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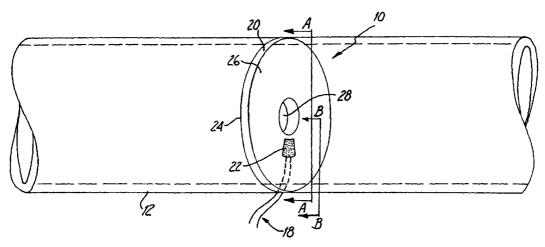
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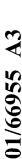
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BI-DIRECTIONAL DIFFERENTIAL PRESSURE FLOW SENSOR



(57) Abstract: Disclosed is a bi-directional differential pressure flow sensor (10) that is configured to establish a direction and flow rate of a fluid flow. The flow sensor (10) includes a flow restriction member (20), a differential pressure sensor (22), and processing electronics (50). The flow restriction member (20) is configured to produce a pressure drop when placed inline with the fluid flow. The differential pressure sensor (22) is embedded or integral with the flow restriction member and produces a differential pressure signal that is indicative of the pressure drop. The processing electronics (50) produces a flow rate signal that is indicative of the direction and flow rate of the fluid flow as a function of the differential pressure signal.





INTERNATIONAL SEARCH REPORT

Inte dional Application No PCT/US 01/05639

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F15B15/28 G01F1/00

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

B. FIELDS SEARCHED

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)

EPO-Internal, PAJ, WPI Data

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X	US 5 576 498 A (SHAMBAYATI) 19 November 1996 (1996-11-19)	1,3-8, 10-12, 16-26
	column 5, line 12 - line 19 column 5, line 28 - line 37 column 6, line 1 - line 6 figures 9,10,13,14	
X	US 4 304 136 A (MCCABE) 8 December 1981 (1981-12-08)	1,3,4, 10, 17-19, 23,26
	column 6, line 1 - line 43; figure 8	
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X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance E* earlier document but published on or after the international filing date L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O* document referring to an oral disclosure, use, exhibition or other means P* document published prior to the international filing date but later than the priority date claimed	 *T* later document published after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
Date of the actual completion of the international search 4 October 2001	Date of mailing of the international search report 12/10/2001
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 SLEIGHTHOLME, G

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INTERNATIONAL SEARCH REPORT

Inter onal Application No PCT/US 01/05639

		PC1/U3 01/05039					
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT Continuation DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No.							
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