

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Benjamin A. Tayag JR.</td> <td>04/13/2013</td> </tr> </tbody> </table>		Name	Execution Date	Benjamin A. Tayag JR.	04/13/2013						
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Benjamin A. Tayag JR.	04/13/2013										
RECEIVING PARTY DATA											
<table border="1"> <tbody> <tr> <td>Name:</td> <td>Richard E. LIM</td> </tr> <tr> <td>Street Address:</td> <td>150 Overlook Avenue #5J</td> </tr> <tr> <td>City:</td> <td>Hackensack</td> </tr> <tr> <td>State/Country:</td> <td>NEW JERSEY</td> </tr> <tr> <td>Postal Code:</td> <td>07601</td> </tr> </tbody> </table>		Name:	Richard E. LIM	Street Address:	150 Overlook Avenue #5J	City:	Hackensack	State/Country:	NEW JERSEY	Postal Code:	07601
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<table border="1"> <tbody> <tr> <td>Name:</td> <td>Alejandro A. KABILING JR.</td> </tr> <tr> <td>Street Address:</td> <td>4403 Kentucky Way</td> </tr> <tr> <td>City:</td> <td>Ave Maria</td> </tr> <tr> <td>State/Country:</td> <td>FLORIDA</td> </tr> <tr> <td>Postal Code:</td> <td>34142</td> </tr> </tbody> </table>		Name:	Alejandro A. KABILING JR.	Street Address:	4403 Kentucky Way	City:	Ave Maria	State/Country:	FLORIDA	Postal Code:	34142
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PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>PCT Number:</td> <td>US2013043096</td> </tr> </tbody> </table>		Property Type	Number	PCT Number:	US2013043096						
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PCT Number:	US2013043096										
CORRESPONDENCE DATA											
<p>Fax Number: <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Email: docket@dcpatent.com, akim@dcpatent.com</p> <p>Correspondent Name: Ditthavong Mori & Steiner</p> <p>Address Line 1: 44 Canal Center Plaza, Suite 322</p> <p>Address Line 4: Alexandria, VIRGINIA 22314</p>											
ATTORNEY DOCKET NUMBER:	P6957PC00										
NAME OF SUBMITTER:	Michael B. Farber										

OP \$40.00 US2013043096

Signature:	/Michael B. Farber/
Date:	07/11/2013
<p>Total Attachments: 21</p> <p>source=P6957PC00_Assignment_filed#page1.tif source=P6957PC00_Assignment_filed#page2.tif source=P6957PC00_Assignment_filed#page3.tif source=P6957PC00_Assignment_filed#page4.tif source=P6957PC00_Assignment_filed#page5.tif source=P6957PC00_Assignment_filed#page6.tif source=P6957PC00_Assignment_filed#page7.tif source=P6957PC00_Assignment_filed#page8.tif source=P6957PC00_Assignment_filed#page9.tif source=P6957PC00_Assignment_filed#page10.tif source=P6957PC00_Assignment_filed#page11.tif source=P6957PC00_Assignment_filed#page12.tif source=P6957PC00_Assignment_filed#page13.tif source=P6957PC00_Assignment_filed#page14.tif source=P6957PC00_Assignment_filed#page15.tif source=P6957PC00_Assignment_filed#page16.tif source=P6957PC00_Assignment_filed#page17.tif source=P6957PC00_Assignment_filed#page18.tif source=P6957PC00_Assignment_filed#page19.tif source=P6957PC00_Assignment_filed#page20.tif source=P6957PC00_Assignment_filed#page21.tif</p>	

Patent Ownership Agreement

This Patent Ownership Agreement (herein-after referred to as the "Agreement") is made and entered on April 13, 2013 (the "Effective Date") by and between the following parties:

Benjamin A. Tayag Jr. (the "Assignor")

AND

Richard E. Lim and Alejandro A. Kabiling Jr. (the "Assignees")

WHEREAS, the Assignor is the sole and rightful owner of patent application 1-2012-000196 (the "Patent"), titled "ARTIFICIAL REEF SYSTEM" and filed on July 4, 2012, set forth in Exhibit A attached hereto; and

WHEREAS, the Assignees desire to purchase or acquire the Assignor's right, title and interest in and to the Patent; and

WHEREAS, the Assignor and Assignees are both duly authorized and capable of entering into this Agreement.

