

Title (en)  
APPARATUS FOR MANUFACTURING MOLTEN IRONS BY INJECTING FINE COALS INTO A MELTER-GASIFIER AND THE METHOD USING THE SAME.

Title (de)  
VORRICHTUNG ZUR HERSTELLUNG VON SCHMELZFLÜSSIGEM EISEN DURCH EINLEITEN VON FEINER KOHLE IN EINEN SCHMELZ-/VERGASUNGSOFEN UND VERFAHREN DAMIT

Title (fr)  
APPAREIL POUR FABRIQUER DU FER FONDU PAR INJECTION DE KEROSENE DANS UN POT DE FUSION-GAZEIFIEUR ET PROCEDE POUR L'UTILISER

Publication  
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Application  
**EP 05771096 A 20050729**

Priority  

- KR 2005002478 W 20050729
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- KR 20050033775 A 20050422

Abstract (en)  
[origin: WO2006011774A1] The present invention relates to an apparatus for manufacturing molten irons by injecting fine carbonaceous materials into a melter-gasifier and a method for manufacturing molten irons using the same. The method for manufacturing molten irons according to the present invention includes steps of reducing mixtures containing iron ores in a reduction reactor and converting the mixtures containing iron ores into reduced materials, preparing lumped carbonaceous materials containing volatile matters as a heating source for melting the reduced materials, charging the lumped carbonaceous materials into a dome-shaped upper portion of a melter-gasifier and forming a coal packed bed, preparing fine carbonaceous materials containing volatile matters as a heating source for melting the reduced materials, injecting oxygen and the fine carbonaceous materials into the coal packed bed through a tuyere installed in the melter-gasifier, charging the reduced materials into the melter-gasifier connected to the reduction reactor and manufacturing molten irons, and supplying reducing gas in the melter-gasifier made from volatile matters contained both in the lumped carbonaceous materials and the fine carbonaceous materials to the reduction reactor.

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Cited by  
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