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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte ERIC A. SCHMIDT
and JEFFREY W. RIEDEL

_____

Appeal No. 95-0746
Application 07/945,036[1]

_____

ON BRIEF

_____

Before MEISTER, ABRAMS and CRAWFORD, *Administrative Patent Judges*.

ABRAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

[1] Application for patent filed September 15, 1992.

This is an appeal from the decision of the examiner finally rejecting claims 1 through 6, which constitute all of the claims of record in the application.

The appellants' invention is directed to an improvement in electrical alternators. The subject matter before us on appeal is illustrated by reference to claim 1, which reads as follows:

1. An improved electrical alternator including a plurality of stator windings and a rectifier assembly, the respective stator lead wires of the stator windings are connected to said rectifier assembly and are disposed within a housing, said housing is formed from an electrically and heat conducting material with a centrally apertured plate integrally formed with a cup portion having a cylindrical wall that extends parallel to a center axis and surrounds a portion of said stator windings;

said rectifier assembly includes an interconnection plate mounted on said apertured plate of said housing and said interconnection plate provides solder terminals for the connection of said stator lead wires extending from said stator windings;

said cylindrical wall portion of said housing contains a plurality of ventilation windows with some windows being sufficiently large to allow stator lead wires to extend from their respective stator windings to the interconnection plate mounted on said deck plate;

the improvement comprising a coating of a resinous material on the exposed housing surfaces of said windows through which said stator lead wires extend from their respective stator windings to said interconnection plate and thereby providing electrical insulation between said lead wires and said housing.

THE REFERENCES

The references relied upon by the examiner to support the final rejection are:

Armbruster *et al.* (Armbruster)	4,952,829	Aug. 28, 1990
Lakin	5,043,612	Aug. 27, 1991

The prior art disclosed by the appellants in Figure 2.

THE REJECTION

Claims 1 through 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over the prior art disclosed by the appellants in Figure 2, Armbruster, and Lakin.

The rejection is explained in the Examiner's Answer.

The opposing viewpoints of the appellants are set forth in the Brief.

OPINION

The appellants' invention is an improvement to electrical alternators of the type in which stator windings are positioned in a housing having a plurality of ventilation windows and upon which is mounted a rectifier assembly. The portion of the housing in which the windows are located also serves as a heat sink. In such an arrangement, it is customary to have the stator lead wires pass through the ventilation windows to the rectifier assembly. Specification, pages 1 and 2.

Independent claim 1 is directed to an electrical alternator in which the improvement provided is recited as

> a coating of a resinous material on the exposed housing surfaces of said windows through which said stator lead wires extend from their respective stator windings . . . thereby providing electrical insulation between said lead wires and said housing.

Independent claim 5 sets forth the invention in the context of an alternator heat sink element for an automotive alternator, and independent claim 6 as an alternator including a rectifier assembly, a heat sink housing element, and a set of stator windings.

All of the claims stand rejected as being unpatentable over the prior art described by the appellants in Figure 2 of their drawings, taken in view of Armbruster and Lakin. The examiner points out that Armbruster teaches a rectifier structure in which the stator wires are bare but are contained in an insulated passage, and that Lakin teaches utilizing an epoxy coating over a stator core to electrically insulate the core windings from the core itself. From this, the examiner concludes it would have been obvious to place resin material around the windows in the heat sink through which the stator wires pass in the device shown in the appellants' Figure 2 because "[t]his would eliminate at

least the conventional stripping of woven acrylic insulators, thereby reducing manufacture time." (Answer, page 4).

We disagree. Armbruster merely shows another manner in which the stator wires can be insulated from the heat sink, in this case by passing them through in an insulated sheath, rather than coating them with insulation, as is shown in the appellants' Figure 2. Therefore, in our view, Armbruster essentially adds nothing new to the prior art system. Lakin discloses no stator wires and no ventilation windows through which they can pass. The problem in Lakin is to insulate the windings of the stator core, and not the stator connecting wires, from the laminated core. Granted, this is accomplished by covering a portion of the core with an insulating material. However, from our perspective, the only motivation for applying this teaching to the ventilating windows of an alternator heat sink in the manner proposed by the examiner is found in the hindsight provided by one who first viewed the appellants' disclosure. This, of course, is impermissible. See *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

The rejection is not sustained.

The decision of the examiner is reversed.

Appeal No. 95-0746
Application 07/945,036

REVERSED

JAMES M. MEISTER Administrative Patent Judge	)
NEAL E. ABRAMS Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
MURRIEL E. CRAWFORD Administrative Patent Judge	)

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