

Title (en)  
RF RADIOFREQUENCY ROTARY JOINT FOR ROTARY DEVICE FOR GUIDING RF WAVES AND RF ROTARY DEVICE INCLUDING SUCH A JOINT

Title (de)  
RADIOFREQUENZ(RF)-DREHKUPPLUNG FÜR DREHVORRICHTUNG ZUR RF-WELLENLEITUNG, UND RF-DREHVORRICHTUNG, DIE EINE SOLCHE KUPPLUNG UMFASST

Title (fr)  
JOINT TOURNANT RADIOFREQUENCE RF POUR DISPOSITIF ROTATIF DE GUIDAGE D'ONDES RF ET DISPOSITIF ROTATIF RF INCLUANT UN TEL JOINT

Publication  
**EP 3680982 B1 20211020 (FR)**

Application  
**EP 19214965 A 20191210**

Priority  
FR 1873020 A 20181218

Abstract (en)  
[origin: CA3065566A1] An RF joint rotating about an axis of rotation (Z) comprises a number N, greater than or equal to 1, of RF transmission channels, a first, internal surface of symmetry of revolution about the axis (Z) and of RF transmission having a first, internal radius r1, and a second, external surface of symmetry of revolution about the axis (Z) and of RF transmission having a second, external radius r2, strictly less than said first, internal radius r1. The first and second RF transmission surfaces facing one another and rotationally mobile about the axis (Z) are configured through the first and second radii r1, r2, the geometry of the first and second RF access ports, and the geometry of the first and second RF containment and guidance means, such that: - each RF transmission channel Vi, i varying from 1 to N, comprises a first RF rotating waveguide, and - the N first RF rotating waveguides are distributed angularly over a predetermined number NC, greater than or equal to 1 and less than or equal to N, of sections of surfaces of revolution about the axis (Z) of the second RF transmission surface, each of the NC sections being situated along the longitudinal axis of symmetry (Z) at a predetermined different level L1(k).

IPC 8 full level  
**H01P 1/06** (2006.01); **H01P 3/123** (2006.01)

CPC (source: EP US)  
**H01P 1/065** (2013.01 - US); **H01P 1/068** (2013.01 - EP); **H01P 1/182** (2013.01 - US); **H01P 3/123** (2013.01 - EP US); **H01P 5/182** (2013.01 - US); **H01Q 13/065** (2013.01 - US); **H01Q 21/064** (2013.01 - US)

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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