

Title (en)

METHOD AND SYSTEM FOR THE DENITRIFICATION OF FLUE GASES BY MEANS OF SNCR (SELECTIVE NON-CATALYTIC REDUCTION) AND DOWNSTREAM CATALYST FOR AMMONIA DECOMPOSITION

Title (de)

VERFAHREN UND ANLAGE ZUR ENTSTICKUNG VON RAUCHGASEN MIT SNCR (SELEKTIVE NICHTKATALYTISCHE REDUKTION) UND NACHGESCHALTETEM KATALYSATOR ZUM AMMONIAKABBAU

Title (fr)

PROCÉDÉ ET INSTALLATION DE DÉNITRIFICATION DE GAZ DE COMBUSTION PAR RNCS (RÉDUCTION NON CATALYTIQUE SÉLECTIVE) ET CATALYSEUR DE DÉCOMPOSITION D'AMMONIAC INSTALLÉ EN AVAL

Publication

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Application

EP 15716497 A 20150410

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Abstract (en)

[origin: WO2015155339A1] The invention relates to a method for the denitrification of flue gases (1) and to a corresponding system, wherein the flue gases (1), which are generated in a rotary kiln (2) for sintering cement clinker, are conveyed to a calcining zone (3) for the deacidification of raw cement meal. Aqueous ammonia solution, ammonia (NH₃), or ammonia-releasing substances (6) for denitrifying the flue gases (1) are injected into the calcining zone (3) according to the method of selective non-catalytic reduction (SNCR), and the flue gas stream, together with an ammonia slip (6) generated during the denitrification, is passed through a heat exchanger (9) and through at least one dedusting device (10). According to the invention, the flue gas stream is guided from the heat exchanger (9) through a heat exchanger exhaust gas line (11) via a catalyst (12) for the decomposition of excess ammonia (6) with residues of nitrogen oxide contained in the flue gas (1) in accordance with a method of selective catalytic reduction (SCR), wherein the catalyst (12) is arranged in a reactor (13) provided in the heat exchanger exhaust gas line (11), and is no larger than is required for a sufficient decomposition of the ammonia (6). The advantage of this is that relatively small catalysts (12) can be used.

IPC 8 full level

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Citation (search report)

See references of WO 2015155339A1

Citation (examination)

- CN 202410497 U 20120905 - ZHEJIANG TIANLAN ENVIRONMENTAL PROT TECHNOLOGY CO LTD
- CN 102512925 B 20140312 - ZHEJIANG TIANLAN ENVIRONMENTAL PROT TECHNOLOGY CO LTD

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