

Title (en)
Production of cast steel parts provided with inner cavities

Title (de)
Herstellung von Gussstahlgegenständen mit inneren Hohlräumen

Title (fr)
Fabrication de pièces avec cavités internes en acier moulé

Publication
EP 0640418 B2 20041201 (EN)

Application
EP 93500118 A 19930802

Priority
• EP 93500118 A 19930802
• ES 9101593 A 19910708

Abstract (en)
[origin: EP0640418A1] The improvements are applicable to the production of cast steel parts (15), provided with inner cavities (16), by the arrangement of various stacked compartments (1,2,3,4,5,6), with a central filling collector (8) and multiple parts (7) disposed radially or in another form in each of the compartments and characterised in that in the end of the core (21,30) which corresponds to the inner cavity of each of the parts, there is a projection (20,22,23,24,26,27,28) for controlling a recess which is provided inside the part, in the area distant from the outer surface thereof, all of the filling being performed from the single central filling duct (8), without supply sinkheads. The projection for controlling the recess disposed inside the core provides communication of the cavity of the recess with the atmosphere, by means of its own core, owing to the permeability of the sand, avoiding local depressions in the walls of the cast part. <IMAGE>

IPC 1-7
B22C 9/20; **B22C 9/10**

IPC 8 full level
B22C 9/10 (2006.01); **B22C 9/20** (2006.01)

CPC (source: EP)
B22C 9/10 (2013.01); **B22C 9/20** (2013.01)

Citation (opposition)
Opponent :
• US 2205327 A 19400618 - JOHN WILLIAMS
• US 1294209 A 19190211 - WALKER JOHN B [US]
• US 4241492 A 19801230 - HEDBERG ARTHUR S [US]
• SU 1687360 A1 19911030 - INST LITYA AN USSR [SU]
• ES 124927 U
• JP S54110616 A 19790830 - NIPPON KOKAN KK
• JP H0332446 A 19910213 - RIKEN KK
• JP S5588953 A 19800705 - HONDA MOTOR CO LTD
• JP S5588952 A 19800705 - HONDA MOTOR CO LTD

Cited by
US5787957A; US5785107A; GB2307197A; US5778965A; GB2307197B; WO2009014412A1

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EP 0640418 A1 19950301; **EP 0640418 B1 19990303**; **EP 0640418 B2 20041201**; ES 2046078 A2 19940116; ES 2046078 B1 19951001; ES 2046078 R 19950316; GR 3030249 T3 19990831

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EP 93500118 A 19930802; ES 9101593 A 19910708; GR 990401342 T 19990519