

Title (en)

Tool changing device for press machines

Title (de)

Werkzeugwechselvorrichtung für Pressen

Title (fr)

Dispositif de changement d'outil pour presses

Publication

EP 1366834 B1 20060125 (DE)

Application

EP 03010227 A 20030507

Priority

DE 10223897 A 20020529

Abstract (en)

[origin: EP1366834A1] The tool change device is for a press with an independent transporting system for each deforming stage with decoupling suction beams. It also has a traveling slide table (5.1, 5.2, 5.3) carrying the tools. The turning device can turn about a turning axis below the top edge and transversely to the component transporting direction in the end region of the slide table.

IPC 8 full level

B21D 37/04 (2006.01); **B21D 43/05** (2006.01)

CPC (source: EP US)

B21D 43/057 (2013.01 - EP US); **Y10T 483/1729** (2015.01 - EP US); **Y10T 483/1731** (2015.01 - EP US)

Cited by

EP1862237A1; US7784324B2

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 1366834 A1 20031203; **EP 1366834 B1 20060125**; BR 0302006 A 20040824; CA 2429896 A1 20031129; CA 2429896 C 20070717; DE 10223897 A1 20031211; DE 50302260 D1 20060413; ES 2254817 T3 20060616; JP 2004050290 A 20040219; US 2004018925 A1 20040129; US 6786857 B2 20040907

DOCDB simple family (application)

EP 03010227 A 20030507; BR 0302006 A 20030526; CA 2429896 A 20030528; DE 10223897 A 20020529; DE 50302260 T 20030507; ES 03010227 T 20030507; JP 2003153294 A 20030529; US 40427703 A 20030401