

Title (en)

MULTISTAGE CONVEYOR UNITS FOR SEPARATING PARCELS

Title (de)

MEHRSTUFIGE FÖRDEREINHEITEN ZUM VEREINZELN VON PAKETEN

Title (fr)

TRANSPORTEURS MULTI-ÉTAGES DESTINÉS À SÉPARER DES COLIS

Publication

EP 3956252 A4 20230621 (EN)

Application

EP 20779677 A 20200327

Priority

- US 201962824557 P 20190327
- US 2020025553 W 20200327

Abstract (en)

[origin: CN113905962A] A multistage multi-lane singulator conveyor system for separating side by side packages in stages. A first conveying lane having a high friction surface is combined with a second conveying lane adjacent thereto in lateral flow communication therewith having a lower friction conveying surface including both forward and lateral conveying forces urging parcels forward and away from the first conveying lane. The conveying surface of the second conveying lane may form an inclined plane extending above an inner lateral receiving edge of an adjacent third conveying lane having a high friction surface. Each of the high friction conveying lanes may utilize a plurality of narrow belts to vary the area of the high friction surface. Assembling one or more multi-lanes comprising narrow belts on a conveyor end to end, or assembling multi-lane conveyors end to end provides means to control the residence time and lateral movement of articles.

IPC 8 full level

B65G 47/30 (2006.01); **B65G 13/02** (2006.01); **B65G 13/10** (2006.01); **B65G 15/12** (2006.01); **B65G 47/256** (2006.01); **B65G 47/54** (2006.01); **B65G 47/71** (2006.01)

CPC (source: EP)

B07C 1/10 (2013.01); **B07C 5/02** (2013.01); **B07C 5/36** (2013.01); **B65G 13/02** (2013.01); **B65G 13/10** (2013.01); **B65G 47/256** (2013.01); **B65G 47/54** (2013.01); **B65G 47/684** (2013.01); **B65G 47/71** (2013.01); **B65G 15/12** (2013.01); **B65G 2201/025** (2013.01)

Citation (search report)

- [XAI] EP 3060504 A2 20160831 - FIVES INTRALOGISTICS CORP [US]
- [A] US 2017173635 A1 20170622 - SCHROADER STEVEN VANN [US]
- See also references of WO 2020198718A1

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)

CN 113905962 A 20220107; CN 113905962 B 20240517; EP 3956252 A1 20220223; EP 3956252 A4 20230621

DOCDB simple family (application)

CN 202080040007 A 20200327; EP 20779677 A 20200327