

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

Publication
EP 0133470 B1 19880511 (DE)

Application
EP 84107559 A 19840629

Priority

- DE 3328824 A 19830810
- DE 3344396 A 19831208

Abstract (en)
[origin: US4566635A] A fuel injection nozzle for internal combustion engines, having a valve needle, which at the end of a pre-stroke directly or indirectly opens an auxiliary conduit, by way of which the fuel pressure acts upon a reservoir piston and a pressure shoulder which acts in the closing direction of the valve needle. As a result, the valve needle is temporarily returned to the valve seat and the closing pressure is notably increased. The subsequent primary injection phase is initiated at a correspondingly higher pressure, and the higher closing pressure continues effective until the end of the injection event, thereby bringing about an exact closure of the valve.

IPC 1-7
F02M 45/08

IPC 8 full level
F02M 45/08 (2006.01)

CPC (source: EP US)
F02M 45/08 (2013.01 - EP US); **Y10T 137/7832** (2015.04 - EP US); **Y10T 137/87764** (2015.04 - EP US)

Citation (examination)

- DE 1751080 B1 19710422 - INT HARVESTER CO
- DE 2032484 A1 19710114
- DE 2555019 A1 19770616 - BOSCH GMBH ROBERT

Cited by
DE3941151A1; US5934254A

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0133470 A1 19850227; EP 0133470 B1 19880511; DE 3471134 D1 19880616; US 4566635 A 19860128

DOCDB simple family (application)
EP 84107559 A 19840629; DE 3471134 T 19840629; US 60004484 A 19840413