

Title (en)  
BIOMASS GASIFICATION DEVICE AND PROCESS

Title (de)  
VORRICHTUNG UND VERFAHREN ZUM VERGASEN VON BIOMASSE

Title (fr)  
DISPOSITIF ET PROCÉDÉ DE GAZÉIFICATION DE BIOMASSE

Publication  
**EP 2379681 A2 20111026 (EN)**

Application  
**EP 09793623 A 20091223**

Priority

- NL 2009050799 W 20091223
- CN 200810230162 A 20081224
- CN 200820232095 U 20081224
- CN 200810230163 A 20081224
- CN 200820232097 U 20081224
- CN 200810230160 A 20081224
- CN 200820232094 U 20081224
- CN 200810230161 A 20081224
- CN 200820232096 U 20081224

Abstract (en)  
[origin: WO2010074574A2] The invention is in the field of biogas production. In particular the invention is directed to a process and apparatus for the conversion of carbon and hydrogen containing materials into biogas (viz. a gas stream comprising CH<sub>4</sub>) containing material and subsequent purification of the resulting gas. According to the invention biogas is produced from carbon and hydrogen containing starting material. The unpurified biogas is subsequently purified by subjecting it to a filtration step, which comprises feeding said biogas to at least one cyclone providing cyclone action, at least one water filter where said biogas is washed with water and at least one dry filter where said biogas is dry-filtered, thus producing a purified biogas, followed by subjecting said purified biogas to compression, preferably using a water ring compressor, followed by feeding the compressed gas to a water-gas separator.

IPC 8 full level  
**C10L 3/08** (2006.01)

CPC (source: EP US)  
**C10G 3/00** (2013.01 - EP US); **C10G 31/09** (2013.01 - EP US); **C10L 3/08** (2013.01 - EP US); **C10L 3/10** (2013.01 - EP US);  
**C10G 2300/1014** (2013.01 - EP US); **C10J 2300/0916** (2013.01 - EP US); **C10J 2300/0966** (2013.01 - EP US); **Y02P 20/145** (2015.11 - EP US);  
**Y02P 30/20** (2015.11 - EP US)

Citation (search report)  
See references of WO 2010074574A2

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 SM TR

DOCDB simple family (publication)  
**WO 2010074574 A2 20100701**; **WO 2010074574 A3 20101216**; EP 2379681 A2 20111026; US 2011308157 A1 20111222

DOCDB simple family (application)  
**NL 2009050799 W 20091223**; EP 09793623 A 20091223; US 200913142064 A 20091223