Title (en)
Process for embedding patterns for full-mould casting

Title (de)
Verfahren zum Einbetten von Modellen für das Vollformgiessverfahren

Title (fr)
Procédé pour enrober des modèles pour le moulage en moules pleins

Publication
EP 0581201 B1 19980204 (DE)

Application
EP 93111778 A 19930722

Priority
DE 4225245 A 19920730

Abstract (en)
[origin: EP0581201A1] In the full-mould casting method, lost patterns (generally composed of rigid polystyrene foam) are embedded in a binder-free free-flowing moulding material (e.g. silica sand). One difficulty with this method is filling critical parts of the pattern, such as undercuts and dome-like cavities, with the moulding material in such a way that the said moulding material surrounds even these parts of the pattern without gaps. According to the invention, the moulding material has beat frequency oscillations imparted to it during its entry into the mould box. The beat frequency oscillations are generated from two fundamentals of the same or almost the same amplitude which have a variable, slightly different fundamental frequency and/or fundamental phase. The beat frequency oscillations can act on the mould box in the horizontal and/or vertical direction. In this way it is possible to embed patterns with extremely critical parts in a manner which meets quality requirements. <IMAGE>

IPC 1-7
B22C 15/10; B22C 9/04

IPC 8 full level
B22C 9/04 (2006.01); **B22C 15/10** (2006.01)

CPC (source: EP)
B22C 9/046 (2013.01); **B22C 15/10** (2013.01)

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)
EP 0581201 A1 19940202; **EP 0581201 B1 19980204**; AT E162967 T1 19980215; DE 4225245 A1 19940203; DE 59308089 D1 19980312

DOCDB simple family (application)
EP 93111778 A 19930722; AT 93111778 T 19930722; DE 4225245 A 19920730; DE 59308089 T 19930722