

Title (en)

TRANSDUCER WITH MULTIMODAL OPTICAL FIBRE AND MODE COUPLING AND METHOD FOR MAKING SAME

Title (de)

WANDLER MIT MULTIMODALER OPTISCHER FASER UND MODENKOPPLUNG SOWIE HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TRANSDUCTEUR A FIBRE OPTIQUE MULTIMODE ET A COUPLAGE DE MODES, PROCEDE DE REALISATION

Publication

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Application

EP 08840514 A 20080926

Priority

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Abstract (en)

[origin: WO2009050385A2] The invention relates to an optical fibre transducer that is sensitive to at least one parameter of an environment in which it is located, the modification of the parameter(s) resulting in a modification of at least one measurable characteristic of a light wave injected into the optical fibre and flowing through the transducer, the optical fibre being multimodal and including a means adapted so that the modification of the light wave characteristic is based on a modification of mode coupling resulting from the modification of the environment parameter, said means leading to a mode coupling modification that generates, during the modification, a deformation of the optical fibre in the transducer according to a predetermined pattern. According to the invention, the means leading to the mode coupling modification is a hollow tube containing a relief pattern and surrounding the optical fibre at the transducer in a right section of the fibre.

IPC 8 full level

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