

Title (en)

IMPROVED MICRO-SOLENOID CONTACT-BREAKER FOR MOTOR VEHICLE STARTER, AND CORRESPONDING STARTER

Title (de)

VERBESSERTER MIKROSOLENOIDSCHUTZSCHALTER FÜR KRAFTFAHRZEUGANLASSER UND ENTSPRECHENDER ANLASSER

Title (fr)

CONTACTEUR A MICRO-SOLENOÏDE PERFECTIONNE POUR DEMARREUR DE VEHICULE AUTOMOBILE ET DEMARREUR CORRESPONDANT

Publication

**EP 3111461 A1 20170104 (FR)**

Application

**EP 15709283 A 20150219**

Priority

- FR 1451567 A 20140227
- FR 2015050408 W 20150219

Abstract (en)

[origin: WO2015128564A1] The invention essentially relates to a contact-breaker (1) for a heat engine starter, comprising: - a cap (30); - a micro-solenoid (41) that comprises a coil (42) which is stationary relative to the cap (30), and a core (43) which is translationally movable relative to the cap (30) between a starting position and an end position; - at least two contact terminals (26a, 26b) that are stationary relative to the cap (30); and - a contact plate (21) that is located inside the cap (30) and can be moved between a deactivated position in which the contact plate (21) is at a distance from the contact terminals (26a, 26b) and an active position in which the contact plate (21) is in contact with the two contact terminals (26a, 26b). Said contact-breaker is characterized in that the contact plate (21) is secured to the core (43) of the micro-solenoid (41) in such a way that the contact plate (21) drives the core (43) of the micro-solenoid (41) towards the starting position of the core when the contact plate (21) moves from the active position into the deactivated position.

IPC 8 full level

**H01H 51/06** (2006.01)

CPC (source: CN EP US)

**H01H 47/22** (2013.01 - US); **H01H 50/18** (2013.01 - CN); **H01H 50/20** (2013.01 - US); **H01H 50/30** (2013.01 - CN); **H01H 50/42** (2013.01 - US);  
**H01H 50/54** (2013.01 - CN); **H01H 51/065** (2013.01 - EP US); **H01H 3/60** (2013.01 - EP US); **H01H 47/04** (2013.01 - EP US);  
**H01H 2235/01** (2013.01 - US)

Citation (search report)

See references of WO 2015128564A1

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)

**FR 3017989 A1 20150828; FR 3017989 B1 20170901**; CN 105849848 A 20160810; EP 3111461 A1 20170104; JP 2017513174 A 20170525;  
US 10068734 B2 20180904; US 2017062164 A1 20170302; WO 2015128564 A1 20150903

DOCDB simple family (application)

**FR 1451567 A 20140227**; CN 201580003398 A 20150219; EP 15709283 A 20150219; FR 2015050408 W 20150219;  
JP 2016543225 A 20150219; US 201515119958 A 20150219