NOW, THEREFORE, for valuable consideration, the receipt of which is acknowledged, the parties hereto agree as follows:

1. AGREEMENT

The Assignor does hereby sell, assign, transfer and set over to Assignees two-thirds (divided equally between Richard E. Lim and Alejandro A. Kabiling) of its right, title and interest in the Patent to Assignees for the entire term of the Patent and any reissues or extension and for the entire terms of any patents, reissues or extensions that may issue from foreign applications, divisions, continuations in whole or part or substitute applications filed claiming the benefit of the Patent. The appointment of successors will be subject to majority approval between the Assignor and Assignees.

The Assignor authorizes United States Patent and Trademark Office and any other applicable jurisdictions outside the United States to record the transfer of the patent and/or patent applications set forth in Exhibit A as recipient of Assignor's right, title and interest herein.

Assignor further agrees to the following terms:

(a) cooperate with Assignees in the protection of the patent rights and prosecution and protection of foreign counterparts;

(b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer;

(c) perform such other acts as Assignees lawfully may request to obtain or maintain the Patent and any and all applications and registrations for the invention in and all countries;

(d) cooperate with majority vote with Assignees on any and all decisions made regarding the Patent including, but not limited to, licensing agreements, selling of all or part ownership shares and division of profits derived from the benefit of the Patent;

(e) the sale of the Patent and any reissues or extension and for the entire terms of any patents, reissues or extensions that may issue from foreign applications, divisions, continuations in whole or part or substitute applications filed claiming the benefit of the Patent entitles Assignor to thirty-seven and one-half percent of net proceeds and Assignees the remainder of the net proceeds as follows: Richard E. Lim is entitled to thirty-five percent and Alejandro A. Kabiling Jr. is entitled to twenty-seven and one-half percent.

2. WARRANTY

Assignor warrants that Assignor is the legal owner of all right, title and interest in the Patent, that the Patent has not been previously pledged, assigned, or encumbered and that this Agreement does not infringe on the rights of any person.

3. GOVERNING LAW

The Agreement is governed by, and is construed in accordance with the laws of the State of Florida.

4. ENTIRE AGREEMENT

This Assignment constitutes the sole agreement of the patents and supersedes all oral negotiations and prior writings with respect to the subject matter hereof.

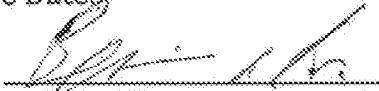
5. SEVERABILITY

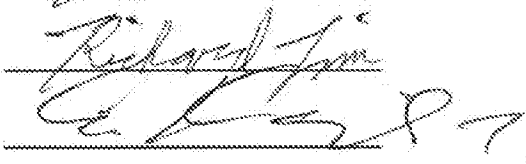
If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. If the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision will be executed from this Agreement, (ii) the balance of the Agreement will be interpreted as if such provision were so excluded and (iii) the balance of the Agreement will be enforceable in accordance with its terms.

6. ADVICE OF COUNSEL

EACH PARTY ACKNOWLEDGES THAT, IN EXECUTING THIS AGREEMENT, SUCH PARTY HAS HAD THE OPPORTUNITY TO SEEK THE ADVICE OF INDEPENDENT LEGAL COUNSEL, AND HAS READ AND UNDERSTOOD ALL OF THE TERMS AND PROVISIONS OF THIS AGREEMENT. THIS AGREEMENT WILL NOT BE CONSTRUED AGAINST ANY PARTY BY REASON OF THE DRAFTING OR PREPERATION HEREOF.

