiner rejecting claims 1 through 20, 23 through 28, and 34 through 38 under 35 U.S.C. § 103 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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