

Title (en)
SOLAR BIOREACTOR

Title (de)
SOLARBIOREAKTOR

Title (fr)
BIORÉACTEUR SOLAIRE

Publication
EP 3221443 A1 20170927 (EN)

Application
EP 15817613 A 20151105

Priority
• TR 201413550 A 20141117
• TR 2015050160 W 20151105

Abstract (en)
[origin: WO2016080932A1] This system, that is developed to transfer light to the regions that it cannot reach in the open and/or closed type alga and/or microalga growing units; consists of heliostats that reflect the sun light to the concave mirror, fresnel lenses which provides that light goes from concave mirror to fiber optical wires focusedly without loss and, fiber optical wires and/or plates that pass through the middle of the column of closed column photobioreactor or pond photobioreactro. The light is reflected from heliostats and is directed onto the concave mirror and the light coming from the concave mirror is transported to the fiber optical wires via fresnel lenses in the designed system. Open and/or closed pond type microalga growing medium that is deeper than 30 cm can be illuminated homogeneously with the system. In addition, it is provided that energy cost is decreased by illuminating from inside with sun light without requirement of fluorescent light in the daytime in the closed type photobioreactor.

IPC 8 full level
C12M 1/00 (2006.01)

CPC (source: EP)
C12M 21/02 (2013.01); **C12M 31/04** (2013.01); **C12M 31/06** (2013.01); **C12M 31/08** (2013.01)

Citation (search report)
See references of WO 2016080932A1

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Designated extension state (EPC)
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