

Title (en)  
SELF-CALIBRATING AND AUTONOMOUS MAGNETIC OBSERVATORY

Title (de)  
SELBSTKALIBRIERENDES UND AUTONOMES MAGNETISCHES OBSERVATORIUM

Title (fr)  
OBSERVATOIRE MAGNÉTIQUE AUTONOME ET AUTO-CALIBRÉ

Publication  
**EP 3452781 A1 20190313 (FR)**

Application  
**EP 17717453 A 20170418**

Priority  
• BE 201605322 A 20160504  
• EP 2017059196 W 20170418

Abstract (en)  
[origin: WO2017190951A1] The invention relates to an autonomous magnetic observatory that comprises: a scalar magnetometer for measuring the modulus of the local magnetic field vector F; an angular magnetometer for measuring the vertical direction, the direction of geographic North, and the direction of the local magnetic field vector F; a variometer for measuring three variations in the local magnetic field vector F; a clock; and a controller. In which observatory the controller is configured to control and manage the orientation of sensors, to acquire the measurements of the variometer, of the scalar magnetometer, of the angular magnetometer and of the variometer, and to process the acquired measurements in order to obtain automatically the local magnetic field vector F and the errors in the measurements associated with each instrument.

IPC 8 full level  
**G01C 17/02** (2006.01); **G01R 33/02** (2006.01); **G01V 3/00** (2006.01)

CPC (source: EA EP US)  
**G01C 17/02** (2013.01 - EA EP US); **G01R 33/02** (2013.01 - EA EP US); **G01R 33/0206** (2013.01 - EA EP US); **G01V 3/08** (2013.01 - US)

Citation (search report)  
See references of WO 2017190951A1

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)  
**WO 2017190951 A1 20171109**; BE 1023739 B1 20170706; CA 3022175 A1 20171109; CN 109073380 A 20181221; CN 109073380 B 20201110; EA 036173 B1 20201009; EA 201892176 A1 20190430; EP 3452781 A1 20190313; US 11346667 B2 20220531; US 2019162537 A1 20190530

DOCDB simple family (application)  
**EP 2017059196 W 20170418**; BE 201605322 A 20160504; CA 3022175 A 20170418; CN 201780027292 A 20170418; EA 201892176 A 20170418; EP 17717453 A 20170418; US 201716098229 A 20170418