

Title (en)

DEVICE FOR A PHOTOCHEMICAL PROCESS

Title (de)

EINRICHTUNG FÜR EINEN PHOTOCHEMISCHEN PROZESS

Title (fr)

DISPOSITIF POUR UN PROCESSUS PHOTOCHIMIQUE

Publication

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Application

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Abstract (en)

[origin: WO2010102316A2] The invention relates to a device for a photochemical process, such as a photocatalytic and/or a photosynthetic process, especially for the cultivation and production or hydrocultivation of preferably phototrophic micro-organisms. A reactor, especially a bioreactor, is provided, and a reaction medium, for example an aqueous solution or a suspension, is guided in the reactor in a meandering manner. The reactor through which the reaction medium (6) flows consists of at least one reactor element (2) comprising two interconnected pipes (3) or chambers (8) that are vertical or inclined at an angle. The reaction medium (6) is introduced into the reactor and released therefrom, over the upper reaction medium surface, preferably continuously, without pressure and freely to the atmosphere. As a result of the hydrostatic pressure and level compensation, the flow of the reaction medium (6) is stress-free for the micro-organisms. The reactor and its pipes (3) or chambers (8) preferably consisting of a transparent or translucent material are arranged in a light-conducting liquid (14).

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Citation (examination)

WO 2007098150 A2 20070830 - UNIV ARIZONA STATE [US], et al

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KR 20110137314 A 20111222; MX 2011009076 A 20111028; MY 149734 A 20131014; NZ 595592 A 20130125; US 2012003734 A1 20120105;
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