Title (en)

AN IMPROVED MAGNETIC ROTATIONAL VELOCITY SENSOR.

Title (de)

VERBESSERTER MAGNETISCHER SENSOR FÜR ROTATIONSGESCHWINDIGKEIT.

Title (fr)

DETECTEUR MAGNETIQUE AMELIORE DE VITESSE DE ROTATION.

Publication

EP 0112903 A4 19841107 (EN)

Application

EP 83902390 A 19830623

Priority

US 39580282 A 19820706

Abstract (en)

[origin: WO8400422A1] Improved magnetic rotational velocity sensor (20) adapted for use with stepper motors. The sensor (20) includes a rotor portion (22) and a stator portion (26) arrayed circumferentially about the rotor (22). The rotor portion (22) is in the form of an alternately radially polarized magnetic disk (24). The stator portion (26) includes an insulated conducting ring (28), a plurality of conducting windings (30) and electrical leads (36) for connecting the sensor (20) to external analysis and control apparatus. The rotor portion (22) is concentrically rigidly mounted upon the rotational shaft (16) of a stepper motor (10) such that rotation of the shaft (16) generates inducted electrical signals in the conducting windings (30). These signals provide analogs for the rotational velocity and the position of the shaft (16). The sensor (20) is protected from external signal interference by a conducting cap (40). The predominant current usage of the invention is in combination with electrical stepper motors utilized in disk drives for data storage and retrieval.

IPC 1-7

G01P 3/44

IPC 8 full level

G01P 3/46 (2006.01)

CPC (source: EP)

G01P 3/465 (2013.01)

Citation (search report)

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