

Title (en)

METHOD FOR IMPROVING QUALITY OF AQUACULTURE POND WATER USING A NUTRIENT GERMINANT COMPOSITION AND SPORE INCUBATION METHOD

Title (de)

VERFAHREN ZUR VERBESSERUNG DER QUALITÄT VON AQUAKULTURTEICHWASSER UNTER VERWENDUNG EINER NÄHRSTOFFKEIMUNGSZUSAMMENSETZUNG UND SPORENINKUBATIONSVERFAHREN

Title (fr)

PROCÉDÉ D'AMÉLIORATION DE LA QUALITÉ DE L'EAU D'UN BASSIN D'AQUACULTURE À L'AIDE D'UNE COMPOSITION DE GERMINAT NUTRITIVE ET D'UN PROCÉDÉ D'INCUBATION DE SPORES

Publication

EP 3758475 A4 20210428 (EN)

Application

EP 19760620 A 20190131

Priority

- US 201815907682 A 20180228
- US 2019016020 W 20190131

Abstract (en)

[origin: WO2019168627A1] A method for improving the quality of pond water used in aquaculture applications by adding to the pond water active bacteria that are preferably germinated from spores on site using a nutrient-germinant composition and an incubation method for increased spore germination efficiency, in combination with a nitrification enhancement agent such as calcium carbonate or calcified seaweed, and an optional reaction surface area modifier such as calcified seaweed or plastic or metal particles or fragments. The nutrient-germinant composition comprises L-amino acids, D-glucose and/or D-fructose, a phosphate buffer, an industrial preservative, and may include bacteria spores (preferably of one or more *Bacillus* species) or they may be separately combined for germination. The incubation method comprises heating a nutrient germinant composition and bacteria spores, to a temperature range of 35°C to 60°C for around 2 to 60 minutes to produce an incubated bacteria solution that is discharged to the aquaculture application.

IPC 8 full level

A01K 61/13 (2017.01); **A01K 63/04** (2006.01); **C02F 3/30** (2006.01); **C02F 3/34** (2006.01); **C12N 3/00** (2006.01); **C02F 103/00** (2006.01)

CPC (source: EP)

C02F 3/302 (2013.01); **C02F 3/348** (2013.01); **C12N 1/20** (2013.01); **C02F 3/303** (2013.01); **C02F 3/308** (2013.01); **C02F 3/341** (2013.01); **C02F 2103/007** (2013.01); **C02F 2103/20** (2013.01); **C02F 2209/02** (2013.01)

Citation (search report)

- [XY] WO 2016022779 A1 20160211 - ENVERA LLC [US]
- [YI] WO 2015179788 A1 20151126 - NCH CORP [US]
- See also references of WO 2019168627A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019168627 A1 20190906; BR 112020013121 A2 20201201; BR 112020013121 B1 20230314; CA 3088139 A1 20190906; CA 3088139 C 20240220; CN 111770681 A 20201013; CO 2020011856 A2 20201210; EP 3758475 A1 20210106; EP 3758475 A4 20210428; MX 2020008635 A 20200921; PH 12020500607 A1 20210531; TW 201940063 A 20191016; TW I826421 B 20231221

DOCDB simple family (application)

US 2019016020 W 20190131; BR 112020013121 A 20190131; CA 3088139 A 20190131; CN 201980015866 A 20190131; CO 2020011856 A 20200924; EP 19760620 A 20190131; MX 2020008635 A 20190131; PH 12020500607 A 20200714; TW 108105090 A 20190215