

Title (en)
SWITCHING SHAFT UNIT FOR AN ELECTRICAL CONTACT SYSTEM

Title (de)
SCHALTWELLENEINHEIT FÜR EIN ELEKTRISCHES KONTAKTSYSTEM

Title (fr)
UNITÉ D'AXE DE COMMANDE POUR UN SYSTÈME DE CONTACT ÉLECTRIQUE

Publication
EP 1989721 A1 20081112 (DE)

Application
EP 07711725 A 20070301

Priority
• EP 2007001748 W 20070301
• DE 102006009645 A 20060302

Abstract (en)
[origin: WO2007098943A1] The invention relates to a switching shaft unit for an electrical contact system for use in at least one single-pole low-voltage breaker with an insulating-material housing, wherein the switching shaft unit comprises a single-interrupting or a double-interrupting rotary contact (8) which is capable of moving in a switching shaft (20) and is in the form of a lever. The lever arms (8A, 8B) of the rotary contact bear at least one contact piece (11A, 11B), which comes into switching contact with at least one fixed contact (15A, 15B). The rotary contact (8) is acted upon by at least one pair of contact-force-increasing springs (40, 42, 44), wherein each contact force spring (40, 42, 44) is supported with its first end (40A) on a support (22) in the interior (28) of the switching shaft (20) and with its second end (40B) on a bearing pin (10) on the rotary contact (8), wherein the connection line between the bearing pin (10) and the support (22) is displaced over a breakover point plane T in the event of an opening movement and then the rotary contact (8) remains in the open position. The invention proposes designing the contact force springs as leaf springs (42) subject to bending stress.

IPC 8 full level
H01H 77/10 (2006.01); **H01H 73/04** (2006.01)

CPC (source: EP US)
H01H 1/205 (2013.01 - EP US); **H01H 73/045** (2013.01 - EP US); **H01H 77/104** (2013.01 - EP US)

Citation (search report)
See references of WO 2007098943A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102006009645 A1 20070906; CN 101395689 A 20090325; EP 1989721 A1 20081112; US 2009127083 A1 20090521;
WO 2007098943 A1 20070907

DOCDB simple family (application)
DE 102006009645 A 20060302; CN 200780007515 A 20070301; EP 07711725 A 20070301; EP 2007001748 W 20070301;
US 28110707 A 20070301