

Title (en)  
BURNING APPARATUS HAVING BULK MATERIAL LAYER TO REDUCE PARTICULATE MATTER

Title (de)  
BRENN EINRICHTUNG MIT SCHÜTTGUTSCHICHT ZUR REDUZIERUNG VON FEINSTAUB

Title (fr)  
DISPOSITIF DE COMBUSTION COMPRENANT UNE COUCHE DE MATIÈRE EN VRAC DESTINÉE À RÉDUIRE LES POUSSIÈRES FINES

Publication  
**EP 4402406 A1 20240724 (DE)**

Application  
**EP 22782494 A 20220914**

Priority

- DE 102021123747 A 20210914
- EP 2022075557 W 20220914

Abstract (en)  
[origin: WO2023041599A1] The present invention relates to a device for, in particular low-emission, combustion of (solid) fuels, in particular with visible fire, preferably to a fireplace and/or stove and/or stove fireplace, comprising a portion for receiving a bulk material, preferably an air turbulence chamber, which is designed to guide an air mass flow in at least one direction through the bulk material and to receive the bulk material so that the air mass flow experiences turbulence through the bulk material, which turbulence decelerates the air mass flow in the at least one direction and makes the air mass flow decelerated in this way available for combustion of the (solid) fuel, in particular so that the combustion produces little particulate matter.

IPC 8 full level  
**F23B 30/02** (2006.01); **F23B 60/02** (2006.01); **F23G 5/027** (2006.01); **F23H 13/00** (2021.01); **F23H 15/00** (2006.01); **F23L 99/00** (2006.01)

CPC (source: EP US)  
**F23B 30/02** (2013.01 - EP); **F23B 60/02** (2013.01 - EP); **F23G 5/027** (2013.01 - EP); **F23H 13/00** (2013.01 - EP); **F23H 15/00** (2013.01 - EP); **F23L 99/00** (2013.01 - EP); **F24B 5/021** (2013.01 - US); **F24B 13/008** (2013.01 - US); **F23G 2209/261** (2013.01 - EP); **F23J 2700/00** (2013.01 - EP)

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)  
**DE 102021123747 A1 20230316**; EP 4402406 A1 20240724; US 2024302047 A1 20240912; WO 2023041599 A1 20230323

DOCDB simple family (application)  
**DE 102021123747 A 20210914**; EP 2022075557 W 20220914; EP 22782494 A 20220914; US 202418605650 A 20240314