

Title (en)
COMBUSTION BOILER CONTROL METHOD, COMBUSTION BOILER AND BOILER COMPUTATION SYSTEM

Title (de)
VERBRENNUNGSKESSELSTEUERUNGSVERFAHREN, VERBRENNUNGSKESSEL UND KESSELBERECHNUNGSSYSTEM

Title (fr)
PROCÉDÉ DE COMMANDE DE CHAUDIÈRE À COMBUSTION, CHAUDIÈRE À COMBUSTION ET SYSTÈME DE CALCUL DE CHAUDIÈRE

Publication
EP 4222417 A1 20230809 (EN)

Application
EP 21777437 A 20210909

Priority
EP 2021074838 W 20210909

Abstract (en)
[origin: WO2023036921A1] To improve control of a heat releasing reactor, a method is suggested, comprising the steps of: a) monitoring the current load (Qh) of the heat release reactor; b) finding such a numerical value (Qh, candidate) for a current computational maximum momentary load (Qh, max) for which at least one product gas factor (dfi) computed using currently monitored process data with a numerical model of the reactor fulfills an acceptance condition, and selecting the numerical value (Qh, candidate) as the current computational maximum momentary load (Qh,max); c) indicating the current computational maximum momentary load (Qh,max) to the operator and/or, if the current load (Qh) is c1) smaller than the current computational maximum momentary load (Qh,max): c1i) indicating the operator that the load (Qh) may be increased, and/or c1ii) automatically increasing the load (Qh), and/or c2) larger than the current computational maximum momentary load (Qh,max): c2i) indicating the operator that the load (Qh) exceeds the current computational maximum 5 momentary load, and/or c2ii) automatically reducing the load (Qh).

IPC 8 full level
F23C 10/28 (2006.01); **F22B 35/00** (2006.01); **F22B 35/18** (2006.01); **F23N 5/02** (2006.01); **F23N 5/24** (2006.01)

CPC (source: EP KR)
F22B 31/0076 (2013.01 - KR); **F22B 35/008** (2013.01 - EP KR); **F22B 35/18** (2013.01 - EP KR); **F23C 10/28** (2013.01 - EP KR); **F23N 5/022** (2013.01 - EP KR); **F23N 5/242** (2013.01 - EP KR); **F23N 2223/06** (2020.01 - EP KR); **F23N 2223/10** (2020.01 - EP KR); **F23N 2223/40** (2020.01 - EP KR); **F23N 2223/48** (2020.01 - EP KR); **F23N 2223/50** (2020.01 - EP); **F23N 2225/10** (2020.01 - EP KR); **F23N 2225/19** (2020.01 - EP KR); **F23N 2225/21** (2020.01 - EP KR); **F23N 2237/10** (2020.01 - EP KR)

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

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2023036921 A1 20230316; AU 2021463486 A1 20240404; AU 2022344519 A1 20240404; CN 117957402 A 20240430; CN 118318130 A 20240709; EP 4222417 A1 20230809; EP 4222418 A1 20230809; KR 20240065109 A 20240514; KR 20240065111 A 20240514; WO 2023036426 A1 20230316; WO 2023036426 A9 20230519

DOCDB simple family (application)
EP 2022075087 W 20220909; AU 2021463486 A 20210909; AU 2022344519 A 20220909; CN 202180102240 A 20210909; CN 202280061108 A 20220909; EP 2021074838 W 20210909; EP 21777437 A 20210909; EP 22782478 A 20220909; KR 20247011275 A 20220909; KR 20247011282 A 20210909