

Title (en)  
Pressure diecasting method

Title (de)  
Druckgiessverfahren

Title (fr)  
Procédé de coulée sous pression

Publication  
**EP 1046444 B1 20020306 (DE)**

Application  
**EP 99107814 A 19990420**

Priority  
EP 99107814 A 19990420

Abstract (en)  
[origin: EP1046444A1] A horizontal chamber die casting process comprises forming a stabilized and homogenized cylindrical melt volume for feeding additional compression of the solidifying cast product in the die. A horizontal chamber die casting process comprises applying a vacuum to the chamber and piston, accelerating the melt before entry into the die and subjecting the die to pressure before or when the melt reaches the ingate opening. Before acceleration, the melt is formed to a cylindrical shape which is retained until achievement of hydrodynamic stabilization, temperature equalization and uniform pressure distribution in the cylindrical material volume and which is fed into the solidifying metal after filling of the die to provide additional compression during solidification of the cast product.

IPC 1-7  
**B22D 17/00**

IPC 8 full level  
**B22D 17/02** (2006.01); **B22D 17/10** (2006.01); **B22D 17/14** (2006.01); **B22D 17/20** (2006.01); **B22D 17/22** (2006.01); **B22D 17/30** (2006.01); **B22D 17/32** (2006.01); **B22D 27/11** (2006.01)

CPC (source: EP KR)  
**B22D 17/10** (2013.01 - EP); **B22D 17/14** (2013.01 - KR); **B22D 17/2015** (2013.01 - KR); **B22D 17/2053** (2013.01 - EP); **B22D 17/2069** (2013.01 - EP); **B22D 17/30** (2013.01 - EP); **B22D 27/11** (2013.01 - EP); **B22D 21/007** (2013.01 - KR)

Cited by  
DE102020113633B3; CN114653917A; DE10033166A1; CN112719245A; JP2022117932A; CN116140580A; CN110842170A; CN116851700A; DE10062436A1; EP3646966A1; IT201800009961A1; WO02090020A1; WO02090021A1; WO2005080024A1; EP3892399A1; WO2007038892A1; WO2008152665A1; US11440087B2; US11969784B2; EP3912749A1

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