

Title (en)
BIOLOGICAL METHANE PRODUCTION

Title (de)
BIOLOGISCHE METHANERZEUGUNG

Title (fr)
PRODUCTION BIOLOGIQUE DE MÉTHANE

Publication
EP 4127196 A1 20230208 (DE)

Application
EP 21717801 A 20210406

Priority
• DE 102020109419 A 20200403
• EP 2021058852 W 20210406

Abstract (en)
[origin: WO2021198526A1] In a process for biological methane production, wherein hydrogen and carbon dioxide are converted to form methane and water in a liquid by means of microorganisms and the liquid is guided through a tubular reactor (1) having a horizontal tube section (2), the invention proposes that the liquid is an aqueous liquid, the hydrogen gas and carbon dioxide gas are introduced into the liquid, and the liquid is circulated. Also proposed is a plant for performance of the process, having a tubular reactor (1) having multiple superposed tube sections (2).

IPC 8 full level
C12P 5/02 (2006.01); **C12M 1/00** (2006.01); **C12M 1/107** (2006.01); **C12M 1/12** (2006.01)

CPC (source: EP)
C12M 21/04 (2013.01); **C12M 23/06** (2013.01); **C12M 29/06** (2013.01); **C12P 5/023** (2013.01); **Y02E 50/30** (2013.01)

Citation (search report)
See references of WO 2021198526A1

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

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
DE 102020109419 A1 20211007; EP 4127196 A1 20230208; FR 3108916 A1 20211008; WO 2021198526 A1 20211007

DOCDB simple family (application)
DE 102020109419 A 20200403; EP 2021058852 W 20210406; EP 21717801 A 20210406; FR 2103427 A 20210402