

Title (en)  
METHOD FOR CLEANING MOLTEN METAL

Publication  
**EP 0362851 B1 19930331 (EN)**

Application  
**EP 89118517 A 19891005**

Priority  
• JP 3110589 A 19890213  
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Abstract (en)  
[origin: EP0362851A2] 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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IPC 8 full level  
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