

Title (en)

Method and device for making hinges in flat cardboard material.

Title (de)

Verfahren und Vorrichtung zur Erzeugung von Gelenkscharnieren in Flachmaterial aus Karton.

Title (fr)

Procédé et dispositif pour la fabrication des charnières en matériau plat de carton.

Publication

EP 0426188 B1 19940323 (DE)

Application

EP 90120988 A 19901102

Priority

DE 3936393 A 19891102

Abstract (en)

[origin: EP0426188A1] The invention relates to a method for making hinges in flat cardboard material, which on one side are groove-shaped and on the other side are bead-shaped, for example for file covers, book bindings and cardboard boxes with folding tops and the like. The flat material is compressed on the groove side by a compression edge (14), which plunges into the flat material, and at the same time folded, forming the groove, and on the bead side deformed by bending at two places at the same distance on both sides of the compression edge about in each case a bending edge parallel to the compression edge, in the opposite direction to the folding, forming bead outer edges. During the plunging of the compression edge into the flat material, the mutual distance between the bending edges is reduced. In order to obtain an easy-running hinge with only low restoring forces and to avoid surface damage in the compression process, it is proposed according to the invention that the flat material parts projecting beyond the bead outer edges are clamped independently of one another at clamping points (46, 52) close to the neighbouring bending edges and, during plunging of the compression edge into the flat material, are moved towards one another in mutual alignment.

IPC 1-7

B31B 1/25

IPC 8 full level

B31B 50/25 (2017.01)

CPC (source: EP US)

B31B 50/00 (2017.07 - EP); **B31B 50/252** (2017.07 - EP US)

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

EP 0426188 A1 19910508; **EP 0426188 B1 19940323**; DE 4034865 A1 19910508; DE 59005092 D1 19940428

DOCDB simple family (application)

EP 90120988 A 19901102; DE 4034865 A 19901102; DE 59005092 T 19901102