

Title (en)

SYSTEMS AND METHODS FOR DETECTING DISCREPANCY IN A COMBUSTION SYSTEM

Title (de)

SYSTÈME UND VEFahren ZUR ERKENNUNG EINER DISKREPANZ BEI EINEM VERBRENNUNGSSYSTEM

Title (fr)

SYSTÈMES ET PROCÉDÉS DE DÉTECTION DE DIVERGENCE DANS UN SYSTÈME DE COMBUSTION

Publication

EP 3830482 B1 20220817 (EN)

Application

EP 20744105 A 20200619

Priority

- US 201962864967 P 20190621
- US 201962864997 P 20190621
- US 201962865021 P 20190621
- IB 2020055821 W 20200619

Abstract (en)

[origin: WO2020255090A1] Systems and methods for determining operating discrepancy a process heater. The discrepancy may be identified by solving a fired-systems model of the heater. The fired-systems model is then compared to current operating data. If the sensed current operating data is outside of the expected value(s), as defined by the fired-systems model, the systems and methods may take a remediation action to resolve the discrepancy. The discrepancy may include convection fouling identification and identification of tramp-air leaks within the process heater that are otherwise not easily detected by a human operator.

IPC 8 full level

F23N 3/00 (2006.01); **F23N 5/00** (2006.01)

CPC (source: EP US)

F23N 3/002 (2013.01 - EP); **F23N 5/006** (2013.01 - EP); **F23N 5/242** (2013.01 - EP US); **F23D 2900/00002** (2013.01 - EP);
F23N 2229/20 (2020.01 - EP US)

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)

WO 2020255090 A1 20201224; EP 3830482 A1 20210609; EP 3830482 B1 20220817; EP 3988842 A1 20220427; US 2022252265 A1 20220811

DOCDB simple family (application)

IB 2020055821 W 20200619; EP 20744105 A 20200619; EP 21212594 A 20200619; US 202017613953 A 20200619