

Title (en)  
Fuel injection apparatus.

Title (de)  
Kraftstoffeinspritzvorrichtung.

Title (fr)  
Dispositif d'injection de combustible.

Publication  
**EP 0024803 A1 19810311 (EN)**

Application  
**EP 80302428 A 19800718**

Priority  
US 7900695 W 19790904

Abstract (en)  
It is some time desired that fuel injection apparatus include pilot injection capabilities in addition to main injection, but undesirable expense, weight and bulk are usually associated with such pilot injection capabilities. To overcome this problem rotary fuel injection apparatus (10) has a plurality of continuously rotating valves (72, 92) for controlling the starting and stopping of both pilot injection and main injection.

IPC 1-7  
**F02M 45/06**; **F02M 59/36**

IPC 8 full level  
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CPC (source: EP)  
**F02M 45/06** (2013.01); **F02M 59/02** (2013.01); **F02M 59/362** (2013.01); **F02M 59/366** (2013.01); **F02B 2075/027** (2013.01)

Citation (search report)  
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• US 4033301 A 19770705 - WALTON ERLIN B  
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