

Title (en)
SYSTEM AND METHOD FOR LOCALLY PRECISE APPLICATION OF SOLIDS AND LIQUIDS AND MIXTURES THEREOF IN AGRICULTURE AND FORESTRY

Title (de)
SYSTEM UND VERFAHREN ZUR ÖRTLICH GENAUEN AUSBRINGUNG VON FESTSTOFFEN UND FLÜSSIGKEITEN SOWIE DEREN GEMISCHEN IN DER LAND- UND FORSTWIRTSCHAFT

Title (fr)
SYSTÈME ET PROCÉDÉ D'ÉPANDAGE LOCALEMENT PRÉCIS DE MATIÈRES SOLIDES ET LIQUIDES ET DE LEURS MÉLANGES DANS LES DOMAINES DE L'AGRICULTURE ET DE LA SYLVICULTURE

Publication
EP 3411768 A1 20181212 (DE)

Application
EP 17718804 A 20170120

Priority
• DE 102016001353 A 20160205
• DE 2017000008 W 20170120

Abstract (en)
[origin: WO2017133719A1] The present invention relates to a system for locally precise application of substances to useful areas of farmland and woodland and a corresponding method. The system comprises at least one multiple rotary wing aircraft, which contains at least one electronic control device for controlling the flight movements, which steers the multiple rotary-wing aircraft autonomously on predefined flight paths. The electronic control device contains at least one processing unit, at least one receiver for signals of a global satellite navigation system for position determining and an inertial measurement unit for detecting movement data of the multiple rotary-wing aircraft. The processing unit calculates the data of the receiver according to the method of real-time kinematics with the data of a base station and with the measured data of the inertial measurement unit for improving the accuracy of the position measurement data so that the electronic control device can sufficiently accurately steer the multiple rotary-wing aircraft to apply substances to farmlands.

IPC 8 full level
G05D 1/10 (2006.01); **A01B 79/00** (2006.01); **A01B 79/02** (2006.01)

CPC (source: EP US)
A01B 79/005 (2013.01 - EP US); **A01B 79/02** (2013.01 - EP US); **A01M 7/0089** (2013.01 - EP US); **A01M 9/00** (2013.01 - EP US); **A01M 11/00** (2013.01 - EP US); **B64C 39/024** (2013.01 - US); **B64U 10/13** (2023.01 - EP); **G05D 1/102** (2024.01 - EP US); **B64D 1/02** (2013.01 - EP); **B64D 1/18** (2013.01 - EP US); **B64U 10/13** (2023.01 - US); **B64U 30/20** (2023.01 - EP US); **B64U 50/13** (2023.01 - US); **B64U 50/19** (2023.01 - EP US); **B64U 60/50** (2023.01 - EP); **B64U 2101/60** (2023.01 - EP US); **B64U 2201/104** (2023.01 - US); **Y02A 40/28** (2017.12 - EP US)

Citation (search report)
See references of WO 2017133719A1

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 2017133719 A1 20170810; AU 2017214169 A1 20180816; CN 108780327 A 20181109; DE 102016001353 A1 20170810; DE 102016001353 B4 20170921; DE 112017000651 A5 20181025; EP 3411768 A1 20181212; US 2019047703 A1 20190214

DOCDB simple family (application)
DE 2017000008 W 20170120; AU 2017214169 A 20170120; CN 201780009956 A 20170120; DE 102016001353 A 20160205; DE 112017000651 T 20170120; EP 17718804 A 20170120; US 201716075362 A 20170120