

Title (en)

SYSTEM FOR REDUCTION IN TEMPERATURE VARIATION DURING LENGTHWISE GRAPHITIZATION OF CARBON BODIES

Title (de)

SYSTEM ZUR VERRINGERUNG VON TEMPERATURSCHWANKUNGEN WÄHREND DER LÄNGENWEISEN GRAPHITISIERUNG VON KOHLENSTOFFKÖRPERN

Title (fr)

SYSTEME VISANT A REDUIRE UNE VARIATION DE TEMPERATURE PENDANT LA GRAPHITISATION LONGITUDINALE DE CORPS CARBONES

Publication

**EP 1279319 A1 20030129 (EN)**

Application

**EP 00920231 A 20000410**

Priority

US 0009528 W 20000410

Abstract (en)

[origin: WO0178460A1] A method for heat treating carbon products comprises providing a pair of electrodes (34a, 34b), providing a carbon body (32) in electrical contact between the electrodes (34a, 34b), and inserting a joint (20) between at least one of the electrodes (34a, 34b) and the carbon body (32). The joint (20) has a plurality of layers of a low electrical resistivity material; and a plurality of layers of a high electrical resistivity material. The layers of low and high electrical resistivity materials are in alternating relationship and of a thickness sufficient such that an electric current passing through the layers may generate a desired amount of heat which flows to the carbon body (32). The method includes passing an electric current through the electrode (34a or 34b), joint (20) and carbon body (32) and generating a desired amount of heat in the joint (20) with the electric current to heat a portion of the carbon body (32) adjacent the joint (20) to a graphitizing temperature. Preferably, the layer of low electrical resistivity material comprises graphite, more preferably, flexible graphite foil having a density less than about 0.5 g/cc. Preferably, the layer of high electrical resistivity material comprises a cellulose-based material or graphite foil having a density greater than about 0.5 g/cc.

IPC 1-7

**H05B 7/06**; H05B 3/60

IPC 8 full level

**B32B 18/00** (2006.01); **C04B 35/52** (2006.01); **C04B 35/64** (2006.01); **H05B 3/00** (2006.01); **H05B 7/085** (2006.01)

CPC (source: EP)

**B32B 18/00** (2013.01); **C04B 35/52** (2013.01); **C04B 35/6365** (2013.01); **C04B 35/64** (2013.01); **C04B 37/005** (2013.01); **C04B 37/008** (2013.01); **H05B 3/0004** (2013.01); **H05B 7/085** (2013.01); **C04B 2237/086** (2013.01); **C04B 2237/363** (2013.01); **C04B 2237/592** (2013.01); **C04B 2237/62** (2013.01); **C04B 2237/704** (2013.01); **C04B 2237/708** (2013.01); **C04B 2237/72** (2013.01); **C04B 2237/76** (2013.01); **C04B 2237/78** (2013.01)

Citation (search report)

See references of WO 0178460A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 0178460 A1 20011018**; AU 4080900 A 20011023; BR 0017204 A 20030114; EP 1279319 A1 20030129; MX PA02009994 A 20040819

DOCDB simple family (application)

**US 0009528 W 20000410**; AU 4080900 A 20000410; BR 0017204 A 20000410; EP 00920231 A 20000410; MX PA02009994 A 20000410