

Title (en)
NONINVASIVE BLOOD-PRESSURE MEASURING DEVICE

Title (de)
NICHTINVASIVE BLUTDRUCK-MESSVORRICHTUNG

Title (fr)
APPAREIL DE MESURE DE PRESSION ARTÉRIELLE NON INVASIF

Publication
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Application
EP 19762739 A 20190827

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• EP 2019072847 W 20190827

Abstract (en)
[origin: WO2020043725A1] The invention relates to a measuring device for continuously determining the intra-arterial blood pressure in two fingers of a hand, which measuring device comprises a base part and a cuff part, which can be connected to the base part without using tools. For each of the two fingers, a light source (23a, 23b) for near-infrared light and a photodetector (24a, 24b) are provided, which are arranged on a common circuit board (4). By means of respective light pipes (27), i.e. optical waveguides not in the form of fiber bundles, the light sources (23a, 23b) and the photodetectors (24a, 24b) are connected to an associated optical emission surface (25a, 25b) and an associated optical collector surface (26a, 26b), respectively, in order couple emitted light into the finger tissue and to couple unabsorbed light out of the finger tissue, respectively. At the interface between the cuff part (8) and the base part (18), the cuff-part segments and base-part segments of the light pipes (27) are interconnected by means of optical contact points (28) that can be disconnected. On the base part, a cover glass piece (29), e.g. mineral glass piece or sapphire glass piece, that is flush with the housing (2) of the base part (18) and that is as scratch-resistant as possible is mounted at each of the contact points.

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