

Title (en)

PRESS PLANT WITH SEVERAL PRESSES FOR TREATING SHEET STEEL PARTS

Publication

EP 0388610 B1 19930609 (DE)

Application

EP 90102072 A 19900202

Priority

DE 3905069 A 19890218

Abstract (en)

[origin: EP0388610A1] The hybrid press plant comprises a plurality of individual presses with a drawing press (1) and progressive presses (2). These are set up via stands (16, 17) on common mounting surfaces (20). A tool is assigned to each press (1, 2), comprising a top piece, a ram (26), a press table (15) and a sliding table (11). The tools can be replaced by means of the sliding table (11). Guided through the hybrid press plant is a transfer device (13), the individual parts of which are arranged above the plane in which the sheet-metal parts are transported and grasp the sheet-metal parts from above. Intermediate deposition points between two processing stages are designated by (12). This reduces the length of the transfer movement of the sheet-metal parts per punch stroke. Large-area and thin-walled, hence intrinsically stable, sheet-metal parts can be transferred. <IMAGE>

IPC 1-7

B21D 43/05

IPC 8 full level

B21D 43/00 (2006.01); **B21D 43/05** (2006.01); **B30B 13/00** (2006.01); **B30B 15/00** (2006.01)

CPC (source: EP US)

B21D 43/052 (2013.01 - EP US); **B21D 43/055** (2013.01 - EP US); **B30B 15/04** (2013.01 - EP US)

Cited by

EP0653254A3; FR2976199A1; DE19506518C2; EP0850752A1; EP2463039A1; ITMI20101949A1; DE10328447A1; DE10328447B4; DE19855862A1; DE19855862C2; EP0581008A3; EP0722793A3; US8429811B2; US6453718B1

Designated contracting state (EPC)

AT BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

EP 0388610 A1 19900926; **EP 0388610 B1 19930609**; **EP 0388610 B2 19980304**; AT E90236 T1 19930615; CA 1316047 C 19930413; DE 3905069 A1 19900823; DE 3905069 C2 20001012; DE 59001647 D1 19930715; ES 2044252 T3 19940101; ES 2044252 T5 19980501; JP H02247031 A 19901002; RU 2076011 C1 19970327; US 5012665 A 19910507

DOCDB simple family (application)

EP 90102072 A 19900202; AT 90102072 T 19900202; CA 613739 A 19890927; DE 3905069 A 19890218; DE 59001647 T 19900202; ES 90102072 T 19900202; JP 3403290 A 19900216; SU 4743013 A 19900216; US 42858789 A 19891030