

Title (en)

ENCLOSED PHOTOBIOREACTOR FOR CULTURE OF PHOTOSYNTHETIC MICROORGANISMS

Title (de)

VERKAPSELTER FOTOBIOREAKTOR FÜR FOTOSYNTHETISCHE MIKROORGANISMENKULTUR

Title (fr)

PHOTOBIOREACTEUR EN MILIEU FERME POUR LA CULTURE DE MICRO-ORGANISMES PHOTOSYNTHETIQUES

Publication

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Application

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Abstract (en)

[origin: WO2012152637A1] The present invention relates to a photobioreactor intended for culture, especially continuous culture, of photosynthetic microorganisms, preferably microalgae, comprising at least one culture chamber (1) intended to contain the culture medium (3) of the microorganisms, and at least one light source (2) located outside of the culture chamber (1), characterized in that it furthermore comprises at least one cylindrical or prismatic light-scattering element (4) placed in the culture chamber (1), the light-scattering element (4) being optically coupled to the light source (2) so as to capture photons emitted by the light source (2) and deliver them to the culture medium (3) via its lateral surface. The present invention also relates to the use of a photobioreactor to cultivate photosynthetic microorganisms and the use of a light-scattering element (4) to illuminate the culture medium of a photobioreactor.

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See references of WO 2012152637A1

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US 6278827 B1 20010821 - SUGIYAMA HIDEO [JP], et al

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EA 201391620 A1 20140430; EP 2705129 A1 20140312; HK 1191668 A1 20140801; IL 229263 A0 20140130; JP 2014512832 A 20140529;
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HK 14104667 A 20140519; IL 22926313 A 20131105; JP 2014508792 A 20120503; KR 20137032466 A 20120503; TW 101116014 A 20120504;
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