

Title (en)  
LOCKING DEVICE FOR TUBULAR ELEMENTS

Title (de)  
VORRICHTUNG ZUR VERRIEGELUNG VON ROHRFÖRMIGEN ELEMENTEN

Title (fr)  
DISPOSITIF POUR LE VERROUILLAGE D'ÉLÉMENTS TUBULAIRES

Publication  
**EP 2503092 A1 20120926 (EN)**

Application  
**EP 12159469 A 20120314**

Priority  
IT TO20110248 A 20110322

Abstract (en)  
A device for locking tubular elements to a drilling machine adapted to drive said tubular elements or casing pipes into the ground. Said drilling machine comprises a guiding mast and a rotary tool head (1) for handling drill strings which are slideable along the mast and are operated by a mechanism that causes axial movement. Said rotary head comprises a fixed part slideable along the guides of said mast or tower (2) and a rotary part connected to the first casing pipe piece, allowing rotation thereof about an axis of rotation (4).

IPC 8 full level  
**E21B 3/04** (2006.01); **E21B 7/02** (2006.01); **E21B 19/16** (2006.01)

CPC (source: EP)  
**E21B 3/04** (2013.01); **E21B 7/021** (2013.01); **E21B 19/16** (2013.01)

Citation (applicant)  
• DE 19621849 A1 19970306 - BILFINGER BERGER BAU [DE]  
• DE 3721448 A1 19890119 - BILFINGER BERGER BAU [DE]  
• DE 102006022613 A1 20071122 - KLEMM BOHRTECHNIK ZWEIGNIEDERL [DE]

Citation (search report)  
• [XAY] DE 102006022613 A1 20071122 - KLEMM BOHRTECHNIK ZWEIGNIEDERL [DE]  
• [Y] DE 19621849 A1 19970306 - BILFINGER BERGER BAU [DE]  
• [A] DE 10023467 C1 20010927 - BAUER SPEZIALTIEFBAU [DE]  
• [A] DE 3721448 A1 19890119 - BILFINGER BERGER BAU [DE]  
• [A] DE 3642387 A1 19880630 - DELMAG MASCHINENFABRIK [DE]  
• [A] EP 1860275 A1 20071128 - BAUER MASCHINEN GMBH [DE]  
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CN103075109A; US10113619B2

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 MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2503092 A1 20120926; EP 2503092 B1 20160427; IT TO20110248 A1 20120923**

DOCDB simple family (application)  
**EP 12159469 A 20120314; IT TO20110248 A 20110322**