

Title (en)
COMPLEX HEAT SOURCE APPARATUS

Title (de)
KOMPLEXE WÄRMEQUELLENVORRICHTUNG

Title (fr)
APPAREIL DE SOURCE THERMIQUE COMPLEXE

Publication
EP 3150916 B1 20210127 (EN)

Application
EP 16191573 A 20160929

Priority
JP 2015195646 A 20151001

Abstract (en)
[origin: EP3150916A1] In a complex heat source apparatus having first and second, i.e., a total of two, burners (2 1 , 2 2), and a fan (6) is interposed in an air supply passage (5) connected to both the burners. Downstream end of a gas supply passage (7) having interposed therein a flow control means (73) is connected to that portion of the air supply passage which is on an upstream side or a downstream side of the fan (6). It is thus so arranged that air-fuel mixture of the primary air and the fuel gas is supplied to both the burners (2 1 , 2 2) through the air supply passage (5). Downsizing of the fan (6) and the reduction of noises can be attained at the time of simultaneous operation in which both the first and the second burners (2 1 , 2 2) are combusted. An on-off valve (8 1 , 8 2) is respectively disposed at a connection portion (52 1) between the first burner 2 1 and the air supply passage (5) and at a connection portion (52 2) between the second burner (2 2) and the air supply passage (5). The air flow resistance in the connection portion (52 2) between the second burner (2 2) and the air supply passage (5) is set, in a state in which the amount of air-fuel mixture supplied to the first burner (2 1) at the time of simultaneous operation becomes maximum corresponding to a rated combustion amount of the first burner (2 1), to be such that the amount of air-fuel mixture supplied to the second burner (2 2) becomes smaller than a maximum amount corresponding to a rated combustion amount of the second burner (2 2).

IPC 8 full level
F23N 1/02 (2006.01); **F23D 14/04** (2006.01); **F23D 23/00** (2006.01)

CPC (source: EP)
F23D 14/04 (2013.01); **F23D 23/00** (2013.01); **F23N 1/02** (2013.01); **F23N 2237/02** (2020.01); **F23N 2241/04** (2020.01); **F23N 2241/06** (2020.01)

Cited by
WO2021185918A1; WO2021185906A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3150916 A1 20170405; **EP 3150916 B1 20210127**; JP 2017067410 A 20170406; JP 6633335 B2 20200122

DOCDB simple family (application)
EP 16191573 A 20160929; JP 2015195646 A 20151001