

Title (en)

METHOD OF USING LOST METAL PATTERNS TO FORM CERAMIC MOLDS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON KERAMIKFÖRDERN UNTER VERWENDUNG VON VERLORENNEN METALLMODELLEN

Title (fr)

UTILISATION DE MODELES PERDUS METALLIQUES POUR FORMER DES MOULES DE CÉRAMIQUE

Publication

EP 1037723 A1 20000927 (EN)

Application

EP 98954659 A 19981127

Priority

- IB 9801887 W 19981127
- US 98686197 A 19971208

Abstract (en)

[origin: WO9929451A1] A method for forming a ceramic mold comprises the step of placing a pattern (1) having critical pattern surfaces (13) in a flask (3) having an open end. The critical pattern surfaces face upward toward the open end. Successive steps include adding a heat reversible liquid metal (5) to the flask (3) to cover the critical pattern surfaces, and cooling the liquid metal to form a solid metal mold. The metal mold (7) has critical metal mold (7) surfaces inverse to the critical pattern surfaces (10). Further steps include removing the pattern from the metal mold (7), casting a ceramic mold (11) around the metal mold, and liquifying the metal mold to remove it from the ceramic mold (11). The ceramic mold (11) has critical ceramic surfaces (10) inverse to the critical metal mold surfaces, thereby accurately replicating the critical pattern surfaces.

IPC 1-7

B22C 7/02; B22C 9/04

IPC 8 full level

B22C 7/02 (2006.01); **B22C 9/04** (2006.01); **B29C 33/38** (2006.01)

CPC (source: EP KR)

B22C 7/02 (2013.01 - EP KR); **B22C 9/04** (2013.01 - EP)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9929451 A1 19990617; AR 017427 A1 20010905; AT E235331 T1 20030415; AU 1170099 A 19990628; BR 9813401 A 20001024; CA 2313228 A1 19990617; CN 1281398 A 20010124; DE 69812702 D1 20030430; EP 1037723 A1 20000927; EP 1037723 B1 20030326; JP 2001525257 A 20011211; KR 20010032866 A 20010425; TW 492897 B 20020701; ZA 9811055 B 19990606

DOCDB simple family (application)

IB 9801887 W 19981127; AR P980106206 A 19981207; AT 98954659 T 19981127; AU 1170099 A 19981127; BR 9813401 A 19981127; CA 2313228 A 19981127; CN 98811875 A 19981127; DE 69812702 T 19981127; EP 98954659 A 19981127; JP 2000524096 A 19981127; KR 20007006195 A 20000607; TW 87120321 A 19981208; ZA 9811055 A 19981203