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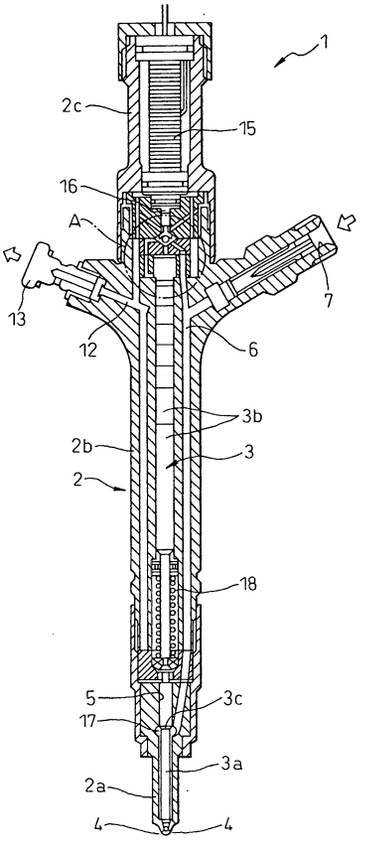
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(54) Fuel injector

(57) A fuel injector (1) comprises a housing (2) with nozzles, a needle (3) movably accommodated in a needle accommodating chamber (5) formed in the housing, a fuel supply conduit (6) extending in the housing to the nozzles, a pressure control chamber (8) defined between the needle (3) and an inner wall of the needle accommodating chamber (5), a valve chamber (10) formed in the housing and connected to the pressure control chamber (8) via a communicating conduit, and a pressure control valve (14) accommodated in the valve chamber for controlling communication between the valve chamber and a relief conduit (12). When the pressure control valve (14) prevents communication between the valve chamber (10) and the relief conduit (12), fuel pressure in the pressure control chamber is increased and the needle is displaced in a first direction in which a volume of the pressure control chamber is increased and, when the pressure control valve connects the valve chamber and the relief conduit, a fuel pressure in the pressure control chamber drops and the needle is displaced in a second direction in which a volume of the pressure control chamber is reduced. The valve chamber is connected to the fuel supply conduit (6) via an inflowing conduit, so that fuel flows into the pressure control chamber from the fuel supply conduit through the valve chamber when the pressure control valve prevents communication between the valve chamber and the relief conduit.

Fig.1



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EUROPEAN SEARCH REPORT

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F02M

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	19 September 2003	Wagner, A

CATEGORY OF CITED DOCUMENTS

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