

## 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 A2 19990120 (EN)**

## Application

**EP 98115005 A 19930317**

## Priority

- EP 93104307 A 19930317
- US 85659392 A 19920324

## Abstract (en)

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

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