

Title (en)

Device for separating (intermediate) layers from piles of stacked products.

Title (de)

Vorrichtung zum Abheben von (Zwischen-)Lagen gestapelter Gegenstände.

Title (fr)

Dispositif pour séparer des couches (intermédiaires) d'une pile de produits empilés.

Publication

EP 0437760 B1 19940330 (DE)

Application

EP 90124401 A 19901217

Priority

DE 4001053 A 19900116

Abstract (en)

[origin: EP0437760A2] 1. Device for separating (intermediate) layers from piles of stacked products. <??>2.1 On pallets 10 loaded with a plurality of layers (stack layers 11) relatively thin intermediate layers 13 of cardboard or the like are normally located between the stack layers 11. These must be cleared away after removing a stack layer 11. <??>For this purpose a suction lifter 16 with suction plate 17 is provided which raises the freed intermediate layer by means of suction air and conveys it away. In order to prevent undesirable relative displacements of the stacked products (cut stack 12) during this process, the suction lifter 16 is equipped with hold-down devices 22. These pass through gaps 23 in the intermediate layer 13 until they rest on the cut stacks 12 in such a way that these are fixed when the intermediate layer 13 is raised. <??>2.2 For further securing of the products (cut stack 12) profiled sections 31 are fitted on the suction lifter 16. These engage positively in hollow cavities 32, which are formed between adjacent products (cut stacks 12). <IMAGE>

IPC 1-7

B65H 3/08

IPC 8 full level

B65G 59/04 (2006.01); **B65H 1/04** (2006.01); **B65H 3/08** (2006.01)

CPC (source: EP US)

B65H 3/0816 (2013.01 - EP US); **Y10S 414/108** (2013.01 - EP US)

Cited by

FR2681843A1; EP0744363A3

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0437760 A2 19910724; **EP 0437760 A3 19910911**; **EP 0437760 B1 19940330**; BR 9100158 A 19911022; CA 2033407 A1 19910717; DE 4001053 A1 19910718; DE 59005200 D1 19940505; JP H04213525 A 19920804; US 5174712 A 19921229

DOCDB simple family (application)

EP 90124401 A 19901217; BR 9100158 A 19910115; CA 2033407 A 19901228; DE 4001053 A 19900116; DE 59005200 T 19901217; JP 351291 A 19910116; US 63509590 A 19901228