

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 February 2008 (21.02.2008)

PCT

(10) International Publication Number
WO 2008/020753 A1

(51) International Patent Classification:
A01K 61/00 (2006.01)

(74) Agent: **LOK, Choon, Hong**; Pintas IP Group SDN BHD,
Suite 6.03, 6th Floor, Wisma Mirama, Jalan Wisma Putra,
50460 Kuala Lumpur (MY).

(21) International Application Number:
PCT/MY2007/000057

(22) International Filing Date: 16 August 2007 (16.08.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PI 20063949 16 August 2006 (16.08.2006) MY

(71) Applicant (for all designated States except US): **UNIVERSITY PUTRA MALAYSIA** [MY/MY]; 43400 Seri Kemangan, Selangor (MY).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **YUSOFF, Fatimah** [MY/MY]; Department of Biology, Faculty of Science, universiti Putra Malaysia, 43 400 UPM Serdang (MY). **MOHAMED DIN, Mohamed, Shariff** [MY/MY]; Faculty of Veterinary Medicine, Universiti Putra Malaysia, 43400 UPM Serdang (MY). **MOHAMAD, Suhaila** [MY/MY]; Faculty of Food Science and Technology, University Putra Malaysia, 43400 UPM Serdang (MY). **KUPPAN, Perumal** [MY/MY]; Marine Science Laboratory, Institute of Bioscience, University Putra Malaysia, 43400 UPM Serdang (MY).

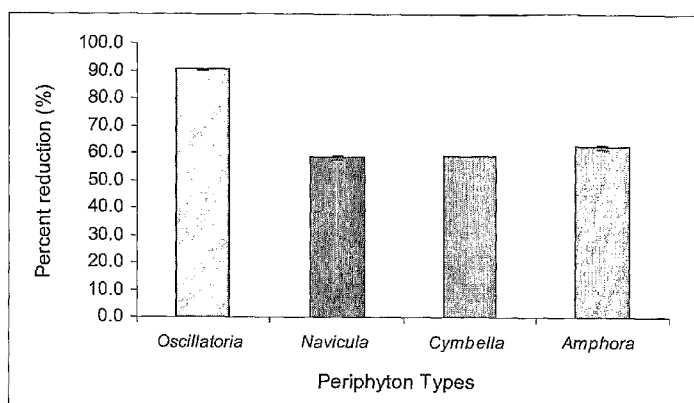
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(54) Title: PERIPHYTON-BASED APPARATUS FOR IMPROVING AQUACULTURE PRODUCTION AND METHOD PREPARING THEREOF



(57) Abstract: A method to manufacture an apparatus for aquaculture improvement comprises the steps of providing at least one suitable construct into purified periphyton culture; growing a purified periphyton on the surface of a suitable construct until its surface coated with the periphyton; and removing the coated construct from the culture container for use. The construct is for use to improve water quality and increase growth and survival of aquatic organisms in aquaculture systems.