IN WITNESS whereof, the Assignor and Assignees have executed this Agreement as of the Effective Date.

Assignor: 

Assignees: 

[Exhibit Acknowledgement to follow]

Notary

State of Florida

County of Collier

This instrument was acknowledged before me on 13 Apr 2013 by
DL - FL



Tina Swanson
Notary Public
State of Florida
My Commission # EE 857340
Expires: December 10, 2016

Tina Swanson
Notary Public's Signature

Exhibit A

SALLAN & JOCSON LAW OFFICES
 3RD FLR., NORRIS BLDG., 11 CALBAYOG CORNER
 LIBERTAD STS., MANDALUYONG CITY PH086

SQA No. : 0003220120186801
 Application No. : 12012000196
 Filing Date : 7/4/2012
 Applicant : TAYAG, BENJAMIN A.
 Title : ARTIFICIAL REEF SYSTEM
 SPI Ref. No. : IPPHL32120186803216

ACKNOWLEDGEMENT

This is to acknowledge receipt of the above-identified application on July 4, 2012
 This application as filed is deemed COMPLETE as to the filing date requirements will be considered in its order. Processing of this application will now proceed. The Office will be sending to the applicant(s) Official Action(s) or Notice(s) to that effect.

In any dealing made before the Office, be it a query, follow-up or submission of documents, regarding this application, the applicant(s) is (are) required to indicate the APPLICATION NUMBER, FILING DATE (OR RECEIVED DATE), BUREAU, DIVISION, & PERSONNEL-IN-CHARGE, if so indicated in the latest communication or Action sent by this Office. All communications or responses must be addressed only to THE DIRECTOR OF PATENTS so indicated at this address: Intellectual Property Office, World Finance Plaza Bldg., #28 Upper Mc Kinley Road, Mc Kinley Town Center, Ermita, Manila, Taguig City 1634, Philippines.

INTELLECTUAL PROPERTY OFFICE
 307745
 Date: 07/04/2012 13:58:10

This serves also as STATEMENT OF ACCOUNT for the following assessed fees :

Type of Fee	Amount (Php)
201 Filing Fee	1,800.00
203 For each claim in excess of five (5)	600.00

Amount	2,424.00
Cashier	jdepino
Amount (Php)	
	1,800.00
	600.00
Total Assessed Fees	2,400.00
1% LRP	24.00
Grand Total	2,424.00

Note:

- This application shall be deemed FORFEITED if the filing fee is NOT Paid within ONE(1) month from the filing date of this application.
- SPI will charge a minimal SERVICE FEE for over the counter transaction.

Very Truly Yours,

Ferino L. Espiritu
 Records Officer II



Republic of the Philippines
INTELLECTUAL PROPERTY OFFICE
 Intellectual Property Center
 28 Upper McKinley Road, McKinley Hill Town Center
 Fort Bonifacio, Taguig City 1634 Philippines
 (Government Fees - VAT EXEMPT)

Appr:

SALLAN & JOCSON LAW OFFICES

Official Receipt No.: **0397745**

3RD FLR., NORKIS BLDG., 11 CALIBISAN
 CORNER LIBERTAD
 S.F. BANDAYONG

04-Jul-2012 1:55:10 pm

App. No.	Class	Item	Rate of Collection	App./Reg. Case No.	Amount
0002230120166801	201	Filing fee - Invention		12012000196	1,800.00
	203	Claims - Inv		412012000196	800.00
		LRP (1%) Legal Research Fee			24.00

NOTHING FOLLOWS

TOTAL AMOUNT PAID → 2,424.00

Amount in words:

TWO THOUSAND FOUR HUNDRED TWENTY-FOUR AND XX / 100 (Pesos)

REMARKS:

0397745/

Received the amount stated above

[Signature]
 Cashier

PAYMENT DETAILS:

Mode	Bank	Date	Amount	Ref. No.
Cash		7/4/12	2,424.00	
Total Payment			2,424.00	

NOTE: Write the number and date of this receipt on the back of the respective check and/or money order received.

