

Title (en)

Drive system for a closure device for a casting nozzle in a metallurgical vessel.

Title (de)

Antriebseinrichtung für ein Verschlussorgan am Ausguss eines Metallschmelze enthaltenden Behälters.

Title (fr)

Système d'entraînement pour un obtinateur du tron de coulée d'un conteneur métallurgique.

Publication

EP 0622139 A3 19961016 (DE)

Application

EP 94102681 A 19940223

Priority

CH 110493 A 19930413

Abstract (en)

[origin: EP0622139A2] A drive system (30) for a closure device at the casting nozzle of a metallurgical vessel (10) has a piston/cylinder unit (40) which is attached to the said vessel, controls the closure device via a linkage and has a valve lock which is made up of a control valve (55) and of a by-pass valve (55) used for the manual operation of the closure device. According to the invention, the piston/cylinder unit (40) is designed as a synchronised-motion cylinder, the cylinder of which has a part (46) that forms the working chamber (49) for the piston (45) sliding therein and a part (48) which is connected to the abovementioned part and contains the valve block. Part (48) and the piston rod (42') arranged therein are provided with a travel sensor (60) while the piston rod (42) opposite the piston (45) is coupled to the linkage for the movement of the closure member (20). These two parts (46, 48) of the cylinder are furthermore manufactured from aluminium. This and the fact that the said lines and hence the valve lock are fully integrated into the said parts (46, 48) give the considerable advantage over the known solutions that this piston/cylinder unit (40) is very light overall and, furthermore, very compact and, as a result, very small in size. <IMAGE>

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IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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- [A] FR 2184520 A1 19731228 - SIDERURGIE FSE INST RECH [FR]
- [A] DE 3041788 A1 19810604 - METACON AG [CH]
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EP 94102681 A 19940223; CA 2121008 A 19940411; CH 110493 A 19930413; CN 94103978 A 19940411; JP 541294 U 19940408; TW 83102819 A 19940331; US 22698094 A 19940413