

Title (en)

METHOD FOR THE CATALYTIC COMBUSTION OF A FOSSIL FUEL IN AN INCINERATOR AND ARRANGEMENT FOR CARRYING OUT SAID METHOD

Title (de)

VERFAHREN ZUR KATALYTISCHEN VERBRENNUNG EINES FOSSILEN BRENNSTOFFS IN EINER VERBRENNUNGSANLAGE UND ANORDNUNG ZUR DURCHFÜHRUNG DIESES VERFAHRENS

Title (fr)

PROCEDE DE COMBUSTION CATALYTIQUE D'UN COMBUSTIBLE FOSSILE DANS UN INCINERATEUR ET SYSTEME PERMETTANT DE METTRE LEDIT PROCEDE EN OEUVRE

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Application

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Abstract (en)

[origin: DE19637727A1] Undesirable nitric oxides are produced during the combustion of a fossil energy carrier in an incinerator (1). The generation of these nitric oxides increases superproportionally to the temperature in the incinerator (1). According to the invention, in order to reduce the generation of nitric oxides, the fuel (46) together with oxygen or fresh air (44) is brought into contact with an oxidation catalyst (36). In addition to titanium dioxide in the rutile modification, the catalyst material used contains a doping material which comprises at least one of the elements with atomic numbers between 38 and 72 of the periodic system of elements and additionally or alternatively at least one of the elements of the third sub-group of the periodic system, such as scandium, yttrium or lanthanum. The catalytic activity (A) can be adjusted by means of the oxygen content (V) of the gas mixture (44, 46) supplied.

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