

Title (en)

A BLOCKING UNIT FOR TELESCOPIC SYSTEMS, A HYDRAULIC CYLINDER AND A TELESCOPIC SYSTEM

Title (de)

BLOCKIEREINHEIT FÜR TELESKOPISCHE SYSTEME, HYDRAULIKZYLINDER UND TELESKOPISCHES SYSTEM

Title (fr)

UNITÉ DE BLOCAGE POUR SYSTÈMES TÉLESCOPIQUES, VÉRIN HYDRAULIQUE ET SYSTÈME TÉLESCOPIQUE

Publication

**EP 4357292 A1 20240424 (EN)**

Application

**EP 23204006 A 20231017**

Priority

IT 202200021702 A 20221021

Abstract (en)

A blocking unit (100) for telescopic sections (300) comprising a first engaging part (110) movable between a disengaged position (dis) and an engaged position (imp), a first hydraulic cylinder (1a, 1b) which moves the first engaging part, a first movement part (130) of blocking pins (400) movable between a first position (p) and a second position (s), a second hydraulic cylinder (2) which moves the first movement part, a first (5) and a second (6) safety hydraulic cylinder (5) comprising a chamber (52, 62) and a movable part (51, 61) which passes from a rest position (rip) to an extended position (est) and a hydraulic circuit. The movable parts (51, 61) are respectively movable in the direction of the first engaging part (110) and of the first movement part (130) and in the extended position (est) the hydraulic fluid in the chambers (52, 62) oppose the return into the first (p) or disengagement position (dis).

IPC 8 full level

**B66C 23/70** (2006.01); **F15B 15/26** (2006.01)

CPC (source: EP)

**B66C 23/705** (2013.01); **B66C 23/708** (2013.01)

Citation (applicant)

- EP 0476225 B1 19940727 - LIEBHERR WERK EHINGEN [DE]
- EP 0661234 B2 20040303 - LIEBHERR WERK EHINGEN [DE]
- EP 0754646 B1 20000510 - MONTAN HYDRAULIK GMBH & CO KG [DE], et al
- EP 2210853 B1 20160127 - MANITOWOC CRANE GROUP F SAS [FR]

Citation (search report)

- [AD] US 2010187194 A1 20100729 - SCHUERMANN JOHANNES [DE], et al & EP 2210853 B1 20160127 - MANITOWOC CRANE GROUP F SAS [FR]
- [A] EP 0754646 A1 19970122 - MONTAN HYDRAULIK GMBH & CO KG [DE]
- [A] JP 2004323207 A 20041118 - TADANO LTD
- [A] DE 10056649 C1 20020613 - DEMAG MOBILE CRANES GMBH & CO [DE]
- [A] US 5628416 A 19970513 - FROMMELT UWE [DE], et al

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4357292 A1 20240424**

DOCDB simple family (application)

**EP 23204006 A 20231017**