

Title (en)  
Method and apparatus for pressure diecasting a semi-solid metallic slurry

Title (de)  
Verfahren und Vorrichtung zum Druckgiessen breiartiger Metallschmelze

Title (fr)  
Procédé et dispositif de coulée sous pression d'un métal en phase pâteuse

Publication  
**EP 1413373 A2 20040428 (EN)**

Application  
**EP 03253376 A 20030529**

Priority  

- KR 20020058163 A 20020925
- KR 20020063162 A 20021016
- KR 20030003250 A 20030117
- KR 20030013515 A 20030304

Abstract (en)  
Provided are a die casting method and apparatus for rheocasting that ensure the manufacture of products with a fine, uniform, spherical particle structure, with improvements in energy efficiency and mechanical properties, cost reduction, convenience of casting, and shorter manufacturing time. The die casting method involves applying an electromagnetic field to a slurry manufacturing domain in a sleeve (2) having an end through which a plunger (3) is inserted and the other end connected to a casting die (4) with a mold cavity (43), loading a molten metal into the slurry manufacturing domain to manufacture a semi-solid metallic slurry, and moving the plunger toward the casting die to push the metallic slurry into the mold cavity.  
<IMAGE>

IPC 1-7  
**B22D 17/00**; **B22D 27/02**; **B22D 1/00**

IPC 8 full level  
**B22D 1/00** (2006.01); **B22D 17/00** (2006.01); **B22D 17/12** (2006.01); **B22D 17/20** (2006.01); **B22D 17/30** (2006.01); **B22D 27/02** (2006.01); **C22C 1/00** (2006.01); **C22C 21/02** (2006.01)

CPC (source: EP US)  
**B22D 1/00** (2013.01 - EP US); **B22D 17/007** (2013.01 - EP US); **C22C 1/12** (2023.01 - EP US); **C22C 21/02** (2013.01 - EP US)

Cited by  
ITBO20130146A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2004055726 A1 20040325**; CN 1298461 C 20070207; CN 1485170 A 20040331; EP 1413373 A2 20040428; EP 1413373 A3 20051130; JP 2004114154 A 20040415; JP 3549055 B2 20040804

DOCDB simple family (application)  
**US 44810303 A 20030530**; CN 03141281 A 20030603; EP 03253376 A 20030529; JP 2003102320 A 20030404