

Title (en)
NETWORK ANTENNA WITH CONFORMABLE REFLECTOR(S) HIGHLY RECONFIGURABLE IN ORBIT

Title (de)
NETZWERKANTENNE MIT KONFORMEN REFLEKTOREN MIT HOHER REKONFIGURIERBARKEIT IM ORBIT

Title (fr)
ANTENNE RESEAU A REFLECTEUR(S) CONFORME(S), A FORTE RECONFIGURABILITE EN ORBITE

Publication
EP 1902492 A2 20080326 (FR)

Application
EP 06779044 A 20060711

Priority
• FR 2006050708 W 20060711
• FR 0552175 A 20050713

Abstract (en)
[origin: CA2619403A1] The invention concerns a network antenna with reflector(s) (AR) comprising i) a network (RS) of at least two sources (S1-S5), one of which a central source (S1), arranged and positioned so as to transmit and/or receive beams (F1-F5) in selected directions; ii) beam-forming means for controlling the amplitude and the phase of each of the sources based on amplitude/phase laws applied upon their access and for providing an appropriate amplifying level, so that each source (S1-S5) should transmit a selected radiated pattern (forming a beam and including a main lobe) designed to cover a selected zone (Z1-Z5), and iii) at least one reflector (RC) provided with a surface (SU) capable of reflecting the beams delivered by the sources and/or addressed thereto and configured in three dimensions so as to reflect the beam delivered by each source (S1-S5) by spreading its energy so that it covers the selected associated zone, and that the main lobe of the radiated pattern associated with the central source (S1) should define a primary coverage (CP) including integrally each active coverage zone (ZC1, ZC2) of the antenna, of selected shape and dimensions, and that the main lobe of the radiated pattern associated with each non-central source (S2-S5) should overlap at least partly the primary coverage (CP).

IPC 8 full level
H01Q 19/17 (2006.01); **H01Q 15/16** (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP KR US)
H01Q 15/16 (2013.01 - EP KR US); **H01Q 19/17** (2013.01 - EP KR US); **H01Q 21/06** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2007007011A2

Cited by
US11831075B2; EP3714510B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
FR 2888674 A1 20070119; FR 2888674 B1 20091023; BR PI0613013 A2 20101214; CA 2619403 A1 20070118; CA 2619403 C 20141118; CN 101288204 A 20081015; CN 101288204 B 20120523; EP 1902492 A2 20080326; EP 1902492 B1 20141231; ES 2533262 T3 20150408; JP 2009501469 A 20090115; KR 20080032182 A 20080414; PT 1902492 E 20150407; RU 2008105418 A 20090820; RU 2406192 C2 20101210; US 2008303736 A1 20081211; US 7714792 B2 20100511; WO 2007007011 A2 20070118; WO 2007007011 A3 20070719

DOCDB simple family (application)
FR 0552175 A 20050713; BR PI0613013 A 20060711; CA 2619403 A 20060711; CN 200680029897 A 20060711; EP 06779044 A 20060711; ES 06779044 T 20060711; FR 2006050708 W 20060711; JP 2008520929 A 20060711; KR 20087003531 A 20080213; PT 06779044 T 20060711; RU 2008105418 A 20060711; US 99552506 A 20060711