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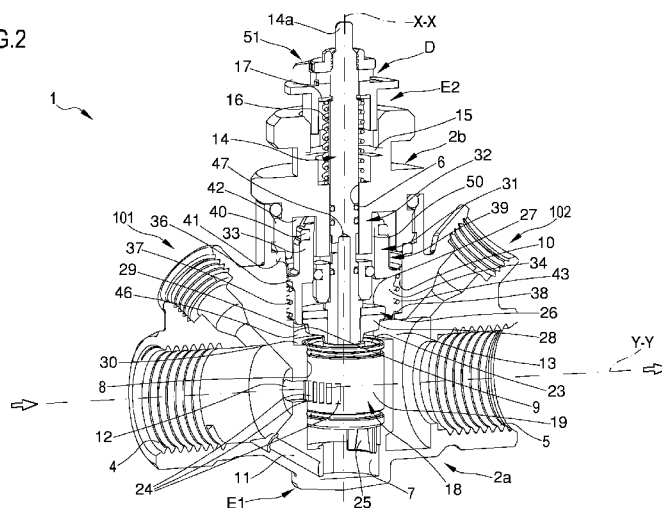
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(54) Title: CONTROL VALVE

FIG.2



(57) **Abstract:** The present invention relates to a control valve comprising: a valve body, a flow shutter operatively interposed between an inlet and an outlet, a driving spindle having at least a first actuating end and a second end connected to the flow shutter. The valve also comprises a differential pressure automatic regulation device, comprising: a cup-shaped body arranged around the driving spindle and axially mobile with respect to said driving spindle; a spring operatively interposed between the valve body and the cup-shaped body to push the latter away from the flow shutter; a rolling membrane having a radially inner edge fixed to the cup-shaped body and a radially outer edge fixed to the valve body so as to delimit a first chamber in fluid communication with the inlet and a second chamber in fluid communication with the outlet. The flow shutter has at least one inlet opening facing the inlet of the valve body and at least one outlet opening facing the cup-shaped body. A shutter is mounted around the driving spindle, facing the outlet opening of the flow shutter, whereby the flow from the inlet enters the flow shutter along a direction substantially radial to the principal axis of the valve, then exits the flow shutter along a direction substantially parallel to the principal axis of the valve and then transit towards the valve outlet along a direction substantially radial to the principal axis of the valve.

INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER
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ADD.

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)
G05D F24D

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.
X	WO 2009/135490 A2 (FRESE AS [DK]; JORGENSEN AGNES [DK]) 12 November 2009 (2009-11-12)	1,9,13, 16
A	page 6 - page 8; claims 1-2,6,8-9; figures 1,2,4-7	2-8, 10-12, 14,15, 17,18
X	----- AT 413 435 B (SEEBACHER THEODOR [AT]) 15 February 2006 (2006-02-15)	1,9,13
A	page 3, line 37 - page 4, line 35; claims 1,2; figures 1,2	2-8, 10-12, 14-18
A	----- WO 2005/038315 A1 (FLOWCON INTERNAT A S [DK]; MOESBY PETER [DK]) 28 April 2005 (2005-04-28)	1-18
	page 3, line 13 - page 4; claim 1; figures 1,2a-2b,4 -----	



Further documents are listed in the continuation of Box C.



See patent family annex.

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Information on patent family members

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