

Title (en)
FURNACE WALL OBSERVATION DEVICE

Title (de)
OFENWANDBEOBACHTUNGSVORRICHTUNG

Title (fr)
DISPOSITIF D'OBSERVATION DE LA PAROI D'UN FOUR

Publication
EP 1473350 B1 20150429 (EN)

Application
EP 03700487 A 20030108

Priority
• JP 0300072 W 20030108
• JP 2002002342 A 20020109
• JP 2002231370 A 20020808
• JP 2002237948 A 20020819

Abstract (en)
[origin: EP1473350A1] An oven wall viewing apparatus for viewing the surface of facing surface walls in a coke oven coking chamber etc. and an oven wall shape measurement apparatus for measuring the surface of the oven walls, wherein a light beam emitter and camera apparatus are housed in a heat insulated container, a mirror surface is arranged at the outside of the heat insulated container, and the image of the oven wall surface reflected at the mirror surface is captured by the camera apparatus. <IMAGE>

IPC 8 full level
C10B 41/00 (2006.01); **F23M 5/00** (2006.01); **F27D 21/00** (2006.01); **F27D 21/02** (2006.01)

CPC (source: EP KR)
C10B 29/00 (2013.01 - KR); **C10B 41/00** (2013.01 - EP); **F23M 5/00** (2013.01 - EP); **F27D 21/0021** (2013.01 - EP); **F27D 2021/026** (2013.01 - EP)

Cited by
US9638516B2; EP1655570A1; EP2660558A4; EP3118554A1; EA037693B1; US10060725B2; WO2016135158A1; US10837704B2; WO2017012732A1; TWI710741B

Designated contracting state (EPC)
DE FI FR IT NL

DOCDB simple family (publication)
EP 1473350 A1 20041103; EP 1473350 A4 20101006; EP 1473350 B1 20150429; AU 2003201914 A1 20030902; AU 2003201914 B2 20041028; BR 0302581 A 20040225; BR 0302581 B1 20130723; CN 1290969 C 20061220; CN 1496397 A 20040512; KR 100615106 B1 20060825; KR 20030080249 A 20031011; WO 03066775 A1 20030814

DOCDB simple family (application)
EP 03700487 A 20030108; AU 2003201914 A 20030108; BR 0302581 A 20030108; CN 03800054 A 20030108; JP 0300072 W 20030108; KR 20037011546 A 20030902