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(54) Fuel injection system

(57) A fuel injection system for use in an internal combustion engine having an engine housing comprises two or more unit pumps (18) and a plurality of fuel injectors (26), each of the unit pumps being received, in use, within a pocket provided in the engine housing and including a pumping plunger (30) that is reciprocable within a plunger bore (32) under the influence of a drive arrangement (40, 42, 46), to cause fuel pressurisation within a pumping chamber (36). Each drive arrangement includes a cam (46) that is mounted upon a cam shaft of the engine, which extends through the engine housing and which carries or is formed with the or each of the other cams. An inlet metering valve arrangement (50) is arranged to control the rate of flow of fuel into each pumping chamber (36), thereby to control the quantity of fuel to be pressurised within the pumping chamber during a pumping cycle. An outlet valve arrangement (64) is arranged to control the delivery of pressurised fuel from the pumping chamber (36) directly to an accumulator volume (22) through an associated high pressure fuel line (70), said accumulator volume being arranged to supply pressurised fuel to all of the injectors (26) of the system. An engine installation incorporating the fuel injection system and the cam drive arrangement for each unit pump (18) is also provided by the present invention.

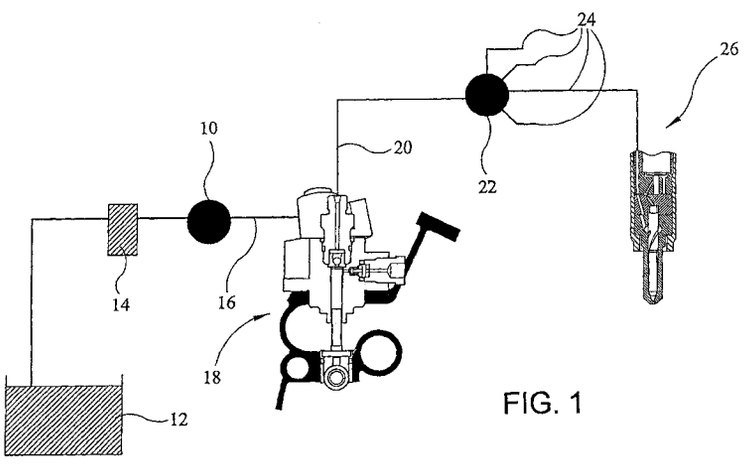

FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 03 25 0874

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Y	* page 4, line 30 - page 5, line 20 * * page 8, lines 15-17; figures 2,3,7,8 *	15	F02M59/36 F02M55/02 F02M59/10
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TECHNICAL FIELDS SEARCHED (Int.Cl.7)

F02M

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	19 October 2004	Boye, M

CATEGORY OF CITED DOCUMENTS

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