

Title (en)

Cylinder piston unit with locking means and method for locking and unlocking the same

Title (de)

Kolben-Zylindereinheit mit Verriegelung und Verfahren zur Verriegelung und Entriegelung einer Kolben-Zylindereinheit

Title (fr)

Vérin de verrouillage et procédé de verrouillage et de déverrouillage d'un vérin de verrouillage

Publication

**EP 2239470 A3 20120613 (DE)**

Application

**EP 10156720 A 20100317**

Priority

DE 102009017212 A 20090409

Abstract (en)

[origin: EP2239470A2] The locking cylinder (20) has a cylinder (21) and a piston (22). Two transportable lock-supporting-bodies (35,36) are provided in a mutually frictional locking contact. The lock-supporting-bodies are determined to lock a spindle (30) against a rotation around its rotational axis (33) in friction fit manner. Independent claims are also included for the following: (1) a method for a locking a rotably fixed and frictionally engaged locking cylinder; and (2) a method for unlocking a rotably fixed and frictionally engaged locking cylinder.

IPC 8 full level

**F15B 15/26** (2006.01)

CPC (source: EP)

**F15B 15/264** (2013.01)

Citation (search report)

- [XAI] DE 3629677 A1 19880310 - KONTEC GMBH [DE]
- [A] US 2632426 A 19530324 - GEESINK-DE GRAAF MARRETJE GIJS, et al
- [A] GB 644424 A 19501011 - C V FABRIEK VOOR AUTO EN MACHI
- [A] GB 2154282 A 19850904 - H C H MANUFACTURING LTD
- [A] CH 546895 A 19740315 - BIERI H AG
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Cited by

EP3101283A1; CN108679038A; CN114517809A; CN109470442A; CN110356545A; DE102015108829A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

**EP 2239470 A2 20101013; EP 2239470 A3 20120613; EP 2239470 B1 20130703;** DE 102010015996 A1 20101014; EP 2570679 A1 20130320; EP 2570679 B1 20130918; EP 2570680 A1 20130320; EP 2570680 B1 20130918; ES 2429341 T3 20131114; ES 2437762 T3 20140114; ES 2437763 T3 20140114; PL 2239470 T3 20131129; PL 2570679 T3 20140228; PL 2570680 T3 20140228

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**EP 10156720 A 20100317;** DE 102010015996 A 20100317; EP 12197151 A 20100317; EP 12197159 A 20100317; ES 10156720 T 20100317; ES 12197151 T 20100317; ES 12197159 T 20100317; PL 10156720 T 20100317; PL 12197151 T 20100317; PL 12197159 T 20100317