Publication
EP 0558669 A4 19940119

Application
EP 92902114 A 19911126

Priority
- US 9108917 W 19911126
- US 61797690 A 19901126
- US 61797790 A 19901126
- US 61798090 A 19901126
- US 61830190 A 19901126

Abstract (en)
[origin: WO9209849A1] This invention is a combustion process having a series of stages in which a fuel/oxygen-gas-containing mixture (16, 18) is combusted stepwise using a series of specific catalysts and catalytic structures (figure 2) and, optionally, a final homogeneous combustion zone to produce a combusted gas at a selected temperature preferably between 1050 DEG and 1700 DEG C. Depending upon the pressure of operation, there may be two or three discrete catalytic stages (stages 1, 2 and 3). The choice of catalysts and the use of specific structures, including those employing integral heat exchange (44) results in a catalyst and its support which are stable due to their comparatively low temperature, do not deteriorate, and yet the product combustion gas is at a temperature suitable for use in a gas turbine, furnace, boiler, or the like, but has low NOx content. Neither fuel nor air is added to the combustion process except in the initial stage.

IPC 1-7
F23D 14/18

IPC 8 full level
F23D 14/18 (2006.01); **F23C 6/04** (2006.01); **F23C 13/00** (2006.01); **F23C 99/00** (2006.01)

CPC (source: EP)
F23C 6/045 (2013.01); **F23C 13/00** (2013.01); F23C 2900/13002 (2013.01)

Citation (search report)
- [AD] US 3969082 A 19760713 - CAIRNS JAMES ANTHONY, et al
- [A] US 4703555 A 19871103 - HUEBNER HANS-JOERG [DE]
- See references of WO 9209849A1

Cited by
GB2354587A; GB2354587B

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
WO 9209849 A1 19920611; AT E171258 T1 19981015; AU 9143891 A 19920625; CA 2096951 A1 19920527; DE 69130225 D1 19981022; DE 69130225 T2 19990408; EP 0558669 A1 19930908; EP 0558669 A4 19940119; EP 0558669 B1 19980916; ES 2121004 T3 19981116; JP 3364492 B2 20030108; JP H07500659 A 19950119; KR 100261783 B1 20000715; RU 2161755 C2 20010110; TW 198743 B 19930121

DOCDB simple family (application)
US 9108917 W 19911126; AT 92902114 T 19911126; AU 9143891 A 19911126; CA 2096951 A 19911126; DE 69130225 T 19911126; EP 92902114 A 19911126; ES 92902114 T 19911126; JP 50266692 A 19911126; KR 930701568 A 19930526; RU 93043402 A 19911126; TW 81104053 A 19920523