

Title (en)

DEVICE FOR UNPILING RELATIVELY FLAT ARTICLES SUCH AS LETTERS OR MAIL ENVELOPES

Publication

**EP 0295170 B1 19911211 (FR)**

Application

**EP 88401308 A 19880527**

Priority

FR 8707527 A 19870527

Abstract (en)

[origin: US4867430A] A device for unstacking relatively flat objects such as letters or postal packets of various different lengths, widths, and thicknesses. The device includes: a conveyor for conveying stacks of objects as well as an object separating and grasping mechanism for separating and grasping the objects one-by-one, and a transport conveyor for transporting the objects one after another. The object separating and grasping mechanism has retainer and guide for retaining and guiding a stack of objects, for example a wall against which one of the edges of each object is pressed and object-grasping suction cup for engaging the first object of the stack as well as a displacement mechanism for displacing the cups initially in a first direction substantially perpendicular to the direction of stack advance and substantially parallel to the plane of the retainer and guide means, and then in a second direction which is substantially perpendicular to the movement of the first direction, in order to convey the object towards the transport conveyor.

IPC 1-7

**B07C 1/02; B65H 3/08; B65H 5/08**

IPC 8 full level

**B07C 1/02** (2006.01); **B65H 3/08** (2006.01); **B65H 5/08** (2006.01)

CPC (source: EP US)

**B07C 1/025** (2013.01 - EP US); **B65H 3/0808** (2013.01 - EP US); **B65H 5/08** (2013.01 - EP US)

Cited by

EP0582869A3; EP1276078A3; EP0696482A3; US5657982A

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0295170 A1 19881214; EP 0295170 B1 19911211**; AT E70249 T1 19911215; DE 3866791 D1 19920123; ES 2029049 T3 19920716; FR 2615840 A1 19881202; FR 2615840 B1 19900608; US 4867430 A 19890919

DOCDB simple family (application)

**EP 88401308 A 19880527**; AT 88401308 T 19880527; DE 3866791 T 19880527; ES 88401308 T 19880527; FR 8707527 A 19870527; US 20052088 A 19880526