

Title (en)

DEVICE FOR UNSTACKING FLAT OBJECTS THAT DETECTS THE PATH OF UNSTACKED OBJECTS

Title (de)

VORRICHTUNG ZUM VEREINZELN VON FLACHEN GEGENSTÄNDEN MIT MITTELN ZUM ERFASSEN DES TRANSPORTVERLAUFS DER VEREINZELTEN GEGENSTÄNDE

Title (fr)

DISPOSITIF DE DÉPILAGE D'OBJETS PLATS AVEC DÉTECTION DE LA TRACE DES OBJETS DÉPILÉS

Publication

EP 2454178 A1 20120523 (FR)

Application

EP 10742202 A 20100705

Priority

- FR 2010051417 W 20100705
- FR 0954931 A 20090716

Abstract (en)

[origin: WO2011007077A1] The device (1) for unstacking flat objects includes: a magazine (3) in which the objects (2) to be unstacked are stacked, by the edges thereof, against a jogging edge (5) and opposite an unstacking plate (4) that is provided so as to separate a first object (2A) and carry said object in an unstacking direction (A) perpendicular to the jogging edge (5); a conveyor (7) for the unstacked objects that has an inlet (7A) downstream from the jogging edge (5); and a retaining means (8) that is placed between the jogging edge (5) and the conveyor inlet (7A) and is controlled so as to exert, on an object (2A, 2B), a retaining force counteracting the movement of the object. The device includes a detection device (9, 10) capable of sensing and analyzing the path of the object moving between the jogging edge and the conveyor, in order to detect the presence of a plurality of jointly moving objects and control said retaining means on the basis of said detection so as to separate said objects.

IPC 8 full level

B65H 3/54 (2006.01); **B65H 1/02** (2006.01); **B65H 7/12** (2006.01)

CPC (source: EP US)

B65H 1/025 (2013.01 - EP US); **B65H 3/54** (2013.01 - EP US); **B65H 7/12** (2013.01 - EP US); **B65H 2511/13** (2013.01 - EP US);
B65H 2511/20 (2013.01 - EP US); **B65H 2511/413** (2013.01 - EP US); **B65H 2511/524** (2013.01 - EP US); **B65H 2515/20** (2013.01 - EP US);
B65H 2515/30 (2013.01 - EP US); **B65H 2553/42** (2013.01 - EP US)

Citation (search report)

See references of WO 2011007077A1

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2011007077 A1 20110120; AU 2010272408 A1 20110120; AU 2010272408 B2 20120913; DK 2454178 T3 20130506;
EP 2454178 A1 20120523; EP 2454178 B1 20130306; FR 2948109 A1 20110121; FR 2948109 B1 20110617; JP 2012516232 A 20120719;
JP 5456793 B2 20140402; PT 2454178 E 20130510; RU 2011121869 A 20121210; RU 2482045 C2 20130520; US 2011129324 A1 20110602;
US 8764009 B2 20140701

DOCDB simple family (application)

FR 2010051417 W 20100705; AU 2010272408 A 20100705; DK 10742202 T 20100705; EP 10742202 A 20100705; FR 0954931 A 20090716;
JP 20111546931 A 20100705; PT 10742202 T 20100705; RU 2011121869 A 20100705; US 92226810 A 20100705