

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KENTA KOJIMA and YUKIO SAKANE

Appeal No. 1999-2248
Application No. 08/960,255

ON BRIEF

Before KRASS, BARRETT and FLEMING, **Administrative Patent Judges.**

FLEMING, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-9, all of the claims pending in the present application.

The invention relates generally to a bobbin unit for a

brushless alternator field coil and a method for assembling it (specification, page 1, lines 5-6). The bobbin unit (figure 1, numeral 16) includes an iron core (figure 1, numeral 13) in a

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ring shape defining a center hole; a thin plate (figure 1, numeral 14) in a ring shape attached to the iron core, having a diameter at least as large as the diameter of the center hole of the iron core and having a flange portion (figure 1, numeral 14b) extending in the outward radial direction at one end; a resinous bobbin (figure 1, numeral 15) inserted into the cavity formed by the iron core and thin plate. The thin plate is connected to the iron core by securing a distal end of the thin plate opposite the flange portion to an end surface of the iron core (specification, page 7, line 27, through page 8, line 19).

Independent claims 1 and 7 are reproduced as follows:

1. A bobbin unit for a brushless alternator field coil, comprising:

a ring-shaped iron core having a thick wall defining a center hole, said thick wall delimited in an axial direction of said center hole by a first surface at one end and a second surface at another end opposite said first surface;

a plate which has a cylindrical portion and a flange

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portion, said cylindrical portion defining a hole whose inside diameter is at least as large as an inside diameter of the center hole of said iron core, and wherein said cylindrical portion is connected to said iron core by abutting a distal end of said cylindrical portion opposite said flange portion to said first surface of said iron core and fixedly securing said distal end to said first surface by butt connection means provided at said distal end of said cylindrical portion where said cylindrical portion abuts said first surface so that an axial center of said cylindrical portion is substantially coincident with an axial center of said iron core, and so that said flange portion extends outwardly in a radial direction; and

a resinous bobbin for insulating and accommodating a field coil disposed in a space formed by the first surface of said iron core and an outer peripheral surface of said plate.

7. A method of assembling a bobbin unit for a brushless alternator field coil, comprising the steps of:

providing:

a ring-shaped iron core having a thick wall defining a center hole, said thick wall delimited in an axial direction of said center hole by a first surface at one end and a second surface at another end opposite said first surface;

a plate which has a cylindrical portion and a flange portion, said cylindrical portion defining a hole whose inside diameter is at least as large as an inside diameter of the center hole of said iron core, said flange portion extending outwardly in a radial direction from an end of said cylindrical portion; and

a resinous bobbin for insulating and accommodating a field coil;

mounting said bobbin to said plate; and

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connecting said cylindrical portion of said plate to said iron core by abutting a distal end of said cylindrical portion opposite said flange portion to said first surface of said iron core and fixedly securing said distal end to said first surface by butt connection means provided at said distal end of said cylindrical portion where said cylindrical portion abuts said first surface so that an axial center of said cylindrical portion is coincident with an axial center of said iron core.

The Examiner relies on the following reference:

Appellants' admitted prior art (figures 13-21)("admitted prior art")

Claims 1, 2 and 7 are rejected under 35 U.S.C. § 102(b) as anticipated by Appellants' admitted prior art figures 13-21.¹

Claims 3-6 and 8-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Appellants' admitted prior art figures 13-21.

Rather than reiterate the arguments of Appellants and the

¹ Although Appellants' Brief addresses claim 1 as standing finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakane et al., the Examiner noted in the final Office action that the Sakane reference suggests the structure claimed by Appellants in claim 1 at least, but made no rejection based on this reference. Therefore, no such rejection is before us.

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Examiner, reference is made to the Brief,² Reply Brief,³ Examiner's Answer,⁴ and letter⁵ for the respective details thereof.

OPINION

After careful review of the evidence before us, we will not sustain the rejection of claims 1, 2 and 7 under 35 U.S.C. § 102(b) as anticipated by Appellants' admitted prior art figures 13-21, or the rejection of claims 3-6 and 8-9 under 35 U.S.C.

§ 103(a) as being unpatentable over Appellants' admitted prior art figures 13-21.

A. Rejection of Claims 1, 2 and 7 under 35 U.S.C. § 102(b) as anticipated by Appellants' admitted prior art figures 13-21.

We will not sustain the rejection of claims 1, 2 and 7

² The Brief was received May 10, 1999.

³ The Reply Brief was received July 28, 1999.

⁴ The Examiner's Answer was mailed June 4, 1999.

⁵ The Examiner mailed a letter on August 16, 1999, stating that Appellants' Reply Brief had been entered and considered but no further response by the Examiner was deemed necessary.

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under 35 U.S.C. § 102(b) as anticipated by Appellants' admitted prior art figures 13-21.

It is axiomatic that anticipation of a claim under 35 U.S.C. § 102 can be found only if the prior art reference discloses every element of the claim. See *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984). "Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention." *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984), *cert. dismissed*, 468 U.S. 1228 (1984), *citing Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983).

