

Title (en)

METHOD AND APPARATUS FOR SAND CASTING COMPOSITE PARTS WITH A FIBRE INSERT IN A LIGHT ALLOY MATRIX

Publication

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Application

EP 88420187 A 19880609

Priority

FR 8708749 A 19870611

Abstract (en)

[origin: US4889177A] The invention relates to a method and apparatus for sand molding composite articles formed of a light alloy metal and fibrous insert. A sand mold is formed containing a fibrous preform separated from the walls of the mold cavity. The mold is fed by means of a tube dipping into a liquid metallic bath therebelow. In the molding process, the pressure in the mold cavity and above the bath are reduced, and the pressure above the bath is increased to create a positive pressure differential DELTA P, thereby forcing molten metal from the bath into the mold cavity. The pressure in the mold cavity and above the bath are then increased to above atmospheric, and the pressure differential DELTA P is maintained until the metal in the mold cavity solidifies.

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B22D 18/08; B22D 19/14

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Cited by

FR2648064A1; CN104475699A; EP0624413A1; FR2705044A1; US5597032A; FR2715881A1; US5787960A; EP3246114A4; US7511166B2; US9469052B2; US10099282B2; EP2789444B1

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