

Title (en)  
FUEL INJECTION PUMP FOR INTERNAL-COMBUSTION ENGINES

Publication  
**EP 0202451 B1 19880907 (DE)**

Application  
**EP 86104864 A 19860409**

Priority  
DE 3516867 A 19850510

Abstract (en)  
[origin: US4679993A] A fuel injection pump is disclosed in which the stroke disk of a rotating and reciprocating pump and distributor piston is supported on a rotatable roller ring. The roller ring is axially supported such that it slides on a support ring. In order to assure good lubrication of the supporting face of the support ring, the support ring has a plurality of flutes or grooves extending radially in its face oriented toward the roller ring. The grooves communicate with a radial conduit that is formed by an undercut or chamfer in the support ring.

IPC 1-7  
**F02M 41/12**

IPC 8 full level  
**F02M 41/12** (2006.01)

CPC (source: EP US)  
**F02M 41/121** (2013.01 - EP US); **F02M 41/128** (2013.01 - EP US); **Y10T 74/18024** (2015.01 - EP US)

Cited by  
EP0812985A1; US5950522A

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0202451 A1 19861126**; **EP 0202451 B1 19880907**; DE 3516867 A1 19861113; DE 3660689 D1 19881013; JP 2540304 B2 19961002; JP S61261651 A 19861119; US 4679993 A 19870714

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**EP 86104864 A 19860409**; DE 3516867 A 19850510; DE 3660689 T 19860409; JP 10505986 A 19860509; US 85331686 A 19860418