

Title (en)

SATELLITE MULTIBAND ANTENNA UNIT

Title (de)

MULTIBAND-SATELLITENANTENNENEINHEIT

Title (fr)

UNITÉ D'ANTENNE MULTIBANDE POUR SATELLITE

Publication

**EP 3183775 A1 20170628 (EN)**

Application

**EP 14830538 A 20140822**

Priority

IB 2014001845 W 20140822

Abstract (en)

[origin: WO2016027119A1] The invention relates to a satellite multi-band antenna unit comprising a main reflector; a frequency selective reflective unit; a first feed connected to a first low noise down converter, said first feed being located in a first location for receiving radiation in a first frequency band, said radiation in the first frequency band comprising a plurality of incident beams reflected from said main reflector and transmitted through said frequency selective reflective unit; a second feed connected to a second low noise down converter, said second feed being located in a second location for receiving radiation in a second frequency band lower than said first frequency band, said radiation in the second frequency band comprising a plurality of incident beams reflected from said main reflector and from said frequency selective unit; and a transmitter connected to one of said first or second feed for transmitting uplink radiation to said main reflector. Said frequency selective reflective unit comprises at least two electrically conductive plates (30') facing each other, each plate having an array of spaced apart apertures (31'). The spaced apart apertures (31') of each plate have inner dimensions (Ax1) increasing with an angle of the incident beams.

IPC 8 full level

**H01Q 15/00** (2006.01); **H01Q 5/45** (2015.01); **H01Q 19/13** (2006.01); **H01Q 19/17** (2006.01); **H01Q 19/19** (2006.01)

CPC (source: EP RU)

**H01Q 5/45** (2015.01 - EP); **H01Q 15/00** (2013.01 - RU); **H01Q 15/0026** (2013.01 - EP); **H01Q 15/0033** (2013.01 - EP);  
**H01Q 19/132** (2013.01 - EP); **H01Q 19/17** (2013.01 - EP); **H01Q 19/192** (2013.01 - EP)

Citation (search report)

See references of WO 2016027119A1

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

DOCDB simple family (publication)

**WO 2016027119 A1 20160225**; EP 3183775 A1 20170628; RU 2659303 C1 20180629

DOCDB simple family (application)

**IB 2014001845 W 20140822**; EP 14830538 A 20140822; RU 2017108746 A 20140822