

Title (en)
Process for melting inorganic substances

Title (de)
Verfahren zum Schmelzen von anorganischen Stoffen

Title (fr)
Procédé pour la fusion de substances inorganiques

Publication
EP 0982407 B1 20030122 (DE)

Application
EP 98810835 A 19980824

Priority
EP 98810835 A 19980824

Abstract (en)
[origin: KR20000017396A] PURPOSE: A method for melting an inorganic substance uses an inexpensive fuel and generates vigorous agitation on the surface of a bath, thereby controlling a desired charcoal-to-oxygen ratio. CONSTITUTION: The method for melting fuel(8), oxygen or oxygen concentrated gas(10) and inorganic substance(7) added to a liquid bath(5) in a rotary horizontal converter or a rotary furnace(1) comprises the steps of: adding the solid fuel(8) in the form of fractions; and blowing the oxygen or oxygen concentrated gas(10) over the surface of the liquid bath(5) at a high speed, the gas being reacted with the solid fuel(8) to generate heat. The blowing speed of the oxygen or oxygen concentrated gas(10) over the surface of the liquid bath(5) is greater than the speed of acoustic wave. The solid fuel(8) comprises charcoal or a charcoal-containing fuel.

IPC 1-7
C21C 5/42; F27B 7/20

IPC 8 full level
C10G 1/10 (2006.01); **C21B 11/08** (2006.01); **C21B 13/08** (2006.01); **C21C 5/28** (2006.01); **C21C 5/42** (2006.01); **C22B 7/00** (2006.01); **F23G 5/027** (2006.01); **F23G 5/14** (2006.01); **F23J 1/00** (2006.01); **F27B 3/06** (2006.01); **F27B 3/22** (2006.01); **F27B 7/20** (2006.01)

CPC (source: EP KR US)
C21B 13/085 (2013.01 - EP US); **C21C 5/42** (2013.01 - EP US); **C22B 7/00** (2013.01 - KR); **F27B 3/06** (2013.01 - EP US); **F27B 3/225** (2013.01 - EP US); **F27B 7/2083** (2013.01 - EP US)

Cited by
EP2216419A2

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0982407 A1 20000301; EP 0982407 B1 20030122; AT E231560 T1 20030215; DE 59807017 D1 20030227; JP 2000154387 A 20000606; KR 20000017396 A 20000325; NO 994086 D0 19990824; NO 994086 L 20000225; TW 548332 B 20030821; US 6432162 B1 20020813

DOCDB simple family (application)
EP 98810835 A 19980824; AT 98810835 T 19980824; DE 59807017 T 19980824; JP 23746599 A 19990824; KR 19990034317 A 19990819; NO 994086 A 19990824; TW 88113454 A 19990806; US 37536999 A 19990817