

Title (en)
ASSEMBLING PLIERS WITH RELEASABLE LOCKING PAWL

Title (de)
MONTAGEZANGE MIT LÖSBARER GEGENKLINKE

Title (fr)
PINCE DE MONTAGE AVEC CLIQUET D'ARRET LIBÉRABLE

Publication
EP 2493663 B1 20141224 (DE)

Application
EP 10776939 A 20101022

Priority
• DE 102009050865 A 20091027
• EP 2010006456 W 20101022

Abstract (en)
[origin: WO2011054450A1] The invention relates to hand pliers for installation purposes, in particular for installing pipe connections on pipe systems, comprising two legs, which are rotatably interconnected by means of a first joint connection (1) and which are divided into an installation leg and a handle leg (2, 3) by said joint connection (1), wherein the first handle leg (3) is divided into a lever (14) far from the handle and a lever (15) near the handle and said two levers (14, 15) are rotatably connected to each other by means of a second joint connection using a bolt (16). A pulling wheel (17) and a ratchet wheel (18) having outer teeth (27) and connected to the pulling wheel in a rotationally-fixed manner are rotatably supported on the bolt (16) axially next to each other, wherein the pulling wheel (17) engages in a pulling means (20), which connects both handle legs (2, 3) to each other, and wherein on the lever (15) near the handle, a spring-loaded carrier pawl (25) is arranged, which engages in the ratchet wheel (18) in such a way that, if there is a closing motion of the lever (15) near the handle, the ratchet wheel (18) and the pulling wheel (17) rotate, which causes the closing of the pliers, wherein a spring-loaded locking pawl (30) is provided, which likewise engages in the ratchet wheel (18) and permits a rotation of the ratchet wheel (18) when the pliers are closed, but prevents the rotation of the ratchet wheel in the opposite direction. The problem of the invention is to create hand pliers, the locking pawl of which can be released even in the event of large installation forces. In order to address said problem, the actuation of a switch (33) can reverse the direction of the spring loading of the locking pawl (30) in such a way that the actuation of the switch (33) causes the engagement of the locking pawl (30) in the ratchet wheel (18) to be released.

IPC 8 full level
B25B 7/12 (2006.01); **B25B 7/16** (2006.01); **B25B 27/10** (2006.01)

CPC (source: EP KR US)
B25B 7/12 (2013.01 - EP KR US); **B25B 7/16** (2013.01 - EP KR US); **B25B 27/10** (2013.01 - EP KR US)

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

DOCDB simple family (publication)
WO 2011054450 A1 20110512; AU 2010314468 A1 20120524; AU 2010314468 B2 20160616; BR 112012009968 A2 20160308;
CA 2778999 A1 20110512; CA 2778999 C 20140805; CN 102639300 A 20120815; CN 102639300 B 20150506; DE 102009050865 B3 20110609;
EP 2493663 A1 20120905; EP 2493663 B1 20141224; ES 2533342 T3 20150409; JP 2013508182 A 20130307; JP 5362119 B2 20131211;
KR 101465848 B1 20141126; KR 20120120128 A 20121101; MX 2012004872 A 20121123; PL 2493663 T3 20150731;
RU 2012121852 A 20131210; RU 2524486 C2 20140727; US 2012247283 A1 20121004; US 9010221 B2 20150421; ZA 201203089 B 20121227

DOCDB simple family (application)
EP 2010006456 W 20101022; AU 2010314468 A 20101022; BR 112012009968 A 20101022; CA 2778999 A 20101022;
CN 201080055216 A 20101022; DE 102009050865 A 20091027; EP 10776939 A 20101022; ES 10776939 T 20101022;
JP 2012535661 A 20101022; KR 20127012068 A 20101022; MX 2012004872 A 20101022; PL 10776939 T 20101022;
RU 2012121852 A 20101022; US 201013504228 A 20101022; ZA 201203089 A 20120426