SALLAN & JOCSON

LAW OFFICES

3rd FLOOR, NORKIS BUILDING, 11 CALBAYOG CORNER D. M. GUEVARA STS.
(FORMERLY LIBERTAD ST.), MANDALUYONG CITY, METRO MANILA, PHILIPPINES 1550
Tel. Nos. 533-68-44/531-49-31 Fax No. 533-68-44
Email: info@csjlaw.com.ph
Website: www.csjlaw.com.ph

July 2, 2012

THE DIRECTOR OF PATENTS

Intellectual Property Office
Word Finance Plaza Bldg. No. 28 Upper
Mckinley Road, Mckinley Hill Town Center
Fort Bonifacio, Taguig City

IPP
059 / 22615000 (CTC)
PH201218017
742012 3:31:08 PM
Neil A. Bora

Re: Patent Application

Applicant : Benjamin A. Tayag

Invention : ARTIFICIAL REEF SYSTEM

INTELLECTUAL PROPERTY OFFICE

Serial: 387745

Date: 07/04/2012 13:58:10

Am: 2,424.00

Classifier: J0200

Dear Sir/Madam:

In connection with the above-referenced new patent application, we respectfully enclose herewith the following:

1. Duly accomplished Request Form
2. Specification, claims, abstract and drawings

Moreover, we would like to request for a substantive examination.

Thank you.

Very truly yours,

SALLAN & JOCSON
LAW OFFICES

By:

ARLAN V. SALLAN

PATENT

REEL: 030777 FRAME: 0388

REQUEST FOR GRANT OF PHILIPPINE PATENT

(The following is to be filled in by the Intellectual Property Office)

APPLICATION No.:
1-2012-000196

FILING DATE: JUL 04 2012

Date of Receipt:

THE UNDERSIGNED HEREBY REQUEST GRANT OF A PHILIPPINE PATENT FOR THE SUBJECT APPLICATION.

Box No. I TITLE OF THE INVENTION

ARTIFICIAL REEF SYSTEM

Box No. II APPLICANT (WHETHER OR NOT ALSO INVENTOR) Use this box for indicating the applicant or, if there are several applicants, one of them. If more than one person (include, where applicable, a legal entity) is involved, continue in the supplemental box.

The person identified in this box is (check one only): applicant and inventor applicant only

Name and address: **BENJAMIN A. TAYAG**, of Homonhon Street, Magallanes Village, Makati city

Telephone number: _____ Fax Number: _____ E-Mail address: _____
(including area code)

Country of nationality: _____ Country of residence: _____

INTELLECTUAL PROPERTY OFFICE
SERIAL: 357745
Date: 07/04/2012 13:58:10
Amt: 2,424.00
Counter: 2012/07/04

Box No. III INVENTOR/S A separate sub-box has to be filled in in respect of each person. If the following two sub-boxes are insufficient, continue in the "Supplemental Box" (giving therein for each additional person the same indications as those requested in the following two sub-boxes) or by using a "continuation sheet".

The person identified in this box is (check one only): applicant and inventor inventor only

Name and address:

If the person identified in this sub-box is applicant (or applicant and inventor), indicate also:
Country of nationality: _____ Country of residence: _____

The person identified in this box is (check one only): applicant and inventor inventor only

Name and address:

If the person identified in this sub-box is applicant (or applicant and inventor), indicate also:
Country of nationality: _____ Country of residence: _____

Box No. IV AGENT (IF ANY) OR COMMON REPRESENTATIVE (IF ANY); ADDRESS FOR NOTIFICATIONS (IN CERTAIN CASES) A common representative may be appointed only if there are several applicants and if no agent

is or has been appointed: The common representative must be one of the applicants.

