

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 42

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAI-HER YANG

Appeal No. 1999-1927
Application 08/499,367

ON BRIEF

Before KRASS, JERRY SMITH and GROSS, Administrative Patent Judges.

SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claim 3, which constitutes the only claim remaining in the application.

The disclosed invention pertains to a motor casing which provides an axial flux path between two magnetic poles of the motor, and which is in the form of two C-shaped end casings between which are clamped the magnetic poles.

Single remaining claim 3 is reproduced as follows:

3. In a motor, comprising:

a rotor;

at least two magnetic poles made of a magnetically inductive material surrounded by a field winding and arranged to generate a magnetic field which, by interaction with the rotor, causes the rotor to rotate; and

a casing consisting of two end casings made of a magnetically inductive material for holding said rotor at axially opposed ends of the rotor and for retaining said poles, said casing serving as a sole means of support for said poles and said rotor;

the improvement wherein each of said end casings is a C-shaped member made of a magnetically inductive material which forms a means for providing a respective axial magnetization path between said poles, one on each side of the poles, said respective axial magnetization paths being the only magnetization paths between said poles,

wherein said two magnetic poles are clamped between ends of said end casings such that said poles extend transversely relative to said end casings, and

wherein said C-shaped members thereby form a means for exposing the rotor in order to ventilate the rotor.

The examiner relies on the following references:

Perkins	1,822,859	Sep. 08, 1931
Kawada et al. (Kawada)	4,626,725	Dec. 02, 1986
Linders	UK 17,732	Oct. 16, 1891
De La Riboisiere et al. (De La Riboisiere)	UK 29,562	Dec. 22, 1913

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Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of De La Riboisiere in view of Perkins. Claim 3 also stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Linder in view of Perkins or Kawada.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claim 3. Accordingly, we reverse.

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,

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837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually

made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

We consider first the rejection of claim 3 based on De La Riboisiere and Perkins. The examiner basically finds that De La Riboisiere teaches the claimed invention except that De La Riboisiere does not teach two C-shaped end casings which clamp two magnetic poles therebetween. The examiner cites Perkins as teaching the use of two C-shaped end covers for securing the field-frame of a motor to the end covers. The examiner finds that it would have been obvious to the artisan to provide separate C-shaped end casings to clamp the magnetic poles of De La Riboisiere in order to securely clamp the stator core to the end covers [answer, pages 3-4].

Appellant argues that the C-shaped sections of Perkins are not made of magnetic material as required by the claim. Appellant also argues that the magnetic poles of De La Riboisiere and Perkins are formed integrally with the yoke so that there is no reason why they would be clamped in the manner recited in claim 3. In summary, appellant argues that neither De La Riboisiere nor Perkins teaches or suggests the clamping of separate magnetic poles between two C-shaped magnetic structures [brief, pages 4-8].

The examiner responds that Perkins was cited to teach end covers which clamp a field-frame therebetween. It is the examiner's position that if the field-frame of Perkins is

clamped by the end covers, then the magnetic pole pieces are also clamped between the end covers [answer, pages 6-7]. Appellant responds that clamping the field-frame to the end covers does not teach clamping the pole pieces to the end covers because the pole pieces are a unitary part of the yoke in the applied references [reply brief].

We agree with the position argued by appellant. Since the magnetic poles are formed integrally with the yoke in De La Riboisiere, there would be no motivation to seek to clamp these poles by converting the yoke into two C-shaped sections. Clamping would only be used if the pole pieces were movable with respect to the clamping member. Since the poles in De La Riboisiere are fixed with respect to the yoke, we find no motivation to use two C-shaped end sections as taught by Perkins to clamp the magnetic poles of De La Riboisiere.

We now consider the rejection of claim 3 based on Linder and either Perkins or Kawada. The examiner basically finds that Linder teaches the claimed invention except that Linder does not clamp two magnetic poles between end casings. The examiner cites Perkins and Kawada as each teaching the use of end covers for clamping magnetic poles therebetween. The examiner finds that it would have been obvious to the artisan to provide separate end casings in Linder to clamp the magnetic poles for the respective purposes of clampingly securing the stator poles to the motor casing and precisely maintaining the shape of the stator, the bearings and the motor's other connecting surfaces [answer,

pages 4-6].

Appellant's main brief failed to respond to this rejection. Appellant did file a reply brief in response to this rejection, and the examiner has entered the reply brief. The reply brief argues that none of the applied references suggests clamping the magnetic pole pieces between two C-shaped core parts as claimed. Appellant also argues that the motivations asserted by the examiner for combining the references are nowhere supported by the applied references. Appellant argues that the modification of Linder proposed by the examiner would not achieve any benefit suggested by Perkins or Kawada. The examiner has not responded to the arguments of the reply brief.

We again agree with the position argued by appellant. We do not find any suggestion within the applied prior art which would have led the artisan to modify Linder so as to arrive at the claimed invention. The examiner's motivations to combine seem to require mere speculation in an attempt to reconstruct the invention in hindsight.

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In summary, we have not sustained either of the examiner's rejections of claim 3.
Therefore, the decision of the examiner rejecting claim 3 is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	
JERRY SMITH)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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)	
ANITA PELLMAN GROSS)	
Administrative Patent Judge)	

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cc: Eugene Mar, Esq.
BACON & THOMAS
625 Slaters Lane
4th Floor
Alexandria, VA 22314