

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

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Application

EP 06779044 A 20060711

Priority

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- 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

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Cited by

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