

Title (en)

APPARATUS FOR COMPACTING A FOUNDRY MOULDING MATERIAL BY MEANS OF COMPRESSED GAS

Publication

EP 0203322 B1 19881123 (DE)

Application

EP 86104663 A 19860405

Priority

DE 3518980 A 19850525

Abstract (en)

[origin: US4846253A] An apparatus for the compression of foundry moulding material by compressed gas, which comprises a pressure tank for the compressed gas forming an inlet pressure zone, a moulding zone positioned beneath the same constituted by a moulding box with filling frame and pattern plate with pattern, onto which the moulding material is loosely poured prior to compression, and a large-area valve arranged between the pressure tank and the moulding zone. The closure member thereof frees the valve opening in the pressure tank in a few milliseconds and moves into the inlet pressure zone. The closure member is driven by a pressure cylinder, whose piston on the lift side forms the moveable termination of a gas-pressurized pressure reservoir and by its opposite side is connected to a high pressure source. The high pressure-side outflow is constructed in such a way that the pressure medium flows out at a speed of more than 10 m/s, accompanied by the simultaneous acceleration of the piston, under the pressure in the pressure reservoir and the closure member into the raised open position.

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