

Title (en)

FUEL INJECTION NOZZLE FOR INTERNAL-COMBUSTION ENGINES

Publication

EP 0020888 B1 19831012 (DE)

Application

EP 80101801 A 19800403

Priority

DE 2925187 A 19790622

Abstract (en)

[origin: US4340181A] A fuel injection nozzle for internal combustion engines, in which the valve needle together with the valve seat of the nozzle body forms an electric switch which by its opening and closing indicates the injection onset and the injection duration. A spring-elastic conductive element is disposed inside the closing spring and connects the attachment piece with the valve needle.

IPC 1-7

F02M 65/00

IPC 8 full level

F02M 65/00 (2006.01)

CPC (source: EP US)

F02M 65/005 (2013.01 - EP US)

Cited by

GB2153907A; GB2154658A; WO9205363A1; WO2005080786A1; WO2005010335A3; EP0101822B1

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0020888 A1 19810107; EP 0020888 B1 19831012; DE 2925187 A1 19810108; DE 3065240 D1 19831117; JP H02131073 U 19901030;
JP H037572 Y2 19910225; JP S566063 A 19810122; US 4340181 A 19820720

DOCDB simple family (application)

EP 80101801 A 19800403; DE 2925187 A 19790622; DE 3065240 T 19800403; JP 13543089 U 19891124; JP 8302880 A 19800620;
US 14936580 A 19800513