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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RONALD MOFFATT

Appeal 2010-010549¹
Application 11/326,887
Technology Center 2800

Before JEAN R. HOMERE, TREVOR M. JEFFERSON, and
LARRY J. HUME, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The real party in interest is Belkin International, Inc. (App. Br. 4.)

I. STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1-20. (App. Br. 6.) We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellant's Invention

Appellant invented a method and system for improving a surge suppressor (60) containing a plurality of metal oxide varistors (MOV, 63a-d) and thermal cutoffs (TC, 62a-c). In particular, each MOV (current diverter) is repositioned to be adjacent to a TC so that the MOV side closest to the TC is at substantially the same electrical potential as the TC thereby permitting quick and effective transfer of heat from the MOV to the TC. (Spec. Fig. 6, ¶¶ [0063], [0064].)

Illustrative Claim

Independent claim 1 further illustrates the invention. It reads as follows:

1. A method of improving a surge suppressor configured to pass an electrical current to at least one electronic device and to absorb voltage spikes in the electrical current thereby protecting the at least one electronic device from the voltage spikes, the surge suppressor comprising a plurality of electrical components, the improvement comprising at least the step of revising a layout of the electrical components so that a plurality of MOVs are at a closer electrical potential to adjacent electrical components.

Prior Art Relied Upon

Brady

US 5,010,438

Apr. 23, 1991

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Murphy	US 5,923,517	Jul. 13, 1999
Goldstein	US 6,118,639	Sep. 12, 2000
Chaudhry	US 6,252,754 B1	Jun. 26, 2001
Wu	US 2003/0043519 A1	Mar. 6, 2003

Rejections on Appeal

The Examiner rejects the claims on appeal as follows:

1. Claims 1, 2, 6, and 8 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.
2. Claims 1, 6, and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Murphy.
3. Claims 1, 3, 4, 11-14, and 16-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wu.
4. Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Murphy in view of Brady.
5. Claims 5 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Murphy in view of Chaudhry.
6. Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Murphy in view of Goldstein.
7. Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wu in view of Goldstein.

ANALYSIS

We consider Appellant's arguments *seriatim* as they are presented in the Appeal Brief, pages 12-113, and the Reply Brief, pages 5-9.

Indefiniteness Rejection

Dispositive Issue 1: Under 35 U.S.C. § 112, second paragraph, did the Examiner err in concluding that the recitation of “revising a layout of electrical components so that MOVs are at a closer electrical potential to adjacent electrical components” as recited in claim 1 renders the claim indefinite?

Appellant argues that because MOVs are electrical components that can be moved or rearranged to be adjacent to other electrical components that have similar electrical potentials, the disputed limitation does not render the claim indefinite. (App. Br. 14-15.) Further, Appellant argues that the Examiner’s interpretation of the disputed limitation as any arrangement of the MOVs that would protect an electrical component is incorrect because it not consistent with the discussion provided in Appellant’s Specification. (*Id.* at 16-17.)

In response, the Examiner finds that because the claim does not recite any connection between the MOVs and other electrical components, it is unclear as to how “placement of parts in the layout design can affect the electrical potential of MOV with some other parts.” Therefore, the Examiner submits that the disputed limitation renders the claim indefinite. (Ans. 14-15.)

On the record before us, we find error in the Examiner’s indefiniteness rejection because one of ordinary skill in the art having read Appellant’s Specification would have been apprised of the scope of the claimed subject matter. In particular, we find that the ordinarily skilled

artisan would have been readily apprised that because the MOVs and the other electrical components are parts of the surge protector circuit, the MOVs are connected to the other electrical components. Further, because the MOVs are movable components (Spec. ¶ [0064]), only routine skills would be required to place the MOVs near the other components in such a way for the MOVs to have substantially the same electrical potentials as those of the adjacent electrical components. We thus agree with Appellant that the Examiner erred in rejecting claim 1 as being indefinite.

Regarding claim 2, the Examiner concludes that because MOVs are resistor elements that do not have polarity, the recitation of orienting the MOVs in alternating polarity renders the claim indefinite. (Ans. 4.) We find error in this rejection as well. We agree with Appellant that the ordinary skilled artisan would have readily appreciated that, despite the MOVs being resistor elements, they each have an electrical potential along with a polarity during operation of the surge protector. (App. Br. 19-21.) Therefore, the recitation of alternating the polarities of the MOVs would not render the claim indefinite.

Regarding claims 6 and 8, the Examiner concludes that because safety cannot be measured or objectively estimated, the recitation of advertising that the surge protector is safer renders the claim indefinite. (Ans. 4-5.) We find merit in that rejection. We find that the recited limitation is not functionally tied to the invention to thereby to achieve the task of improving a surge suppressor as set forth in preamble of claims 6 and 8. We find the disputed limitation to be speculative at best, and does not further define or

clarify how the surge protector is improved. Consequently, we will sustain this rejection.

Obviousness Rejection

Dispositive Issue 2: Under 35 U.S.C. § 103, did the Examiner err in finding that Wu or Murphy, taken alone, teaches or suggests *revising a layout of electrical components so that MOVs are at a closer electrical potential to adjacent electrical components*, as recited in claim 1?

