

Title (en)

Hydraulically operated setting device with a hydraulic aggregate and a joining method for connecting at least two components

Title (de)

Hydraulisch betriebenes Setzgerät mit einem Hydraulikaggregat und ein Fügeverfahren zum Verbinden von mindestens zwei Bauteilen

Title (fr)

Appareil de pose d'éléments de fixation doté d'un agrégat hydraulique et procédé d'assemblage d'au moins deux composants

Publication

**EP 2511023 B1 20180725 (DE)**

Application

**EP 12162094 A 20120329**

Priority

DE 102011002058 A 20110414

Abstract (en)

[origin: EP2511023A2] The hydraulically operated setting device (S) comprises a hydraulic unit (10), which has a tank (14) for hydraulic fluid and a pump (12) for pumping the hydraulic fluid to the setting device. A dual-operating cylinder (30) is provided with a forward stroke chamber (34) and a return stroke chamber (36), in which a piston (32) is movably arranged with the piston rod that moves a plunger (38) of the setting device. A valve block (20) is provided, which comprises multiple valves, through which the return stroke chamber is connected to the pump and a blank holder chamber (44). An independent claim is included for a joining method, particularly setting method for connecting two components by a hydraulically operated setting device.

IPC 8 full level

**B21J 15/02** (2006.01); **B21J 15/20** (2006.01)

CPC (source: EP US)

**B21J 15/025** (2013.01 - EP US); **B21J 15/20** (2013.01 - EP US)

Citation (examination)

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Cited by

WO2019086181A1

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