

Title (en)

PROCESS AND DEVICE FOR CHARGING A FUSION GASIFIER WITH GASIFYING MEANS AND SPONGY IRON

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESCHICKUNG EINES EINSCHMELZVERGASERS MIT VERGASUNGSMITTELN UND EISENSCHWAMM

Title (fr)

PROCEDE ET DISPOSITIF POUR LE CHARGEMENT D'UN GAZEIFICATEUR DE FUSION AVEC DES AGENTS DE GAZEIFICATION ET DU FER SPONGIEUX

Publication

EP 0910671 B1 20010704 (DE)

Application

EP 97924906 A 19970516

Priority

- DE 9701038 W 19970516
- DE 19623246 A 19960530

Abstract (en)

[origin: DE19623246C1] The installation consists of a melting gasifier (2) and a reduction shaft (1) which is located above it and serves for reducing iron ore into sponge iron. By means of horizontal delivery units (7) and a pipe (11), sponge iron is brought into the gasifier head where it is melted and reduced into liquid pig iron with the aid of a gasifying agent and a gas containing oxygen. The resultant reduction gas is extracted from the gasifier head. The iron sponge delivery units lead into a dust blocking vessel (5) which is connected to the pipe (11) leading into melting gasifier (2). By means of a delivery unit (10) the vessel (5) is provided with a blocking gas at a higher pressure than the gas in the gasifier head. Also claimed is a method for loading the melting gasifier with sponge iron and a gasifying agent.

IPC 1-7

C21B 13/14

IPC 8 full level

C21B 13/02 (2006.01); **C21B 13/06** (2006.01); **C21B 13/14** (2006.01); **F27D 3/08** (2006.01); **F27D 3/10** (2006.01)

CPC (source: EP KR US)

C21B 13/002 (2013.01 - EP US); **C21B 13/14** (2013.01 - EP KR US); **F27D 3/08** (2013.01 - EP US); **F27D 3/10** (2013.01 - EP US)

Designated contracting state (EPC)

DE GB IT LU

DOCDB simple family (publication)

DE 19623246 C1 19971002; AT 408550 B 20011227; AT A905597 A 20010515; AU 3024797 A 19980105; AU 721434 B2 20000706; BR 9709626 A 19990810; CA 2255710 A1 19971211; CN 1067109 C 20010613; CN 1219976 A 19990616; DE 59703961 D1 20010809; EP 0910671 A1 19990428; EP 0910671 B1 20010704; JP 2000514498 A 20001031; KR 20000016202 A 20000325; PL 330113 A1 19990426; TW 340136 B 19980911; US 6224647 B1 20010501; WO 9746719 A1 19971211; ZA 974310 B 19971218

DOCDB simple family (application)

DE 19623246 A 19960530; AT 905597 A 19970516; AU 3024797 A 19970516; BR 9709626 A 19970516; CA 2255710 A 19970516; CN 97195073 A 19970516; DE 59703961 T 19970516; DE 9701038 W 19970516; EP 97924906 A 19970516; JP 50008498 A 19970516; KR 19980709770 A 19981130; PL 33011397 A 19970516; TW 86106739 A 19970520; US 19447399 A 19990219; ZA 974310 A 19970519