

Title (en)  
SOLID FUEL BURNER

Title (de)  
FESTBRENNSTOFF-BRENNER

Title (fr)  
BRÛLEUR DE COMBUSTIBLE SOLIDE

Publication  
**EP 2677238 A4 20170125 (EN)**

Application  
**EP 12747032 A 20120213**

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Abstract (en)  
[origin: EP2677238A1] The present invention is to provide a solid fuel burner for suppressing collision of fuel particles to an inner wall of a fuel nozzle, increasing fuel concentration and oxygen concentration in an outer circumferential portion in the fuel nozzle while reducing abrasion of the fuel nozzle, thereby enabling stable combustion. A solid fuel burner 42 of the present invention comprising a fuel nozzle 11 for ejecting a mixed fluid of solid fuel and carrier gas therefor, an oxygen-containing gas nozzle 13, 14 arranged outside the fuel nozzle for ejecting oxygen-containing gas, and at least one oxygen-containing gas addition nozzle 12 projected and installed in the fuel nozzle for ejecting oxygen-containing gas having a velocity component in a circumferential direction of the fuel nozzle, wherein the oxygen-containing gas addition nozzle 12 has a nozzle outlet 12A, 12B, 12C in the circumferential direction of the fuel nozzle, characterized in that: the oxygen-containing gas addition nozzle 12 is shaped so as to contract a projected section thereof in an axial direction of the burner toward a central axis of the burner.

IPC 8 full level  
**F23D 1/00** (2006.01)

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