

Title (en)

COMPACT PORTABLE ANTENNA POSITIONER SYSTEM AND METHOD

Title (de)

KOMPAKTES TRAGBARES ANTENNENPOSITIONIERSYSTEM UND VERFAHREN

Title (fr)

SYSTÈME ET MÉTHODE DE POSITIONNEMENT D'ANTENNE PORTABLE ET COMPACT

Publication

EP 2769438 A4 20150708 (EN)

Application

EP 12864142 A 20121018

Priority

- US 201113278927 A 20111021
- US 2012060697 W 20121018

Abstract (en)

[origin: WO2013103432A2] A low power, lightweight, collapsible and rugged antenna positioner for use in communicating with geostationary, geosynchronous and low earth orbit satellite. By collapsing, invention may be easily carried or shipped in a compact container. May be used in remote locations with simple or automated setup and orientation. Azimuth is adjusted by rotating an antenna in relation to a positioner base and elevation is adjusted by rotating an elevation motor coupled with the antenna. Manual orientation of antenna for linear polarized satellites yields lower weight and power usage. Updates ephemeris or TLE data via satellite. Algorithms used for search including Clarke Belt fallback, transponder/beacon searching switch, azimuth priority searching and tracking including uneven re-peak scheduling yield lower power usage. Orientation aid via user interface allows for smaller azimuth motor, simplifies wiring and lowers weight. Tilt compensation, bump detection and failure contingency provide robustness.

IPC 8 full level

H01Q 1/27 (2006.01); **H01Q 1/08** (2006.01); **H01Q 1/12** (2006.01); **H01Q 3/08** (2006.01)

CPC (source: EP)

H01Q 1/08 (2013.01); **H01Q 1/1235** (2013.01); **H01Q 1/125** (2013.01); **H01Q 1/273** (2013.01); **H01Q 3/08** (2013.01)

Citation (search report)

- [Y] US 2007001920 A1 20070104 - WEBB SPENCER [US], et al
- [Y] JP 2007174439 A 20070705 - MITSUBISHI ELECTRIC CORP
- [Y] EP 1916738 A1 20080430 - GILAT SATELLITE NETWORKS LTD [IL]
- [Y] WO 2009088111 A1 20090716 - SATMARK INTERNAT LTD [CN], et al
- [A] CN 101938031 A 20110105 - NANJING ELECTRONIC MEASURING CO LTD, et al
- See references of WO 2013103432A2

Designated contracting state (EPC)

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