

Title (en)

Coupling device for locking a plug-connection of a work tool

Title (de)

Kupplungsvorrichtung zum Verriegeln von Steckverbindungen bei Werkzeugen

Title (fr)

Dispositif d'accouplement pour verrouiller une connexion à fiches d'un outil

Publication

**EP 1371455 B1 20100303 (DE)**

Application

**EP 03013057 A 20030610**

Priority

DE 20209159 U 20020612

Abstract (en)

[origin: US2004007102A1] A coupling device includes a polygonal coupling part on one of the parts to be coupled for engaging a complementary polygonal counterpart on another of the parts to be coupled. The polygonal coupling part has outer side faces, a longitudinal bore therein, and a first transverse bore with a ball therein intersecting the longitudinal bore and one of the side faces. An actuating body tapering at first and second ends is guided for longitudinal movement in the longitudinal bore between an extended position wherein the first end moves the ball radially into a locking position and a retracted position permitting inward movement of the ball out of its locking position. A second transverse bore intersecting the longitudinal bore guides a releasing element having a cam surface engaging the second end of the actuating body. The releasing element is movable against the action of a biasing spring to move the actuating body from its extended position to its retracted position.

IPC 8 full level

**B25B 23/00** (2006.01); **F16B 7/20** (2006.01); **F16D 1/10** (2006.01)

CPC (source: EP US)

**B25B 23/0035** (2013.01 - EP US); **Y10T 403/592** (2015.01 - EP US); **Y10T 403/599** (2015.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2004007102 A1 20040115**; **US 6889582 B2 20050510**; AT E459455 T1 20100315; CN 1330463 C 20070808; CN 1488864 A 20040414; DE 20209159 U1 20020829; DE 50312468 D1 20100415; EP 1371455 A2 20031217; EP 1371455 A3 20061004; EP 1371455 B1 20100303; ES 2341849 T3 20100629; JP 2004132539 A 20040430; JP 4297735 B2 20090715

DOCDB simple family (application)

**US 45890403 A 20030611**; AT 03013057 T 20030610; CN 03143880 A 20030612; DE 20209159 U 20020612; DE 50312468 T 20030610; EP 03013057 A 20030610; ES 03013057 T 20030610; JP 2003166518 A 20030611