

Title (en)
Process and apparatus for pressure die-casting

Title (de)
Verfahren und Vorrichtung zum Druckgiessen

Title (fr)
Procédé et dispositif de moulage par injection

Publication
EP 0691166 A1 19960110 (EN)

Application
EP 95110065 A 19950628

Priority
IT MI941387 A 19940704

Abstract (en)
A process and an apparatus for the die-casting of pressure-cast metal parts according to which a metered quantity of the molten metal in a furnace (20) is fed, under pressure, into the cavity (75 - Fig. 8) of a die assembly (70, 76, 80 - Fig. 8) by means of an injection device (19) operated under controlled pressure and speed conditions; the molten metal is supplied at a pressure ranging between 50 and 350 Atm (4,9 - 34,3 MPa), and under laminar flow conditions by means of a thermally controlled injection device comprising zones thermally regulated at different temperatures for maintaining a condition of axial alignment between the chamber (21) and the plunger (22) of the injection device (19). <MATH>

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IPC 8 full level
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Citation (applicant)
• US 4850420 A 19890725 - KOYA HIROKUNI [JP]
• US 4583579 A 19860422 - MIKI ISAO [JP], et al
• DE 3636936 A1 19880505 - BUEHLER AG GEB [CH]
• DE 3013226 A1 19811015 - NIPPON LIGHT METAL CO [JP]
• DE 3505554 A1 19860821 - HAHN ORTWIN, et al
• GB 489944 A 19380803 - JOSEF POLAK
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Citation (search report)
• [DA] US 4850420 A 19890725 - KOYA HIROKUNI [JP]
• [A] DE 3427475 A1 19850214 - NIPPON LIGHT METAL CO [JP]
• [A] DE 3636936 A1 19880505 - BUEHLER AG GEB [CH]
• [A] DE 1156205 B 19631024 - ECKERT G M B H GEB
• [A] DE 3505554 A1 19860821 - HAHN ORTWIN, et al
• [A] GB 489944 A 19380803 - JOSEF POLAK
• [A] FR 902392 A 19450829 - MAHLE WERK GMBH
• [A] DE 3013226 A1 19811015 - NIPPON LIGHT METAL CO [JP]
• [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 458 (M - 880) 17 October 1989 (1989-10-17)
• [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 087 (M - 372) 17 April 1985 (1985-04-17)
• [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 235 (M - 415) 21 September 1985 (1985-09-21)

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