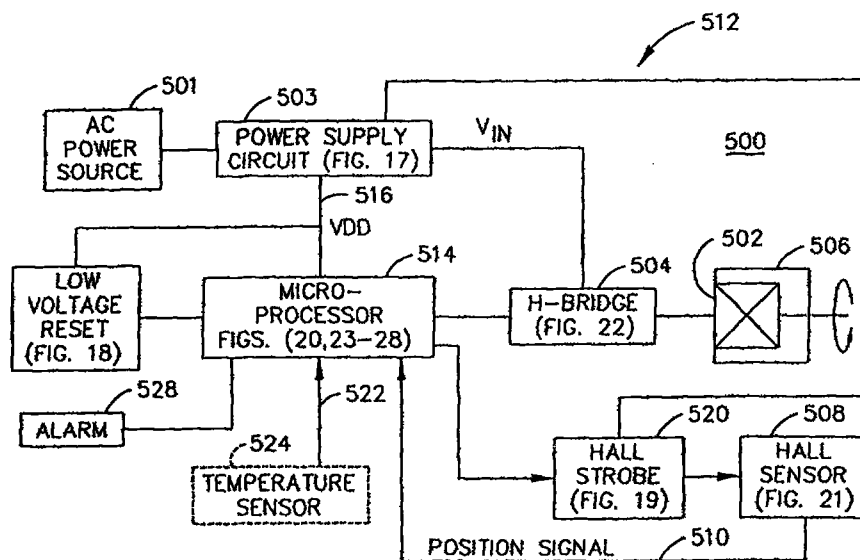




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : H02P 6/08, 6/20	A1	(11) International Publication Number: WO 00/57544 (43) International Publication Date: 28 September 2000 (28.09.00)
(21) International Application Number: PCT/US00/08041 (22) International Filing Date: 27 March 2000 (27.03.00) (30) Priority Data: 09/276,276 25 March 1999 (25.03.99) US (71) Applicant: GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US). (72) Inventor: HOLLENBECK, Robert, Keith; 12212 Amber Ridge Drive, Fort Wayne, IN 46801-2205 (US). (74) Agents: CHASKIN, Jay, L. et al.; General Electric Company, 3135 Easton Turnpike W3C, Fairfield, CT 06431 (US).		(81) Designated States: CA, CN, CZ, HU, IN, MX, PL, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.

(54) Title: MICROPROCESSOR CONTROLLED SINGLE PHASE MOTOR WITH EXTERNAL ROTOR HAVING INTEGRAL FAN



(57) Abstract

A motor powered by a dc power source has a stator having a single phase winding. A power switching circuit of the motor has power switches for selectively connecting the dc power source to the single phase winding. A permanent magnet rotor in magnetic coupling relation to the stator drives a fan. A position sensor on the stator detects the position of the rotor and provides a position signal indicating the detected position. A control circuit including a microprocessor responsive to the position signal and connected to the power switching circuit selectively commutates the power switches to commutate the single phase winding as a function of the position signal.