

Title (en)

DEVICE AND METHOD FOR INCREASING THE ANGULAR RESOLUTION OF AN ANTENNA ARRANGEMENT

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERHÖHUNG DER WINKELAUFLÖSUNG EINER ANTENNENANORDNUNG

Title (fr)

DISPOSITIF ET PROCEDE D'AUGMENTATION DE LA RESOLUTION ANGULAIRE D'UN SYSTEME D'ANTENNE

Publication

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Application

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Abstract (en)

[origin: DE19927395A1] The invention relates to a device and a method for increasing the angular resolution in a radar system which is oriented in the direction of movement and sideways thereto. To this end, the Doppler frequency shift of the transmission signal is evaluated. Several adjacent, narrow ranges are detected in sequence while the antenna is moving using narrow bundle antenna characteristics, these narrow ranges corresponding to an illumination with a broad-bundling antenna characteristic in terms of their entire area. The results of the simulation of this broad-bundling illumination are combined with the results of the narrow-bundling detection process in order to increase the angular resolution of the antenna arrangement.

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