

Title (en)

Device for mechanical joining of superimposed plates using auxiliary joining parts

Title (de)

Vorrichtung zum mechanischen Fügen von flächig aufeinanderliegenden Blechen unter Einsatz von Hilfsfügeteilen

Title (fr)

Dispositif d'assemblage mécanique de plaques superposées au moyen de pièces d'assemblage auxiliaires

Publication

**EP 1099495 A3 20020102 (DE)**

Application

**EP 00124022 A 20001104**

Priority

DE 19954699 A 19991113

Abstract (en)

[origin: EP1099495A2] The device for mechanically joining flat superimposed plates involves a tool set comprising at least one plunger and one matrix. The plunger is arranged on an axially movable tool carrier and at its work end is surrounded by a holding down device. The holding down device (6) has a head section (8) axially projecting in relation to the work end (5) of the plunger (1). Projecting into a forward feed path of the plunger is a pivotable tip component formed as an auxiliary part mat (10). The auxiliary part mat in a starting position of the holding down device in relation to the plunger is positioned for locating an auxiliary seam part (11) at an adequate distance to the work end of the plunger. This distance defines an auxiliary seam part feed space, which is connectable with an auxiliary seam part feed channel (9).

IPC 1-7

**B21J 15/02**; **B21J 15/32**; **B25B 23/10**; **B23P 19/00**

IPC 8 full level

**B21J 15/10** (2006.01); **B21J 15/02** (2006.01); **B21J 15/32** (2006.01); **B23P 19/00** (2006.01); **B25B 23/10** (2006.01)

CPC (source: EP)

**B21J 15/025** (2013.01); **B21J 15/32** (2013.01)

Citation (search report)

- [X] DE 19512198 A1 19961002 - BOELLHOFF GMBH VERBINDUNGS UND [DE]
- [AD] DE 19630488 A1 19980129 - BOELLHOFF GMBH VERBINDUNGS UND [DE]
- [X] DE 9201359 U1 19920521
- [XA] EP 0487957 A1 19920603 - SFS STADLER HOLDING AG [CH]
- [A] US 5813114 A 19980929 - BLACKET STUART EDMUND [AU], et al
- [A] US 5007795 A 19910416 - YOSHIMURA MASAHIRO [JP]

Cited by

DE10348427A1; DE102019128229B3; EP3812062A1; DE202020005655U1; US11471933B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**EP 1099495 A2 20010516**; **EP 1099495 A3 20020102**; **EP 1099495 B1 20040728**; DE 19954699 A1 20010531; DE 50007191 D1 20040902; JP 2001179383 A 20010703

DOCDB simple family (application)

**EP 00124022 A 20001104**; DE 19954699 A 19991113; DE 50007191 T 20001104; JP 2000347450 A 20001109