

Title (en)
METHOD TO DETECT AND COUNTERACT A CRANK IN A ROTARY KILN

Title (de)
VERFAHREN ZUR ERKENNUNG UND ENTGEGENWIRKEN EINER GESAMTEN VERFORMUNG IN EINEM DREHROHROFEN

Title (fr)
MÉTHODE POUR DÉTECTER ET CONTRER UNE DEFORMATION GLOBALE DANS UN FOUR ROTATIF

Publication
EP 3239635 B1 20190814 (EN)

Application
EP 16167660 A 20160429

Priority
EP 16167660 A 20160429

Abstract (en)
[origin: EP3239635A1] A system to detect and counteract a crank in a rotary kiln having a kiln shell (1) and arranged on tyres (2, 2') supported by support rollers (3, 3') comprises a displacement sensor (5) configured and arranged to sense a displacement of the support rollers (3, 3'), a controller (11), and a plurality of nozzles (7) or fans for dispensing a cooling fluid onto the kiln shell (1). The controller (11) is configured to receive data from the displacement sensor (5), to process the received data by applying a sine fit to the data and determine amplitude and phase, to compare the amplitude of the displacement to a threshold value, and to control a valve (13) to release a cooling fluid to the nozzles (7). The system enables detection of a kiln crank and a selective cooling of the kiln shell within a determined angular range (\pm). A method is also claimed.

IPC 8 full level
F27B 7/38 (2006.01); **F27B 7/42** (2006.01); **F27D 19/00** (2006.01)

CPC (source: EP)
F27B 7/38 (2013.01); **F27B 7/42** (2013.01); **F27D 19/00** (2013.01); **F27D 2019/0071** (2013.01)

Cited by
US2021394192A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3239635 A1 20171101; **EP 3239635 B1 20190814**; DK 3239635 T3 20191028

DOCDB simple family (application)
EP 16167660 A 20160429; DK 16167660 T 20160429