Title (en)

ELECTRICAL CABLE JUNCTION UNIT EQUIPPED WITH CUTTING TERMINALS

Publication

EP 0083738 A3 19850410 (DE)

Application

EP 82111362 A 19821208

Priority

- DE 3150568 A 19811221
- DE 3220006 A 19820527

Abstract (en)

[origin: US4501463A] A terminal element for connecting the conductors of an electrical cable to respective knife terminals of an electrical device comprises a cylindrical support body having an external screw thread and a plurality of axially extending, circumferentially spaced slots. The knife terminals each include a plate shaped flange disposed in a respective slot of the support body and provided with a notch for receiving and clamping a respective cable conductor. The terminal element further comprises a cap or sleeve with an internal screw thread having a height increasing within a few turns of the thread from zero at the entrance opening of the sleeve to the maximum conductor diameter. In a preferred embodiment, the notches in the end flanges of the knife terminals are spaced from and parallel to respective radii of the support body lying in the same transverse planes as the respective end flanges. The terminal element is assembled by placing the conductors of the cable in respective slots of the support body, the cable conductors initially overlying the notches of the knife terminal end flanges. Upon a screwing of the sleeve onto the support body, the internal screw thread of the sleeve contacts the cable conductors on opposite sides of the respective knife terminal end flange. The varying thread height of the internal screw thread results in a gradual shifting of the cable conductors radially inwardly into the respective knife terminal notches. The spacing of the notches laterally of respective radii of the support body serves to compensate tangential forces due to friction arising during the screwing of the sleeve onto the support body.

IPC 1-7

H01R 4/24

IPC 8 full level

H01R 4/24 (2006.01)

CPC (source: EP US)

H01R 4/2433 (2013.01 - EP US); H01R 4/2412 (2013.01 - EP US)

Citation (search report)

- [A] US 3980380 A 19760914 CIENIAWA EDWARD A, et al
- [A] US 3798586 A 19740319 HUSKA P

Cited by

US5174783A; CN111509436A; GB2272799A; CN106463848A; DE102011108123A1; DE102011108123B4; EP0542164A3; CN104247156A; US9490582B2; DE102011010854A1; WO2012107179A1; WO2013159773A1; WO2018137927A1

Designated contracting state (EPC)

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EP 82111362 A 19821208; DE 3275794 T 19821208; US 44958382 A 19821214