

Title (en)  
Manipulator with strain gauges.

Title (de)  
Manipulator mit Dehnme streifen.

Title (fr)  
Manipulateur à jauge de contrainte.

Publication  
**EP 0447334 A1 19910918 (FR)**

Application  
**EP 91420084 A 19910312**

Priority  
FR 9003574 A 19900315

Abstract (en)  
The invention relates to a manipulator with strain gauges equipped with a validation button. This manipulator comprises a support part (1); a thin-wall cylindrical tube (5) rigidly fixed, in the region of a first of its extremities (4), to the support part (1); at least two strain gauges (8a, 8d) fixed on the tube in the vicinity of its first extremity (4); an operating handle (6) connected to the other extremity (7) of the tube, this operating handle transmitting to the tube radial manoeuvring forces (9) applied by a user and also constituting a push-button capable of moving along a longitudinal axis (10) of the tube under the action of the user; and a control member (13) housed inside the tube and actuated by the longitudinal movement of the operating handle. <IMAGE>

IPC 1-7  
**G05G 9/047; G06K 11/18; H01H 25/04**

IPC 8 full level  
**G05G 9/047** (2006.01)

CPC (source: EP US)  
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**G05G 2009/04777** (2013.01 - EP US)

Citation (search report)  
• [Y] EP 0151479 A2 19850814 - SIEMENS AG [DE]  
• [Y] US 4758692 A 19880719 - ROESER JOHN O [US], et al  
• [A] GB 2211280 A 19890628 - DACO SCIENT LIMITED [GB]  
• [A] EP 0023864 B1 19830706  
• [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 289 (P-405)(2012) 15 novembre 1985, & JP-A-60 126721 (SHIMAZU SEISAKUSHO) 06 juillet 1985,  
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