

Title (en)
TWO-ZONE MOLTEN METAL HYDROGEN-RICH AND CARBON MONOXIDE-RICH GAS GENERATION PROCESS

Title (de)
VERFAHREN ZUR ERZEUGUNG EINES WASSERSTOFFREICHEN UND KOHLENMONOXIDREICHEN GASES DURCH VERWENDUNG VON FLÜSSIGEN METALLEN IN ZWEI ZONEN

Title (fr)
TECHNIQUE DE PRODUCTION DE GAZ RICHES EN HYDROGENE ET MONOXYDE DE CARBONE FAISANT INTERVENIR DU METAL LIQUIDE REPARTI EN DEUX ZONES

Publication
EP 0946680 A4 20030122 (EN)

Application
EP 96943538 A 19961125

Priority
US 9619081 W 19961125

Abstract (en)
[origin: WO9823707A1] A high pressure two-zone molten iron gasification process for converting solid, liquid and gaseous hydrocarbon feeds into separate substantially hydrogen-rich and carbon monoxide-rich streams at 2 to 200 atmospheres pressure by feeding hydrocarbons into the molten iron in a first zone (4) in which hydrogen-rich gas is formed and then circulating the molten iron into contact with an oxygen containing gas in a second zone (5) in which carbon monoxide-rich gas is formed. The carbon level in the circulating molten iron is carefully controlled above 0.3 wt. % to minimize formation of FeO. Hydrogen sulfide and other volatile sulfur compounds are removed from the separate gas streams via scrubbing in downstream equipment (12 and 16).

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C01B 3/24 (2006.01); **C10J 3/57** (2006.01); **C10K 1/02** (2006.01); **C10K 3/02** (2006.01)

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Citation (search report)

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- See references of WO 9823707A1

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