

Title (en)
SPRING-FORCE CONNECTION AND ROUND PLUG-IN CONNECTOR WITH A LARGE NUMBER OF SPRING-FORCE CONNECTIONS

Title (de)
FEDERKRAFTANSCHLUSS UND RUNDSTECKVERBINDER MIT EINER VIELZAHL VON FEDERKRAFTANSCHLÜSSEN

Title (fr)
CONNEXION ÉLASTIQUE ET CONNECTEUR ROND COMPORTANT UNE PLURALITÉ DE CONNEXIONS ÉLASTIQUES

Publication
EP 3586404 B1 20231213 (DE)

Application
EP 18705650 A 20180220

Priority
• BE 201705116 A 20170227
• EP 2018054155 W 20180220

Abstract (en)
[origin: WO2018153862A1] The present invention discloses a spring-force connection (10) having a housing part (11), having a pivot lever (20) which can be pivoted between an open position and a closed position, having an electrically conductive connecting device (30) which is accessible via a conductor insertion opening (13) of the housing part (11), and having a contact spring (40) by means of which a conductor (L) which is inserted into the housing part (11) via the conductor insertion opening (13) can apply force to the connecting device (30), wherein the spring-force connection is characterized in that the contact spring (40) which can be pivoted between a release position and a clamping position has a pressing limb (41) and a clamping limb (45) which is connected to said pressing limb by means of a bending joint (44), and in that the pivot lever (20) has a pressing device (21) and a driver (22), wherein the pressing limb (41) is arranged between the pressing device (21) and the driver (22) at least in the closed position of the pivot lever (20), and in that, by pivoting of the pivot lever (20) into its closed position, the pressing device (21) can at least indirectly apply force to the pressing limb (41) in such a way that the contact spring (40) is pivoted into its clamping position, so that a conductor (L) which is inserted into the housing part (11) via the conductor insertion opening (13) applies force to the connecting device (30) by means of the clamping limb (45), and in that, by pivoting of the pivot lever (20) into its open position, the driver (22) can at least indirectly apply force to the pressing limb (41) in such a way that the contact spring (40) is pivoted into its release position.

IPC 8 full level
H01R 4/48 (2006.01); **H01R 9/24** (2006.01)

CPC (source: EP US)
H01R 4/48365 (2023.08 - EP US); **H01R 9/2491** (2013.01 - US); **H01R 9/2491** (2013.01 - EP)

Citation (examination)
• EP 2835870 A2 20150211 - SWITCHLAB INC [TW]
• TW 201608789 A 20160301 - SWITCHLAB INC [TW]

Cited by
EP3522303B1

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)
BE 1024468 B1 20180228; CN 110366799 A 20191022; CN 110366799 B 20211022; DE 202018006437 U1 20200527;
DE 202018006858 U1 20231030; EP 3586404 A1 20200101; EP 3586404 B1 20231213; EP 3586404 C0 20231213; EP 4329103 A2 20240228;
EP 4329103 A3 20240522; JP 2020508554 A 20200319; JP 6995870 B2 20220204; US 10998649 B2 20210504; US 2020059014 A1 20200220;
WO 2018153862 A1 20180830

DOCDB simple family (application)
BE 201705116 A 20170227; CN 201880014189 A 20180220; DE 202018006437 U 20180220; DE 202018006858 U 20180220;
EP 18705650 A 20180220; EP 2018054155 W 20180220; EP 23213326 A 20180220; JP 2019546320 A 20180220;
US 201816487503 A 20180220