

Title (en)
METHOD FOR RECOGNIZING A LEAF EDGE, METHOD FOR THE TARGETED TREATMENT OF PLANTS BY MEANS OF A LEAF TREATMENT AGENT, AND USE OF AN EVENT-BASED IMAGE SENSOR FOR THE RECOGNITION OF A LEAF EDGE

Title (de)
VERFAHREN ZUR ERKENNUNG EINES BLATTRANDES, VERFAHREN ZUR GEZIELTEN BEHANDLUNG VON PFLANZEN MIT EINEM BLATTBEHANDLUNGSMITTEL UND VERWENDUNG EINES EVENTBASIERTEN BILDSENSORS ZUR ERKENNUNG EINES BLATTRANDES

Title (fr)
PROCÉDÉ DE DÉTECTION D'UN BORD DE FEUILLE, PROCÉDÉ POUR LE TRAITEMENT CIBLÉ DE PLANTES AU MOYEN D'UN AGENT FOLIAIRE ET UTILISATION D'UN CAPTEUR D'IMAGES À BASE D'ÉVÈNEMENTS POUR LA DÉTECTION D'UN BORD DE FEUILLE

Publication
EP 3688660 A1 20200805 (DE)

Application
EP 18765629 A 20180906

Priority
• DE 102017217275 A 20170928
• EP 2018073932 W 20180906

Abstract (en)
[origin: WO2019063255A1] The invention relates to a method (100) for recognizing a leaf edge, comprising the following steps: sensing (110) events of an image of a ground covered with plants at a travel speed relative to the ground, a ground resolution of the image being between 0.5 and 1 mm per pixel, a bandpass filter of a first frequency range being arranged before a first pixel of the image and a bandpass filter of a second frequency range being arranged before a second pixel of the image; and determining (120) that a leaf edge has been recognized if the first pixel senses at least one event of a first polarity at a first time point t1 and the second pixel senses at least one event of a second polarity at a second time point t2, the first polarity and the second polarity being opposite, and the at least one event of a first polarity of the first pixel and the at least one event of a second polarity of the second pixel corresponding to the same location of the ground covered with plants, or if the detected events were detected either only at the first pixel or only at the second pixel. The invention further relates to a use of an event-based image sensor for the recognition of a leaf edge, a computer program, a machine-readable storage medium and an electronic control device.

IPC 8 full level
G06K 9/00 (2006.01); **G06K 9/46** (2006.01)

CPC (source: EP)
G06V 20/10 (2022.01); **G06V 20/188** (2022.01); **G06V 20/194** (2022.01)

Citation (search report)
See references of WO 2019063255A1

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)
DE 102017217275 A1 20190328; BR 112020002571 A2 20200804; EP 3688660 A1 20200805; WO 2019063255 A1 20190404

DOCDB simple family (application)
DE 102017217275 A 20170928; BR 112020002571 A 20180906; EP 18765629 A 20180906; EP 2018073932 W 20180906