

Title (en)  
A gas burning apparatus with an atmospheric burner

Title (de)  
Gasbeheiztes Gerät mit atmosphärischem Brenner

Title (fr)  
Appareil de combustion à gaz avec brûleur atmosphérique

Publication  
**EP 0596555 B1 19971217 (EN)**

Application  
**EP 93202975 A 19931023**

Priority  
IT MI922510 A 19921102

Abstract (en)  
[origin: EP0596555A1] The apparatus comprises an atmospheric burner (10), a combustion chamber (11), and means (13) for creating a vacuum within the combustion chamber. The burner comprises gas outflow nozzles (17), intake and mixing conduits (18) coaxial with the nozzles (17), and diffusers (19,20) in communication with the conduits (18) to deliver the gas/primary air mixture into the combustion chamber (11). To provide optimum smooth combustion, a box-type structure (23), which is substantially closed and communicated to the combustion chamber (11), is arranged to enclose the intake and mixing conduits (18) and includes a wall (24) disposed crosswise between the nozzles and the conduits which has, for each nozzle, an opening (25) for drawing primary air (AP) into the conduits, and openings (26) for introducing secondary air (AS) adjacent to the primary air opening. The streams of primary air (AP) and secondary air (AS) through their respective openings flow in substantially parallel directions. <IMAGE>

IPC 1-7  
**F23D 14/04**

IPC 8 full level  
**F23D 14/04** (2006.01); **F23D 14/02** (2006.01); **F23L 1/00** (2006.01); **F23L 9/00** (2006.01)

CPC (source: EP)  
**F23D 14/045** (2013.01)

Cited by  
US6135061A; US6003477A; US5950573A; AT402228B; US6116195A; US6085700A; US6138613A; FR2730793A1; AU2014262217B2; US6142106A; AT401564B; CN109556111A; US6155211A; US6082310A; US6085699A; FR2745891A1; CN110513681A; US6293230B1; US6295951B1; US6223697B1; US9212820B2; US9561564B2; US6269779B2; US6302062B2; US6418883B2; US6401668B2; US6196164B1; US9090323B1; US9335045B2; US9663215B1; US9765965B2; US10253981B2; US9429338B2; US9541303B2; US9815154B2; US9878404B2; US10376999B2

Designated contracting state (EPC)  
BE DE ES FR GB IT NL

DOCDB simple family (publication)  
**EP 0596555 A1 19940511; EP 0596555 B1 19971217; CZ 233493 A3 19940518; CZ 288817 B6 20010912; DE 69315804 D1 19980129; DE 69315804 T2 19980709; HU 217277 B 19991228; HU 9303096 D0 19940128; HU T65726 A 19940728; IT 1256091 B 19951127; IT MI922510 A0 19921102; IT MI922510 A1 19940502; PL 172493 B1 19970930; PL 300920 A1 19940516**

DOCDB simple family (application)  
**EP 93202975 A 19931023; CZ 233493 A 19931102; DE 69315804 T 19931023; HU 9303096 A 19931101; IT MI922510 A 19921102; PL 30092093 A 19931102**