

Title (en)  
COMPACT BIPOLARISATION DRIVE ASSEMBLY FOR A RADIATING ANTENNA ELEMENT AND COMPACT NETWORK COMPRISING AT LEAST FOUR COMPACT DRIVE ASSEMBLIES

Title (de)  
KOMPAKTEINHEIT ZUR DOPPELPOLARISIERTEN ANSTEUERUNG FÜR EIN STRAHLUNGSELEMENT EINER ANTENNE, UND KOMPAKTES NETZ, DAS MINDESTENS VIER KOMPAKTE ANSTEUERUNGSEINHEITEN UMFASST

Title (fr)  
ENSEMBLE D'EXCITATION COMPACT BIPOLARISATION POUR UN ELEMENT RAYONNANT D'ANTENNE ET RESEAU COMPACT COMPORTANT AU MOINS QUATRE ENSEMBLES D'EXCITATION COMPACTS

Publication  
**EP 3179551 B1 20210224 (FR)**

Application  
**EP 16202268 A 20161205**

Priority  
FR 1502571 A 20151211

Abstract (en)  
[origin: CA2950993A1] The excitation assembly consists of a symmetrical OMT and two splitters respectively connected to two pathways of the OMT. The OMT consists of a cross junction comprising a central waveguide parallel to an axis Z and four lateral ports oriented in two directions X, Y, the first splitter consisting of an input waveguide and of two output ports coupled to two lateral ports, oriented in the direction X, by respective connection waveguides. The first splitter is located on a lateral side of the OMT, orthogonally to the direction X, and its two output ports are formed one above the other in a lateral wall of the input waveguide, the upper output port being placed facing a first lateral port of the OMT to which it is connected by the first connection waveguide. The difference in electrical length between the two connection waveguides is equal to  $\lambda/2$ .

IPC 8 full level  
**H01P 1/161** (2006.01); **H01P 1/213** (2006.01); **H01P 5/12** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP US)  
**H01P 1/161** (2013.01 - EP US); **H01P 1/165** (2013.01 - US); **H01P 1/182** (2013.01 - US); **H01P 1/2131** (2013.01 - EP US); **H01P 3/12** (2013.01 - US); **H01P 5/12** (2013.01 - EP US); **H01Q 13/0208** (2013.01 - US); **H01Q 21/245** (2013.01 - US); **H01Q 21/24** (2013.01 - EP US)

Cited by  
US2021249748A1; US11791530B2; EP3462532A1; FR3071672A1; CN109616729A; US10673118B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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DOCDB simple family (application)  
**EP 16202268 A 20161205**; CA 2950993 A 20161208; FR 1502571 A 20151211; US 201615369630 A 20161205