

Title (en)

DEVICE FOR DETECTING THE CONDITION OF AN INJECTOR

Title (de)

VORRICHTUNG ZUR ZUSTANDSERFASSUNG EINES INJEKTORS

Title (fr)

DISPOSITIF DE DÉTECTION DE L'ÉTAT D'UN INJECTEUR

Publication

EP 3743613 B1 20240814 (DE)

Application

EP 19702543 A 20190122

Priority

- DE 202018100337 U 20180122
- EP 2019051464 W 20190122

Abstract (en)

[origin: WO2019141865A1] The invention relates to an injector (1) for injecting fuel, comprising an injector housing (2), a movable nozzle needle that is arranged in the injector housing (2) and has a nozzle needle tip, a nozzle needle seat for accommodating the nozzle needle tip, and a mechanical switch (3), which upon a contact of the nozzle needle tip with the nozzle needle seat assumes a closed state, and upon a contact interruption assumes an open state. The injector (1) has an input line (4) and an output line (5) for controlling a movement of the nozzle needle, and the switch (3) has a first connection (6) and a second connection (7). The injector (1) is characterized in that the first connection (6) of the switch (3) is connected to the input line (4), and the second connection (6) of the switch (3) is connected to the injector housing (2).

IPC 8 full level

F02D 41/20 (2006.01)

CPC (source: EP US)

F02D 41/20 (2013.01 - EP); **F02D 41/2096** (2013.01 - US); **F02M 51/005** (2013.01 - EP); **F02M 65/005** (2013.01 - EP US);
F02D 41/2467 (2013.01 - US); **F02D 2041/2055** (2013.01 - EP US); **F02D 2041/2058** (2013.01 - EP US); **F02D 2041/2068** (2013.01 - EP);
F02D 2200/063 (2013.01 - US); **F02M 57/005** (2013.01 - EP); **F02M 2200/242** (2013.01 - EP); **F02M 2200/247** (2013.01 - US)

Citation (examination)

DE 102012215777 A1 20140306 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 202018100337 U1 20190424; CN 111819350 A 20201023; CN 111819350 B 20230428; EP 3743613 A1 20201202;
EP 3743613 B1 20240814; US 11555464 B2 20230117; US 2021156326 A1 20210527; WO 2019141865 A1 20190725

DOCDB simple family (application)

DE 202018100337 U 20180122; CN 201980009667 A 20190122; EP 19702543 A 20190122; EP 2019051464 W 20190122;
US 201916963655 A 20190122