Electronic Acknowledgement Receipt

EFS ID:	1116850
Application Number:	10684185
Confirmation Number:	2582
Title of Invention:	FOR REDUCING ORGANIC CONTAMINATION FROM SEWAGE AND SEPARATING EMULSIONS AND HOMOGENEOUS COMPONENTS FROM CONTAMINATED WATER
First Named Inventor:	Felix Rodriguez
Correspondence Address:	Felix Rodriguez 17634 Heritage Bay Dr. Webster US (281)482-1955 TX 77099
Filer:	Steven S. Boyd
Filer Authorized By:	
Attorney Docket Number:	JDN 0301
Receipt Date:	18-JUL-2012
Filing Date:	12-OCT-2011
Time Stamp:	12:21:27
Application Type:	Utility
International Application Number:	

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Appl. Info
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Payment was successfully received in RAM	$ 395

RAM confirmation Number	803
Deposit Account	121322
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part	Pages
1	Request for Continued Examination (RCE)	021544-00002_RCE_Transmittal.pdf	59791	no	1
Warnings:					
Information:					
2	Preliminary Amendment	021544-00002_Preliminary_Amendment_for_RCE.Pdf	143262	no	6
Warnings:					
Information:					
3	Fee Worksheet (PTO-875)	fee-info.pdf	8202	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	211255		

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New Applications Under 35 U.S.C. 111

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National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/E0/903 indicating acceptance of the in addition to the Filing Receipt, application as a national stage submission under 35 U.S.C. 371 will be issued in due course.

Request for Continued Examination (RCE) Transmittal

Address to:
Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Application_Number	10/684,185
Filing_Date	October 12, 2011
First Named Inventor	Rodriguez, Felix
Art Unit	1724
Examiner Name	CINTINS, Ivars C.
Attorney Docket Number	021544-00002

(Submission required **under** 37 CFR 1.114) Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such

a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked. Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

b. ☐ El Enclosed

i. Amendment/Reply

☐ Information Disclosure Statement (IDS)

Miscellaneous

a. ☐ 111 Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

b. ☐ _____

Fees) The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. 121322 I have enclosed a duplicate copy of this sheet.

i. ☐ RCE fee required under 37 CFR 1.17(e)

Extension of time fee (37 CFR 1.136 and 1.17)

Other _____

a. 11 Check in the amount of $ enclosed

b. ☐ Payment by credit card (Form PTO-2038 enclosed)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

GN,A.T JJ *OF APPLICANT, ATTORNEY, OR AGENT REQUIRED*

Signature		Date	July 18, 2012 J
Name (Print/Type) k	Steven S. Boyd	Registration No.	42,353

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. 0. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature	
Name (Print/Type)	Date

Electronic Patent Application Fee Transmittal

Application Number:	10684185
Filing Date:	12-Oct-2012
Title of Invention	Method FOR REDUCING ORGANIC CONTAMINATION FROM SEWAGE AND SEPARATING EMULSIONS AND HOMOGENEOUS COMPONENTS FROM CONTAMINATED WATER
First Named Inventor:	Felix Rodriguez
Filer:	Steven S. Boyd/Jennifer Barton
Attorney Docket Number:	JDN 0301

Filed as Small Entity

Utility Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	- USD($Total in)
Miscellaneous:				
Request for continued examination	2801	1	395	395
			Total in USD ($)	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:
Felix Rodriguez

Filed: **October 12, 2012**
Serial No.: **10/684,185**

For: APPARATUS FOR OXIDIZING ORGANIC CONTAMINATION SEWAGE WASTEWATER AND SEPARATING EMULSIONS AND HOMOGENEOUS COMPONENTS FROM CONTAMINATED WATER

Attorney Docket No.: **021544-00002**

§

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Dear Sir:

The Commissioner is hereby authorized to charge or credit the Deposit Account No. 12-1322 of Locke Liddell & Sapp LLP under Order No. 021544-00002 for any fee that may be required.

