

Title (en)
COMBUSTION DEVICE

Title (de)
VERBRENNUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE COMBUSTION

Publication
EP 2679899 A1 20140101 (EN)

Application
EP 11859242 A 20110222

Priority
JP 2011000976 W 20110222

Abstract (en)
Provided is a boiler having plurality of burners (19) arranged on a furnace wall (10) of a furnace (18), each burner (19) comprising: a cylindrical fuel nozzle (3) for injecting a mixture of fuel and carrier gas therefor into the furnace (18); one or more cylindrical air nozzles (8, 11) provided on the outer circumference of the nozzle (3) for injecting combustion air into the furnace, and a wind box (12) for supplying combustion air to the nozzles (8, 11) in common. The wind box (12) is provided with openings (12a, 12b) through which combustion air flows in from one direction perpendicular to the axial direction of the burner (19), and is partitioned by a partition wall (14) to form plurality of parallel flow paths for the air flowing in through the openings. Some of the plurality of flow paths are connected to an upper part of the combustion air nozzle (8), and the other flow paths are connected to a lower part of the nozzle (8). Each of the plurality of combustion air flow paths is independently provided with an air momentum deviation damper (15) and an air flow rate adjustment damper (17), such that the direction of the flame of the burner (19) can be changed between upward and downward directions inside the furnace (18) depending on a combustion condition such as a load.

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Cited by
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