Appellants submit⁶ that the limitations of claims 1 and 7

⁶ Brief, page 4 and Reply Brief, pages 2-4.

directed to the cylindrical portion of the bobbin being connected to the iron core by abutting a **distal** end of the cylindrical portion, opposite the flange portion, to the iron core, and **securing the distal end** of the iron core using a butt connection are not disclosed by the admitted prior art.

Appellants also assert⁷ that the admitted prior art cylindrical portion 4a of the plate 4 is secured to a thin wall 3b of the iron core at an intermediate section of the cylindrical wall portion 4a, and therefore the cylindrical portion is not disclosed to be secured to the iron core by its distal end.

Finally, Appellants point out⁸ the advantages of their invention over the admitted prior art and that the Examiner failed to consider the advantages of Appellants' invention.

The Examiner⁹ addresses Appellants' first argument by referring to figure 21 and its showing the plate abutting the

⁷ Brief, page 5.

⁸ Brief, pages 6 and 8.

⁹ Examiner's Answer, page 4.

cylindrical portion. The Examiner contends¹⁰ that the claim language, when given its broadest reasonable interpretation, does not define over the admitted prior art, and that "butt connection" is nothing more than two objects touching at their ends.

The Examiner also asserts that the language of the claims does not preclude the use of thin walled portion (3b).

Turning to claims 1 and 7, we find that the claim limitation "and fixedly securing said distal end to said first surface by butt connection means provided at the distal end of said cylindrical portion where said cylindrical portion abuts said first surface" is not met by the admitted prior art. The cylindrical portion of the flange 4a is not fixedly secured to the first surface of the iron core 3 by butt connection means at the distal end of the cylinder 4a. As disclosed by Appellants,¹¹ the thin wall portion 3b and the cylindrical portion 4a are clamped by a pair of electrodes disposed on the bobbin 5 side and the inner peripheral side of the thin wall

¹⁰ Examiner's Answer, page 5.

¹¹ Specification, page 2.

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portion 3b and spot welded, so the iron core 3 is connected to the plate 4. Thus, the butt connection means are not at the distal end of the cylindrical portion where the cylindrical portion abuts the first surface so that the axial center of the cylinder portion is substantially coincident with the axial center of the iron core. As these elements of the claims are not disclosed by the admitted prior art, this rejection is reversed.

B. Rejection of Claims 3-6 and 8-9 under 35 U.S.C. § 103(a) as unpatentable over Appellants' admitted prior art figures 13-21.

We will not sustain the rejection of claims 3-6 and 8-9 under 35 U.S.C. § 103(a).

The Examiner has failed to set forth a *prima facie* case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. *In re Sernaker*, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when

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determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." *Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 117 S.Ct. 80 (1996) *citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Appellants submit¹² that claims 3-6 and 8-9 should be allowable at least by reason of their respective dependencies from claims 1 and 7.

The Examiner¹³ contends that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the various types of welding recited in the claims to connect two elements, as the types of welding are well known in the art and¹⁴ are very simple and quick methods of securing two metal bodies together.

¹² Brief, page 10.

¹³ Answer, page 6.

¹⁴ Final action, page 3.

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The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266, n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), citing *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." *Para-Ordnance*, 73 F.3d at 1087, 37 USPQ2d at 1239, citing *W. L. Gore & Assocs.*, 721 F.2d at 1553, 220 USPQ at 12-13. In addition, our reviewing court requires the PTO to make specific findings on a suggestion to combine prior art references. *In re Dembiczak*, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999).

Firstly, the findings of Section A above, regarding the limitations of claims 1 and 7 which are not present in the admitted prior art, apply equally to these dependent claims.

Secondly, the Examiner has not provided any evidentiary basis or cogent reason to select the particular modes of welding claimed by Appellants. We are not inclined to

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dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference or shown to be common knowledge of unquestionable demonstration. Our reviewing court requires this evidence in order to establish a *prima facie* case. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984); *In re Knapp-Monarch Co.*, 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); *In re Cofer*, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Furthermore, our reviewing court states in *In re Piasecki*, 745 F.2d at 1472, 223 USPQ at 788 the following:

The Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), focused on the procedural and evidentiary processes in reaching a conclusion under Section 103. As adapted to *ex parte* procedure, *Graham* is interpreted as continuing to place the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under section 102 and 103". *Citing In re Warner*, 379 F.2d 1011, 1020, 154 USPQ 173, 177 (CCPA 1967).

Therefore, we will not sustain the rejections of claims 3-6 and 8-9 under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art.

We have not sustained the rejection of claims 1-2 and 7

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under 35 U.S.C. § 102(b) as anticipated by Appellants' admitted prior art, and we have not sustained the rejection of claims 3-6 and 8-9 under 35 U.S.C. § 103(a) as being unpatentable over Appellants' admitted prior art.

Accordingly, the Examiner's decision is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
LEE E. BARRETT)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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MICHAEL R. FLEMING)
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