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(71) Applicant: UNITED TECHNOLOGIES CORPORATION
[US/US]; Hamilton Standard, Patent Dept., One Hamilton
Road, Windsor Locks, CT 06033 (US).(72) Inventors: FOYT, Arthur, G.; 79 Tall Timbers Road, Glas-
tonbury, CT 06033 (US). PROVENZANO, Paul, L.; 79
German Road, West Hartford, CT 06107 (US). SWIN-
DAL, James, L.; 27 Edgerton Street, East Hampton, CT
06424 (US). WAGNER, Robert, A.; 37 Steep Hollow Lane,
MA Manchester, CT 06040 (US).(74) Agent: KELLY, Robert, H.; Hamilton Standard, Patent Dept.,
MS 1-2-AB24, One Hamilton Road, Windsor Locks, CT
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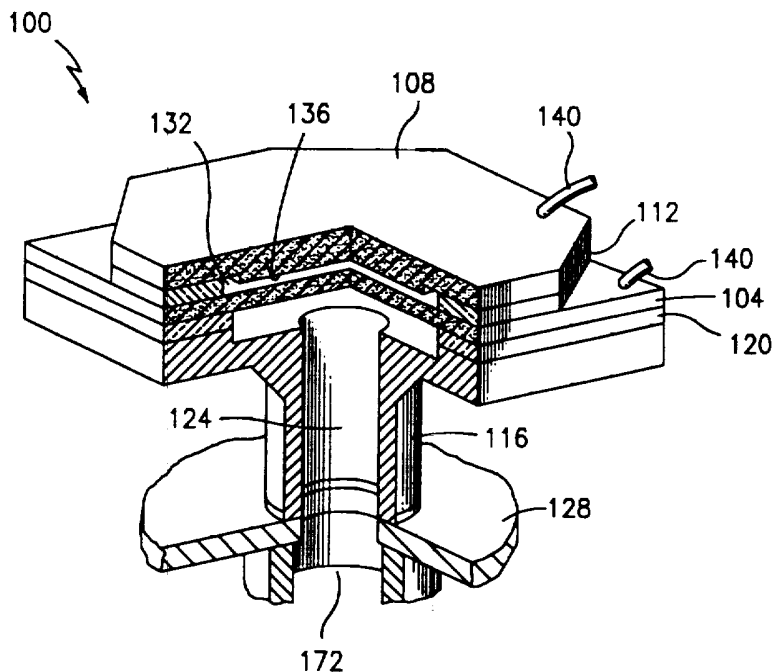
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27 July 1995 (27.07.95)

(54) Title: A SILICON CAPACITIVE PRESSURE SENSOR HAVING A GLASS DIELECTRIC DEPOSITED USING ION MILLING



(57) Abstract

A silicon capacitive pressure sensor is disclosed having a silicon diaphragm (104) and a silicon substrate (108) arranged in parallel and separated by a glass dielectric spacer (112). The glass is deposited onto a surface of the substrate using an ion milling machine. The sensor further includes a transition piece (116) attached to a second layer of glass insulator (120) disposed between the silicon diaphragm and the transition piece. The transition piece has a throughbore (124) formed therein for applying a fluid to a surface of the silicon diaphragm, the fluid having a pressure desired to be measured by the sensor. The glass disposed between the diaphragm and the transition piece is deposited onto the transition piece using the ion milling process.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 94/12826

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G01L9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 G01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US,A,4 495 820 (SHIMADA ET AL.) 29 January 1985 see column 3, line 36 - line 55 ---	1
A	EP,A,0 136 249 (UNITED TECHNOLOGIES CORP.) 3 April 1985 cited in the application see page 6, line 12 - line 29; figure 2 -----	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Zafiropoulos, N

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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