

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. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte KOICHI INAGAKI

---

Appeal No. 1998-1225  
Application 08/542,884

---

ON BRIEF

---

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

JERRY 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 claims 1-11, which constitute all the claims in the application. An amendment after final rejection was filed on June 6, 1997 and was entered by the

Appeal No. 1998-1225  
Application 08/542,884

examiner.

The disclosed invention pertains to the field of sensorless motor drives. More particularly, the invention is directed to a circuit for driving such a motor having a rotor and a plurality of excitation coils for the rotor.

Representative claim 6 is reproduced as follows:

6. A sensorless motor driving circuit, for driving a motor having a rotor and a plurality of excitation coils for the rotor, comprising:

detection means for detecting a reference position for the rotating rotor based on an excitation coil induction voltage;

differential pulse generating means, coupled to an output of said detection means, for generating a differential pulse using a detection means output signal;

a phase-locked loop circuit for generating a clock pulse, having a phase comparator for comparing the differential pulse with the clock pulse after the clock pulse has been frequency divided; and

an activation pulse generator for counting the clock pulses and generating an activation pulse when the differential pulse is not generated within the duration of a prescribed number of counts.

The examiner relies on the following references:

Kaneda	5,396,159	Mar. 07, 1995 (filed Sep. 09,
--------	-----------	----------------------------------



Appeal No. 1998-1225  
Application 08/542,884

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 prior art relied upon does not support the rejection of any of claims 1-11. Accordingly, we reverse.

We consider first the rejection of claims 1-3 and 6-9 as being anticipated by the disclosure of Galvin. These claims stand or fall together as a single group [brief, page 5]. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to representative, independent claim 6, the

Appeal No. 1998-1225  
Application 08/542,884

examiner asserts that all the claimed elements are disclosed by Galvin [answer, pages 3-4]. Appellant basically argues that neither the detection means, the differential pulse generating means, the phase-locked loop having a phase comparator nor the activation pulse generator are disclosed in the manner recited in the claims and are not interconnected as set forth in the claimed invention [brief, pages 6-9 and reply brief]. The examiner's response is to explain in more detail how he reads the claimed invention on the disclosure of Galvin [answer, pages 5-7].

After a careful consideration of the record before us, we agree with appellant that the examiner has essentially failed to establish a prima facie case of anticipation for the reasons set forth by appellant in the briefs. The examiner's purported attempt to correlate elements of the claimed invention with elements of Galvin is not convincing. The invention of independent claims 1 and 6 cannot literally be read on the disclosure of Galvin. Instead, the examiner has pointed to features of Galvin which appear to be similar to elements recited in the claimed invention. All the

Appeal No. 1998-1225  
Application 08/542,884

differences identified by appellant between the claimed invention and Galvin appear to be correctly noted. The examiner's finding of anticipation requires that the fact finder rely on the examiner's speculation and belief that the claimed elements are somehow present in the circuit of Galvin. Anticipation, however, cannot be based upon such speculation and belief.

Since we agree with appellant that Galvin does not disclose every element of the claimed invention, we do not sustain the examiner's rejection of claims 1-3 and 6-9. The examiner's rejection of claims 4, 5, 10 and 11 under 35 U.S.C. § 103 relies on the same speculative reading of Galvin discussed above. Therefore, the examiner has also failed to establish a prima facie case of obviousness of the invention recited in claims 4, 5, 10 and 11. Thus, we also do not sustain this rejection of the examiner.

In summary, we have not sustained either of the examiner's rejections of the appealed claims. Therefore, the decision of the examiner rejecting claims 1-11 is reversed.

Appeal No. 1998-1225  
Application 08/542,884

REVERSED

ERROL A. KRASS	)	
Administrative Patent Judge	)	
	)	
	)	BOARD OF PATENT
JERRY SMITH	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
JOSEPH L. DIXON	)	
Administrative Patent Judge	)	

JS:pgg  
Ronald P. Kananen, Esq.  
Rader, Fishman & Grauer P.L.L.C.  
1233 20<sup>th</sup> Street, NW, Suite 501

Appeal No. 1998-1225  
Application 08/542,884

Washington, DC 20036