

Title (en)

SPRING-FORCE TERMINAL CONNECTION AND PLUG CONNECTOR

Title (de)

FEDERKRAFTKLEMMANSCHLUSS UND STECKVERBINDER

Title (fr)

ATTACHE À SERRAGE PAR RESSORT ET CONNECTEUR ENFICHABLE

Publication

**EP 3061154 B1 20190424 (DE)**

Application

**EP 14784492 A 20141017**

Priority

- DE 102013111574 A 20131021
- EP 2014072342 W 20141017

Abstract (en)

[origin: WO2015059054A1] The invention describes a spring-force terminal connection (1) for the terminal connection of electrical conductors, having an insulating-material housing (2) which has at least one conductor insertion opening (12) for the insertion of an electrical conductor, at least one clamping spring (5) which has a contact limb (7), a clamping limb (10) and a spring bow (8) which connects the contact limb (7) and the clamping limb (10) to one another, and having at least one operating button (15) which is accommodated in the insulating-material housing such that it can be displaced and which has an operating area (14) for making contact with the clamping limb (10) and moving the clamping limb (10) in the direction of the contact limb (7) for opening the clamping point when the operating button (15) is displaced in the direction of the interior of the insulating-material housing (2). The insulating-material housing (2) contains at least one button opening (16) for accommodating an associated operating button (15), said button opening being open in the direction of an associated conductor insertion opening (12). The operating button (15), which is mounted in this button opening (16) such that it can be displaced, forms part of the wall arrangement of the conductor insertion opening (12). Starting from a mouth section (50) which adjoins the conductor insertion opening (12), the button opening (16) is widened in the direction of the back (51) of the button opening (16), said back being situated opposite the conductor insertion opening (12). The cross section of the operating button (15) is matched to the widening contour of the button opening (16).

IPC 8 full level

**H01R 4/48** (2006.01); **H01R 9/24** (2006.01)

CPC (source: CN EP US)

**H01R 4/48275** (2023.08 - US); **H01R 4/4833** (2023.08 - CN EP); **H01R 4/48365** (2023.08 - US); **H01R 9/223** (2013.01 - CN US);  
**H01R 9/2408** (2013.01 - CN); **H01R 4/4821** (2023.08 - CN EP); **H01R 4/4852** (2023.08 - CN EP); **H01R 9/2408** (2013.01 - EP US);  
**H01R 12/721** (2013.01 - EP US); **H01R 2201/20** (2013.01 - EP US)

Citation (examination)

- DE 102008062137 A1 20100624 - WAGO VERWALTUNGS GMBH [DE]
- DE 8232135 U1 19830224

Cited by

CN109643860A

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)

**DE 102013111574 A1 20150423; DE 102013111574 B4 20170112**; CN 105659436 A 20160608; CN 105659436 B 20180105;  
CN 107919538 A 20180417; CN 107919538 B 20191129; EP 3061154 A1 20160831; EP 3061154 B1 20190424; US 2016248174 A1 20160825;  
US 2017214154 A1 20170727; US 9614301 B2 20170404; US 9847587 B2 20171219; WO 2015059054 A1 20150430

DOCDB simple family (application)

**DE 102013111574 A 20131021**; CN 201480053328 A 20141017; CN 201711258157 A 20141017; EP 14784492 A 20141017;  
EP 2014072342 W 20141017; US 201415031235 A 20141017; US 201715435984 A 20170217