

Title (en)
Singulation apparatus of a cartoning machine

Title (de)
Vereinzelungsvorrichtung einer Kartoniermaschine

Title (fr)
Dispositif de séparation d'une machine d'encartonnage

Publication
EP 1394049 B1 20060201 (DE)

Application
EP 03405600 A 20030818

Priority
• CH 14612002 A 20020827
• CH 18252002 A 20021030

Abstract (en)
[origin: EP1394049A1] The device removes blanks from a magazine, and moves them from extraction into a horizontal transfer position. It has a motor-driven pivot arm (5) on a carriage (2) moving in a straight line. During extraction and transfer of a blank, a pivot movement of the arm is superimposed by a straight movement of the carriage. The pivot arm is rigid, especially angled, and has suction holders (6) for individual blank extraction. Each has a holder bar (60) fastened to the pivot arm and suction bars (62) with individual vacuum suction parts (64).

IPC 8 full level
B65B 43/18 (2006.01); **B65H 3/08** (2006.01)

CPC (source: EP US)
B65B 43/185 (2013.01 - EP US); **B65H 3/0808** (2013.01 - EP US); **B65H 3/0816** (2013.01 - EP US); **B65H 3/0883** (2013.01 - EP US); **B65H 2511/10** (2013.01 - EP US); **B65H 2511/20** (2013.01 - EP US); **B65H 2555/24** (2013.01 - EP US); **B65H 2555/30** (2013.01 - EP US); **B65H 2701/1764** (2013.01 - EP US)

Cited by
EP2962970A1; GB2572517A; GB2572517B; EP3819240A1; US9616575B2; WO2014108243A1; WO2018130990A1; WO2021089404A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1394049 A1 20040303; **EP 1394049 B1 20060201**; AT E316906 T1 20060215; CA 2435585 A1 20040227; DE 50302333 D1 20060413; ES 2257657 T3 20060801; US 2004042892 A1 20040304; US 6997671 B2 20060214

DOCDB simple family (application)
EP 03405600 A 20030818; AT 03405600 T 20030818; CA 2435585 A 20030718; DE 50302333 T 20030818; ES 03405600 T 20030818; US 64313403 A 20030818