

Title (en)  
Compression self-ignition internal combustion engine and fuel supply device therefor

Title (de)  
Brennkraftmaschine mit Selbstzündung und Brennstoffzuführleinrichtung

Title (fr)  
Moteur avec auto-allumage et dispositif de prélevement de combustible

Publication  
**EP 1174604 A3 20030326 (EN)**

Application  
**EP 01117479 A 20010719**

Priority  
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Abstract (en)  
[origin: EP1174604A2] A compression self-ignition internal combustion engine in which combustion of air-fuel mixture in a combustion chamber is made upon self-ignition of the air-fuel mixture under compression by a piston. A high temperature air-fuel mixture field is formed in the combustion chamber, and has a fuel concentration which causes no self-ignition within the combustion chamber. A mixture charge injector is disposed to supply to the air-fuel mixture field a mixture charge which has a fuel concentration higher than that in the air-fuel mixture field and contains fuel and a fluid containing air, at least a part of the fuel being vaporized. <IMAGE>

IPC 1-7  
**F02B 3/06; F02M 71/02**

IPC 8 full level  
**F02B 1/12** (2006.01); **F02B 3/06** (2006.01); **F02B 7/00** (2006.01); **F02B 23/10** (2006.01); **F02D 41/02** (2006.01); **F02D 41/38** (2006.01);  
**F02D 41/40** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)  
**F02B 3/06** (2013.01); **F02B 23/101** (2013.01)

- Citation (search report)
- [A] EP 0404357 A2 19901227 - GEN MOTORS CORP [US]
  - [A] US 2103595 A 19371228 - WILLIAM NELSON ALFRED
  - [A] US 4401072 A 19830830 - ITO SUMIO [JP], et al
  - [A] DE 492918 C 19300227 - ADOLF WILHELM KRAEMLING DR ING
  - [A] DE 1148808 B 19630516 - LINDE EISMASCH AG, et al
  - [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 143 (M - 1574) 9 March 1994 (1994-03-09)
  - [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 12 31 October 1998 (1998-10-31)

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