

Title (en)

DEVICE FOR TRANSFERRING WORK PIECES THROUGH A MULTISTAGE PRESS FOR MASSIVE CONVERSION

Publication

EP 0184079 A3 19871021 (DE)

Application

EP 85114814 A 19851121

Priority

DE 3443874 A 19841201

Abstract (en)

[origin: EP0184079A2] 1. Apparatus for conveying workpieces (5) in a multi-stage press for massive forming, comprising grippers (1, 41) which are movable in a reciprocating manner and which take hold of the workpieces (5) and transfer them into the processing stages (2, 3, 4), each of the grippers (1, 41) being arranged in the extension of a coupler (6, 46) articulated by two swinging arms (9) and the swinging arms (9) being drivable in a swinging motion via drive means (11, 12, 13, 14, 15, 52), characterized in that each of the swinging arms (9), in the end part remote from the coupler (6, 46), is mounted on the frame side, and at least one swinging lever (9) can be driven about this swinging point, that at least the swinging arms (9) in each case forming a pair are of the same length and therefore the motion of the coupler (6, 46) together with the grippers (1, 41) between the processing stages (2, 3, 4) takes place on a circular arc (10') predetermined by the swinging arms (9), and that the motion of the grippers (1, 41) is limited by a reversal in the motion of the drive means (11, 12, 13, 14, 15, 52) when the particular processing stage (2, 3, 4) is reached.

IPC 1-7

B21K 27/04

IPC 8 full level

B21K 27/04 (2006.01)

CPC (source: EP)

B21K 27/04 (2013.01)

Citation (search report)

- [AD] DE 2434540 C2 19830908
- [AD] DE 2148529 C2 19820826
- [YD] DE 1144085 C
- [Y] DE 1075924 C
- [Y] DE 1269087 C
- [Y] DE 1251630 C
- [Y] DE 2741581 B2 19791115

Cited by

US5775163A; CH712403A1; CH712402A1; CH712401A1; CN109070179A; US2019134694A1; US10737313B2; US10537932B2; WO2017186672A1; WO2017186673A1

Designated contracting state (EPC)

BE CH DE LI NL

DOCDB simple family (publication)

EP 0184079 A2 19860611; EP 0184079 A3 19871021; EP 0184079 B1 19890719; DE 3443874 A1 19860710; DE 3571564 D1 19890824

DOCDB simple family (application)

EP 85114814 A 19851121; DE 3443874 A 19841201; DE 3571564 T 19851121