

Title (en)

ENERGY-EFFICIENT CONTROL OF A DEVICE FOR CONTINUOUSLY CONVEYING MATERIAL

Title (de)

ENERGIEEFFIZIENTE STEUERUNG EINER VORRICHTUNG ZUR KONTINUIERLICHEN MATERIALFÖRDERUNG

Title (fr)

COMMANDE ÉNERGÉTIQUEMENT EFFICACE D'UN DISPOSITIF DE TRANSPORT EN CONTINU DE MATÉRIAU

Publication

EP 4077175 A1 20221026 (DE)

Application

EP 20824506 A 20201210

Priority

- DE 102019220430 A 20191220
- EP 2020085400 W 20201210

Abstract (en)

[origin: WO2021122252A1] A control system (1) for a device (10) for continuously conveying material is provided for at least one conveyor belt apparatus which is designed for continuously conveying the material and has at least one conveyor belt, the conveyor belt apparatus being operable by means of one or more drives (2) in multiple working processes to provide a predefinable target conveyor current, wherein the control system is designed to detect at least one value of a power and/or energy consumed by at least one of the drives during a working process and to determine an energy efficiency for the respective working process and for the predefined target conveyor current using the at least one value of the consumed power and/or energy, wherein the control system (1) is also designed to provide control data relating to the drive speed for the at least one drive depending on the energy efficiency.

IPC 8 full level

B65G 23/00 (2006.01); **B65G 43/08** (2006.01); **G05B 13/00** (2006.01)

CPC (source: EP US)

B65G 23/00 (2013.01 - EP); **B65G 43/08** (2013.01 - EP US); **G05B 13/0205** (2013.01 - EP); **B65G 2203/0241** (2013.01 - EP US);
B65G 2203/0258 (2013.01 - EP US); **G05B 2219/25387** (2013.01 - EP); **Y02P 70/10** (2015.11 - EP); **Y02P 80/10** (2015.11 - EP)

Citation (search report)

See references of WO 2021122252A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102019220430 A1 20210624; AU 2020410226 A1 20220609; BR 112022012189 A2 20220906; CL 2022001704 A1 20230210;
EP 4077175 A1 20221026; US 2023021955 A1 20230126; WO 2021122252 A1 20210624

DOCDB simple family (application)

DE 102019220430 A 20191220; AU 2020410226 A 20201210; BR 112022012189 A 20201210; CL 2022001704 A 20220620;
EP 2020085400 W 20201210; EP 20824506 A 20201210; US 202017786755 A 20201210