

Title (en)  
DRIVE DEVICE OF A REGULATION VALVE FOR CASTING LIQUID METAL

Title (de)  
ANTRIEBSVORRICHTUNG FÜR EIN STEUERUNGSVENTIL ZUM GIESSEN VON FLÜSSIGEM METALL

Title (fr)  
DISPOSITIF D'ENTRAÎNEMENT D'UNE VALVE DE RÉGULATION POUR LA COULÉE DE MÉTAL LIQUIDE

Publication  
**EP 2398610 A1 20111228 (FR)**

Application  
**EP 10704759 A 20100216**

Priority  
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• EP 09153150 A 20090218  
• EP 10704759 A 20100216

Abstract (en)  
[origin: EP2226140A1] The device comprises a main rod (16) for controlling the opening and closing of the valve, a unit for coupling the main rod to the valve, and a unit for controlling i.e. activating and deactivating the coupling unit. The controlling unit comprises a coupling piston (22) connected to a coupling rod. An end of the coupling rod is provided for activating and deactivating the coupling unit by sliding the piston and the rod. The coupling unit comprises a block linked to the main rod movable with respect to the main rod between an activated position and an inactivated position. The device comprises a main rod (16) for controlling the opening and closing of the valve, a unit for coupling the main rod to the valve, and a unit for controlling i.e. activating and deactivating the coupling unit. The controlling unit comprises a coupling piston (22) connected to a coupling rod. An end of the coupling rod is provided for activating and deactivating the coupling unit by sliding the piston and the rod. The coupling unit comprises a block linked to the main rod movable with respect to the main rod between an activated position, in which the block extends an activated position transverse to the main rod projecting from the rod for coupling the main rod and the valve and a deactivated position, in which the block is partially retracted in the main rod for separating the main rod and the valve. An end of the main rod is intended to be received within a housing (12) of the valve. The block comprises an abutment surface fixed for holding the end in the housing, when the block is in activated position. A return unit is provided for the coupling unit in its deactivated configuration. A cylinder is intended to be received partially within a housing fixed with the valve. The device further comprises a main piston connected to the main rod and a fixing piston arranged to allow the fixing of the cylinder connected to housing. A hydraulic chamber is bounded to one part by the main piston and the other part by the fastening piston. The fastening piston is traversed by the main rod. The operating device is configured so that the main piston, the fastening piston and the coupling piston are controlled by a controlling center with three hydraulic connections, in which a first connection between the central and the hydraulic chamber is defined by the main piston and fixing piston, a second connection between the center and a hydraulic chamber is bounded by the main piston and the cylinder and a third connection between the center and a channel linking a hydraulic chamber is delimited by the fastening piston and the cylinder. The valve is locked in a closed position.

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See references of WO 2010094447A1

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