

Title (en)

METHOD AND COMBUSTION INSTALLATION FOR THE REDUCTION OF NITROGEN OXIDE FORMATION DURING THE COMBUSTION OF FOSSIL FUELS

Publication

**EP 0384277 A3 19910731 (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>

IPC 1-7

**F23C 9/08; F24H 1/26**

IPC 8 full level

**F23C 9/08** (2006.01); **F24H 1/26** (2006.01)

CPC (source: EP)

**F23C 9/08** (2013.01); **F24H 1/263** (2013.01)

Citation (search report)

- [X] DE 3628293 A1 19880225 - WOLF KLIMATECHNIK GMBH [DE]
- [X] DE 2927193 A1 19810115 - KOERTING AG
- [Y] DE 3140821 A1 19830421 - KOERTING AG [DE]
- [Y] US 2585477 A 19520212 - LESLIE JOHN H, et al
- [AD] DE 3601000 A1 19870619 - VAILLANT JOH GMBH & CO [DE]
- [A] EP 0288031 A2 19881026 - WEISHAUP MAX GMBH [DE]
- [A] GB 1011416 A 19651201 - GOSSALTER RENE
- [A] DE 8712358 U1 19871112

Cited by

US7993130B2; EP0387859A3; EP2741000A3; CN106895399A; EP0483520A3; AU614467B2; WO9961839A1; EP1046862A1; WO2006043869A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI NL SE

DOCDB simple family (publication)

**EP 0384277 A2 19900829; EP 0384277 A3 19910731; EP 0384277 B1 19940525**; AT E106127 T1 19940615; DE 3905762 A1 19900830;  
DE 3905762 C2 19930218; DE 59005785 D1 19940630

DOCDB simple family (application)

**EP 90102852 A 19900214**; AT 90102852 T 19900214; DE 3905762 A 19890224; DE 59005785 T 19900214