

Title (en)
Bolt setting device and method for operating same

Title (de)
Bolzensetzgerät und Verfahren zum Betreiben eines Bolzensetzgeräts

Title (fr)
Appareil de fixation de boulons et procédé de fonctionnement d'un appareil de fixation de boulons

Publication
EP 2465643 A3 20151014 (DE)

Application
EP 11189461 A 20111117

Priority
DE 102010063177 A 20101215

Abstract (en)
[origin: EP2465643A2] The device (1) has a working piston (34) translationally moved by igniting an ignitable mixture in a combustion chamber (12) to fix a fastening element e.g. bolt and nail. Volume of the combustion chamber is adjusted. A control device (25) is connected with an adjustment device for adjusting the combustion chamber volume and connected with a metering valve device (10) for metering fuel gas. The adjustment device has an electric motor (16) coupled with an adjustable combustion chamber wall (15) via a drive (17). The control device is connected with an operating device (44). An independent claim is also included for a method for operating a bolt fixing device.

IPC 8 full level
B25C 1/08 (2006.01)

CPC (source: EP US)
B25C 1/08 (2013.01 - EP US); **B25C 1/00** (2013.01 - US); **B25C 1/06** (2013.01 - US)

Citation (search report)
• [AD] DE 19962695 B4 20060216 - HILTI AG [LI]
• [A] DE 19962598 A1 20010712 - HILTI AG [LI]
• [A] DE 4032204 A1 19920416 - HILTI AG [LI]
• [A] EP 1093888 A2 20010425 - HILTI AG [LI]
• [A] EP 1844904 A1 20071017 - HILTI AG [LI]

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EP3199301A1; EP3184251A1; EP3034239A1; US10639777B2; WO2017134021A1; WO2017108745A1; WO2016096962A1; US10898996B2; US10926388B2; TWI628056B

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

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EP 2465643 A2 20120620; EP 2465643 A3 20151014; EP 2465643 B1 20160907; AU 2011254075 A1 20120705; AU 2011254075 B2 20140626;
AU 2011254075 C1 20141106; CA 2761540 A1 20120615; CN 102528754 A 20120704; CN 102528754 B 20151216;
DE 102010063177 A1 20120621; JP 2012125920 A 20120705; JP 6009762 B2 20161019; TW 201240777 A 20121016;
US 2012153002 A1 20120621; US 9687975 B2 20170627

DOCDB simple family (application)
EP 11189461 A 20111117; AU 2011254075 A 20111215; CA 2761540 A 20111213; CN 201110410237 A 20111212;
DE 102010063177 A 20101215; JP 2011273680 A 20111214; TW 100141562 A 20111115; US 201113326053 A 20111214