

Title (en)  
METHOD FOR THE COMPUTER-SUPPORTED CREATION AND/OR UPDATING OF A REFERENCE MAP FOR A SATELLITE-SUPPORTED POSITIONING OF AN OBJECT

Title (de)  
VERFAHREN ZUM RECHNERGESTÜTZTEN ERSTELLEN UND/ODER AKTUALISIEREN EINER REFERENZKARTE FÜR EINE SATELLITENGESTÜTZTE ORTUNG EINES OBJEKTS

Title (fr)  
PROCÉDÉ POUR LA CRÉATION INFORMATISÉE ET/OU POUR LA MISE À JOUR D'UNE CARTE DE RÉFÉRENCE POUR UNE LOCALISATION D'UN OBJET ASSISTÉE PAR SATELLITE

Publication  
**EP 2483709 A1 20120808 (DE)**

Application  
**EP 10751847 A 20100813**

Priority  
• EP 09012346 A 20090929  
• DE 102010011982 A 20100319  
• EP 2010061812 W 20100813  
• EP 10751847 A 20100813

Abstract (en)  
[origin: WO2011038976A1] The invention relates to a method for the computer-supported creation and/or updating of a reference map (RM) for a satellite-supported positioning of an object (O), wherein a correction for a predetermined spatial region is stored in the reference map (RM) by means of which distance dimensions (d1, d2, d3, d4) in the predetermined spatial region are corrected during the positioning of an object (O), from which dimensions the object position (OP) is determined, wherein a distance dimension is determined from a satellite signal of a satellite (S1, S2, S3, S4) received via a satellite-supported receiving unit (1) at the location of the object (O), and wherein the distance dimension represents the distance from the satellite (S1, S2, S3, S4) to the object (O). In the method according to the invention, the distance dimensions are determined from received satellite signals using a satellite-supported receiver unit in a plurality of locations of an object located in the predetermined spatial region. Using a predetermined object position, which can be known in advance or estimated in a suitable manner, distance dimensions which correspond to the predetermined object position are back-calculated by incorporating the satellite positions of the satellites from which the satellite signals are received. On the basis of the difference between the respectively determined and back-calculated distance dimensions, the correction for at least part of the predetermined spatial region around the specified object position is stored and/or updated. The method according to the invention achieves more precise positioning using a suitably trained reference map. The method is particularly advantageous for positioning in developed regions.

IPC 8 full level  
**G01S 19/22** (2010.01); **G01S 19/40** (2010.01)

CPC (source: EP KR US)  
**G01S 19/22** (2013.01 - EP KR US); **G01S 19/40** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2011038976A1

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 SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102010011982 A1 20110407**; EP 2483709 A1 20120808; KR 101451203 B1 20141015; KR 20120062926 A 20120614; US 2012182179 A1 20120719; WO 2011038976 A1 20110407

DOCDB simple family (application)  
**DE 102010011982 A 20100319**; EP 10751847 A 20100813; EP 2010061812 W 20100813; KR 20127011311 A 20100813; US 201013499248 A 20100813