

Title (en)
Device for connecting conductors

Title (de)
Anschlußvorrichtung für Leiter

Title (fr)
Dispositif de connexion pour conducteurs

Publication
EP 1780831 A2 20070502 (DE)

Application
EP 06121235 A 20060926

Priority
• DE 202006009460 U 20060616
• DE 202005016990 U 20051029

Abstract (en)
An electrical connector comprises housing (1), bus bar (3), spring (4), retaining mechanism (14), and release mechanism (5). The housing is formed from an electrically insulating synthetic plastic material. The housing contains a chamber (1a), and a conductor opening (13) communicating with chamber. The conductor opening is operable to receive a bare end portion (11) of insulated conductor. The bus bar is mounted in chamber. The bus bar has a first portion (3a) arranged adjacent the conductor opening. The spring is arranged in the chamber for biasing the conductor bare end portion into engagement with the bus bar first portion. The spring includes stationary base portion (4a) fixed within the housing chamber, and a movable first leg portion (4b) connected with one end of the base portion for movement between extended and retracted positions adjacent and spaced from the bus bar first portion, respectively. The first leg portion is normally biased towards the extended position. The retaining mechanism retains the spring movable portion in the retracted position to permit the insertion of the bare cable end into the housing chamber. The release mechanism operates the retaining mechanism to release the spring movable portion. The bare conductor end is biased by the spring first leg portion toward electrical engagement with the bus bar first portion. The spring includes connecting portion. The bus bar includes second portion orthogonally relative to the bus bar first portion. The connector includes cage, reset mechanism, and return mechanism. The retaining mechanism comprises ledge portion integral with release mechanism.

Abstract (de)
Anschlussvorrichtung (2, 102), insbesondere zur Anordnung in einem Isolierstoffgehäuse (1, 101), die zur werkzeugfreien Direktbeschaltung eines Leiters ausgelegt ist, und die folgendes aufweist: a. eine Stromschiene (3, 103), b. eine Klemmfeder (4, 104) zum Festklemmen des Leiters an der Stromschiene (3, 103), die zumindest einen Grundschenkel (6) und einen Klemmschenkel (8, 108) aufweist, wobei c. ein kombiniertes, bewegliches Rast- und Auslöseelement (5, 105), i. welches eine Einrichtung, vorzugsweise einen Hinterschnitt zum Verrasten des Rast- und Auslöseelements (5, 105) und/oder des Klemmschenkels (108) in seiner Öffnungsstellung aufweist und ii. wenigstens einen auch werkzeugfrei betätigbaren Betätigungsansatz (15, 115, 116) zum Lösen der Raststellung und zumindest zum Bewegen des Rast- und Auslöseelementes (5, 115) in eine Leiterklemmstellung, in der es den Klemmschenkel (8, 108) freigibt.

IPC 8 full level
H01R 4/48 (2006.01)

CPC (source: EP US)
H01R 4/4833 (2023.08 - EP US); **H01R 4/4835** (2023.08 - EP US); **H01R 4/4821** (2023.08 - EP US); **H01R 4/4842** (2023.08 - EP US); **H01R 4/4846** (2023.08 - EP US)

Cited by
CN102354831A; EP2768079B1

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
DE 202006009460 U1 20070315; EP 1780831 A2 20070502; EP 1780831 A3 20140416; EP 1780831 B1 20180523; US 2007099479 A1 20070503; US 7287999 B2 20071030

DOCDB simple family (application)
DE 202006009460 U 20060616; EP 06121235 A 20060926; US 58470206 A 20061020