

Title (en)  
GRIPPING HEAD

Publication  
**EP 0187120 B1 19890315 (DE)**

Application  
**EP 85810575 A 19851205**

Priority  
CH 611884 A 19841221

Abstract (en)  
[origin: US4687241A] A gripper head for the pick-up of a single piece of material from a stack of such pieces. The gripper head is provided with curved needles mounted on the ends of two concentric hollow cylinders. Each hollow cylinder comprises a spiral guide slit. The pitch direction of the guide slit of one cylinder is opposite the pitch direction of the guide slit of the other cylinder. The guide slits cooperate with the gripper head casing to produce rotation of the cylinders in directions opposite to one another during axial advancement of the cylinders within the casing. The cylinders are advanced within the casing by means of a pressure bolt connected to the cylinders. The magnitude of the advancement is determined by the position of an adjustable stop ring located within the casing. In operation, the two sets of curved needles extend from the casing edge and simultaneously rotate in opposite directions in an adjustable and retractable fashion.

IPC 1-7  
**B65H 3/22**

IPC 8 full level  
**B65H 3/22** (2006.01)

CPC (source: EP US)  
**B65H 3/22** (2013.01 - EP US)

Cited by  
FR2754804A1; GB2195618A; EP0385234A3; EP0461074A3; DE3640404A1

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DE FR GB IT SE

DOCDB simple family (publication)  
**EP 0187120 A2 19860709; EP 0187120 A3 19870318; EP 0187120 B1 19890315**; CH 667259 A5 19880930; DE 3568761 D1 19890420; JP S61155136 A 19860714; US 4687241 A 19870818

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