

Title (en)

METHOD FOR DETECTING AND TRACKING THE POSITION OF A MOVABLE TRANSFERRING DEVICE/LOADING DEVICE OF A BUCKET-WHEEL EXCAVATOR OR BUCKET CHAIN EXCAVATOR

Title (de)

VERFAHREN ZUR ERKENNUNG UND NACHFÜHRUNG DER POSITION EINER ORTSVERÄNDERLICHEN ÜBERGABEEINRICHTUNG/VERLADEEINRICHTUNG EINES SCHAUFELRADBAGGERS ODER EIMERKETTENBAGGERS

Title (fr)

PROCÉDÉ D'IDENTIFICATION ET DE SUIVI DE LA POSITION D'UN DISPOSITIF DE TRANSBORDEMENT ET/OU D'UN DISPOSITIF DE CHARGEMENT MOBILE D'UN EXCAVATEUR À ROUE-PELLE OU D'UN EXCAVATEUR À GODETS

Publication

**EP 2707547 B1 20150408 (DE)**

Application

**EP 12718993 A 20120504**

Priority

- DE 102011100890 A 20110507
- EP 2012058202 W 20120504

Abstract (en)

[origin: CA2833999A1] The invention relates to a method for detecting and tracking the position of a mobile transferring device/loading device of a bucket-wheel excavator or bucket chain excavator (1), which bucket-wheel excavator or bucket chain excavator comprises an extraction device (2) having a pivotable superstructure having an inclinable cantilever (4), a track-drivable substructure (9), and a transferring device (12) having a loading cantilever (13) and renders conveyed material by means of a bench conveyor (17) with/without an intermediately arranged mobile transfer conveyor (37). An open-loop/closed-loop control device (20) specifies the pivot angle and the inclination of the loading cantilever of the transferring device according to the signals of the following sensors: a sensor (21) for detecting the current spatial coordinates (xB/vB/zB) of the bucket-wheel excavator or bucket chain excavator (1), a sensor (22) for detecting the current spatial coordinates (xS/yS/zS) of the discharging conveyor, a sensor (23) for detecting the current longitudinal inclination and transverse inclination of the loading cantilever (13), a sensor (24) for detecting the current pivot angle of the loading cantilever (13), a sensor (26) for detecting the current distance of the loading cantilever (13) above the discharging conveyor, a sensor (27) for detecting the current vertical positioning of the loading cantilever (13) above the discharging conveyor, and a sensor for monitoring cover filling in/at the transfer point of the loading cantilever (13).

IPC 8 full level

**E02F 7/00** (2006.01); **E02F 3/26** (2006.01); **E02F 9/20** (2006.01); **E21C 47/02** (2006.01); **E21F 13/00** (2006.01)

CPC (source: EP US)

**E02F 3/26** (2013.01 - EP US); **E02F 7/00** (2013.01 - US); **E02F 7/02** (2013.01 - EP US); **E02F 9/205** (2013.01 - EP US); **E21C 47/02** (2013.01 - EP US); **E21F 13/00** (2013.01 - US)

Cited by

DE102019200773A1; WO2020151945A1

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

DOCDB simple family (publication)

**DE 102011100890 A1 20121108**; AU 2012252544 A1 20131128; AU 2012252544 B2 20150903; BR 112013028622 A2 20170124; CA 2833999 A1 20121115; CL 2013003170 A1 20140516; CN 103732831 A 20140416; CN 103732831 B 20151202; EP 2707547 A1 20140319; EP 2707547 B1 20150408; HR P20150753 T1 20150911; HU E026594 T2 20160628; PE 20141751 A1 20141119; PL 2707547 T3 20150930; RS 54115 B1 20151231; RU 2013154104 A 20150620; RU 2556095 C1 20150710; US 2014067194 A1 20140306; WO 2012152674 A1 20121115

DOCDB simple family (application)

**DE 102011100890 A 20110507**; AU 2012252544 A 20120504; BR 112013028622 A 20120504; CA 2833999 A 20120504; CL 2013003170 A 20131105; CN 201280022138 A 20120504; EP 12718993 A 20120504; EP 2012058202 W 20120504; HR P20150753 T 20150708; HU E12718993 A 20120504; PE 2013002465 A 20120504; PL 12718993 T 20120504; RS P20150447 A 20120504; RU 2013154104 A 20120504; US 201314073496 A 20131106