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- (54) Title: A DIFFERENTIAL PRESSURE CONTROL VALVE

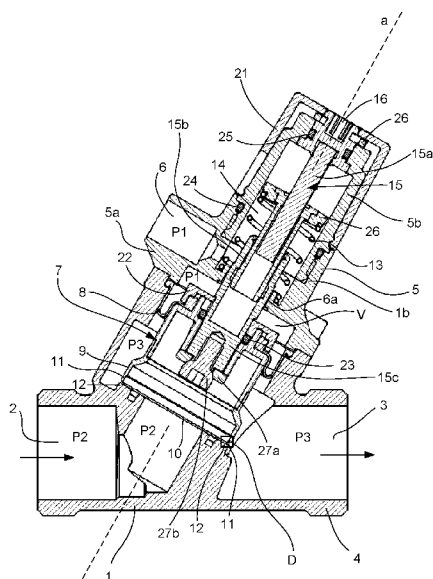


Fig. 5

(57) Abstract: The valve comprises a housing with an upstream inlet, a valve inlet for communicating with a downstream flow, and a valve outlet. A pressure maintaining arrangement comprises a diaphragm and a valve member movable along an axis of the valve, the valve member setting itself in a balance between the upstream pressure on the one hand and the downstream pressure as well as a spring force on the other hand. The valve member comprises a circumferentially extending skirt (9) facing the valve seat (12). The skirt (9) comprises an abutment surface (17) facing an opposing surface (17a). An inner corner formed between said abutment surface (17) and an inner surface (18) of the skirt (9) is chamfered or establishes a non-linear transition (19) between the abutment surface (17) and the inner surface (18), said chamfer or transition (19) extending less than a distance (A) of 0.1 mm from the inner surface (18) in a direction towards the abutment surface (17) and less than a distance (B) of 0.1 mm from the abutment surface (17) in a direction towards the inner surface (18).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
G05D

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 practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 90/01657 A1 (FRESE ARMATUR [DK]) 22 February 1990 (1990-02-22) abstract figures 1,2 page 6, lines 21-26 page 9, lines 13-22	1-11
A	WO 2009/135490 A2 (FRESE AS [DK]; JORGENSEN AGNES [DK]) 12 November 2009 (2009-11-12) figures 1-3	1-11
A	WO 2006/136158 A1 (FRESE AS [DK]; JOERGENSEN OLE [DK]) 28 December 2006 (2006-12-28) figure 1	1-11

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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