

Title (en)
Centering clamping element

Title (de)
Zentrierspannelement

Title (fr)
Elément de serrage centrant

Publication
EP 1321234 A3 20061004 (DE)

Application
EP 02102519 A 20021031

Priority
DE 10163104 A 20011220

Abstract (en)
[origin: EP1321234A2] The centering clamping element clamps workpieces by means of diverting bolts between a drive element and centering clamping slides (21). There are four recesses in the casing (1) in a plane parallel to the resting plane of the unit, in which the pairs of diverting bolts can slide. The bolts are wedge-shaped at the top end.

IPC 8 full level
B25B 1/08 (2006.01); **B25B 1/18** (2006.01)

CPC (source: EP US)
B25B 1/08 (2013.01 - EP US); **B25B 1/18** (2013.01 - EP US); **Y10S 409/903** (2013.01 - EP US); **Y10T 279/1274** (2015.01 - EP US); **Y10T 279/1291** (2015.01 - EP US); **Y10T 279/1973** (2015.01 - EP US); **Y10T 409/309016** (2015.01 - EP US)

Citation (search report)

- [DA] EP 0386295 B1 19930728
- [A] EP 0386294 A1 19900912 - FISCHER DAVID [DE], et al
- [A] US 4507031 A 19850326 - HIESTAND KARL [DE]
- [A] DE 19845576 A1 20000105 - HICO HIMMEL & CO KG [DE]

Cited by
EP0965317A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
EP 1321234 A2 20030625; **EP 1321234 A3 20061004**; **EP 1321234 B1 20091014**; AT E445482 T1 20091015; DE 10163104 A1 20030703; DE 50213916 D1 20091126; US 2003118417 A1 20030626; US 6783310 B2 20040831

DOCDB simple family (application)
EP 02102519 A 20021031; AT 02102519 T 20021031; DE 10163104 A 20011220; DE 50213916 T 20021031; US 32301402 A 20021218