

Title (en)

Actuation device for an electric connection terminal

Title (de)

Elektrische Anschlussklemme

Title (fr)

Dispositif d'actionnement pour une pince de raccordement électrique

Publication

EP 2846408 B1 20160427 (DE)

Application

EP 14190509 A 20110309

Priority

- DE 102010014143 A 20100407
- EP 11001933 A 20110309

Abstract (en)

[origin: EP2375503A2] The actuating device has an actuating element formed as a pushing device (21), which is integrally connected to an insulating material housing (2). A conductor terminal connection is formed on a contact frame by a spring element, free end of which forms a clamping edge that is directed toward an electrical conductor. The pushing device has pushing arm (23), where the pushing arm is connected with one of its ends to the insulating material housing. The pushing arm extends along a partial section of two upper surfaces (18,20) of the housing, which are arranged at an angle to each other.

IPC 8 full level

H01R 4/48 (2006.01); **H01R 12/53** (2011.01); **H01R 12/57** (2011.01)

CPC (source: CN EP KR US)

H01R 4/48 (2013.01 - KR); **H01R 4/48185** (2023.08 - CN); **H01R 4/48365** (2023.08 - EP US); **H01R 4/48455** (2023.08 - EP); **H01R 9/24** (2013.01 - KR); **H01R 12/515** (2013.01 - EP); **H01R 13/02** (2013.01 - CN); **H01R 13/193** (2013.01 - CN); **H01R 13/46** (2013.01 - CN); **H01R 13/50** (2013.01 - KR); **H01R 13/629** (2013.01 - CN); **H01R 12/515** (2013.01 - US); **H01R 12/57** (2013.01 - EP US)

Citation (opposition)

Opponent : Delta Patents B.V.

- JP 2001035560 A 20010209 - MATSUSHITA ELECTRIC WORKS LTD
- DE 19735835 A1 19990218 - WAGO VERWALTUNGS GMBH [DE]
- DE 3743410 A1 19890629 - ELECTRO TERMINAL GMBH [AT]
- DE 1975279 U 19671221 - BERKER GEB [DE]
- JP 2004022482 A 20040122 - J S T MFG CO LTD

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)

EP 2375503 A2 20111012; EP 2375503 A3 20130306; EP 2375503 B1 20150701; CN 102237608 A 20111109; CN 102237608 B 20151028; CN 105356150 A 20160224; CN 105356150 B 20190104; CN 105356151 A 20160224; CN 105356151 B 20191203; DE 102010014143 A1 20111013; DE 102010014143 B4 20160707; DE 202011110996 U1 20180117; DE 202011111075 U1 20190405; DE 202011111076 U1 20190405; EP 2846408 A2 20150311; EP 2846408 A3 20150318; EP 2846408 B1 20160427; EP 2846408 B2 20220406; EP 2953208 A2 20151209; EP 2953208 A3 20160120; EP 2953208 B1 20171004; EP 3151338 A1 20170405; EP 3151338 B1 20190724; EP 3159974 A1 20170426; EP 3159974 B1 20190508; EP 3159974 B2 20220504; ES 2547125 T3 20151001; ES 2583411 T3 20160920; ES 2654406 T3 20180213; JP 2011222509 A 20111104; JP 5767499 B2 20150819; KR 101368118 B1 20140227; KR 20110112785 A 20111013; PL 2375503 T3 20151130; PL 2846408 T3 20161130; PL 2953208 T3 20180228; PL 3151338 T3 20191231; PL 3159974 T3 20191031; TR 201910911 T4 20190821; TW 201212434 A 20120316; TW 201624846 A 20160701; TW 201624847 A 20160701; TW 201729469 A 20170816; TW 201731169 A 20170901; TW I523355 B 20160221; TW I568111 B 20170121; TW I591915 B 20170711; TW I604675 B 20171101; TW I605653 B 20171111; US 2011250775 A1 20111013; US 8328586 B2 20121211

DOCDB simple family (application)

EP 11001933 A 20110309; CN 201110077533 A 20110330; CN 201510695626 A 20110330; CN 201510695864 A 20110330; DE 102010014143 A 20100407; DE 202011110996 U 20110309; DE 202011111075 U 20110309; DE 202011111076 U 20110309; EP 14190509 A 20110309; EP 15174437 A 20110309; EP 16197946 A 20110309; EP 16197947 A 20110309; ES 11001933 T 20110309; ES 14190509 T 20110309; ES 15174437 T 20110309; JP 2011083593 A 20110405; KR 20110031668 A 20110406; PL 11001933 T 20110309; PL 14190509 T 20110309; PL 15174437 T 20110309; PL 16197946 T 20110309; PL 16197947 T 20110309; TR 201910911 T 20110309; TW 100108564 A 20110314; TW 105100200 A 20110314; TW 105100201 A 20110314; TW 106117396 A 20110314; TW 106117397 A 20110314; US 201113075610 A 20110330