

Title (en)
Flexible transport device for presses

Title (de)
Flexible Transporteinrichtung für Pressen

Title (fr)
Dispositif de transport flexible pour presses

Publication
EP 1129800 A3 20031008 (DE)

Application
EP 00128239 A 20001227

Priority
DE 10009574 A 20000229

Abstract (en)
[origin: EP1129800A2] Each processing station (8,9) in a press has an independent transporter unit (2) with detachable cross heads (5). The cross head is born spherically in the transporter unit via e.g. a cardan joint. A suction cross head is moveably held on each cross head via guides in carriages. The carriages are located in linear guides and moved in horizontal direction by a drive via a bar and spindle nut system.

IPC 1-7
B21D 43/05; **B21D 43/10**

IPC 8 full level
B21D 43/05 (2006.01)

CPC (source: EP US)
B21D 43/05 (2013.01 - EP US)

Citation (search report)
• [X] US 5632181 A 19970527 - VANDERZEE ALLEN J [US], et al
• [XD] EP 0693334 A1 19960124 - MUELLER WEINGARTEN MASCHF [DE]
• [AD] DE 4408449 A1 19950914 - MUELLER WEINGARTEN MASCHF [DE]

Cited by
DE10348643B3; EP2248743A4; DE102007011584B4; DE10352982A1; DE10352982B4; US11826813B2; EP2548672A4; US7484922B2; US8439624B2; US9339861B2

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EP 1129800 A2 20010905; **EP 1129800 A3 20031008**; **EP 1129800 B1 20051130**; BR 0100645 A 20011009; CA 2331290 A1 20010829; CA 2331290 C 20080819; DE 10009574 A1 20010830; DE 50011750 D1 20060105; ES 2251931 T3 20060516; US 2002029701 A1 20020314; US 6968725 B2 20051129

DOCDB simple family (application)
EP 00128239 A 20001227; BR 0100645 A 20010220; CA 2331290 A 20010117; DE 10009574 A 20000229; DE 50011750 T 20001227; ES 00128239 T 20001227; US 76768901 A 20010124