

Title (en)  
DEVICE FOR SENSING THE STATE OF AN INJECTOR

Title (de)  
VORRICHTUNG ZUR ZUSTANDSERFASSUNG EINES INJEKTORS

Title (fr)  
DISPOSITIF DE DÉTECTION DE L'ÉTAT D'UN INJECTEUR

Publication  
**EP 3642473 B1 20221130 (DE)**

Application  
**EP 18743508 A 20180720**

Priority  
• DE 102017116379 A 20170720  
• EP 2018069796 W 20180720

Abstract (en)  
[origin: WO2019016380A1] The invention relates to a device for sensing the state of an injector, comprising an injector for injecting fuel into an engine combustion chamber, a switch, which is designed to change the switching state thereof in accordance with the state of the injector, and an evaluating unit for sensing the switching state of the switch, wherein a first switch contact of the switch is connected to an electrical input line of the injector, a second switch contact of the switch is connected to ground, and the evaluating unit is designed to carry out a first current measurement for a current flowing into the injector and into the switch and a second current measurement for the current flowing into the injector.

IPC 8 full level  
**F02M 65/00** (2006.01); **F02D 41/20** (2006.01); **F16K 37/00** (2006.01)

CPC (source: EP US)  
**F02D 41/20** (2013.01 - EP); **F02M 51/005** (2013.01 - US); **F02M 51/06** (2013.01 - US); **F02M 55/025** (2013.01 - US); **F02M 61/10** (2013.01 - US); **F02M 61/14** (2013.01 - US); **F02D 2041/2055** (2013.01 - EP); **F02D 2041/2058** (2013.01 - EP); **F02D 2041/2068** (2013.01 - EP); **F02M 65/005** (2013.01 - EP)

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)  
**WO 2019016380 A1 20190124**; CN 111051682 A 20200421; CN 111051682 B 20220802; DE 102017116379 A1 20190124; EP 3642473 A1 20200429; EP 3642473 B1 20221130; ES 2939061 T3 20230418; US 11111892 B2 20210907; US 2020256297 A1 20200813

DOCDB simple family (application)  
**EP 2018069796 W 20180720**; CN 201880048736 A 20180720; DE 102017116379 A 20170720; EP 18743508 A 20180720; ES 18743508 T 20180720; US 201816632526 A 20180720