

Title (en)

QUICK FASTENER FOR FIXING A TOOL AT THE END OF A LOADING ARM OR THE LIKE

Title (de)

SCHNELLKUPPLUNGSVORRICHTUNG ZUR BEFESTIGUNG EINES WERKZEUGS AM ENDE DES LADERAUSLEGERS ODER DGL

Title (fr)

ATTACHE RAPIDE POUR FIXER UN OUTIL A L'EXTREMITE DU BRAS D'UN CHARGEUR OU ANALOGUE

Publication

EP 1129259 A1 20010905 (FR)

Application

EP 99949087 A 19991021

Priority

- FR 9902560 W 19991021
- FR 9814185 A 19981112
- FR 9912671 A 19991012

Abstract (en)

[origin: US6629811B1] Quick fastener system for fixing a tool at the end of a loading arm. The system includes a first part coupled to the loading arm. The first part includes a cradle and a first aperture. A second part is arranged on the tool. The second part includes an element having a hook-shaped extension and a shaft which is adapted to be engaged by the cradle. A locking member is adapted to engage the hook-shaped extension. The tool is movable by the loading arm when the cradle engages the shaft and when the locking member engages the hook-shaped extension.

IPC 1-7

E02F 3/36

IPC 8 full level

E02F 3/40 (2006.01); **E02F 3/36** (2006.01); **E02F 3/96** (2006.01)

CPC (source: EP US)

E02F 3/3613 (2013.01 - EP US); **E02F 3/3627** (2013.01 - EP US); **E02F 3/3645** (2013.01 - EP US); **E02F 3/3672** (2013.01 - EP US); **Y10T 403/59** (2015.01 - EP US)

Citation (search report)

See references of WO 0029680A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 6629811 B1 20031007; AT E266127 T1 20040515; AU 6209299 A 20000605; DE 69917062 D1 20040609; DE 69917062 T2 20050428; EP 1129259 A1 20010905; EP 1129259 B1 20040506; ES 2221443 T3 20041216; FR 2785952 A1 20000519; FR 2785952 B1 20010406; JP 2003521600 A 20030715; JP 4245814 B2 20090402; NO 20012330 D0 20010511; NO 20012330 L 20010511; PL 195903 B1 20071130; PL 347629 A1 20020422; RU 2224846 C2 20040227; WO 0029680 A1 20000525

DOCDB simple family (application)

US 83135001 A 20010523; AT 99949087 T 19991021; AU 6209299 A 19991021; DE 69917062 T 19991021; EP 99949087 A 19991021; ES 99949087 T 19991021; FR 9902560 W 19991021; FR 9912671 A 19991012; JP 2000582651 A 19991021; NO 20012330 A 20010511; PL 34762999 A 19991021; RU 2001116109 A 19991021