

Title (en)  
FUEL INJECTION PUMP FOR INTERNAL COMBUSTION ENGINES

Publication  
**EP 0263304 B1 19920429 (DE)**

Application  
**EP 87112919 A 19870904**

Priority  
DE 3633899 A 19861004

Abstract (en)  
[origin: US4811716A] A fuel injection pump for internal combustion engines having at least one pump element comprising a housing, a cylinder liner in the housing, a pump piston operative in the cylinder liner, a recess in the cylinder liner having a radial entrance, for a control slide which controls injection onset during axial displacement on the pump piston. In the vicinity of the entrance to the recess which discharges into the pump work chamber, an apron is disposed on the control slide or on the cylinder liner, in order to cover a portion of a radial three-dimensional gap present between the control slide and the cylinder liner. By this means, the diverted fuel stream that is reflected by the side walls can be interrupted and reflected at least one additional time, so as thereby to reduce its kinetic energy.

IPC 1-7  
**F02M 55/00**; **F02M 59/24**

IPC 8 full level  
**F02M 59/26** (2006.01); **F02M 55/00** (2006.01); **F02M 59/24** (2006.01); **F02M 59/44** (2006.01)

CPC (source: EP US)  
**F02M 55/001** (2013.01 - EP US); **F02M 59/24** (2013.01 - EP US); **F02M 59/44** (2013.01 - EP US)

Cited by  
US5160088A; FR2681910A1; GB2251038A; GB2251038B; WO9008892A1

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**EP 0263304 A2 19880413**; **EP 0263304 A3 19890419**; **EP 0263304 B1 19920429**; DE 3633899 A1 19880407; DE 3778629 D1 19920604; JP S6390664 A 19880421; US 4811716 A 19890314

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