Title (en)

RADAR MODULATION METHOD WITH A HIGH DISTANCE RESOLUTION AND LITTLE SIGNAL PROCESSING OUTLAY

Title (de)

RADARMODULATIONSVERFAHREN MIT HOHER ENTFERNUNGSAUFLÖSUNG BEI GERINGEM SIGNALPROZESSIERUNGSAUFWAND

Title (fr)

PROCÉDÉ DE MODULATION DE RADAR AVEC UNE RÉSOLUTION À GRANDE DISTANCE ET UNE FAIBLE DÉPENSE DE TRAITEMENT DE SIGNAL

Publication

EP 4193186 A1 20230614 (DE)

Application

EP 21727360 A 20210507

Priority

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- DE 2021200060 W 20210507

Abstract (en)

[origin: WO2022033638A1] A method according to the invention for a radar system is presented, for detecting the surroundings using transmission means for emitting transmission signals which contain a sequence of at least approximately identical individual signals, the sequence of individual transmission signals being repeated cyclically, said method being characterized in that over the sequence of the individual signals the frequency position thereof – optionally apart from a varying and at least approximately mean value-free component – is changed at least approximately linearly and, in the process, the slope of the linear frequency position change over the individual transmission signals is at least sometimes varied from sequence to sequence, in particular in order to increase the radial distance and/or relative speed measurement accuracy and/or in order to be more robust in respect of interference with other radar systems.

IPC 8 full level

G01S 13/58 (2006.01); **G01S 7/02** (2006.01); **G01S 7/35** (2006.01); **G01S 13/00** (2006.01); **G01S 13/34** (2006.01); **G01S 13/44** (2006.01); **G01S 13/931** (2020.01)

CPC (source: EP US)

G01S 7/0232 (2021.05 - EP US); **G01S 7/0235** (2021.05 - EP); **G01S 7/35** (2013.01 - EP); **G01S 7/354** (2013.01 - EP); **G01S 7/356** (2021.05 - EP US); **G01S 13/006** (2013.01 - EP); **G01S 13/343** (2013.01 - EP US); **G01S 13/347** (2013.01 - EP US); **G01S 13/44** (2013.01 - EP); **G01S 13/584** (2013.01 - EP); **G01S 13/931** (2013.01 - EP US)

Designated contracting state (EPC)

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