The following person (include, where applicable, a legal entity) is hereby/has been appointed as agent or common representative to act on behalf of the applicant(s) before the Intellectual Property Office.

Name and address, including postal code:

SALLAN & JOCSON LAW OFFICE, 3rd Floor, Norkis Building, 11 Calbayog corner Libertad Streets, Mandaluyong City

Telephone number:
(including area code)

Fax No.:

E-Mail address:

Box No. V PRIORITY CLAIM (IF ANY) The priority of the following earlier application(s) is hereby claimed:

Country in which it was filed:

Filing Date

Application No.

(month, day, year)

(1) _____

(2) _____

(3) _____

Box No. VI SIGNATURE OF APPLICANT(S) OR AGENT OVER PRINTED NAME(S)

SALLAN & JOCSON LAW FIRM

By:

ARLANN SALLAN
For the Firm

If the present Request form is signed on behalf of any applicant by an agent, a separate notarized power of attorney appointing the agent and signed by the applicant is required. If in such case it is desired to make use of a general power of attorney (deposited with the Intellectual Property Office), a copy thereof must be attached to this form.

Box No. VII CHECK LIST (To be filled in by the Applicant)

This application contains the following number of sheets:

1. Request:

2. Description :

3. Claim(s): _____

4. Drawing(s):

5. Abstract:

Total Sheets:

Figure number(s) _____ of the drawings (if any) is suggested to accompany the abstract for publication.

This application as filed is accompanied by the items checked below.

- Separate notarized power of attorney
- Copy of general power of attorney
- Priority document(s) (see Box No. V)
- Cheques for the payment of fees
- Other documents (specify)

**REQUEST FOR GRANT OF A
PHILIPPINE PATENT**

THE UNDERSIGNED HEREBY REQUEST GRANT OF A PHILIPPINE PATENT FOR THE SUBJECT APPLICATION.	(The following is to be filled in by the Intellectual Property Office) APPLICATION No.:	
	FILING DATE:	
	Date of Receipt:	
Box No. I TITLE OF THE INVENTION		
ARTIFICIAL REEF SYSTEM		
Box No. II APPLICANT (WHETHER OR NOT ALSO INVENTOR) Use this box for indicating the applicant or, if there are several applicants, one of them. If more than one person (include, where applicable, a legal entity) is involved, continue in the supplemental box.		
The person identified in this box is (check one only): <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> applicant only		
Name and address: BENJAMIN A. TAYAG , of Homonhon Street, Magallanes Village, Makati city		
Telephone number: (including area code)	Fax Number:	E-Mail address:
Country of nationality:	Country of residence:	
Box No. III INVENTOR/S A separate sub-box has to be filled in in respect of each person. If the following two sub-boxes are insufficient, continue in the "Supplemental Box" (giving therein for each additional person the same indications as those requested in the following two sub-boxes) or by using a "continuation sheet".		
The person identified in this box is (check one only): <input type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only		
Name and address:		
If the person identified in this sub-box is applicant (or applicant and inventor), indicate also:		
Country of nationality:	Country of residence:	
The person identified in this box is (check one only): <input type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only		
Name and address:		
If the person identified in this sub-box is applicant (or applicant and inventor), indicate also:		
Country of nationality:	Country of residence:	

PHI 113017
2001-11-08 PM

Box No. IV AGENT (IF ANY) OR COMMON REPRESENTATIVE (IF ANY); ADDRESS FOR NOTIFICATIONS (IN CERTAIN CASES) A common representative may be appointed only if there are several applicants and if no agent

is or has been appointed: The common representative must be one of the applicants.

The following person (include, where applicable, a legal entity) is hereby/has been appointed as agent or common representative to act on behalf of the applicant(s) before the Intellectual Property Office.

Name and address, including postal code:

SALLAN & JOCSON LAW OFFICE, 3rd Floor, Norkis Building, 11 Calbayog corner Libertad Streets, Mandaluyong City

Telephone number:
(including area code)

Fax No.:

E-Mail address:

Box No. V PRIORITY CLAIM (IF ANY) The priority of the following earlier application(s) is hereby claimed:

Country in which it was filed:

Filing Date

Application No.

