

Title (en)
METHOD OF PRODUCING CASTINGS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON GUSSSTÜCKEN

Title (fr)
PROCEDE DE PRODUCTION DE PIECES MOULEES EN FONTE

Publication
EP 0917500 B1 20000510 (DE)

Application
EP 97918966 A 19970806

Priority
• DE 19632195 A 19960809
• EP 9704296 W 19970806

Abstract (en)
[origin: US6199618B1] In order to produce castings from cast iron with foliated graphite, the carbon content of the cast iron can be set at between approximately 3 and 4% by controlling the melting process of the type and/or operation of the melting furnace. The molten mass is then cast in a sand-casting or lost-form method. During conventional cooling, the known mechanical properties of the cooled cast are set. In order to improve these mechanical properties in terms of hardness and strength, the casting is released from its mold at a temperature ranging from 1,100° C. to 800° C. and is immediately subjected to a cooling treatment by being blasted with an air flow in order to cool it to below 723° C. in a given amount of time. The casting, in selected regions, is cooled to below 723° C. by specific intermittent bursts of air in a relatively short amount of time in order to produce a harder structure. The cooling treatment is stopped when the temperature at the eutectoid line of the iron-carbon diagram is reached.

IPC 1-7
B22D 30/00

IPC 8 full level
C21D 1/613 (2006.01); **C21D 5/00** (2006.01); **C21D 1/667** (2006.01)

CPC (source: EP US)
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DOCDB simple family (publication)
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