

Alerta

Biocombustibles

Base explorada	Restricción	Registros
Repositorio INAPIPROYECTA	2005-2010	15
Código filtrado		
Palabra clave	Área: ERNC	Sub área: Biocombustibles

PATENTES

► Biomass pelletizing process

EP20090252195	País: Estados Unidos	Solicitante: PELLET TECHNOLOGY LLC	Fecha: 2009/09/16
---------------	-----------------------------	---	--------------------------

Inventores: ZEECK, JAMES R

Resumen: A process is provided using non-food or limited-feed agricultural residue and energy crops for energy production, such as ethanol or electricity generation. The agricultural plant material is harvested and baled. The bales are transported to the processing site for storage or immediate processing. The bale strings are first removed, and then the broken bales are shredded. The shredded plant material is then ground to a small size. The ground material is then pelletized to produce densified pellets of the agricultural plant material. The pellets are cooled and then stored or transported to an end user.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101124&CC=EP&NR=225
3885A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101124&CC=EP&NR=2253885A2&KC=A2)

▶ Treatment of cellulosic material and enzymes useful therein

EP20100191152	País: Finlandia	Solicitante: ROAL OY	Fecha: 2006/12/15
---------------	-----------------	----------------------	-------------------

Inventores: VEHMAANPERAE, JARI, ; ALAPURANEN, MARIKA, ; PURANEN, TERHI, ; SIIKA-AHO, MATTI, ; KALLIO, JARNO, ; HOOMAN, SATU, ; VOUTILAINEN, SANNA, ; HALONEN, TEEMU, ; VIKARI, LIISA

Resumen: The present invention relates to the production of sugar hydrolysates from cellulosic material. The method may be used e.g. for producing fermentable sugars for the production of bioethanol from lignocellulosic material. Cellulolytic enzymes and their production by recombinant technology is described, as well as uses of the enzymes and enzyme preparations.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20110511&CC=EP&NR=2319920A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20110511&CC=EP&NR=2319920A1&KC=A1)

▶ Method of sequestering carbon dioxide using algae

GB20080019865	País: Gran Bretaña	Solicitante: RAFFAEL JOVINE	Fecha: 2008/10/29
---------------	--------------------	-----------------------------	-------------------

Inventores: RAFFAEL JOVINE

Resumen: A method and system of sequestering carbon dioxide from the atmosphere comprises culturing coccolithophorid algae in seawater wherein the seawater in which the algae are cultured is the discharge of an ocean thermal energy conversion (OTEC) process where the source water for the OTEC process is provided by cold seawater and seawater which has been warmed by solar energy means such as land based greenhouses which utilise solar energy. The discharge of the OTEC process may be combined with seawater to provide water at the optimum temperature for coccolithophorid algal aquaculture. The coccolithophorid algae may be harvested and/or further processed. Also disclosed is a method and system of increasing the efficiency of OTEC by the use of solar energy, such as that created by greenhouses to warm seawater.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20100505&CC=GB&NR=2464763A&KC=A](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20100505&CC=GB&NR=2464763A&KC=A)

IMPROVED PROCESS FOR THE PREPARATION OF FATTY ACID METHYL ESTER (BIODIESEL) FROM TRIGLYCERIDE OIL THROUGH TRANSESTERIFICATION

MX20080004064	País: México	Solicitante: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH	Fecha: 2008/03/26
---------------	---------------------	---	--------------------------

Inventores: PANDYA, JAYANT BATUKRAI, ; GHOSH, PUSPITO KUMAR, ; SHETHIA, BHUPENDRA DHANVANTRAI, ; PARMAR, DAHYABBHAI, REVABHAI, ; GANDHI, MAHESH RAMNIKBHAI, ; RATHOD, MEENA RAJNIKANT, ; PATEL, MEHUL GHANSHYAMBHAI, ; VAGHELA, NILESH KUMAR KANJIBHAI, ; DODIA, PRAKASH JAGIJIVANBHAI, ; PARMAR, RAJENDRA, AMRUTLAL, ; PATEL, SANAT NATWARLAL, ; ADIMURTHY, SUBBARAYAPPA

