

Title (en)

BURNER FOR A THERMAL POST-COMBUSTION DEVICE

Title (de)

BRENNER FÜR EINE THERMISCHE NACHVERBRENNUNGSVORRICHTUNG

Title (fr)

BRÛLEUR POUR DISPOSITIF DE POSTCOMBUSTION THERMIQUE

Publication

**EP 2401551 B1 20190529 (DE)**

Application

**EP 10708909 A 20100223**

Priority

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Abstract (en)

[origin: WO2010097197A2] The invention describes a burner (10) for a thermal post-combustion device, which, in a known way, has a burner jet (1) arranged in a housing (12). Arranged on the end region of the housing (12) is a swirl apparatus (13), through which the exhaust gas to be purified can be made to flow. The burner jet (1) comprises an outer tube (2) and an inner tube (3), wherein it is possible for combustion gas to be made to flow through the interspace between said two tubes (2, 3) as far as an annular outlet gap (4) in the end region thereof. The flow path for the combustion gas has a bottleneck in the vicinity of the outlet gap (4). In this way, a compact flame can be achieved, the form of which can be designated "bell-shaped" and which, for a given volume, has a relatively small surface. Although, from a conventional point of view, such a flame has poor CO<sub>2</sub> values, the swirl apparatus (13) ensures that the exhaust gas burns in the flame with very low NO<sub>x</sub> and CO values.

IPC 8 full level

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US 4447010 A 19840508 - MAEDA YASUNORI [JP], et al

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