

Title (en)

Quick coupling device for earthmoving machines or similar.

Title (de)

Schnellwechsellvorrichtung für Erdbewegungsmaschine und dgl.

Title (fr)

Dispositif pour permettre la prise automatique d'outils, notamment pour engins de terrassement ou analogue.

Publication

EP 0672796 A1 19950920 (FR)

Application

EP 95420064 A 19950313

Priority

FR 9403308 A 19940316

Abstract (en)

The mechanism consists of a tool holder (20) on the end of the machine's manipulator which is connected to the tool (1) by a system of male and female couplings (4,6,14,16) with parallel axes (8,9,18,19), and a lock to hold the tool in its fixed position. The lock is in the form of a rigid plate (28) pivoted to the tool holder about an axis perpendicular to the axes of the couplings and equipped with a torsion spring (24) which tends to hold the plate against the tool so that it engages with a stop (7). The plate is held between side flanges (27), and during its movement its edge describes an arc about its axis and engages by friction with the stop. The lock is released to disengage the tool by means of a lever (35) or a hydraulic cylinder.

Abstract (fr)

Dispositif pour permettre la prise automatique d'outil sur des engins de terrassement. L'assemblage de l'outil (1) et du porte-outil (20) est réalisé au moyen de deux jeux d'organes mâles et femelles de solidarisation (4, 6, 14, 16) présentant une symétrie de révolution. Selon l'invention, l'ensemble comporte également un organe de verrouillage, constitué d'une plaque rigide (28), articulée sur le porte-outil (20) selon un axe d'articulation perpendiculaire à l'axe de révolution (8, 9, 18, 19) des organes de solidarisation (4, 6, 14, 16), ledit axe recevant un ressort de torsion (24) induisant l'abaissement de la plaque (28) contre l'outil (1) et sa coopération avec une butée de verrouillage (7) solidaire dudit outil. <IMAGE>

IPC 1-7

E02F 3/36

IPC 8 full level

E02F 3/36 (2006.01)

CPC (source: EP)

E02F 3/3613 (2013.01); **E02F 3/364** (2013.01); **E02F 3/3663** (2013.01)

Citation (search report)

- [A] FR 2690718 A1 19931105 - GROUPE PEL JOB [FR]
- [AD] FR 2475160 A1 19810807 - PINGON PIERRE DE [FR], et al
- [A] EP 0472115 A1 19920226 - AHLMANN MASCHINENBAU GMBH [DE]

Cited by

US5974706A; EP0637649A3; FR2872231A1; EP1167634A3; EP0864697A1; US6154989A; US5983535A; US6163989A; EP0810330A1; FR2749332A1; WO0196672A1; WO9840569A1

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