

Title (en)  
Fuel-supply device for an internal combustion engine

Title (de)  
Kraftstoffversorgungseinrichtung für eine Brennkraftmaschine

Title (fr)  
Dispositif d'alimentation en carburant d'un moteur à combustion interne

Publication  
**EP 1146224 B1 20060222 (DE)**

Application  
**EP 01106998 A 20010321**

Priority  
DE 10018793 A 20000415

Abstract (en)  
[origin: EP1146224A1] The supply unit has at least one supply pump (12), which supplies fuel from a supply container (14) to a high pressure pump (16). The fuel is supplied at high pressure at least indirectly to an injection point (22) of at least one cylinder (24) of the engine, which has a suction pipe (26) for the cylinder, through which air for combustion is drawn into the cylinder. An additional supply pump, which is formed as a membrane pump (30), supplies fuel from the supply container to the high pressure pump in parallel with the first supply pump. The membrane pump is connection to the suction pipe and is operated at a pulsed under pressure in the suction pipe during the engine operation.

IPC 8 full level  
**F02M 59/42** (2006.01); **F02M 39/00** (2006.01); **F02M 59/10** (2006.01); **F02M 59/14** (2006.01); **F02M 59/44** (2006.01); **F02M 69/30** (2006.01);  
**F02M 69/34** (2006.01)

CPC (source: EP)  
**F02M 59/107** (2013.01); **F02M 59/14** (2013.01); **F02M 59/42** (2013.01); **F02M 59/447** (2013.01); **F02M 69/30** (2013.01); **F02M 69/34** (2013.01)

Cited by  
CN105653799A; CN101684766A; US11619198B1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 1146224 A1 20011017; EP 1146224 B1 20060222**; DE 10018793 A1 20011025; DE 50108968 D1 20060427

DOCDB simple family (application)  
**EP 01106998 A 20010321**; DE 10018793 A 20000415; DE 50108968 T 20010321