

Title (en)

REACTOR FOR PRODUCING BIOGAS FROM BIOMASS USING ANAEROBIC DIGESTION

Title (de)

REAKTOR ZUR BIOGASERZEUGUNG AUS BIOMASSE ÜBER ANAEROBEN AUFSCHLUSS

Title (fr)

RÉACTEUR POUR LA PRODUCTION DE BIOGAZ À PARTIR DE BIOMASSE À L'AIDE D'UNE DIGESTION ANAÉROBIE

Publication

EP 3759211 A4 20211110 (EN)

Application

EP 19760206 A 20190225

Priority

- FI 20185183 A 20180227
- FI 2019050151 W 20190225

Abstract (en)

[origin: WO2019166694A1] The invention relates to a reactor for producing biogas from biomass using anaerobic digestion, which includes - a vertical channel-like frame (12) delimiting within itself a reaction space (14) within it for vertical plug flow of biomass (16), the frame (12) including at least three successive blocks (24) with related microbial strains, - feed equipment (25) arranged at the upper end (13.1) of the frame (12) for feeding biomass into the frame (12), - agitation equipment (20) for agitating biomass (16) and feeding microbes into biomass (16), arranged at least partly within the frame (12), - recovery equipment (22) for recovering generating biogas, - a bottom cone (17) connected to the lower end (13.2) of the frame (12) for collecting solid material, - removal equipment (27) for solid material arranged at the lower end (13.2) of the frame (12), at the lower end (92) of the bottom cone (17), for removing solid material, - an external skeleton (50) arranged outside the frame (12) for supporting the frame (12) externally against hydrostatic pressure generating within the frame (12).

IPC 8 full level

C12M 1/107 (2006.01); **C02F 11/04** (2006.01); **C12M 1/00** (2006.01); **C12M 1/06** (2006.01); **C12M 1/113** (2006.01); **C12M 1/20** (2006.01); **C12P 5/02** (2006.01)

CPC (source: EP FI)

C02F 11/04 (2013.01 - FI); **C12M 1/113** (2013.01 - FI); **C12M 1/20** (2013.01 - FI); **C12M 21/04** (2013.01 - EP FI); **C12M 23/06** (2013.01 - FI); **C12M 27/02** (2013.01 - EP FI); **C12M 29/06** (2013.01 - EP); **C12P 5/023** (2013.01 - FI); **C02F 11/04** (2013.01 - EP); **C12P 5/023** (2013.01 - EP); **Y02E 50/30** (2013.01 - EP)

Citation (search report)

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- See references of WO 2019166694A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

FI 2019050151 W 20190225; CN 201980014648 A 20190225; EP 19760206 A 20190225; FI 20185183 A 20180227; UA A202006182 A 20190225