

Title (en)

Workpiece gripper device for automatic tooling change

Title (de)

Werkstückgreifereinrichtung für automatischen Toolingwechsel

Title (fr)

Dispositif de saisie d'une pièce à usiner pour changement d'outillage automatique

Publication

EP 1862237 B1 20081029 (DE)

Application

EP 07009501 A 20070511

Priority

DE 102006025272 A 20060531

Abstract (en)

[origin: EP1862237A1] Workpiece gripper system for large presses, e.g. for car bodywork, has connectors which link the grippers to a supporting arm. These consist of two halves (36, 37), one of which carries a pin (38) which fits into a bore (41) in the other and is held in place by a spring-loaded bolt (45, 46) on it.

IPC 8 full level

B21D 43/10 (2006.01); **B21D 43/05** (2006.01); **B21D 43/11** (2006.01)

CPC (source: EP US)

B21D 43/057 (2013.01 - EP US)

Cited by

DE102010053401A1; DE102014204366A1; WO2014023286A1; JP2017202491A; US11660761B2; US8522679B2; US9713835B2; WO2009135552A1; WO2012136750A1; DE102012016721A1; US10384258B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1862237 A1 20071205; EP 1862237 B1 20081029; AT E412479 T1 20081115; CN 101081421 A 20071205; CN 101081421 B 20100602; DE 102006025272 B3 20071122; DE 502007000203 D1 20081211; ES 2317605 T3 20090416; RU 2007120197 A 20081210; RU 2365455 C2 20090827; US 2007277582 A1 20071206; US 7784324 B2 20100831

DOCDB simple family (application)

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