

Title (en)
Coaxial connector

Title (de)
Koaxialverbinder

Title (fr)
Connecteur coaxial

Publication
EP 1047156 B1 20011114 (DE)

Application
EP 00108198 A 20000413

Priority
DE 29907173 U 19990422

Abstract (en)
[origin: US6396367B1] A coaxial connector comprises an outer conductor having an inner diameter D, an inner conductor coaxial with the outer conductor and having an outer diameter d, and an insulating structure having plural radii between the conductors. The diameters are selected in such a manner that the connector has a predetermined characteristic impedance. The connector has a first cable side for connection to a coaxial cable and a second connection side for connection to a corresponding coaxial connector. The insulating structure is one piece, including a disk and tube, together having a bore with a diameter less than d. The inner conductor is inserted into the bore of the tube that is mounted in proximity to the second end. The disk periphery is fixedly mounted against the inner wall of the outer conductor. The portion of the inner conductor in the bore and the bore have a smaller diameter than d to compensate for the dielectric properties of the insulating structure in such manner that the connector has the predetermined characteristic impedance Z₀ where the insulating structure is located. The structure radii are selected as a function of the structure dielectric constant ϵ_{psi} in such manner that the predetermined characteristic impedance Z₀ wave equation is attained.

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H01R 13/646

IPC 8 full level
H01R 13/646 (2011.01)

CPC (source: EP US)
H01R 24/44 (2013.01 - EP US); **H01R 2103/00** (2013.01 - EP US)

Cited by
GB2383475A; WO2018153777A1

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US 6396367 B1 20020528; AT E208964 T1 20011115; CA 2306302 A1 20001022; CA 2306302 C 20090113; DE 29907173 U1 19991007; DE 50000037 D1 20011220; EP 1047156 A1 20001025; EP 1047156 B1 20011114

DOCDB simple family (application)
US 55335800 A 20000421; AT 00108198 T 20000413; CA 2306302 A 20000420; DE 29907173 U 19990422; DE 50000037 T 20000413; EP 00108198 A 20000413