

Title (en)
PLASTIC WAVEGUIDE FOR THE PROPAGATION OF WAVES IN THE FREQUENCY RANGE COMPRISED BETWEEN 1 GHZ AND 10 THZ

Title (de)
KUNSTSTOFFWELLENLEITER ZUR WELLENAUSBREITUNG IM FREQUENZBEREICH ZWISCHEN 1 GHZ 10 THZ

Title (fr)
GUIDE D'ONDES PLASTIQUE POUR LA PROPAGATION D'ONDES DANS LA GAMME DE FREQUENCES COMPRISES ENTRE 1 GHZ ET 10 THZ

Publication
EP 3453071 B1 20210707 (FR)

Application
EP 17725326 A 20170502

Priority
• FR 1654003 A 20160503
• FR 2017051050 W 20170502

Abstract (en)
[origin: CA3021295A1] The present invention relates to an assembly for propagating waves of frequencies comprised between 1 GHz and 10 THz. According to the invention, this assembly comprises: (a) a waveguide (11, 21) for guiding said waves, said waveguide (11, 21) being made from a plastic, one portion of said waves propagating in the interior of this waveguide (11, 21) and another portion of said waves propagating on the exterior of this waveguide (11, 21); and (b) a protective jacket (12) that encircles said wave guide (11, 21) while defining one or more spaces between said waveguide (11, 21) and said jacket, wherein said waves propagating on the exterior of said waveguide (11, 21) are contained, said protective jacket (12) thus forming a barrier protecting the latter from external interference.

IPC 8 full level
H01P 3/16 (2006.01)

CPC (source: EP RU US)
H01P 3/12 (2013.01 - US); **H01P 3/16** (2013.01 - EP RU US)

Cited by
US11588514B2; EP3958469A1; FR3113547A1; EP3958469B1

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)
FR 3051075 A1 20171110; FR 3051075 B1 20190628; BR 112018071382 A2 20190205; CA 3021295 A1 20171109; CN 109417212 A 20190301; CN 109417212 B 20210615; EP 3453071 A1 20190313; EP 3453071 B1 20210707; ES 2893110 T3 20220208; JP 2019519969 A 20190711; JP 6949877 B2 20211013; PL 3453071 T3 20220307; RU 2018142261 A 20200603; RU 2018142261 A3 20200617; RU 2734843 C2 20201023; US 11005150 B2 20210511; US 2020395648 A1 20201217; WO 2017191409 A1 20171109

DOCDB simple family (application)
FR 1654003 A 20160503; BR 112018071382 A 20170502; CA 3021295 A 20170502; CN 201780026743 A 20170502; EP 17725326 A 20170502; ES 17725326 T 20170502; FR 2017051050 W 20170502; JP 2018557829 A 20170502; PL 17725326 T 20170502; RU 2018142261 A 20170502; US 201716097735 A 20170502