

Title (en)

Method for producing thin ceramic foundry cores

Title (de)

Verfahren zur Herstellung dünner keramischer Kerne für die Giesserei

Title (fr)

Procédé de fabrication de noyaux céramiques minces pour fonderie

Publication

EP 1013360 B1 20040121 (FR)

Application

EP 99402794 A 19991110

Priority

FR 9814168 A 19981112

Abstract (en)

[origin: FR2785836A1] Thin ceramic core (5) production comprises casting a core-making mixture strip, shaping, curing and impregnating with a resin or organic polymer. Thin ceramic cores (5) are produced from a mixture of (by wt.) 30 % ceramic material, comprising 70 % silica and 30 % zircon, and 70 % binder, comprising 50-70 % solvent, 15-20 % binder product, 5-10 % first plasticizer, 10-15 % second plasticizer and 1 % dispersing agent. Production comprises strip casting the mixture on a uniformly thick belt, drying the strip, shaping in a mould by preheating at 100 deg C for 30 minutes and pressing at 40 MPa for 3 minutes, curing to a ceramic preform and impregnating with a resin or organic polymer. An Independent claim is also included for production of ceramic cores, in which one or more thin ceramic cores, produced by the above process, are assembled with one or more other thin ceramic cores and/or a conventionally produced thick central core.

IPC 1-7

B22C 9/10

IPC 8 full level

B22C 1/00 (2006.01); **B22C 1/22** (2006.01); **B22C 9/10** (2006.01)

CPC (source: EP US)

B22C 1/00 (2013.01 - EP US); **B22C 1/22** (2013.01 - EP US); **B22C 9/10** (2013.01 - EP US)

Cited by

GB2373747A; GB2373747B

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

FR 2785836 A1 20000519; **FR 2785836 B1 20001215**; DE 69914299 D1 20040226; DE 69914299 T2 20041125; EP 1013360 A1 20000628; EP 1013360 B1 20040121; US 6286582 B1 20010911

DOCDB simple family (application)

FR 9814168 A 19981112; DE 69914299 T 19991110; EP 99402794 A 19991110; US 43677099 A 19991109