

Title (en)

Production of metal matrix composites.

Title (de)

Herstellung von Verbundwerkstoffen mit Metallmatrix.

Title (fr)

Fabrication de matériaux composites à matrice métallique.

Publication

EP 0328805 A1 19890823 (EN)

Application

EP 88304238 A 19880511

Priority

CA 559212 A 19880218

Abstract (en)

A method of producing a composite cast article having a metal matrix containing divided dispersible solid material, i.e. divided solid filler, such as reinforcing fibers or particles, wherein a melt of the metal matrix is placed in a die cavity, a preheated preform of a divided solid filler is placed on top of the melt and pressure is exerted on the preform in a direction parallel to the cavity axis for forcing the preform downwardly into the molten metal whereby the molten metal fully infiltrates the the preform filler, and the resultant cast article is solidified by controlling heat flow within the die cavity in such manner that a solidification from advances unidirectionally, along the cavity axis, entirely through the metal-infiltrated preform layer, while the metal ahead of this front within and at least immediately beyond the preform layer remains molten.

IPC 1-7

C22C 1/09

IPC 8 full level

B22D 19/14 (2006.01); **B22D 27/04** (2006.01); **C22C 1/10** (2006.01); **C22C 47/06** (2006.01); **C22C 47/08** (2006.01)

CPC (source: EP KR)

B22D 18/02 (2013.01 - KR); **C22C 1/1036** (2013.01 - EP); **C22C 47/06** (2013.01 - EP); **C22C 47/08** (2013.01 - EP)

Citation (search report)

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Designated contracting state (EPC)

DE ES FR GB IT SE

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DOCDB simple family (application)

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