The Examiner finds that Murphy's disclosure of a surge protector having placed therein a plurality of MOVs adjacent to a plurality of electrical components (e.g. line-ground, line-neutral, and neutral ground components respectively) to thereby cause the MOVs to have substantially the same electrical potential as the electrical components teaches or suggests the disputed limitations. (Ans. 5.) Similarly, the Examiner finds that Wu's disclosure of a surge protector including a plurality of MOVs placed adjacent to electrical components (line to neutral, line to ground, and neutral to ground respectively) substantially teaches the disputed limitations. (*Id.* at 6.)

Further, the Examiner finds that although neither Murphy nor Wu discloses revising the layout of the surge protector, it would have been obvious to do so through trial and error until the optimal design is achieved. (*Id.* at 16-17, 20.)

Appellant argues that neither Murphy nor Wu teaches or suggests the disputed limitations emphasized above. (App. Br. 29-37.) In particular, Appellant argues that while both Murphy and Wu disclose placing the

MOVs adjacent to electrical components within a surge protector, neither reference teaches or suggests *revising* the layout of the surge protector to thereby allow the MOVs to have substantially the same electrical potential as the adjacent electrical components. (*Id.* at 32, 38-46.)

Based upon our review of the record before us, we agree with the Examiner's underlying factual findings and ultimate conclusion of obviousness regarding claim 1. We note at the outset that Appellant does not dispute the Examiner's finding that both Murphy and Wu disclose a surge protector having a layout wherein MOVs are placed adjacent to electrical components. However, Appellant disputes the Examiner's conclusion that it would have been obvious to revise the layout of electrical components within the surge protectors to find an optimum design therefor.

As discussed above, we find the ordinarily skilled artisan would have readily appreciated that in a surge protector circuit where the MOVs are connected to other electrical elements, only routine skills would be required to arrange the MOVs to have substantially the same electrical potential as adjacent components connected thereto. Further, because it is undisputed that both Wu and Murphy disclose three MOVs that are adjacently placed to a line to ground, line to neutral, and a neutral to ground components, respectively, the ordinarily skilled artisan would have readily discerned therefrom that the MOVs are capable of having substantially the same electrical potential as those electrical components, and that only routine skill would be required for such modification or revision.

Next, regarding the lack of logical reason to modify argument, we note that U.S. Supreme Court has held that "[t]he combination of familiar

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elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007). The Court further instructs that:

[o]ften it will be necessary for a court to look to interrelated teachings of multiple patents; . . . and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason for combining the known elements in a the fashion claimed by the patent at issue.

Id. at 418.

Additionally, the Court instructs that:

rejections on obviousness grounds cannot be sustained by mere conclusory statements. Instead, 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.

Id. (citation omitted).

First, we find that the ordinarily skilled artisan, being a creative individual would have been able to fit the teachings of the cited references (including established knowledge in the art) together like pieces of a puzzle to predictably result in the disputed limitations. That is, the proffered modification of the cited references would predictably result in a surge protector having a plurality of MOVs adjacently connected to thermal fuses to thereby allow the MOVs to have substantially the same voltages as the thermal fuses connected thereto. While it may be necessary for an Examiner

to identify a reason for combining the familiar elements obtained from the prior art in establishing a prima facie case of obviousness, the identification of such a reason is not a *sine qua non* requirement. So long as the Examiner provides an articulated reasoning with some rational underpinning to substantiate the obviousness rejection, such a conclusion is proper. In this case, the Examiner provides more than just a mere conclusory statement.

The Examiner notes that at the time of the claimed invention, an ordinarily skilled artisan would have been motivated to revise the layout of Murphy's and Wu's system to reposition components thereof as such revision is a part of a normal design procedure to obtain an optimal design. (Ans. 5.) In our view, such a statement suffices as an articulated reason with a rational underpinning to support the cited modification. As noted above, the case law allows the Examiner to look to the state of the prior art, including the knowledge of the ordinarily skilled artisan to arrive at such a reason for combining or modifying the known elements of the prior art. Consequently, the Examiner's reliance upon the cited references in order to arrive at an articulated reason with a rational underpinning to support the proffered modification is proper. For these same reasons, Appellant's argument that Murphy or Wu teaches away from the invention is not persuasive.

Regarding claims 2-20, Appellant reiterates substantially the same arguments submitted for patentability of claim 1 above. (App. Br. 47-113.) As discussed above, these arguments are not persuasive. *See* 37 C.F.R. § 1.37(c)(1)(vii). Further, while Appellant raised additional arguments for patentability of the cited claims, we find that the Examiner has rebutted in

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the Answer each and every one of those arguments by a preponderance of the evidence. (Ans. 16-29.) Therefore, we adopt the Examiner's findings and underlying reasoning, which are incorporated herein by reference. Consequently, we have found no error in the Examiner's rejections of claims 2-20.

DECISION

We affirm the Examiner's obviousness rejections of claims 1-20 as set forth above. We further affirm the Examiner's indefiniteness rejection of claims 6 and 8. However, we reverse the indefiniteness Examiner's rejection of claims 1 and 2.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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).

AFFIRMED

msc