

Title (en)

Method and combustion installation for the reduction of nitrogen oxide formation during the combustion of fossil fuels.

Title (de)

Verfahren und Feuerungsanlage zum Reduzieren der Stickoxidbildung beim Verbrennen fossiler Brennstoffe.

Title (fr)

Procédé et installation de combustion pour la réduction de la formation d'oxyde d'azote pendant la combustion de combustibles fossiles.

Publication

EP 0384277 B1 19940525 (DE)

Application

EP 90102852 A 19900214

Priority

DE 3905762 A 19890224

Abstract (en)

[origin: EP0384277A2] In the method for reducing the nitrogen oxide formation in the combustion of fossil fuels in a combustion chamber, flue gases are, after preceding removal of heat, recycled to the burner side of the combustion chamber and, due to the injector action of the flame, introduced around the burner into the combustion space in a part quantity reducing the combustion temperature to a temperature level which is at most equal to the limiting temperature for the formation of nitrogen oxides. As a result, the flame is surrounded by - cool - flue gases and cooled. In a firing installation, a combustion chamber arranged within a housing carrying a flow of a heat carrier medium has a "hot" combustion space which is surrounded by a shell accommodated at a distance from the combustion chamber walls. Flue gas flow paths extend between the shell and the combustion chamber, and at least one inflow path branches off from these for recycling a part stream of the - cooled - flue gas into the combustion space, this path leading into the latter in the vicinity of a burner or flame tube and cooling the combustion flame. <IMAGE>

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Cited by

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