

Title (en)

METHOD FOR DETECTING MASKING OF ONE OR MORE SATELLITES, ELECTRONIC DETECTION DEVICE AND ASSOCIATED COMPUTER PROGRAM PRODUCT

Title (de)

VERFAHREN ZUR ERKENNUNG DER MASKIERUNG EINES ODER MEHRERER SATELLITEN, ELEKTRONISCHE DETEKTIONSVORRICHTUNG UND ZUGEHÖRIGES COMPUTERPROGRAMMPRODUKT

Title (fr)

PROCÉDÉ DE DÉTECTION D'UN MASQUAGE D'UN OU PLUSIEURS SATELLITES, DISPOSITIF ÉLECTRONIQUE DE DÉTECTION ET PRODUIT PROGRAMME D'ORDINATEUR ASSOCIÉ

Publication

**EP 4232849 A1 20230830 (FR)**

Application

**EP 21799258 A 20211025**

Priority

- FR 2010946 A 20201026
- EP 2021079542 W 20211025

Abstract (en)

[origin: CA3196129A1] The present invention relates to a method for detecting masking of one or more satellites by an obstacle for a GNSS receiver on board a movable carrier, the method comprising the following steps: - receiving (110), for each one of M satellites, a code pseudo-distance measurement and a variation of carrier pseudo-distances; - computing (120) a definite position of the receiver and a computed position of each satellite (S<sub>i</sub>); - detecting (170) masking of at least one satellite on the basis of the following sub-steps: - computing (171), at a computation instant and for each satellite, a computed pseudo-distance and a pseudo-distance reconstructed at a previous time; - detecting (174) masking of at least one satellite by analysing a magnitude, called residue, computed by applying a least-squares algorithm.

IPC 8 full level

**G01S 19/22** (2010.01)

CPC (source: EP US)

**G01S 19/22** (2013.01 - EP); **G01S 19/51** (2013.01 - US)

Citation (search report)

See references of WO 2022090157A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**FR 3115608 A1 20220429**; **FR 3115608 B1 20230331**; CA 3196129 A1 20220505; EP 4232849 A1 20230830; US 2023393289 A1 20231207; WO 2022090157 A1 20220505

DOCDB simple family (application)

**FR 2010946 A 20201026**; CA 3196129 A 20211025; EP 2021079542 W 20211025; EP 21799258 A 20211025; US 202118249251 A 20211025