Resumen: The present invention relates to an improved process for the preparation of biodiesel from triglyceride oils through transesterification. More specifically, the invention relates to preparation of fatty acid methyl ester of oil mechanically expelled from whole seeds of *Jatropha curcas*, a plant that has potential for cultivation on wasteland in India and other countries. All the unit operations in the process for preparation of Biodiesel are carried out at ambient temperature. The utilization of the co products for preparing value added products and the integrated approach to utilize and manage the effluent streams make the process environmentally friendly. The process steps for work up of the crude methyl ester are made simple, practical, effective and economical to prepare Biodiesel in high yield and to match international standards.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090928&CC=MX&NR=2008004064A&KC=A](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090928&CC=MX&NR=2008004064A&KC=A)

PRODUCTION OF BIODIESEL AND GLYCERIN FROM HIGH FREE FATTY ACID FEEDSTOCKS

MX20070009932	País: México	Solicitante: NOVA BIOSOURCE FUELS, INC	Fecha: 2007/08/15
---------------	---------------------	---	--------------------------

Inventores: JOHN P. JACKAM, ; JOEL M. PIERCE, ; JEFFREY D. JONES, ; RICHARD H. TALLEY

Resumen: A system and method for the conversion of free fatty acids to glycerides and the subsequent conversion of glycerides to glycerin and biodiesel includes the transesterification of a glyceride stream with an alcohol. The fatty acid alkyl esters are separated from the glycerin to produce a first liquid phase containing a fatty acid alkyl ester rich (concentrated) stream and a second liquid phase containing a glycerin rich (concentrated) stream. The fatty acid alkyl ester rich stream is then subjected to distillation, preferably reactive distillation, wherein the stream undergoes both physical separation and chemical reaction. The fatty acid alkyl ester rich stream is then purified to produce a purified biodiesel product and a glyceride rich residue stream. The glycerin rich second liquid phase stream may further be purified to produce a purified glycerin product and a (second) wet alcohol stream. Neutralization of the alkaline stream, formed during the alkali-catalyzed transesterification process, may proceed by the addition of a mineral or an organic acid.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090218&CC=MX&NR=2007009932A&KC=A](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090218&CC=MX&NR=2007009932A&KC=A)

▶ PROCESS AND APPARATUS FOR THE PRODUCTION OF BIODIESEL USING AN ACID STAGE AND TWO ALKALINE STAGES

MX20070010827	País: México	Solicitante: MARIO ANGEL OJEDA ESCOBAR	Fecha: 2007/08/28
---------------	---------------------	---	--------------------------

Inventores: MARIO ANGEL OJEDA ESCOBAR, ; SERGIO PATRACA GUZMAN, ; SOL YURINZHIN ROMAN OCAMPO

Resumen: Described is a process and apparatus for the production of biodiesel obtained from triglycerides and fatty acids derived from animal fat and new and used vegetable oils and a combination thereof, which are subjected to three reaction stages. In the first reaction stage the mixture of triglycerides and homogeneous acids is stratified; in the following stage of the process the acid catalyst is neutralised and the mixture is pre-transesterified with an alkaline heterogeneous catalyst, and in the final stage the mixture is transesterified with an alkaline homogeneous catalyst. The transesterification occurs by a cavitation induced by an agitation axis. The inventive apparatus consists in a hermetic and improvable industrial reactor, which has an electronic control panel, an engine, an agitation axis with three pairs of blades, a pair of submergible electric resistances, an outlet lower valve located at the base portion of a tank, an alcohol condenser with a refrigerating liquid and/or a pressure regulator.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090305&CC=MX&NR=2007010827A&KC=A](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090305&CC=MX&NR=2007010827A&KC=A)

▶ PROCESS AND APPARATUS FOR EXTRACTING BIODIESEL FROM ALGAE

MX20080007914	País: México	Solicitante: ALTERNATIVAS BIOENERGETICAS, S. DE R.L. DE C.V	Fecha: 2008/06/18
---------------	---------------------	--	--------------------------

Inventores: ANTONIO JOSE DE JESUS DE SAN JUAN BOSCO ECHEVARRIA PARRES

Resumen: The present invention relates to a system for cultivation of algae, extraction of lipids and transesterification of the lipids to obtain biodiesel. The system comprises three sections, that is to say cultivation, extraction and storage and reaction. In the lipid extraction area there is an ultrasonic reactor wherein the external walls of the alga are ruptured together with those of the oil sac to permit the extraction of lipids, in the transesterification area there is also an ultrasonic reactor which ruptures the molecules of the fluid which passes therethrough to accelerate the reaction and render it almost immediate.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20091218&CC=MX&NR=2008007914A&KC=A](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20091218&CC=MX&NR=2008007914A&KC=A)

