Title (en)

Fiber optical sensor system, preferably for measuring physical parameters.

Title (de)

Sensorsystem für Lichtleitfasern, vorzugsweise zum Messen physikalischer Parameter.

Title (fr)

Système de capteurs à fibre optique, de préférance pour mesurer des paramètres physiques.

Publication

EP 0053790 A1 19820616 (DE)

Application

EP 81110054 A 19811201

Priority

US 21168180 A 19801201

Abstract (en)

The system contains a fiber optical transmission line (6), a first light source (10) for emitting a first light beam into a first end of the transmission line (6), and at least one first light sensitive element (46) for receiving light from a second end of the transmission line (6). An energy storage device (56) such as a capacitor is connected to the first light sensitive element (46) for energizing various components. The system further contains a second light source (82) for emitting a second light beam into the second end of the transmission line (6). This source (82) is controlled in dependence upon information to be transmitted, preferably in dependence of a physical parameter (p1,p2,p3,p4). The system finally contains a second receiver element (90) for receiving light from the first end of the transmission line (6). This element generates an electric output signal which is in accordance with the transmitted information. The system preferably has a large number of transducer units (60) or measuring elements associated with various second ends of the transmission line (6) for transmitting information of various nature and/or from various locations.

IPC 1-7

H04B 9/00; H04B 12/00; B60R 16/04

IPC 8 full level

G08C 15/06 (2006.01); **G08C 23/04** (2006.01); **H04B 10/00** (2006.01); **H04B 10/22** (2006.01); **H04B 14/02** (2006.01); B60R 16/02 (2006.01); B60R 16/03 (2006.01)

CPC (source: EP US)

H04B 10/807 (2013.01 - EP US); **H04B 14/026** (2013.01 - EP US); B60R 16/0315 (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

DE FR GB SE

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DOCDB simple family (application)

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