

Title (en)

PHOTOBIOREACTOR, IN PARTICULAR FOR GROWING AND DEVELOPING PHOTOSYNTHETIC AND HETEROTROPHIC MICRO-ORGANISMS

Title (de)

FOTOBIOREAKTOR, IM BESONDEREN ZUR ZÜCHTUNG UND ENTWICKLUNG FOTOSYNTHETISCHER UND HETEROTROPHER MIKROORGANISMEN

Title (fr)

PHOTOBIOREACTEUR, NOTAMMENT POUR LA CROISSANCE ET LE DEVELOPPEMENT DE MICROORGANISMES PHOTOSYNTHETIQUES ET HETEROTROPHES

Publication

EP 2440648 A2 20120418 (FR)

Application

EP 10734769 A 20100609

Priority

- FR 2010000420 W 20100609
- FR 0902781 A 20090609

Abstract (en)

[origin: WO2010142870A2] The invention relates to a photobioreactor, in particular for growing and developing photosynthetic micro-organisms such as microalgae and cyanobacteria. The photobioreactor includes at least one reflector (101) arranged on one side of the photobioreactor and tubes arranged in a plurality of layers which follow one another in a direction (N) normal to the reflector at a central region thereof, each layer comprising a plurality of tubes. The tubes (1, 16, etc.) are preferably rectilinear and extend in a direction orthogonal to the normal direction (N), the reflector is cylindrical with a circular or oval section, and the layers are cylindrical with a circular or oval section and concentric.

IPC 8 full level

C12M 1/00 (2006.01)

CPC (source: EP US)

C12M 21/02 (2013.01 - EP US); **C12M 23/06** (2013.01 - EP US); **C12M 29/12** (2013.01 - EP US); **C12M 31/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2010142870A2

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 SE SI SK SM TR

DOCDB simple family (publication)

FR 2946362 A1 20101210; FR 2946362 B1 20121109; BR PI1009018 A2 20151201; CN 102459561 A 20120516; CN 102459561 B 20130925; EP 2440648 A2 20120418; TN 2011000633 A1 20130524; US 2012122199 A1 20120517; WO 2010142870 A2 20101216; WO 2010142870 A3 20110630

DOCDB simple family (application)

FR 0902781 A 20090609; BR PI1009018 A 20100609; CN 201080032281 A 20100609; EP 10734769 A 20100609; FR 2010000420 W 20100609; TN 2011000633 A 20111209; US 201013376942 A 20100609