(month, day, year)

- (1) _____
- (2) _____
- (3) _____

Box No. VI SIGNATURE OF APPLICANT(S) OR AGENT OVER PRINTED NAME(S)

SALLAN & JOCSON LAW FIRM

By:

ARLEEN N. SALLAN
For the Firm

If the present Request form is signed on behalf of any applicant by an agent, a separate notarized power of attorney appointing the agent and signed by the applicant is required. If in such case it is desired to make use of a general power of attorney (deposited with the Intellectual Property Office), a copy thereof must be attached to this form.

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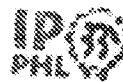
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- 2. Description :
- 3. Claim(s): _____
- 4. Drawing(s):
- 5. Abstract:
- Total Sheets:

Figure number(s) _____ of the drawings (if any) is suggested to accompany the abstract for publication.

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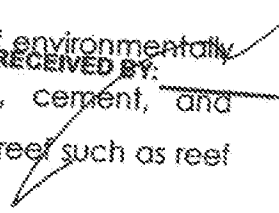
ARTIFICIAL REEF SYSTEM



ABSTRACT OF DISCLOSURE

72 JUL -4 P1 36

Disclosed is an artificial reef molded from a mixture of environmentally friendly homogenized organic and inorganic materials, cement, and aggregates of sand and gravel to form thereon an artificial reef such as reef buds, reef plates, honey combs and the likes.

RECEIVED BY: 

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FIELD OF THE INVENTION

72 JUL -4 P1 36

This invention relates in general to artificial reefs which can be deposited on the ocean floor for permitting or enhances growth of coral and other marine growth thereon but more particularly to an artificial reef system
5 utilizing a mixture of environmentally friendly organic and inorganic components blended together for use as basic material for the production of said reef such as reef buds, reef plate, reef honeycomb, and the likes. The components can also be used for underwater erosion control structures and coastal embankment stabilization.

10 BACKGROUND OF THE INVENTION

The sea is a vital source of life yet often time's man endangers the ability of the sea to continue giving life. That is why many coastal areas once teeming with fish and other marine life are now dead areas due to irresponsible activities of man like dynamite fishing, cyanide fishing, and
15 indiscriminate dumping of industrial wastes and other garbage.

The effect of these activities has led to the significant destruction and reduction of our natural reef systems. All reefs, both natural and artificial serve as food, shelter and protection for a multitude of marine animals and plants, including vital links in the food chain such as crustaceans, sponges, and
20 invertebrates. Because natural reefs cannot rebuild themselves fast enough to keep up with their destruction rates, the fragile ocean reef system stands in peril.

Since large natural coral structures take thousands of years to develop, one way that man can help the reef system is to put back the essential
25 structure that sustains life. Much like forests replanted on land, artificial reefs must be "planted" on the ocean floor. Efforts have been made to build marine sanctuaries and artificial reefs out of many things such as car tires, construction rubble, ships and planes. Even refuse unsuitable for land fills have been used to make reefs. Unfortunately, many of these methods and

systems have turned out to be environmentally unsound, very expensive, or both.

In the case of standard all concrete, reefs take way much longer for marine life to latch on and germinate on them.

5 There are also the all organic reef materials such as weighed down logs, ropes, bamboo, etc. these materials do not generate permanent calcified reef structures which are the basic foundations of a marine ecosystem. Rather these organic materials simply serve as fish accumulators attracting them from somewhere else.

10 SUMMARY OF THE INVENTION

A need therefore to utilize a mixture of organic and inorganic components blended together for use as basic material for the production of reef buds, reef plate, reef honeycomb, and boulder like materials, that will answer the abovementioned problems. The applications of the product
15 mixture are used to mold said reef buds, reef plates, honey combs, boulder like materials, and the likes.

