

Title (en)

CONNECTION APPARATUS FOR INTERCONNECTING AN ARM AND A TOOL OF A WORK MACHINE

Title (de)

VORRICHTUNG FÜR DIE KUPPLUNG ZWISCHEN ARM UND WERKZEUG EINER ARBEITSMASCHINE

Title (fr)

APPAREIL POUR LE RACCORDEMENT ENTRE LE BRAS ET L'OUTIL D'UN ENGIN DE TRAVAIL

Publication

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Application

EP 17202832 A 20140704

Priority

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- EP 14175847 A 20140704

Abstract (en)

A quick coupling (250) of a tool (U) to an arm of a heavy machine. The quick coupling (250) comprises a main body (252), substantially box-shaped, provided with an inner compartment (253) containing an actuator device (275) of at least one bolt element (270) adapted to engage with a complementary element (102) provided on an adapter (100) integral with the tool (U). The quick coupling (250) is characterized in that the bolt element (270) is shaped so as to receive therein a double-acting hydraulic actuation system (275) adapted to move this bolt element (270) forward from a retracted disengaged position to an extended position engaged with an element (102) of the adapter (100), so that the thrust exerted by the hydraulic actuation system (275) has an operating axis substantially coincident with a longitudinal axis (X) of the bolt element (270). (Fig. 4)

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [XY] US 3243066 A 19660329 - GARDNER CHARLES W, et al
- [XY] NL 7900631 A 19800729 - INTERPARTS B V
- [X] WO 2008051095 A2 20080502 - J B SALES INTERNAT LTD [NZ], et al
- [Y] DE 20215590 U1 20030306 - WIMMER ALOIS [AT]
- [Y] EP 2584099 A1 20130424 - CATERPILLAR SARL [CH]
- [A] EP 0615023 A1 19940914 - KOEHL JEAN MARIE GERARD RENE [FR]
- [A] WO 2009137576 A1 20091112 - JRB ATTACHMENTS LLC [US], et al
- [A] EP 1900880 A2 20080319 - CANGINI BENNE SRL [IT]
- [A] WO 2012061895 A1 20120518 - ESSEX STUART ALEXANDER [AU], et al

Cited by

EP3770330A1

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