

IP MARKETPLACE

CONNECTING INNOVATION TO YOUR BUSINESS

TECH OFFER

A BIOREACTOR FOR ALGAE CULTIVATION



▶ MORE INFORMATION

MEGA-TREND

- Agriculture
- Future Application in Agriculture Sector

TECHNOLOGY READINESS LEVEL (TRL)

- TRL 3

PATENT/ GRANTED NUMBER

- MY-165830-A

▶ TECHNOLOGY OVERVIEW

A bioreactor for algae cultivation comprises a plurality of light permeable columns arranged in an upright position and spacing apart one another at a predetermined gap that each column has a top and bottom openings; a top and a bottom medium conduits engaged to the top and bottom openings of the columns respectively to substantially shield the openings from being exposed to the external environment; a first pumping means configured to deliver medium from a reservoir into the columns through the top medium conduit and channel the medium back into the reservoir via the bottom medium conduit under a positive pressure; a gas inlet disposed adjacent to

the bottom opening of each column to introduce gases into each column through a gas conduit from a second pumping means that the gasses flow in a counter-current fashion in relative to the flow of the medium and being collectively released out from the bioreactor through one or more pressure release valve; and a first medium outlet located on the bottom medium conduit or in between the bottom medium conduit and the reservoir to drain out content the medium and the algae; wherein the medium in all the columns flows in an uni-direction movement from the top opening towards the bottom openings.

CONTACT US!

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