

Title (en)

IGNITION APPARATUS COMPRISING A SPRING FOR ELECTRICALLY CONNECTING A SPARK PLUG

Title (de)

ZÜNDVORRICHTUNG MIT EINER FEDER ZUR ELEKTRISCHEN ANBINDUNG EINER ZÜNDKERZE

Title (fr)

DISPOSITIF D'ALLUMAGE DOTÉ D'UN RESSORT POUR LA CONNEXION ÉLECTRIQUE D'UNE BOUGIE D'ALLUMAGE

Publication

EP 3523534 A1 20190814 (DE)

Application

EP 17765451 A 20170914

Priority

- DE 102016219281 A 20161005
- EP 2017073115 W 20170914

Abstract (en)

[origin: WO2018065184A1] The invention relates to an ignition apparatus (1) for an internal combustion engine, comprising a spark plug (4); a ignition coil (3) with a voltage connection (5); and a spring (2) for electrically connecting the spark plug (4) to the voltage connection (5), wherein a continuous spring wire in the form of external turns (9) extends from an ignition coil-side end (7) of the spring (2) to a spark plug-side end (8) of the spring, and the spring wire at the spark plug-side end (8) continues in the form of internal turns (10) within the external turns (9) in a direction toward the ignition coil-side end (7). The invention further relates to an internal combustion engine comprising an ignition apparatus (1) of this kind, and also to a motor vehicle comprising an internal combustion engine of said kind.

IPC 8 full level

F02P 3/02 (2006.01); **F02P 7/00** (2006.01); **F02P 13/00** (2006.01); **F16F 1/04** (2006.01); **H01F 38/12** (2006.01); **H01R 13/24** (2006.01);
H01T 13/04 (2006.01)

CPC (source: EP US)

F02P 3/02 (2013.01 - EP US); **F02P 13/00** (2013.01 - EP US); **F16F 1/046** (2013.01 - EP US); **H01T 13/04** (2013.01 - EP US);
F02D 2400/22 (2013.01 - EP US); **F02P 7/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2018065184A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102016219281 A1 20180405; **DE 102016219281 B4 20181213**; CN 109790812 A 20190521; CN 109790812 B 20210817;
EP 3523534 A1 20190814; JP 2019534977 A 20191205; JP 6905589 B2 20210721; US 10907605 B2 20210202; US 2019226442 A1 20190725;
WO 2018065184 A1 20180412

DOCDB simple family (application)

DE 102016219281 A 20161005; CN 201780060433 A 20170914; EP 17765451 A 20170914; EP 2017073115 W 20170914;
JP 2019518271 A 20170914; US 201916372486 A 20190402