

Title (en)  
ELECTRICAL CONNECTION SYSTEM FOR SHIELDED WIRE CABLE

Title (de)  
STROMANSCHLUSSSYSTEM FÜR ABGESCHIRMTES DRAHTKABEL

Title (fr)  
SYSTÈME DE CONNEXION ÉLECTRIQUE POUR CÂBLE DE FIL BLINDÉ

Publication  
**EP 3480900 A1 20190508 (EN)**

Application  
**EP 18201302 A 20181018**

Priority  
US 201715804444 A 20171106

Abstract (en)  
An electrical connection system configured to terminate electrical conductors (102, 104) and to transmit digital electrical signals having a data transfer rate of 5 Gigabits per second (Gb/s) or higher. The system includes a first parallel mirrored pair of terminals (160, 162) having a planar connection portion (164, 166) and a second pair of parallel mirrored terminals (132, 134) having a cantilever beam portion (136, 140) and a contact points (138, 142) configured to contact the first terminals (160, 162). The cantilever beam portions (136, 140) are generally perpendicular to the planar connection portions (164, 166). The terminals (132, 134, 160, 162) cooperate to provide consistent characteristic impedance. The connection system further includes an electromagnetic shield (172, 174) that longitudinally surrounds the terminals (132, 134, 160, 162). The connection system is suited for terminating wire cables (100) transmitting digital signals using data transfer protocols such as Universal Serial Bus (USB) 3.0 and High Definition Multimedia Interface (HDMI) 1.4.

IPC 8 full level  
**H01R 13/6593** (2011.01); **H01R 13/6474** (2011.01); **H01R 13/6591** (2011.01); **H01R 24/62** (2011.01); **H01R 107/00** (2006.01)

CPC (source: EP KR)  
**H01B 7/1875** (2013.01 - KR); **H01B 11/002** (2013.01 - KR); **H01B 11/1091** (2013.01 - KR); **H01R 13/2442** (2013.01 - KR); **H01R 13/6581** (2013.01 - KR); **H01R 13/6593** (2013.01 - EP); **H01R 13/6474** (2013.01 - EP); **H01R 13/6591** (2013.01 - EP); **H01R 24/62** (2013.01 - EP); **H01R 2107/00** (2013.01 - EP)

Citation (search report)

- [IY] US 9142907 B2 20150922 - JONES LESLIE L [US], et al
- [YA] US 2014051295 A1 20140220 - WESTMAN JOHN EUGENE [US], et al
- [A] WO 2016112384 A1 20160714 - MOLEX LLC [US]

Citation (examination)  
JP H06223909 A 19940812 - SUMITOMO WIRING SYSTEMS

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US11881656B2

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3480900 A1 20190508**; CN 109755816 A 20190514; CN 109755816 B 20210205; JP 2019106356 A 20190627; JP 6752260 B2 20200909; KR 102091944 B1 20200323; KR 20190051826 A 20190515

DOCDB simple family (application)  
**EP 18201302 A 20181018**; CN 201811294285 A 20181101; JP 2018177085 A 20180921; KR 20180132768 A 20181101