Title (en)

CONTACTLESS HIGH POWER RF CONNECTOR

Title (de)

KONTAKTLOSER HF-VERBINDER MIT HOHER LEISTUNG

Title (fr)

CONNECTEUR HAUTE PUISSANCE RF SANS CONTACT

Publication

EP 4109670 A1 20221228 (EN)

Application

EP 22166617 A 20220405

Priority

EP 21180753 A 20210622

Abstract (en)

A RF connector includes a first coupler section and a symmetrical second coupler section. Each coupler section includes a housing having a cuboid shape with an open side forming an open channel and holding a conductor. Each conductor has an elongated structure of a flat conductive material with a length corresponding to ¼ of a nominal frequency of a signal to be coupled and is connected with a first end to a coaxial connector and with a second end to the housing. The RF connector can be switched between an ON state and an OFF state, wherein in the OFF state, the first coupler section is distant from the second coupler section and in the ON state the first coupler section is in close contact with the second coupler section such that the open sides of their housings are oriented against each other, and the conductors are facing each other.

IPC 8 full level

H01P 5/04 (2006.01); **H01P 1/203** (2006.01); H01P 1/12 (2006.01)

CPC (source: EP)

H01P 1/20372 (2013.01); **H01P 5/04** (2013.01); H01P 1/127 (2013.01)

Citation (applicant)

- EP 3300535 A1 20180404 - SPINNER GMBH ELEKTROTECH [DE]
- US 4754241 A 19880628 - SPINNER GEORG [DE]

Citation (search report)

- [A] US 3121848 A 19640218 - KRUSE JR FREDERICK W, et al
- [A] BOLT M H ET AL: "DIRECTIONAL COUPLER SWITCH", IBM TECHNICAL DISCLOSURE BULLETIN,, vol. 15, no. 6, 1 November 1972 (1972-11-01), pages 1914, XP001402814

Cited by

WO2023193939A1

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4109667 A1 20221228; EP 4109670 A1 20221228

DOCDB simple family (application)

EP 21180753 A 20210622; EP 22166617 A 20220405