AMENDMENT

In the Claims:

1. (Previously presented). A system for the oxidation in sewage wastewater and separation of highly emulsified and/or immiscible components mixed in a fluid, particularly useful for treating sewer and waste water contaminated with oils and oily emulsions, as from depleted oil wells, sewage waste, water grey water, vehicle washing stations, and meat rendering plants.

2. (Previously presented). Particularly suitable for reducing the amount of oil, with oil-consuming microorganisms, and separating oil that is not consumed within the system from the water so that the oil may be recycled (Previously presented).

3. (Previously presented). The system comprises a multi-stage, recirculating series of treatment tanks. In a first stage, the fluid is recirculated through a treatment loop where the fluid is aerated and then passed through a biofilm cord .8.0.
    a. (Previously presented). Organic metabolizing microorganisms that contribute to de-emulsification and contaminant reduction within the system are introduced, together wit
    b. a superoxygenated catalyst containing microorganism nutrients.

4. (Previously presented). Therefore, the removal of immiscible and emulsified components, and other contaminants which are mixed with water, is preferable for the safe and legal disposal or reuse of such contaminated water.

5. (Previously presented) The present invention addresses an existing need in the prior art by providing a high efficiency waste fluid treatment system for the treatment of waste fluids which contain oils, and particularly oily emulsions and a wide range of organic and inorganic contaminants

6. (Previously presented) Further, this system is rapid, easy and inexpensive to operate and maintain, flexible in order to meet a user's changing needs for either batch or continuous fluid treatment, and is quick and easy to switch between its batch and continuous fluid treatment modes.

7. (Previously presented) Waste streams containing a wide spectrum of organic conducive to bio-degradation are effectively reduced to clean or reusable water in this invention.
8.
9. (Previously presented) Such a spectrum includes hundreds of chemicals and compounds that cause elevated levels of biological and chemical oxygen demands in the waste stream
10. (Previously presented) Many inorganic contaminants are also removed as a by-product of the process. Industries finding use for the invention include, in addition to those producing
11. organic emulsified waste streams, sewage plant, metals manufacturing, dry cleaning, textiles, paper and paper
    a. products, lumber and wood products industries.

12. (Previously presented). Briefly described according to one aspect of the invention, a method of separating immiscible components mixed in a fluid comprises the steps of (a) providing a coalescer comprising a plurality of spaced apart oleophilic plates, each plate having corrugations running along the plate forming crests and valleys.

13. (Canceled).

14. (Canceled).

15. (Canceled).

16. (Canceled).

17.

18. (Previously presented). a microorganism catalyst can be added to the fluid to increase the rate of digestion and de-emulsification by the microbes. Further still, the fluid is aerated.

19. (Previously presented). Preferably, the fluid is filtered after the fluid has passed through the zeolite bio reactor prior to discharge. More preferably still, the fluid is recirculated through the filtering stage before discharge

20. (Previously presented). More particularly described, untreated fluid is introduced into a first treatment tank or reactor, accumulated in the reactor tank,

21. (Previously presented). Microorganisms and catalyst are introduced in a region of this reactor, prior to the zeolite bio-reactor

22. (Previously presented). The preferred coalescer is mounted the first treatment tank, and the outflow of the coalescer is directed back into the reactor tank for recirculation and further waste reduction

23. (Previously presented). When the level of fluid in the second treatment tank reaches a second predetermined level, the fluid is transferred to a third treatment tank. Preferably, the fluid is filtered as it is transferred from the second treatment tank to the third treatment tank.

24. (Previously presented). In the third treatment tank, fluid is accumulated. When the level of fluid in the third treatment tanks reaches a third predetermined level, the fluid is recirculated back into the second treatment tank, for additional filtering and refiltering.

25. (Previously presented). Fluid accumulates in the fourth treatment tank. When the level of fluid in the fourth treatment tank reaches a fifth predetermined level, treated fluid is discharged from the fourth treatment tank. Preferably, the method includes the step of filtering the treated fluid as it is discharged from the fourth treatment tank.

