

Title (en)

APPARATUS FOR SEPARATING SHEET MATERIAL

Title (de)

VORRICHTUNG FÜR DIE VEREINZELUNG VON BLATTGUT

Title (fr)

SYSTÈME DE SÉPARATION DE FEUILLES

Publication

EP 2247518 B1 20110928 (DE)

Application

EP 09705657 A 20090122

Priority

- EP 2009000381 W 20090122
- DE 102008006743 A 20080130

Abstract (en)

[origin: US7883088B2] Apparatus for singling sheet material, in particular bank notes, which is inputted into an input area of the apparatus as a stack and is transported up to a singler, which transfers individual pieces of sheet material of the stack of sheet material to a sheet transport system, which transports the singled sheet material in a transport direction, a sensor disposed in transport direction upstream of the singler, which substantially extends over the width of the input area, generating signals which specify whether and in which area of the width of the input area the sheet material is present, and a control device evaluating the signals of the sensor during a transport of the stack of sheet material to the singler and comparing occurring fluctuations and changes of the signals of the sensor regarding the presence or absence of sheet material with predetermined threshold values for fluctuations and changes of the signals of the sensor, in order to derive a statement from the occurring fluctuations and changes of the signals of the sensor, whether the pieces of sheet material forming the stack of sheet material are aligned to each other with respect to their edges, and whether the stack of sheet material has an alignment which substantially is in parallel to the transport direction of the transport system.

IPC 8 full level

B65H 1/22 (2006.01); **B65H 7/06** (2006.01); **G07D 11/00** (2006.01)

CPC (source: EP US)

B65H 1/22 (2013.01 - EP US); **B65H 7/06** (2013.01 - EP US); **G07D 11/14** (2019.01 - EP US); **G07D 11/237** (2019.01 - EP US); **B65H 2511/24** (2013.01 - EP US); **B65H 2511/51** (2013.01 - EP US); **B65H 2511/515** (2013.01 - EP US); **B65H 2513/512** (2013.01 - EP US); **B65H 2553/412** (2013.01 - EP US); **B65H 2701/1912** (2013.01 - EP US)

C-Set (source: EP US)

EP

1. **B65H 2511/51 + B65H 2220/01**
2. **B65H 2511/515 + B65H 2220/01**
3. **B65H 2513/512 + B65H 2220/02**
4. **B65H 2511/24 + B65H 2220/03**

US

1. **B65H 2511/24 + B65H 2220/03**
2. **B65H 2511/51 + B65H 2220/01**
3. **B65H 2511/515 + B65H 2220/01**
4. **B65H 2513/512 + B65H 2220/02**

Designated contracting state (EPC)

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 TR

DOCDB simple family (publication)

US 2009206541 A1 20090820; **US 7883088 B2 20110208**; AT E526266 T1 20111015; DE 102008006743 A1 20090806; EP 2247518 A1 20101110; EP 2247518 B1 20110928; ES 2373632 T3 20120207; WO 2009095179 A1 20090806

DOCDB simple family (application)

US 36321809 A 20090130; AT 09705657 T 20090122; DE 102008006743 A 20080130; EP 09705657 A 20090122; EP 2009000381 W 20090122; ES 09705657 T 20090122