

Title (en)  
Burner with center air jet

Title (de)  
Brenner mit zentralem Luftstrahl

Title (fr)  
Brûleur avec jet d'air central

Publication  
**EP 2138765 A3 20100922 (EN)**

Application  
**EP 09170949 A 20060816**

Priority  
• EP 09170949 A 20060816  
• EP 06254290 A 20060816

Abstract (en)  
[origin: EP1892470A1] A new burner apparatus and method of combusting fossils fuels for commercial and industrial application is provided wherein the new burner apparatus achieves low NO x emissions by supplying oxygen to the center of the burner flame in as manners so as to create a fuel rich internal combustion zone within the burner flame.

IPC 8 full level  
**F23D 1/02** (2006.01)

CPC (source: EP)  
**F23D 1/02** (2013.01)

Citation (search report)  
• [I] EP 1306614 A1 20030502 - BABCOCK HITACHI KK [JP]  
• [A] US 5231937 A 19930803 - KOBAYASHI HIRONOBU [JP], et al  
• [A] DE 3535873 A1 19870409 - BURKARD THEO DIPL ING [DE]

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1892470 A1 20080227; EP 1892470 B1 20110126; EP 1892470 B8 20110309**; AT E497126 T1 20110215; DE 602006019860 D1 20110310; DK 1892470 T3 20110321; DK 2138765 T3 20160725; EP 2051005 A2 20090422; EP 2051005 A3 20100609; EP 2051005 B1 20170614; EP 2138765 A2 20091230; EP 2138765 A3 20100922; EP 2138765 B1 20160330; ES 2358273 T3 20110509; ES 2576008 T3 20160704; ES 2636594 T3 20171006; PL 1892470 T3 20110729; PL 2051005 T3 20171031; PL 2138765 T3 20160930

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**EP 06254290 A 20060816**; AT 06254290 T 20060816; DE 602006019860 T 20060816; DK 06254290 T 20060816; DK 09170949 T 20060816; EP 09151678 A 20060816; EP 09170949 A 20060816; ES 06254290 T 20060816; ES 09151678 T 20060816; ES 09170949 T 20060816; PL 06254290 T 20060816; PL 09151678 T 20060816; PL 09170949 T 20060816