

Title (en)
DEVICE FOR CONTINUOUSLY MIXING FED-OUT NATURAL GAS WITH OXYGEN TO PRODUCE A BURNABLE GAS FOR HEATING
PRESSURIZED NATURAL GAS BEFORE OR AFTER THE EXPANSION THEREOF

Title (de)
VORRICHTUNG ZUM KONTINUIERLICHEN MISCHEN VON AUSGESPEICHERTEM ERDGAS MIT SAUERSTOFF ZU EINEM BRENNGAS FÜR
EINE ERWÄRMUNG DES UNTER DRUCK STEHENDEN ERDGASES VOR ODER NACH SEINER ENTSPANNUNG

Title (fr)
DISPOSITIF POUR LE MÉLANGE CONTINU DE GAZ NATUREL DÉSTOCKÉ AVEC DE L'OXYGÈNE POUR FORMER UN GAZ COMBUSTIBLE
SERVANT À CHAUFFER LE GAZ NATUREL SOUS PRESSION AVANT OU APRÈS SA DÉTENTE

Publication
EP 2310116 A2 20110420 (DE)

Application
EP 09775871 A 20090512

Priority
• DE 2009000666 W 20090512
• DE 102008036269 A 20080804

Abstract (en)
[origin: CA2734367A1] The invention relates to a device for continuously mixing fed-out natural gas with oxygen to produce a burnable gas used for heating the pressurized natural gas before or after the relaxation thereof, comprising a mixing section having connections for a natural gas supply line, an oxygen infeed line, and a burnable gas discharge line. The mixing section is designed as a closed mixing container, which has a mixing chamber, at the center of which forming a mixing zone a distributing pipe for oxygen is disposed that is joined to the connection for oxygen infeed. The mixing chamber is filled completely, and the distributing pipe is filled at least partially, with a packing of ceramic granular material. The mixing chamber of the mixing container is equipped with temperature sensors for temperature measurement. The mixing container is designed as a standing container, which at the bottom has the connection of the natural gas supply and at the top the connection for the burnable gas discharge.

IPC 8 full level
B01F 23/10 (2022.01)

CPC (source: EP US)
B01F 23/10 (2022.01 - EP US); **B01F 25/4524** (2022.01 - EP US); **B01F 25/45241** (2022.01 - EP US); **F23K 5/002** (2013.01 - EP US); **F23K 2400/20** (2020.05 - EP US); **Y10T 137/4259** (2015.04 - EP US); **Y10T 137/86348** (2015.04 - EP US); **Y10T 137/86372** (2015.04 - EP US); **Y10T 137/87571** (2015.04 - EP US)

Citation (search report)
See references of WO 2010015215A2

Designated contracting state (EPC)
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 SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
DE 102008036269 A1 20100211; CA 2734367 A1 20100211; CA 2734367 C 20160202; DK 2310116 T3 20150330; EP 2310116 A2 20110420; EP 2310116 B1 20141217; ES 2532465 T3 20150327; PL 2310116 T3 20150529; PT 2310116 E 20150304; RU 2011103867 A 20120910; RU 2466776 C2 20121120; US 2011132481 A1 20110609; US 8607820 B2 20131217; WO 2010015215 A2 20100211; WO 2010015215 A3 20100401

DOCDB simple family (application)
DE 102008036269 A 20080804; CA 2734367 A 20090512; DE 2009000666 W 20090512; DK 09775871 T 20090512; EP 09775871 A 20090512; ES 09775871 T 20090512; PL 09775871 T 20090512; PT 09775871 T 20090512; RU 2011103867 A 20090512; US 73759009 A 20090512