

Title (en)
MONITORING OF FOULING OR OF LOSS OF MATERIAL OF HEAT TRANSFER TUBES IN A COMBUSTION VESSEL BY RESISTANCE MEASUREMENTS

Title (de)
ÜBERWACHUNG VON ABLAGERUNGEN AUF ODER VON MATERIALVERLUST IN WÄRMEÜBERGANGSROHREN IN BRENNKESSELN MITTELS WIDERSTANDSMESSUNGEN

Title (fr)
CONTROLE DU COLMATAGE OU DE LA FUITE DE MATIERE DE TUBES DE TRANSFERT THERMIQUE DANS UNE CUVE DE COMBUSTION PAR MESURES DE RESISTANCE

Publication
EP 1287309 A1 20030305 (EN)

Application
EP 00938186 A 20000606

Priority
US 0015580 W 20000606

Abstract (en)
[origin: WO0194876A1] There is provided a method and system for evaluating a condition of a heat transfer surface in a combustion vessel (12) exposed to deposition thereon of a material released during a combustion of a fuel in the combustion vessel (12) during a combustion process. The method comprises the steps of imposing a current on a portion of interest (36) of a fireside surface of several of the heat transferring water wall tubes forming an electrical network (34) detecting the corresponding voltage and thus an instantaneous resistance of electrical network. The method further includes the step of determining based upon the at least one detected loss of material of the water walls or fouling of the water walls by external deposition of slag or fly ash or internal build up of material resistance of the electrical network (34).

IPC 1-7
G01B 7/06; **G01K 1/02**; **G01N 17/00**; **G01N 27/20**

IPC 8 full level
G01K 1/02 (2006.01); **G01N 17/00** (2006.01); **G01N 27/20** (2006.01)

CPC (source: EP)
G01K 1/026 (2013.01); **G01N 17/008** (2013.01); **G01N 27/20** (2013.01)

Citation (search report)
See references of WO 0194876A1

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 0194876 A1 20011213; AU 5326300 A 20011217; EP 1287309 A1 20030305

DOCDB simple family (application)
US 0015580 W 20000606; AU 5326300 A 20000606; EP 00938186 A 20000606