

Title (en)

ANTENNA WITH ADJUSTABLE BEAM PATTERN AND METHOD OF OPERATION THEREOF

Title (de)

ANTENNENVORRICHTUNG MIT EINSTELLBARER ABSTRAHLCHARAKTERISTIK UND VERFAHREN ZUM BETREIBEN EINER ANTENNENVORRICHTUNG

Title (fr)

ANTENNE AVEC UN LOBE AJUSTABLE ET MÉTHODE POUR OPÉRER CELLE-CI

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Application

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Abstract (en)

[origin: WO2015197228A1] The invention relates to an antenna device having an adjustable emission characteristic and to a method for operating an antenna device. The antenna device according to the invention comprises: an input-signal provision apparatus (300), by means of which a first, second, third, and fourth electrical input signal (D1, D2, D3, D4) can be provided; wherein the electrical input signals (D1, D2, D3, D4) are coherent with each other and have phases relative to each other which are modified in order to adjust the adjustable emission characteristic of the antenna device (100, 200), wherein the phases can be modified by means of an input-signal modification apparatus (340); a plurality of antenna columns (140-i); wherein each antenna column (140-i) has a plurality of electrically connected antenna elements (142-ij); wherein the electrical input signals (D1, D2, D3, D4) can be conducted in order to induce the antenna elements (142-ij; 242-ij) of the antenna columns (140-i; 240-i) to emit electromagnetic waves having the adjusted emission characteristic.

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