Title (en)

METHOD AND APPARATUS FOR DESIGNING A PHASED ARRAY ANTENNA, PHASED ARRAY ANTENNA AND METHOD FOR OPERATING A PHASED ARRAY ANTENNA

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ENTWURF EINER PHASENGESTEUERTEN GRUPPENANTENNE, PHASENGESTEUERTE GRUPPENANTENNE UND VERFAHREN ZUM BETRIEB EINER PHASENGESTEUERTEN GRUPPENANTENNE

Title (fr)

PROCÉDÉ ET APPAREIL DE CONCEPTION D'UNE ANTENNE RÉSEAU À COMMANDE DE PHASE, ANTENNE RÉSEAU À COMMANDE DE PHASE ET PROCÉDÉ DE FONCTIONNEMENT D'UNE ANTENNE RÉSEAU À COMMANDE DE PHASE

Publication

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Application

EP 20768018 A 20200904

Priority

EP 2020074846 W 20200904

Abstract (en)

[origin: WO2022048772A1] A method for designing a phased array antenna comprises a step of determining, for at least one antenna element set which includes a plurality of antenna elements of the phased array antenna, a set of phase shift values to which switchable phase shifters for the antenna elements of the antenna element set are switchable, so that, during operation of the phased array antenna, the phased array antenna is steerable towards directions within a predetermined direction range by selecting, for each of the antenna elements of the antenna element set, one of the phase shift values out of the determined set of phase shift values. The determining of the set of phase shift values for a respective antenna element set comprises determining, for a plurality of candidate sets of phase shift values, each of the candidate sets comprising a number of phase shift values, respective antenna quality measures describing a quality of an operation of the phased array antenna using the respective candidate set of phase shift values as the set of phase shift values.

IPC 8 full level

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