

Title (en)

QUICK COUPLER HAVING IMPROVED SAFETY

Title (de)

SCHNELLKUPPLUNG MIT VERBESSERTER SICHERHEIT

Title (fr)

COUPLEUR RAPIDE AYANT UNE SÉCURITÉ AMÉLIORÉE

Publication

EP 3249106 A4 20181017 (EN)

Application

EP 16740382 A 20160119

Priority

- KR 20150008498 A 20150119
- KR 2016000553 W 20160119

Abstract (en)

[origin: EP3249106A1] A hydraulic cylinder of a quick coupler has an elongated hole formed at either a cylinder rod or a cylinder body such that one of the cylinder rod and the cylinder body is fitted onto a cylinder shaft of a coupler body and the other is rotatably coupled to a movable hook, and rotates the movable hook such that the movable hook is coupled to or released from a second coupling pin according to extension or retraction. A rotary key has a rotary key protrusion inserted into or withdrawn from a coupling groove of a fixed hook according to a rotation position thereof, and the rotary key protrusion is maintained in a state in which the protrusion is inserted into the coupling groove of the fixed hook by means of the elastic force of a rotary key spring, so as to prevent the separation of a first coupling pin from the coupling groove of the fixed hook. A stopper has a stopper hook coupled to or separated from a cylinder hook around the elongated hole, is supported by the elastic force of a stopper spring, and rotates the rotary key such that the rotary key protrusion is withdrawn from the coupling groove of the fixed hook when the hydraulic cylinder is retracted.

IPC 8 full level

E02F 3/36 (2006.01); **E02F 3/96** (2006.01)

CPC (source: EP)

E02F 3/3622 (2013.01); **E02F 3/365** (2013.01); **E02F 3/3663** (2013.01)

Citation (search report)

- [XA] GB 2473942 A 20110330 - HILL IAN [GB]
- [A] WO 2014072709 A1 20140515 - MILLER INT LTD [GB], et al
- See also references of WO 2016117909A1

Cited by

GB2576131A; GB2576131B

Designated contracting state (EPC)

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DOCDB simple family (publication)

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KR 101789909 B1 20171120; KR 20160089294 A 20160727; WO 2016117909 A1 20160728

DOCDB simple family (application)

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