

Title (en)

Device and method for creating and/or for transporting a layer transport flow of flat, flexible objects

Title (de)

Vorrichtung und Verfahren zur Bildung und/oder zum Transport eines Schuppenstroms von flachen, flexiblen Objekten

Title (fr)

Dispositif et procédé de formation et/ou de transport d'un flux de tuiles d'objets plats flexibles

Publication

EP 2660174 A3 20140820 (DE)

Application

EP 13165945 A 20130430

Priority

DE 102012207285 A 20120502

Abstract (en)

[origin: EP2660174A2] The device (70) has a front sucking and transport device (M1) and a rear sucking and transport device (M2), which are arranged on different sides of a transportation path (TP) such that the sucking and transport devices are displaced against each other toward the transportation path about length (L). The sucking and transport devices are arranged distance from each other in a direction transverse to the transportation path. The rear sucking and transport device is bent at angle opposite to a direction of the transportation path. An independent claim is also included for a method for formation and transportation of a shingled stream of flat, flexible objects along a transportation path.

IPC 8 full level

B65H 29/66 (2006.01)

CPC (source: EP US)

B65H 5/224 (2013.01 - US); **B65H 5/36** (2013.01 - US); **B65H 29/6609** (2013.01 - EP US); **B65H 29/6654** (2013.01 - EP US); **B65H 2220/09** (2013.01 - EP US); **B65H 2301/44734** (2013.01 - EP US); **B65H 2301/44735** (2013.01 - EP US); **B65H 2402/10** (2013.01 - EP US); **B65H 2404/2691** (2013.01 - EP US); **B65H 2406/3124** (2013.01 - EP US); **B65H 2406/323** (2013.01 - EP US); **B65H 2406/36625** (2013.01 - EP US); **B65H 2513/10** (2013.01 - EP US); **B65H 2701/1912** (2013.01 - EP US)

C-Set (source: EP US)

EP

1. **B65H 2301/44735 + B65H 2220/01**
2. **B65H 2301/44734 + B65H 2220/02**
3. **B65H 2301/44734 + B65H 2220/01 + B65H 2220/02 + B65H 2220/09**
4. **B65H 2513/10 + B65H 2220/02**

US

1. **B65H 2301/44735 + B65H 2220/01**
2. **B65H 2301/44734 + B65H 2220/02**
3. **B65H 2301/44734 + B65H 2220/01 + B65H 2220/02 + B65H 2220/09**
4. **B65H 2513/10 + B65H 2220/02**
5. **B65H 2406/323 + B65H 2220/09**
6. **B65H 2406/36625 + B65H 2220/09**
7. **B65H 2406/3124 + B65H 2220/09**

Citation (search report)

- [Y] EP 0503531 A1 19920916 - SPIESS GMBH G [DE]
- [YA] US 6494452 B1 20021217 - KARASIEWICZ KRZYSZTOF [US]
- [YA] EP 0962414 A2 19991208 - MARQUIP INC [US]
- [YA] US 2011056804 A1 20110310 - KEARNEY PETER XAVIER [DE], et al

Cited by

WO2022106393A1; WO2022106411A1

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)

EP 2660174 A2 20131106; EP 2660174 A3 20140820; EP 2660174 B1 20191120; CN 103381976 A 20131106; DE 102012207285 A1 20131107; ES 2773118 T3 20200709; JP 2013234070 A 20131121; US 2013292894 A1 20131107; US 8960666 B2 20150224

DOCDB simple family (application)

EP 13165945 A 20130430; CN 201310157447 A 20130502; DE 102012207285 A 20120502; ES 13165945 T 20130430; JP 2013096818 A 20130502; US 201313873361 A 20130430