

Title (en)
RADAR SYSTEM COMPRISING AN ANTENNA ARRANGEMENT FOR TRANSMITTING AND RECEIVING ELECTROMAGNETIC RADIATION

Title (de)
RADARSYSTEM, UMFASSEND EINE ANTENNENANORDNUNG ZUM SENDEN UND EMPFANGEN ELEKTROMAGNETISCHER STRAHLUNG

Title (fr)
SYSTÈME DE RADAR, COMPORTANT UN ENSEMBLE D'ANTENNES POUR ÉMETTRE ET RECEVOIR UN RAYONNEMENT ÉLECTROMAGNÉTIQUE

Publication
EP 3423863 A1 20190109 (DE)

Application
EP 16820305 A 20161229

Priority
• DE 102016203160 A 20160229
• EP 2016082808 W 20161229

Abstract (en)
[origin: WO2017148561A1] The invention relates to a radar system comprising an antenna arrangement (1) which is intended to transmit and receive electromagnetic radiation, wherein N first antennas (4) are provided for transmission and M second antennas (5) are provided for reception and objects in the capture range of the antennas (4, 5) are detected according to the MIMO principle using the N first transmitting antennas (4) and using the M second receiving antennas (5). Provision is also made for the N first transmitting antennas (4) to emit transmission signals which are orthogonal to one another in a transmitting cycle, for N-n of the N first transmitting antennas (10, 11) to be arranged horizontally beside one another and for at least n of the N first transmitting antennas (12, 13) to be arranged in a vertically offset manner with an offset which is the same in each case with respect to the N-n transmitting antennas (10, 11) which are arranged horizontally beside one another, and for M-m of the M second receiving antennas (14, 15, 16, 17) to be arranged horizontally beside one another and for at least m of the M second receiving antennas (19, 20, 21) to be arranged in a vertically offset manner with respect to the M-m receiving antennas (14, 15, 16, 17) which are arranged horizontally beside one another.

IPC 8 full level
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G01S 7/032 (2013.01 - US); **G01S 13/42** (2013.01 - EP KR US); **G01S 13/931** (2013.01 - EP KR US); **H01Q 1/3233** (2013.01 - EP KR US); **H01Q 21/065** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2017148561A1

Cited by
CN113258266A

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DOCDB simple family (publication)
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