

Title (en)
BURNER ARRAY FOR USE WITH LIQUID FUELS

Title (de)
BRENNERANORDNUNG FÜR FLÜSSIGE BRENNSTOFFE

Title (fr)
ENSEMBLE BRULEUR A COMBUSTIBLE LIQUIDE

Publication
EP 0836696 A1 19980422 (DE)

Application
EP 96906752 A 19960307

Priority
• DE 19507978 A 19950307
• EP 9600982 W 19960307

Abstract (en)
[origin: DE19507978A1] The invention concerns a burner array in which the liquid fuel is introduced into a stream of gaseous oxidant (3) by a metering system (1) comprising a plurality of jets for producing fuel droplets (2). To create a burner which can be regulated through a wide power output range and with a high combustion efficiency, it is proposed that the metering system (1) should be provided with a plurality of micro-jets which are integrally connected to one or more pump mechanisms. The latter are operated in such a way that fuel droplets are expelled by control pulses (one drop per control pulse) from each jet. The combustion chamber has an inlet aperture (5) through which the fuel droplets (2) expelled by the metering system (1) are injected into the combustion chamber (6), the metering system (1) being fitted in front of the inlet aperture (5) so as to ensure that fuel droplets are introduced into the oxidant (3) in a predetermined distribution and pass in through the inlet aperture (5) in the same, essentially unchanging, distribution, thereby creating a homogeneous and stoichiometrically optimal mixture.

IPC 1-7
F23D 11/34; B05B 17/04

IPC 8 full level
B05B 17/06 (2006.01); **F23D 11/34** (2006.01)

CPC (source: EP)
B05B 17/0638 (2013.01); **F23D 11/345** (2013.01)

Citation (search report)
See references of WO 9627760A1

Designated contracting state (EPC)
CH DE FR LI SE

DOCDB simple family (publication)
DE 19507978 A1 19960912; DE 19507978 C2 20020307; EP 0836696 A1 19980422; WO 9627760 A1 19960912

DOCDB simple family (application)
DE 19507978 A 19950307; EP 9600982 W 19960307; EP 96906752 A 19960307