

Title (en)

Antenna for communicating with low earth orbit satellite

Title (de)

Antenne zum Kommunizieren mit Satelliten in niedriger Umlaufbahn

Title (fr)

Antenne pour communiquer avec satellite à orbite basse

Publication

**EP 0921590 A2 19990609 (EN)**

Application

**EP 98309924 A 19981203**

Priority

JP 33406097 A 19971204

Abstract (en)

To provide an antenna for communicating with a low earth orbit (LEO) satellite which is small-sized and light and can track a LEO satellite at high speed at a small-sized earth station using a LEO satellite, the above antenna uses an offset parabolic antenna-type reflector and a primary feed is installed in the focal position of the paraboloid of revolution forming the reflector. The quantity of an offset of the offset parabolic antenna is selected so that antenna gain is maximum at the minimum operational elevation. The primary feed is mechanically independent of the mobile reflector and is attached and fixed to a radiator supporting part. The reflector is turned based upon an azimuth axis and an elevation axis according to AZ-EL mount.  
<IMAGE>

IPC 1-7

**H01Q 3/20**; **H01Q 19/13**

IPC 8 full level

**H01Q 19/12** (2006.01); **G01S 3/38** (2006.01); **H01Q 3/20** (2006.01); **H01Q 19/13** (2006.01)

CPC (source: EP)

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Cited by

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GB SE

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**EP 98309924 A 19981203**; AU 9520798 A 19981203; CN 98125182 A 19981204; JP 33406097 A 19971204; TW 87120120 A 19981202