

Title (en)

DIRECTIONAL SOLIDIFICATION COOLING FURNACE AND COOLING PROCESS USING SUCH A FURNACE

Title (de)

KÜHLOFEN MIT GERICHTETER ERSTARRUNG UND KÜHLVERFAHREN MIT SOLCH EINEM OFEN

Title (fr)

FOUR DE REFROIDISSEMENT PAR SOLIDIFICATION DIRIGÉE ET PROCÉDÉ DE REFROIDISSEMENT UTILISANT UN TEL FOUR

Publication

EP 3475012 A1 20190501 (FR)

Application

EP 17745799 A 20170627

Priority

- FR 1655959 A 20160627
- FR 2017051706 W 20170627

Abstract (en)

[origin: CA3029438A1] Directional solidification cooling furnace (20) for a metal casting, comprising a cylindrical internal chamber (26) with a vertical central axis (X) and a mold support (28) positioned in the internal chamber (26), the internal chamber (26) comprising a casting zone (A) and a cooling zone (B), the casting zone (A) and the cooling zone (B) being superimposed on one another, the casting and cooling zones being thermally insulated from one another, when the mold support is positioned in the casting zone (A), by a fixed first heat shield (31) and a second heat shield (32) borne by the mold support (28), the casting zone (A) comprising at least a first heating device and the cooling zone (B) comprising a second heating device (60), the first and second heating devices being configured so that the temperature of the casting zone (A) is higher than the temperature of the cooling zone (B), the cooling zone (B) comprising an upper portion (B') and a lower portion (B'') superposed on one another and thermally insulated from one another by a third heat shield (33), the upper portion (B') of the cooling zone (B) comprising the second heating device (60).

IPC 8 full level

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