Reef buds are used for marine life and underwater fauna and flora regeneration, seafloor rehabilitation, silt and slick immobilization, rehabilitation of water body and large surface application. Reef plates are
20 used for silt and slick immobilization, especially when contaminated and environmentally insecure, and for basic underwater farming of sea grass and algae growth. Honey comb's used as sea barrier, under and over water embankment protections, current control installations, front barrier for land reclamations at sea and preventive shoreline rehabilitation and protection
25 (erosion control). Boulder like materials is used for land restoration and reclamation.

Thus, it is the primary object of the present invention to provide an artificial reef system utilizing a mixture of environmentally friendly organic and inorganic components that ensure porosity, capillarity, calcification, and
30 stability of the material to guarantee for a long period the water absorbcency

in and through the finished product, notwithstanding the speed of growth of marine life.

Another object is to provide an artificial reef system utilizing a mixture of environmentally friendly organic and inorganic components susceptible to different depths and areas with different pH value at the sea floor, the material will have always the same pH of the surrounding water.

Still another object is to provide an artificial reef system utilizing a mixture of environmentally friendly organic and inorganic components that function further as an incubator of plant growing's nutrition's and will be also one of the activators of the ongoing structure changes of the product itself over a certain period of time.

Yet another object is to provide an artificial reef system utilizing a mixture of environmentally friendly organic and inorganic components serves as basic support and anchor for the root growths and allows new growing marine fauna/flora to anchor with the roots easier and stronger in the product surface and will have therefore more resistance against possible strong current and underwater turbulence.

A further object is to provide an artificial reef system utilizing a mixture of environmentally friendly organic and inorganic components that is economical and can be formed and molded into any shape and form desired and no steel reinforcement is needed.

MODE OF CARRYING OUT THE INVENTION

The present invention is a mixture of environmentally friendly organic and inorganic components blended together for use as basic material for the production of said reef such as reef buds, reef plate, reef honeycomb, and the likes adapted for enhancing marine life habitat. The mixtures are the following:

Organic components, that serves as fibrous organic materials having both slow and fast degrading characteristics. These comprise 40% to 60% of the homogenized volume.

These organic materials are sourced from agricultural industry, the lumber and wood industry, the food industry and the likes. Examples of these materials are:

- a.) coconut peat, shredded mixed coconut fibers, copra residuals, shredded coconut tree trunks and leaves.
- b.) sugar cane bagasse.
- 10 c.) wood industry residuals-wood chips, wood dust, wood shavings, shredded leaves, trunks, twigs and bark.
- d.) paper industry residuals-wood pulp, all types of residuals from paper manufacture, and post consumer paper discards, and
- 15 e.) all types of shredded plants and plant parts including those found in waterways such as water lilies, mangroves, algae and others.

These organic components ensure the capillarity; porosity of the homogenized material to guarantee for a long period the water absorbency in and through the finished product (estimated penetration time minimum of 14 hours). After placement of the product in different depths and areas with 20 different pH value at the sea floor, the product will have always the same pH of the product surrounding water.

The organic components functioning further as incubator of plant growing nutrition's and will be also one of the activators of the ongoing structure changes of the product itself over a certain period of time. The absorbed 25 and the organic particles stored humidity will be the catalyst for several ongoing chemical reactions.

Furthermore, these organic components are also the basic support and anchor for the root growths and allow new growing marine fauna/flora to anchor with their roots easier and stronger in the product surface and will have therefore more resistance against possible strong current and
5 underwater turbulences.

Inorganic components, that serves as calcification agents that comprise 40% to 60% of homogenized volume. These components include:

- a.) pulverized or ground dolomite like limestone (apog),
- b.) chalk, gipson/bentonite,
- 10 c.) cinderized-natural zeolite like ash additives, recovered out from volcanic activities and being refined prior to application,
- d.) perlite or its derivatives,
- e.) sulfonated kalsomine, and
- 15 f.) mixture of metal oxides, reactive to salt water/seawater, all the oxides used are from metals, not considered and listed as heavy metals of about 0.5% of the volume.

