

Title (en)

RANGE SENSING CONVEYOR PACKAGE MANAGEMENT SYSTEM FOR MEASURING AND CONTROLLING DENSITY OF PARCELS ON A CONVEYOR

Title (de)

REICHWEITENERFASENDES FÖRDERPACKUNGVERWALTUNGSSYSTEM ZUR MESSUNG UND STEUERUNG DER DICHTE VON PAKETEN AUF EINEM FÖRDERER

Title (fr)

SYSTÈME DE GESTION D'EMBALLAGE DE CONVOYEUR DE DÉTECTION DE PORTÉE POUR MESURER ET CONTRÔLER LA DENSITÉ DES COLIS SUR UN CONVOYEUR

Publication

**EP 3999458 A4 20240103 (EN)**

Application

**EP 20840370 A 20200716**

Priority

- US 201962874902 P 20190716
- US 2020042429 W 20200716

Abstract (en)

[origin: WO2021011833A1] The present invention relates to the field of using different sensing and detection methods to determine parcel flow density 1D lineal, 2D area or 3D volumetrically on a selected section of a feed conveyor and receiving conveyor and adjusting conveyor speed ratios proportioned according to ratio of desired density to current density to increase the density or volume of parcels in a selected area of the receiving conveyor.

IPC 8 full level

**B65G 47/71** (2006.01); **B65G 43/08** (2006.01); **B65G 47/31** (2006.01)

CPC (source: EP)

**B07C 1/04** (2013.01); **B65G 43/08** (2013.01); **B65G 43/10** (2013.01); **B65G 47/31** (2013.01); **B65G 47/681** (2013.01); **B65G 2201/0285** (2013.01); **B65G 2203/0241** (2013.01); **B65G 2203/044** (2013.01)

Citation (search report)

- [I] DE 102013212900 A1 20150108 - SIEMENS AG [DE]
- [A] US 2016221762 A1 20160804 - SCHROADER STEVEN VANN [US]
- [A] DE 102016121852 A1 20180517 - KRONES AG [DE]
- [A] DE 102012212331 A1 20140515 - SIEMENS AG [DE]
- See references of WO 2021011833A1

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)

**WO 2021011833 A1 20210121; WO 2021011833 A4 20210415;** CN 114341032 A 20220412; CN 114341032 B 20240524;  
EP 3999458 A1 20220525; EP 3999458 A4 20240103; JP 2022540937 A 20220920; JP 7397162 B2 20231212

DOCDB simple family (application)

**US 2020042429 W 20200716;** CN 202080064651 A 20200716; EP 20840370 A 20200716; JP 2022502938 A 20200716