

Abstract**OPTICAL-FIBRE SENSOR DEVICE**

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The invention proposes a method for manufacturing an optical-fibre sensor device (1), including a enclosure (10) defining a recess (3) and an optical-fibre sensor (2), the optical-fibre sensor including an optical-fibre (12) and a device for holding the sensor (11) that is rigidly connected to the optical fibre, the optical fibre passing
10 through the holding device between two attachment points provided on the holding device. The method advantageously includes the following steps of: positioning the optical-fibre sensor (2) in the enclosure (10) so as to pass the fibre (12) through two passage openings (13), 140) provided on the enclosure (10), the optical fibre generally extending along a longitudinal axis in the recess (3), which
15 defines two optical-fibre portions in the enclosure, on either side of the holding device (11), each fibre portion extending between one of the points for attachment of the holding device and one of the passage openings in the enclosure, substantially in a straight line; holding the optical-fibre sensor in position; performing a differential elongation of the enclosure (10) relative to the optical-fibre sensor (2) in
20 the longitudinal direction, and towards the outside of the enclosure (10), while the optical-fibre sensor remains held in position; attaching the optical fibre to the enclosure (10) at said passage openings; and bringing the enclosure (10) into a position of balance.

FIGURE 3