

Title (en)
METHOD FOR CLEANING MOLTEN METAL AND APPARATUS THEREFOR

Publication
EP 0322763 B1 19930811 (EN)

Application
EP 88121503 A 19881222

Priority
• JP 311288 A 19880112
• JP 311388 A 19880112
• JP 32672287 A 19871225
• JP 32672387 A 19871225

Abstract (en)
[origin: EP0322763A2] A method for cleaning molten metal comprises a bubbling process, wherein the gas soluble in molten metal is bubbled in the molten metal under increased pressure, the inclusions in the molten metal are trapped by the gas bubbles produced by bubbling, and the gas is dissolved in the molten metal; a pressure reduction process, wherein fine gas bubbles are produced in the molten metal by reducing a pressure on the molten metal in which gas is dissolved, and the inclusions suspended in the molten metal are trapped by the fine gas bubbles produced by reduction of the pressure; and an inclusions removing process, wherein inclusions having risen to the surface of the molten metal are removed. An apparatus comprises a first vessel (30) which has an inlet (32) for charging molten metal at the top end thereof and outlet (34) for charging molten metal at the bottom thereof; a second vessel (40) which has an inflow port(38) for pressurized molten metal at the bottom thereof and an outflow port (42) for the pressurized molten metal and in which the pressurized molten metal goes upwardly; a communicating tube (36) connecting the first vessel to the second vessel; and a first bubbling device (44) positioned at the bottom of the first vessel for bubbling the gas soluble in molten metal.

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C21C 1/00; **C21C 7/072**; **C22B 9/05**

IPC 8 full level
C21C 7/072 (2006.01); **C22B 9/05** (2006.01); **C21C 5/56** (2006.01); **C21C 7/00** (2006.01)

CPC (source: EP KR)
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Cited by
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EP 0322763 A2 19890705; **EP 0322763 A3 19900207**; **EP 0322763 B1 19930811**; AU 2703888 A 19890817; AU 605949 B2 19910124; BR 8806870 A 19890829; CA 1337744 C 19951219; DE 3883190 D1 19930916; DE 3883190 T2 19940105; KR 890010223 A 19890807; KR 930005065 B1 19930615

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