

Title (en)
Switching device for flat products

Title (de)
Umlenkvorrichtung für flächige Produkte

Title (fr)
Dispositif de déviation pour produits plats

Publication
EP 2399854 A3 20121219 (DE)

Application
EP 11171069 A 20110622

Priority
DE 102010025224 A 20100623

Abstract (en)
[origin: EP2399854A2] The device (10) has a feeder (12) for feeding flat products (18) in a transport direction, and conveying units for retaining and forwarding the products in another transport direction. The conveying units comprise a set of guiding elements. The flat products are accommodated between the guiding-elements that are in holding engagement, where flat sides of the products are transported in the latter transport direction. The guiding elements gradually move out of the holding engagement during transporting the products in latter transport direction. An independent claim is also included for a method for transporting flat products.

IPC 8 full level
B65H 29/40 (2006.01); **B65H 31/06** (2006.01)

CPC (source: EP US)
B65H 29/40 (2013.01 - EP US); **B65H 31/06** (2013.01 - EP US); **B65H 2301/42142** (2013.01 - EP US); **B65H 2404/3111** (2013.01 - EP US); **B65H 2404/6591** (2013.01 - EP US); **B65H 2701/1916** (2013.01 - EP US)

Citation (search report)

- [X] DE 4023234 A1 19910221 - BREHMER BUCHBINDEREIMASCHINEN [DE]
- [X] DE 4023233 A1 19910214 - BREHMER BUCHBINDEREIMASCHINEN [DE]
- [X] EP 0240691 A1 19871014 - GRAPHIA HOLDING AG [CH]
- [X] US 2925271 A 19600216 - FAEBER HARRY W
- [X] EP 0442590 A2 19910821 - KLUESSENDORF AG [DE]
- [A] EP 0061631 A1 19821006 - BARTESAGHI ANGELO

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 2399854 A2 201111228; EP 2399854 A3 20121219; DE 102010025224 A1 20111229; DE 102010025224 B4 20140821; US 2011315511 A1 20111229; US 8302762 B2 20121106

DOCDB simple family (application)
EP 11171069 A 20110622; DE 102010025224 A 20100623; US 201113166290 A 20110622