

Title (en)

Impedance and inductance control in electrical connectors

Title (de)

Impedanz- und Induktanzkontrolle in elektrischen Verbindern

Title (fr)

Contrôle d'impédance et d'inductance pour des connecteurs électriques

Publication

EP 0892470 A3 19990728 (EN)

Application

EP 98115005 A 19930317

Priority

- EP 93104307 A 19930317
- US 85659392 A 19920324

Abstract (en)

[origin: EP0562427A2] A method and structure of an electrical connector (10) is provided for tuning the impedance of the connector according to a given impedance of an electrical circuit in which the connector is interconnected. The connector includes a dielectric housing (16) having a receptacle (12) for receiving a complementary mating connector. A plurality of terminals (12) are mounted on the housing. The terminals include body portions (32) located in the housing and contact portions (42) located at the receptacle for engaging appropriate terminals of the mating connector when inserted into the receptacle. The areas (34, 34', 34", 34''') of the body portions of the terminals are selectively varied to vary the capacitance of the terminals and, therefore, the impedance of the connector to match the given impedance of the electrical circuit. When the connector is used for mounting to a printed circuit board, ground terminals (30) have at least two feet (36) for engaging a respective single ground trace of a common ground circuit on the printed circuit board for reducing the inductance between a particular ground terminal and its respective circuit trace. <IMAGE>

IPC 1-7

H01R 23/68; **H01R 13/658**

IPC 8 full level

H01R 12/50 (2011.01); **H01R 13/6476** (2011.01); **H01R 12/72** (2011.01)

CPC (source: EP KR)

H01R 13/6473 (2013.01 - KR); **H01R 13/6476** (2013.01 - EP); **H01R 13/658** (2013.01 - EP); **H01R 12/721** (2013.01 - EP)

Citation (search report)

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- [A] EP 0436943 A1 19910717 - AMP INC [US]
- [A] US 4419626 A 19831206 - CEDRONE NICHOLAS J [US], et al

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EP1037330A3

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