These inorganic components secure a quick reaction of the product with the seawater and start a simulated calcification process. At the same time, the components react with each other and with the surrounding
20 contaminants in the seawater, such as; urine/ammoniac, detergents and surfactants (nitrates/sulfates and sulfides) as a form of absorbent and neutralization agent. At the beginning, the absorbed nitrates will support and positively influence the calcification reaction of the product.

One of the positive aspects of this reaction in combination with the
25 organic matters implemented will be the oxygen/nitrogen production of the product, supported with the quick establishment of marine life.

The presence of metal oxides will generate a battery effect and generate an electrostatic field between 0.5 to 1.5 volt direct current. The generated electrostatic field will further enhance the attraction of marine life to the product. This is known as coral cloning, but the advantage of this is that we
5 have a large generated surface.

Activated calcification of the product will guarantee a natural, fertile and compatible habitat for marine life and after a short while will be overgrown and remain as a fully hard and stable coral reef foundation. Eventually it will be a shelter and breeding place for marine life during their breeding and
10 spawning periods.

The reaction and effects, supported by the new growth of underwater fauna and flora, in combination with the marine life habitation will be a suitable solution to rehabilitate and reactivate affected areas/dead reefs and imbalanced bodies of water.

15 The mixture of organic and inorganic components comprise of homogenized volume are being mixed with cement as binder and sand and gravel aggregates. This will be formed or molded to produce a product such as reef buds, reef plates, honey combs, boulder like materials, and the likes with or without steel reinforcement.

20 The standard mixture is 50 kilos of mixture of organic and inorganic components, 40 kilos of cement, and 300 kilos of sand and gravel with the ratio of 4 bags of sand is to 1 bag of gravel. In other preference, it may be 200 kilograms of the mixture mixed with 25 to 30 kilograms of cement.

25 Although certain preferred embodiments of the present invention have been shown and described in detail, it should be understood that various changes and modifications may be made therein without departing from the scope of the appended claims.

WHAT IS CLAIMED IS:

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1. The artificial reef for enhancing marine life habitat comprising a mixture of environmentally friendly homogenized organic and inorganic materials, cement, and sand and gravel aggregates molded to form said reef.
2. The artificial reef in accordance with claim 1, wherein said mixture is 50 kilograms of environmentally friendly homogenized organic and inorganic materials, 40 kilograms of cement, and 300 kilograms of sand and gravel aggregates.
3. The artificial reef in accordance with claim 1, wherein said organic materials is 40% to 60% homogenized mixture selected from the group coconut peat, shredded mixed coconut fibers, copra residuals, sugar cane bagasse, wood industry residuals, wood dust, wood shavings, shredded leaves, frunks, twigs and bark, paper industry residuals and post consumer paper discards, and all types of shredded plants and plant parts including those in waterways such as water lilies, mangroves, and algae.
4. The artificial reef in accordance with claim 1, wherein said inorganic materials is 40% to 60% homogenized mixture selected from the group pulverized dolomite, chalk, gipson/bentonite, cinderized-natural zeolite, perlite, sulfonated kalsomine, and metal oxides.
5. The artificial reef in accordance with claim 3, wherein said dolomite is a limestone (apog).
6. The artificial reef in accordance with claim 3, wherein said zeolite is ash additive from refined volcanic ash.
7. The artificial reef in accordance with claim 3, wherein said metal oxide is reactive to salt water/seawater, metals not considered as heavy metals of about 0.5% of the volume.

8. The artificial reef in accordance with claim 3, wherein said metal oxide generate a battery effect having an electrostatic field to enhance the attraction of marine life.

9. The artificial reef in accordance with claim 8, wherein said electrostatic field is between 0.5 to 1.5 volt direct current.

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