26. (Previously presented). According to another aspect of the invention, a method of separating immiscible components mixed in a fluid comprises the steps of (a) aerating the fluid; (b) adding oil metabolizing microorganisms to the fluid; (c) providing a bio film cord which comprises a plurality of vertical, spaced apart biocord, each line having subsequently filtering the fluid through a filtration media.

27. (Previously presented). According to yet another aspect of the invention, a method of separating immiscible components mixed in a fluid, which comprises the steps of (a) introducing fluid to be cleaned into a first treatment tank; (b) providing a coalescer; (c) prior to any filtration, moving the fluid from the first treatment tank through the second biocord reactor; (d) removing cleaned fluid from the biofilter; (e) filtering the cleaned fluid removed from the biofilter; and f) recirculating the

cleaned fluid through a prior treatment stage. In this aspect of the invention, the cleaned fluid may be recirculated through the coalescer, or through the filter, or through both. In preferred embodiments of the invention, at both the coalescer stage and the filtering stage, for maximization of removal of immiscible and solid components.

28. (Previously presented). Still more particularly described, a method of separating immiscible components mixed in a fluid comprises the steps of (a) passing the fluid through the coalescer at least once introducing uncleaned fluid into a first treatment tank; (b) aerating the fluid; (c) adding oil metabolizing microorganisms to the fluid; (d) providing a biocord, (e); (f) removing partially cleaned fluid from the coalescer into a second treatment tank; (g) accumulating partially cleaned fluid in the second treatment tank; (h) removing fluid from the second treatment tank; (i) filtering the fluid; and (j) discharging the filtered fluid.

29. (Previously presented). Still more particularly described, a method of separating immiscible components mixed in a fluid comprises the steps of (a) introducing uncleaned fluid into a first treatment tank; (b) aerating the fluid; (c) adding oil metabolizing microorganisms to the fluid; (d) providing a coalescer, (e) passing the fluid through the coalescer at least once; (f) removing partially cleaned fluid from the coalescer into a second treatment tank; (g) accumulating partially cleaned fluid in the second treatment tank; (h) removing fluid from the second treatment tank; (i) filtering the fluid; and (j) discharging the filtered fluid.

30. (Previously presented). The apparatus also includes a fourth treatment tank positioned to receive relatively clean fluid that has been discharged from the third treatment tank. A second barrier is located between the third treatment tank and the fourth treatment tank, wherein the second barrier is higher than the first barrier, and such that when the fluid in the third treatment tank exceeds the level of the top of the second bather, the relatively clean fluid passes over the second barrier into the fourth treatment tank.

REMARKS

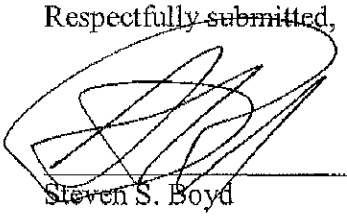
Claims in the Application.

Claims 1-11 and 17-29 are pending in the present application. Claims 12-16 have been canceled. In light of the amendment and following remarks, Applicant respectfully submits that the active claims of this application are in a condition for Allowance and Notice to that effect is earnestly solicited.

CONCLUSION

For the stated reasons, reconsideration is respectfully requested. The Commissioner is hereby authorized to charge or credit the Deposit Account No. 12-1322 of Locke Liddell & Sapp LLP under Order No. 021544-00002. In light of the foregoing remarks, the claims of the application have been distinguished over the cited references. The Examiner is requested to contact the undersigned at (713) 226-1218 should he deem it necessary to advance the prosecution of this application.

Respectfully submitted,



DATED: July 18, 2012

Steven S. Boyd
Registration No. 42,353

LOCKE LIDDELL & SAPP LLP
600 Travis, Suite 3400
Houston, Texas 77002-3095
Telephone No.: (713) 226-1218
Facsimile No.: (713) 223-3717