Title (en)
Method for cleaning molten metal.

Title (de)
Verfahren zum Reinigen von Metall.

Title (fr)
Procédé de purification de métal liquide.

Publication
EP 0362851 A2 19900411 (EN)

Application
EP 89118517 A 19891005

Priority
- JP 3110589 A 19890213
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Abstract (en)
A method for cleaning molten metal , especially steel, comprises the steps of keeping a pressure inside a vessel having molten metal therein at a pressure of PS of atmospheric pressure or less, bubbling the molten metal in the vessel by gas soluble in the molten metal, a portion of said gas dissolving in the molten metal and the rest of the gas converting to gas bubbles, and reducing rapidly the pressure in the vessel to pressure PE, fine gas bubbles being produced in the molten metal in the vessel, nonmetallic inclusions being trapped by said fine gas bubbles and by gas bubbles produced by bubbling and rising to the the surface of the molten metal, and gas dissolved in the molten metal being removed. Pressure PS in the step of keeping a pressure and pressure PE in the step of reducing the pressure are pressures PS and PE of atmosphere inside the vessel in a zone enclosed with PS=760, PE=40, $(PS)^{1/2} - (PE)^{1/2} = 3.06$ in two-dimensional rectangular coordinates, whose ordinate is PS Torr and whose abscissa is PE Torr.

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C21C 7/00; C21C 7/10; C22B 9/05

IPC 8 full level
C21C 7/00 (2006.01); **C21C 7/10** (2006.01); **C22B 9/05** (2006.01)

CPC (source: EP KR)
C21C 7/00 (2013.01 - KR); **C21C 7/0081** (2013.01 - EP); **C21C 7/10** (2013.01 - EP); **C22B 1/04** (2013.01 - KR); **C22B 9/05** (2013.01 - EP)

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EP 0362851 A2 19900411; **EP 0362851 A3 19900620**; **EP 0362851 B1 19930331**; AU 1397692 A 19920528; AU 4245789 A 19900816; AU 655245 B2 19941208; BR 8905068 A 19900508; CA 1339703 C 19980310; DE 68905741 D1 19930506; DE 68905741 T2 19930923; KR 900006541 A 19900508; KR 920006578 B1 19920810

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EP 89118517 A 19891005; AU 1397692 A 19920402; AU 4245789 A 19891002; BR 8905068 A 19891005; CA 614559 A 19890929; DE 68905741 T 19891005; KR 890014420 A 19891006