

Title (en)  
Transfer device for multi-stage presses

Title (de)  
Transfereinrichtung für Mehrstationenpressen

Title (fr)  
Dispositif de transfert dans presse de formages à postes multiples

Publication  
**EP 0778094 B1 20010404 (DE)**

Application  
**EP 96119403 A 19961204**

Priority  
DE 19545570 A 19951207

Abstract (en)  
[origin: EP0778094A1] A transfer system for a multistage press has two adjustable supports which have grippers and which are arranged parallel to a row of workpiece work stations, the novelty being that the supports are in the form of two parallel gripper rails (12, 13) arranged on one side of the row of work stations (dies 5a to 5e). Preferably, each gripper has two fingers (14, 15) mounted on different gripper rails (12, 13) the rails being counter-adjustable in their longitudinal direction with respect to the workpiece to effect gripping and release of a workpiece. Preferably, the fingers (14, 15) consists of rigid cantilevers which follow arcuate paths during their gripping and release movements. The rails (12, 13) are preferably supported on a common support (19) which can be moved with respect to the press preferably by swivelling into a rest position about a pivot axis parallel to a line defined by the press tools (5). Preferably, the support (19) has a gear system (31, 32, 33, 34) which effects the counter-adjustment of the rails (12, 13) and which is connected to a common drive system (36, 39, 41, 42). Each rail (12, 13) is preferably supported by two crank arms and all the crank arms (23, 27; 24, 28) are driven by a central drive (45, 43) via the gear system (31-34). Preferably, the support (19) can be moved perpendicularly to its length direction (21) by a lifting device, so that the fingers (14, 15) can move towards and away from the tools, or can be moved longitudinally by a pusher device, so that the fingers (14, 15) can move parallel to a row of tools. Preferably, the central drive (45, 43) is used for the gripping motion of the rails (12, 13) and the advancing and lifting motions of the support (19).

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**B21K 27/04; B21D 43/05**

IPC 8 full level  
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Cited by  
CN104156626A; EP2233221A2

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CH DE ES FR GB IT LI SE

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