

Title (en)
CATENARY TYPE FURNACE

Title (de)
DURCHHANGOFEN

Title (fr)
FOUR DE TYPE CONTINU

Publication
EP 1584694 A4 20060322 (EN)

Application
EP 03776019 A 20031202

Priority
• JP 0315394 W 20031202
• JP 2003006356 A 20030114

Abstract (en)
[origin: EP1584694A1] An object of the present invention is to provide a catenary furnace which has high compatibility with environmental protection, is easy to maintain, and can satisfactorily perform heating treatment of a material by restraining fluctuations in furnace temperature. <??>In the present invention, in a catenary furnace (1) for heating a material (3), which is formed in a shape of a catenary curve and is conveyed in the longitudinal direction of a furnace casing (2), in the furnace casing (2) heated by burners, a lower burner, which is fired continuously toward the transverse direction of the furnace casing (2), is provided on the lower side of the material (3), and an alternate combustion type regenerative burner (5, 6), which has a pair of burners (5a, 5b, 6a, 6b) burned alternately and is fired toward the longitudinal direction of the furnace casing (2), is provided on the upper side of the material (3). <IMAGE>

IPC 1-7
C21D 9/56; C21D 1/52

IPC 8 full level
F23L 15/02 (2006.01); **C21D 1/52** (2006.01); **C21D 9/56** (2006.01); **F27D 17/00** (2006.01)

CPC (source: EP)
C21D 1/52 (2013.01); **C21D 9/56** (2013.01)

Citation (search report)
• [Y] JP H0554539 U 19930720
• [Y] PATENT ABSTRACTS OF JAPAN vol. 016, no. 190 (C - 0937) 8 May 1992 (1992-05-08)
• [Y] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 03 31 March 1997 (1997-03-31)
• [Y] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 14 22 December 1999 (1999-12-22)
• [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 090 (C - 104) 27 May 1982 (1982-05-27)
• See references of WO 2004063403A1

Designated contracting state (EPC)
ES FI

DOCDB simple family (publication)
EP 1584694 A1 20051012; EP 1584694 A4 20060322; EP 1584694 B1 20120905; CN 100419097 C 20080917; CN 1726293 A 20060125;
ES 2394634 T3 20130204; JP 2004218000 A 20040805; JP 4278990 B2 20090617; WO 2004063403 A1 20040729

DOCDB simple family (application)
EP 03776019 A 20031202; CN 200380106157 A 20031202; ES 03776019 T 20031202; JP 0315394 W 20031202; JP 2003006356 A 20030114