

Title (en)  
PRODUCTION OF HIGH-GRADE MANGANESE FROM FERROMANGANESE BY MEANS OF VAPORIZATION IN A VACUUM INDUCTION PLANT

Title (de)  
HERSTELLUNG VON HOCHWERTIGEM MANGAN AUS FERROMANGAN MITTELS VERDAMPFUNG IN EINER VAKUUMINDUKTIONSANLAGE

Title (fr)  
PROCÉDÉ DE PRODUCTION DE MANGANÈSE DE GRANDE QUALITÉ À PARTIR DE FERROMANGANÈSE PAR VAPORISATION DANS UNE INSTALLATION À INDUCTION SOUS VIDE

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Application  
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Abstract (en)  
[origin: WO2015043560A1] The invention relates to a process for producing manganese of industrial grade purity by vaporizing carbon-containing ferromanganese in an induction vacuum vessel and to an apparatus for conducting the process, wherein the process is carried out under reduced pressure and at temperatures above the liquidus temperature of manganese, and a pan containing liquid carbon-containing ferromanganese is inserted into an induction vaporizer, the metal is generated under reduced pressure and is vaporized by a vacuum pump and filter system in the range of 10-900 mbar and a temperature in the region of > 1248 °C while being stirred with argon, and further on in the plant is cooled with water by means of a primary condenser, wherein the manganese vapors are liquefied by means of a secondary condenser in a mobile condensation chamber at temperatures in the range of 1350-1400 °C and tapped off continuously into a casting machine by means of a siphon-like heated tap hole and cast to give the end product.

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