Title (en)

TRANSDUCER HAVING FIBER OPTIC TRANSMISSION SYSTEM.

Title (de)

UMWANDLER MIT FASEROPTISCHEM ÜBERTRAGUNGSSYSTEM.

Title (fr)

TRANSDUCTEUR AYANT UN SYSTEME DE TRANSMISSION PAR FIBRE OPTIQUE.

Publication

EP 0146611 A4 19851024 (EN)

Application

EP 84902417 A 19840607

Priority

US 50309383 A 19830610

Abstract (en)

[origin: WO8404972A1] An optical wheel speed transducer (20) having a first optical fiber (48) for transmitting light pulses of constant frequency and intensity to an interrupter (44) rotating at an angular velocity proportional to the angular velocity of the wheel (2). The intensity of the light pulses is modulated by the interrupter (44) as a function of the angular velocity of the wheel (2). A second optical fiber (49) transmits the intensity modulated light pulses passing through the interrupter (44) to a light-sensitive device (64) which converts the intensity modulated light pulses to amplitude modulated electrical pulses. A demodulator (68) converts the amplitude modulated electrical pulses to an electrical signal that represents the angular velocity of the wheel (2). The transmission of the light pulses through the system is used to test the continuity of the system and to discriminate light emitted by external sources. A pair of collimating lenses (50 and 52) is used to focus the light pulses transmitted between the two optical fibers (48 and 49) across the interrupter (44).

IPC 1-7

G02B 5/14

IPC 8 full level

G01D 5/36 (2006.01); **G01P 3/486** (2006.01); **G02B 6/00** (2006.01); **G02B 6/32** (2006.01)

CPC (source: EP)

G01P 3/486 (2013.01); **G02B 6/32** (2013.01)

Citation (search report)

- [X] US 3559065 A 19710126 - GRUNDY REED H
- [A] US 3954339 A 19760504 - ATWOOD JOHN G, et al
- [X] ELEKTRIE, vol. 33, no. 4, 1979, pages 208-210, Berlin, DE; J. ERMISCH: "Schaltungstechnik eines berührungslosen fremdlicht-unabhängigen Drehzahlimpulsgebers"
- See references of WO 8404972A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

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DOCDB simple family (application)

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