

Title (en)

A spring drive unit, an operating device for an electrical switching apparatus, and method for charging and/or discharging a spring in an operating device for an electrical switching apparatus

Title (de)

Federantriebseinheit und Verfahren zum Spannen und/oder Lösen der Feder in einer Betriebsvorrichtung für eine elektrische Schaltvorrichtung

Title (fr)

Unité de commande de ressort, dispositif de commande pour appareil de commutation électrique et procédé de chargement et/ou déchargement d'un ressort dans un dispositif de fonctionnement pour un appareil de commutation électrique

Publication

EP 2093780 B1 20141105 (EN)

Application

EP 08101862 A 20080222

Priority

EP 08101862 A 20080222

Abstract (en)

[origin: EP2093780A1] The invention concerns a spring drive unit (1) comprising a motor (4) for driving a spring charging mechanism (5), a gearbox (6) connected to the motor, a camshaft (7) connected to the gearbox, said gearbox transmitting rotational energy from the motor via a gearbox shaft to the camshaft, a closing spring unit (2) and an opening spring unit (3) coupled to the spring charging mechanism, via the camshaft (7) and a main operating lever (30). The spring charging mechanism comprises a freewheel (11) which is mounted on the gearbox shaft, a driver wheel (10) mounted on the freewheel and driving the camshaft during charging of the closing spring unit, a latch assembly (12) for engagement and disengagement of the driver wheel to the camshaft and mounted on the camshaft, and a stop member (16) acting on the latch assembly (12) and thereby provoking disengagement of the driver wheel from the camshaft. According to the invention is also described an operating device for an electrical switching apparatus, methods for charging and discharging a spring unit and also for performing a slow manual closing operation and a slow manual opening and/or discharging of a charged opening spring.

IPC 8 full level

H01H 3/30 (2006.01)

CPC (source: EP)

H01H 3/3026 (2013.01)

Cited by

CN114586126A; JP2022553287A; EP2109125A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 2093780 A1 20090826; EP 2093780 B1 20141105; CN 101939806 A 20110105; CN 101939806 B 20140514; KR 101579329 B1 20151221; KR 20100127211 A 20101203; WO 2009103693 A1 20090827

DOCDB simple family (application)

EP 08101862 A 20080222; CN 200980104358 A 20090217; EP 2009051837 W 20090217; KR 20107018753 A 20090217