



US007508194B2

(12) **United States Patent**  
**Åkerblom**

(10) **Patent No.:** **US 7,508,194 B2**

(45) **Date of Patent:** **Mar. 24, 2009**

(54) **METHOD AND A SENSOR DEVICE FOR MEASURING THE DISTANCE BETWEEN A STATOR AND AN OPPOSING ROTOR**

(58) **Field of Classification Search** ..... 324/207.11, 324/207.13, 207.15-207.17, 207.22, 207.24, 324/207.26; 241/28, 30, 37, 259.1  
See application file for complete search history.

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 252 days.

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(21) Appl. No.: **10/550,592**

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(22) PCT Filed: **Mar. 9, 2004**

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(86) PCT No.: **PCT/SE2004/000339**

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§ 371 (c)(1),  
(2), (4) Date: **Jul. 3, 2006**

(57) **ABSTRACT**

(87) PCT Pub. No.: **WO2004/085070**

A sensor device for measuring distance between a stator and a rotor in a machine is of the magnetic type and is intended to be mounted in the stator in order to interact with an opposing surface on the rotor. A sensor body (10) can be moved axially in a housing (11) mounted in the stator by means of an operating mechanism (13) and has a stop (16) at a predetermined distance (e) from its end surface designed to interact with a corresponding stop (17) inside the housing. This distance (e) exceeds the distance (d) between the stop (17) in the housing and the end of the sensor body (10) by a predetermined distance (c) when the sensor body is in its normal measuring position. These stops (16, 17) make possible a particularly accurate calibration of the sensor device.

PCT Pub. Date: **Oct. 7, 2004**

(65) **Prior Publication Data**

US 2007/0090828 A1 Apr. 26, 2007

(30) **Foreign Application Priority Data**

Mar. 24, 2003 (SE) ..... 0300794

(51) **Int. Cl.**

**G01B 7/14** (2006.01)  
**B02C 23/00** (2006.01)

(52) **U.S. Cl.** ..... 324/207.13; 324/207.26; 241/37

**11 Claims, 1 Drawing Sheet**

