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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G01L 9/00, 13/02, 19/00	A3	(11) International Publication Number: WO 96/06338
		(43) International Publication Date: 29 February 1996 (29.02.96)

(21) International Application Number: PCT/US95/10610

(22) International Filing Date: 18 August 1995 (18.08.95)

(30) Priority Data:
08/294,090 22 August 1994 (22.08.94) US

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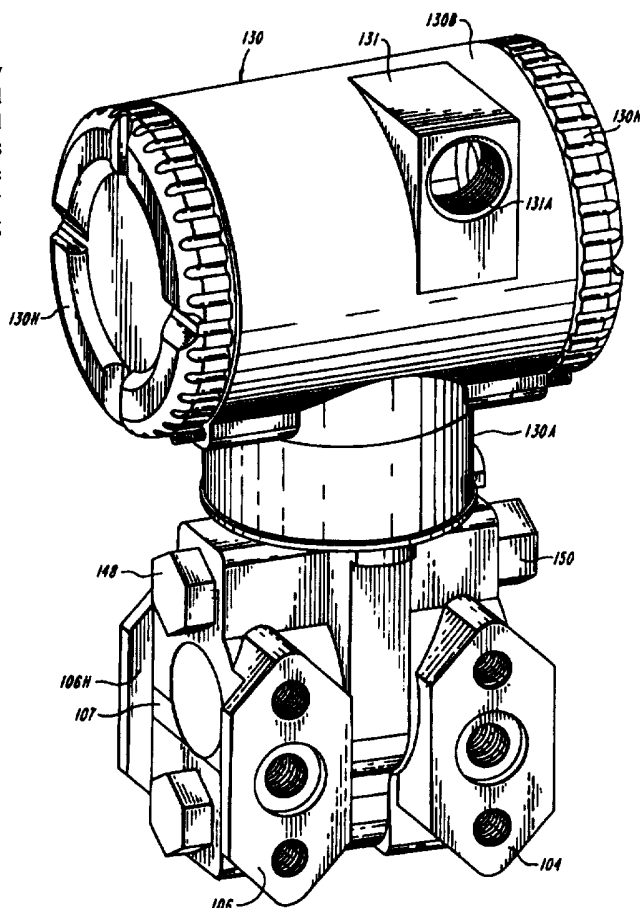
(81) Designated States: BR, CN, JP, KR, RU, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published*With international search report.**Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.*(88) Date of publication of the international search report:
11 April 1996 (11.04.1996)

(54) Title: DIFFERENTIAL PRESSURE TRANSMITTER

(57) Abstract

A pressure transmitter apparatus having a unitary body portion (16), separate diaphragms and flange elements (14) and disposed within the body, a first and second normally vertical pressure passage. The first and second pressure passageways communicate respectively between first and second pressure openings extending normally horizontally through the body portion, and a transducer mounting element. The mounting element, coupled to the body portion and located above the pressure passageways, mounts a transducer that generates a differential pressure signal. One or a pair of diaphragm elements are configured to form first and second process diaphragms, closing first and second pressure openings. The flange element overlies the diaphragm element and is removably and replaceably secured to the body portion. The pressure transmitter also includes a flame retardation element (13A) that is disposed within at least one of the pressure passageways, and an overrange protection element, integrally arranged with the unitary body portion, that protects the transducer from overrange pressure fluctuations. Special flange plane geometries optimize size and sensitivity of isolation diaphragms.



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INTERNATIONAL SEARCH REPORT

Intern. Appl. No.

PCT/US 95/10610

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 G01L9/00 G01L13/02 G01L19/00

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,5 094 109 (DEAN ET AL.) 10 March 1992 see column 5, line 5 - column 6, line 30; figures 5,7	1-44
A	WO,A,83 02004 (ROSEMOUNT INC) 9 June 1983 see page 6, line 5 - page 8, line 21; figure 1	1-44
A	EP,A,0 209 495 (KENT-TIEGHI S.P.A.) 21 January 1987 see page 4, line 4 - line 44; figures 1,2	1-44
A	US,A,4 738 276 (ADAMS) 19 April 1988 see figures 2-4	1-44

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

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Date of the actual completion of the international search

14 February 1996

Date of mailing of the international search report

22 02 96

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 95/10610

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