

Title (en)
Gripper for flat stacked objects

Title (de)
Stapelgreifer

Title (fr)
Dispositif de préhension pour des objets plats empilés

Publication
EP 0816272 B1 20020320 (DE)

Application
EP 97109230 A 19970606

Priority
DE 19626802 A 19960703

Abstract (en)
[origin: EP0816272A1] The device has a stack holder chamber (22) with a guide (14-20) on all four sides, and a stack support (24,26). This is positioned in the area of the lower guide ends, and moved into and out of the stack holder chamber by a horizontal movement. The stack support has at least one preferably telescopic cylinder (28,30), or a thrust chain, and at least one flexible support belt (36,38). The belt passes over a slidable deflection pulley (32,34). To move the stack support in and out, the lower belt section (37,39) is drawn out of the chamber, while the upper section is tensioned between the pulley and a fixed point outside the chamber.

IPC 1-7
B65H 31/30; **B65H 31/32**

IPC 8 full level
B65B 5/08 (2006.01); **B25J 15/00** (2006.01); **B65G 57/03** (2006.01); **B65H 31/30** (2006.01); **B65H 31/32** (2006.01)

CPC (source: EP US)
B65H 31/30 (2013.01 - EP US); **B65H 31/3045** (2013.01 - EP); **B65H 31/3063** (2013.01 - EP); **B65H 31/32** (2013.01 - EP US); **B65H 2301/4224** (2013.01 - EP US); **B65H 2301/4225** (2013.01 - EP US)

Citation (examination)
DE 4203118 A1 19930513 - WINDMOELLER & HOELSCHER [DE]

Cited by
CN104128923A; CN111115241A; AT16811U1; US8622685B2; US9764909B2; WO2010047595A1; US8235436B2; EP2072430A1

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