

Title (en)

RADIO-FREQUENCY COAXIAL ELECTRIC CONNECTOR WITH CONTACT ELEMENT

Title (de)

KOAXIALER ELEKTRISCHER HOCHFREQUENZVERBINDER MIT KONTAKTELEMENT

Title (fr)

CONNECTEUR ÉLECTRIQUE COAXIAL RADIOFRÉQUENCE AVEC UN ÉLÉMENT DE CONTACT

Publication

EP 2961004 B1 20210505 (EN)

Application

EP 14753640 A 20140213

Priority

- CN 201310055102 A 20130221
- CN 2014072054 W 20140213

Abstract (en)

[origin: EP2961004A1] Disclosed is a radio-frequency coaxial electric connector with a contact element. The contact element (14) is arranged between a plug outer conductor (11) and a socket outer conductor (22), the contact element (14) is cylindrical, the front part of the contact element (14) is divided into a plurality of elastic cantilever beams through axial cut grooves (142), and an annular contact ring (143) is formed at the rear part of the contact element (14); a radial outward raised annular contact (141) is arranged at the front end of each cantilever beam; and the contact element (14) is fixed in a plug first step hole (113) in the plug outer conductor (11) in an interference fit manner through the contact ring (143) at the rear part, and is tightly in elastic contact with the inner wall of a socket first step hole (221) through the annular contacts (141) of the elastic cantilever beams at the front part. The radio-frequency coaxial electric connector can improve the passive intermodulation or three-order intermodulation performance of radio-frequency coaxial connection, reduce the space occupied in the length direction of the connector, improve the impedance matching performance, reduce the standing-wave ratio and improve the sealing performance. (Fig. 1)

IPC 8 full level

H01R 24/40 (2011.01); **H01R 103/00** (2006.01)

CPC (source: EP)

H01R 24/40 (2013.01); **H01R 2103/00** (2013.01)

Cited by

CN109075494A; US10141688B2; WO2017178101A1

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

DOCDB simple family (publication)

EP 2961004 A1 20151230; EP 2961004 A4 20170125; EP 2961004 B1 20210505; CN 103117469 A 20130522; CN 103117469 B 20160803; WO 2014127708 A1 20140828

DOCDB simple family (application)

EP 14753640 A 20140213; CN 201310055102 A 20130221; CN 2014072054 W 20140213