

Title (en)
MANIPULATOR FOR METAL SHEETS

Publication
EP 0300984 B1 19930324 (FR)

Application
EP 88830320 A 19880722

Priority
IT 8558087 A 19870723

Abstract (en)
[origin: JPS6440289A] PURPOSE: To rapidly transfer a thin plate to a molding press by a manipulator, by slidingly mounting a transverse carriage of a lower supporting element mounted on an upper supporting element on a guide, and mounting an end in the transverse direction, of the transverse carriage, on a longitudinal carriage by a rotary supporting shaft of a lower jaw. CONSTITUTION: A longitudinal carriage is moved to an immovable base by the driving of an electric motor 16, and one edge side of a thin plate is folded by a press at a terminal of the movement. Then the electric motor 16 is further driven to return and oscillate the upper and lower supporting elements 1, 3 to the original positions, and the thin plate is rotated, so that the other edge side of the thin plate is faced to the press. On this occasion, an upper jaw 5 is loosely seated on a pedestal of the upper supporting element 1, and the upper jaw 5 is rotated following the twist to be added by the lower jaw 10 through the thin plate.

IPC 1-7
B21D 43/10

IPC 8 full level
B21D 43/10 (2006.01); **B25J 11/00** (2006.01); **B25J 9/00** (2006.01)

CPC (source: EP US)
B21D 43/105 (2013.01 - EP US); **Y10T 29/53709** (2015.01 - EP US)

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0300984 A2 19890125; EP 0300984 A3 19901024; EP 0300984 B1 19930324; AT E87244 T1 19930415; DE 3879566 D1 19930429; DE 3879566 T2 19930930; ES 2040380 T3 19931016; IT 1220216 B 19900606; IT 8785580 A0 19870723; JP 2566294 B2 19961225; JP S6440289 A 19890210; US 4905976 A 19900306

DOCDB simple family (application)
EP 88830320 A 19880722; AT 88830320 T 19880722; DE 3879566 T 19880722; ES 88830320 T 19880722; IT 8558087 A 19870723; JP 18338888 A 19880722; US 22131888 A 19880719