

Title (en)

METHOD FOR TRACKING A SPACE OBJECT USING ON-BOARD RADAR AND LIDAR SYSTEMS

Title (de)

VERFAHREN ZUR VERFOLGUNG EINES RAUMOBJEKTES UNTER VERWENDUNG VON RADAR- UND LIDAR-SYSTEMEN AN BORD

Title (fr)

PROCEDE DE POURSUITE D'UN OBJET SPATIAL A L'AIDE DE SYSTEMES RADAR ET LIDAR EMBARQUES

Publication

**EP 4038412 A1 20220810 (FR)**

Application

**EP 20819807 A 20201103**

Priority

- FR 1912345 A 20191104
- FR 2020051983 W 20201103

Abstract (en)

[origin: CA3161114A1] The invention relates to a method for tracking, by means of a space vehicle (101), a target on an orbital trajectory, the method comprising an acquisition phase (504, 505) which comprises the steps of: - activating a lidar; - acquiring signals from the lidar system, - determining data relating to the trajectory of the target from the signals emitted by the lidar, wherein the space vehicle has embarked on a trajectory (505) to approach or inspect the target, which trajectory is determined depending on the trajectory data of the target; and if the target is no longer detected, - activating a short-distance detection phase which comprises the step of: - activating a wide-field radar.

IPC 8 full level

**G01S 13/42** (2006.01); **B64G 1/64** (2006.01); **B64G 3/00** (2006.01); **G01S 13/72** (2006.01); **G01S 13/86** (2006.01); **G01S 17/66** (2006.01);  
**G01S 17/88** (2006.01)

CPC (source: EP US)

**B64G 1/078** (2013.01 - EP); **B64G 1/242** (2013.01 - US); **B64G 1/244** (2019.05 - EP); **B64G 1/66** (2013.01 - EP); **G01S 13/42** (2013.01 - EP);  
**G01S 13/72** (2013.01 - EP); **G01S 13/865** (2013.01 - EP US); **G01S 17/58** (2013.01 - US); **G01S 17/66** (2013.01 - EP);  
**G01S 17/88** (2013.01 - EP); **B64G 1/10** (2013.01 - EP); **B64G 1/36** (2013.01 - EP)

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

DOCDB simple family (publication)

**FR 3102862 A1 20210507; FR 3102862 B1 20211029;** CA 3161114 A1 20210514; EP 4038412 A1 20220810; JP 2023501349 A 20230118;  
US 2022390605 A1 20221208; WO 2021089938 A1 20210514

DOCDB simple family (application)

**FR 1912345 A 20191104;** CA 3161114 A 20201103; EP 20819807 A 20201103; FR 2020051983 W 20201103; JP 2022526042 A 20201103;  
US 202017755666 A 20201103