

Title (en)  
MODULAR ELECTRICAL PLUG AND PLUG-CABLE ASSEMBLY INCLUDING THE SAME

Title (de)  
ELEKTRISCHER MODULAR STECKER UND KABELSTECKERZUSAMMENBAU MIT EINEM SOLCHEN STECKER

Title (fr)  
PRISE ELECTRIQUE MODULAIRE ET ENSEMBLE PRISE-CABLE LE COMPRENANT

Publication  
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Application  
**EP 99914025 A 19990319**

Priority  

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- US 11031298 P 19981130
- US 24616699 A 19990208

Abstract (en)  
[origin: WO9952182A1] Modular plug (28) offering consistent terminated open circuit (TOC) performance includes a plug housing (30) defining channels (50) and electrically conductive material (58) arranged in or defining two channels (50) and electrically connected to one another to enable capacitance to develop between the wires (52) received in the channels (50). The channels (50) between which capacitance is developed receive wires from different wire pairs. Modular plug (140) offering consistent de-embedded near-end crosstalk (NEXT) performance and TOC values for plugs having the same design includes a housing (142) defining terminal-receiving slots (150) and a longitudinal cavity (154) extending from a rear surface of the housing (142) to a location below the slots (150) and being in communication therewith. The housing (142) includes a strain relief element (164) for engaging with the cable (190) and securing the cable (190) to the housing (142). The plug (140) also includes contact terminals (182) arranged in the slots (150) and a load bar (144) defining wire-receiving channels (166) for receiving wires (168) of the cable (190). The load bar (144) is arranged in the cavity (154) opposite the strain relief element (164) such that the wires (168) of the cable (190) are fixed in position at least at a location opposite the strain relief element (164). The load bar (144) is preferably hinged such that a rearward portion (186) thereof is rotatable with respect to a forward portion (188) thereof. This in conjunction with the dimensioning of the channels (166) in the load bar (144) and size of the cavity (154) in the plug housing (142) enables the plug (140) to be used to terminate cables of various sizes. A modular plug (200) offering improved near-end crosstalk (NEXT) performance includes a housing (202) defining a plurality of terminal-receiving slots (208), wire-receiving channels (210) each situated in communication with a slot (208) and a longitudinal cavity (212) extending from a rear surface of housing (202) to the channels (210) and which is in communication with the channels (210). The plug (200) includes contact terminals (216) situated in the slots (208) and a load bar (204) arranged in the cavity (212). The load bar (204) defines wire-receiving channels (214) for receiving the wires of the cable. At least first and second wire-receiving channels (214) are arranged in a first plane parallel to the upper and lower faces of the load bar (204) and at least third and fourth channels (214) are arranged in a second plane parallel to the first plane. The first and second channels (214) are adapted to receive two of the wires of the cable which operatively form part of a first circuit during use.

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IPC 8 full level  
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Citation (search report)  

- [A] US 4516822 A 19850514 - WOLFEL LEE A [US]
- See references of WO 9952182A1

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