

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(2) is not binding precedent of the Board.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. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte NORIYUKI YOSHIMURA  
and KENJI YOSHIDA

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Appeal No. 1997-2808  
Application 08/313,129

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HEARD: FEBRUARY 10, 2000

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Before HAIRSTON, RUGGIERO and HECKER, Administrative Patent  
Judges.

HECKER, Administrative Patent Judge.

Appeal No. 1997-2808  
Application No. 08/313,129

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 2 through 15. Claim 1 was canceled by an amendment, paper no. 10.

The invention relates to a multi-phase hybrid stepping motor. In particular, looking at Figure 3, we see that the invention has a motor stator with 10 magnetic poles. The stator has a first set of magnetic poles each having 5 teeth. A second set of magnetic poles, each having 4 teeth, is alternately disposed between the first set of magnetic poles.

Representative independent claim 15 is reproduced as follows:

15. A multi-phase hybrid type stepping motor including a rotor having a plurality of rotor teeth disposed about a perimeter thereof and a stator encircling said rotor, said stator comprising:

a first plurality of magnetic poles, each including a first predetermined number of teeth; and

a second plurality of magnetic poles alternately

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disposed between said first plurality of magnetic poles, each including a second predetermined number of teeth greater than said first predetermined number of teeth.

The Examiner relies on the following references:

Satomi	4,385,247	May 24, 1983
Kaneko	JP 60-111382	Jul. 27, 1985
Murakami et al. (Murakami)	JP 61-185056	Aug. 18, 1986

Claims 2 through 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Satomi and Kaneko and Murakami.<sup>1</sup>

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the brief, reply brief and answer for the respective details thereof.

#### OPINION

After a careful review of the evidence before us, we

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<sup>1</sup> A 35 U.S.C. § 101 obvious double patenting rejection has been withdrawn as a result of the filing of a terminal disclaimer. A 35 U.S.C. § 102(b) rejection has been withdrawn as a result of Appellants perfecting their priority date. (Answer-page 2.)

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will not sustain the rejection of claims 2 through 15 under  
35 U.S.C. § 103.

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 reasonable teachings or suggestions

found in the prior art, or by a reasonable inference to the  
artisan contained in such teachings or suggestions.

***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir.  
1983). "Additionally, when 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) (***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)).

With regard to the rejection of claims 2 through 15

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under 35 U.S.C. § 103, Appellants argue:

All independent claims set forth first poles having a first number of teeth and second poles, ***alternately disposed between said first poles***, having a second number of teeth greater than the first number of teeth. (Brief-page 9.)

The Examiner responds that Appellants' specification ...appears to indicate that what is important about alternating the poles is having poles with differing number of teeth oppose each other, and not completely alternating the poles so that poles with four teeth, and poles with five teeth are always adjacent. ... Applicant's specification simply does not explain the importance of alternating poles with different numbers of teeth, and it appears that applicant's alternating of poles is merely an obvious design choice over the

invention disclosed by Satomi. The only difference between the Satomi reference and applicant's claimed invention is that while Satomi substantially alternates the poles so that poles of four teeth oppose poles of five teeth, applicant only makes the obvious step of completely alternating the poles. (Answer-pages 4 and 5.)

Appellants further argue "Applicants do not claim poles which 'substantially alternate'" and "The Examiner has failed to provide any evidence of record as to why one skilled in the art would modify a pole arrangement which 'substantially alternates' to a pole arrangement which simply

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'alternates'" (reply brief-page 2).

Simply put, we agree with Appellants. The Examiner's analysis of Appellants' specification to determine what is important and what is not important has no bearing on what Appellants have **claimed** as their invention.

The Examiner's argument that it would have been obvious to modify Satomi to provide completely alternating poles is simply unsupported by any evidence. 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***

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*Mfg. v. SGS Importers Int'l*, 73 F.3d at 1087, 37 USPQ2d at 1239, *citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13.

Since there is no evidence in the record that the prior art suggested the desirability of the proffered modification, we will not sustain the Examiner's rejection of independent claims 2, 9, 10 and 15, all of which contain the **alternating** language discussed supra.

The remaining claims on appeal also contain the above limitations discussed in regard to the independent claims and thereby, we will not sustain the rejection as to these claims.

We have not sustained the rejection of claims 2 through 15 under 35 U.S.C. § 103. Accordingly, the Examiner's

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decision is reversed.

REVERSED

PATENT

Kenneth W. Hairston	)	
Administrative Patent Judge	)	
	)	
	)	BOARD OF
Stuart N. Hecker	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
Joseph F. Ruggiero	)	
Administrative Patent Judge	)	

SH/dm

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