

Title (en)

METHOD FOR THE TREATMENT OF PRODUCT GAS PRODUCED BY PRESSURE GASIFICATION OF SOLID FUELS

Title (de)

VERFAHREN ZUM BEHANDELN VON DURCH DRUCKVERGASEN FESTER BRENNSTOFFE ERZEUGTEM PRODUKTGAS

Title (fr)

PROCÉDÉ POUR TRAITER UN GAZ PRODUIT PAR GAZÉIFICATION SOUS PRESSION DE COMBUSTIBLES SOLIDES

Publication

EP 2148913 A2 20100203 (DE)

Application

EP 08758739 A 20080523

Priority

- EP 2008004147 W 20080523
- DE 102007024312 A 20070524

Abstract (en)

[origin: CA2687996A1] The invention relates to a method for the treatment of raw product gas produced by pressure gasification of solid fuels. After cooling to 15 to 45 °C, the following substances are removed by physisorption with cold oxygenate: in a preliminary stage, HCN and NH₃; in a first stage, H₂S and COS and, if necessary, other sulfurous compounds; and in a second stage CO₂. The pure product gas is then conveyed as a reduction gas and/or as a combustion gas to the direct reduction of iron ore. An improvement to the method lies in the fact that the desulfurized product gas is mixed with return gas loaded with CO₂ and water vapor diverted from the circulation of the return gas from the direct reduction of iron ore, once the water vapor contained therein has been removed.

IPC 8 full level

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Citation (search report)

See references of WO 2008141839A2

Citation (examination)

US 4861369 A 19890829 - VON BOGDANDY LUDWIG [AT], et al

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MX 2009012514 A 20100421; RU 2009148023 A 20110627; RU 2475515 C2 20130220; UA 100856 C2 20130211; US 2011126542 A1 20110602;
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RU 2009148023 A 20080523; UA A200913402 A 20080523; US 60146008 A 20080523; ZA 200907997 A 20091113