

Title (en)

Injector pump unit with a sleeve-valve controlled floating piston for internal-combustion engines.

Title (de)

Pumpen-Düsen-Einheit mit durch Hülsenventil gesteuertem Freikolben für Brennkraftmaschinen.

Title (fr)

Pompe à injection combinée ayant un piston libre commandé par un tiroir tubulaire pour moteurs à combustion interne.

Publication

**EP 0095026 A1 19831130 (DE)**

Application

**EP 83102732 A 19830319**

Priority

- US 36168082 A 19820325
- US 36168182 A 19820325

Abstract (en)

1. An injection nozzle (10, 110) for the combustion chamber of an internal combustion engine having a nozzle body (12, 112) which accommodates a cylindrical sleeve (16, 114) having an internal bore (18, 122), wherein a hollow annular chamber (23, 120) is provided between the nozzle body (12, 122) and the cylindrical sleeve (16, 114), provided in the internal bore (18, 22) of the cylindrical sleeve (16, 114) is a displaceable push rod (24, 130) and disposed at a spacing therefrom is a piston (26, 132), formed between the push rod (24, 130) and the piston (26, 132) is a control chamber (36, 136), and formed between the piston (26, 132) and the end of the injection nozzle (10, 110) which is remote from the push rod (24, 130) is a metering chamber (38, 138), the control chamber (36, 136) is connected to a fuel duct (48, 144) which can be shut off, and the metering chamber (38, 138) can be filled with fuel, characterized in that disposed in the annular chamber (23, 120), is a remotely-controllable sleeve valve (56, 150) which is displaceable on the cylindrical sleeve (16, 114) and by way of which the fuel duct (48, 114) can be shut off.

Abstract (de)

Eine Einspritzdüse (10, 110) ist mit einem Steuerungsraum (36, 136) und einem Zumeßraum (38, 138) versehen, um in Abhängigkeit von Parametern des Verbrennungsmotors den Einspritzzeitpunkt und die Einspritzmenge wählen zu können. Beim Einspritzvorgang treten extrem hohe Drücke auf, die zu Dichtungsproblemen führen, weshalb in dem Düsenkörper (12, 112) ein verschiebbares, den Steuerungsraum (36, 136) in einer Endstellung abdichtendes Hülsenventil (56, 150) vorgesehen ist, das in seiner anderen Endstellung ein Auffüllen des Steuerungsraums (36, 136) zuläßt.

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**F02M 59/32**

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CPC (source: EP)

**F02M 59/32** (2013.01)

Citation (search report)

- [A] DE 1266566 B 19680418 - HONDA GIJUTSU KENKYUSHO KK
- [AD] EP 0014142 A1 19800806 - BENDIX CORP [US]

Cited by

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