► ALGAL CULTURE PRODUCTION, HARVESTING, AND PROCESSING

MX20100008112	País: Estados Unidos	Solicitante: AQUATIC ENERGY LLC	Fecha: 2010/07/23
---------------	-----------------------------	--	--------------------------

Inventores: PRISCILA BELLE DEMARIS, ; RAMANUJAM RAVIKUMAR, ; PHILIPPE VANDEVIVERE

Resumen: Materials and methods are provided for growing algae while maintaining culture selectivity. Algae that can be grown include, for example, green algae such as those of the genus *Scenedesmus*. Lipid obtained from the algae can be used to produce biofuels such as biodiesel or polyunsaturated fatty acids such as omega-3 fatty acids. Feedstocks such as animal feed and aquaculture feed can also be produced as can phytonutrients such as astaxanthin and beta-carotene.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPDOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101221&CC=MX&NR=2010008112A&KC=A](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPDOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101221&CC=MX&NR=2010008112A&KC=A)

► BIODIESEL PURIFICATION BY A CONTINUOUS REGENERABLE ADSORBENT PROCESS

MX20100008479	País: Estados Unidos	Solicitante: THE DALLAS GROUP OF AMERICA	Fecha: 2010/07/30
---------------	-----------------------------	---	--------------------------

Inventores: JAMES R. MUNSON, ; BRIAN S. COOKE, ; BRYAN L. BERTRAM

Resumen: A process for the continuous purification of biodiesel (fatty acid alkyl esters (FAAE)) is described using an adsorbent. The adsorbent is contained in a column system and is regenerated for reuse multiple times. The process employs an adsorbent such as, carbon, silica, clay, zeolite or a metal silicate contained in a column to remove the impurities from fatty acid alkyl esters (FAAE) or crude biodiesel in a continuous process. The crude biodiesel is contacted with an adsorbent packed into one or more columns to remove impurities such as soaps, metals, free glycerin, and sterol glucosides. The resulting finished biodiesel exiting the column(s) is ready for the methanol recovery process. Once the adsorbent no longer removes the desired amount of impurities, it is regenerated for reuse. The solvent used for the regeneration process is reclaimed and reused by recycling it back to the transesterification reaction.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPDOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101025&CC=MX&NR=2010008479A&KC=A](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPDOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101025&CC=MX&NR=2010008479A&KC=A)

► **CONTINUOUS PROCESS FOR THE OBTENTION OF BIOFUELS (BIODIESEL) FROM VEGETABLE OILS AND ANIMAL FATS BY MEANS OF MAGNETIC IMPULSE CAVITATION**

MX20090006064	País: México	Solicitante: RIGOBERTO RIQUELME ROJAS	Fecha: 2009/06/08
---------------	---------------------	--	--------------------------

Inventores:	RIGOBERTO RIQUELME ROJAS
Resumen:	<p>Described is a process for obtaining a cost effective biofuel of excellent quality by means of a continuous and automatic modular system using a magnetic impulse cavitation method. The process does not present alcohol or catalyst waste, since these products are dispensed in the exact amount for performing the stoichiometric reaction without adding more liquid to the process, except the inevitable liquid loss during the alcohol recovering process, thus improving the system and operators safety against explosions during process. The cavitation processes and magnetic impulses are regulated and perfectly controlled by a software exclusively intended to perform these processes in a continuous, affordable and safe manner; The reduction of power consumption in the process is highly noticed, since the components are not preheated; also, the process is automatic, thereby regulating and controlling the startup and stop of the pumps and those of the further control elements. The additional product thus obtained is Glycerine, which is an added value byproduct that once it is refined it is turned into raw material for several transformation industries; Each module allows the continuous production to be performed in a predetermined value, the amount of modules depending on the desired total production volume, said amount being increased or reduced as required.</p>
Enlace:	http://worldwide.espacenet.com/publicationDetails/biblio? DB=EPDOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101213&CC=MX&NR=2009006064A&KC=A

► **Process, Method, and Device for the Production and/or Derivation of Hydrogen Utilizing Microwave Energy**

US20080034760	País: Estados Unidos	Solicitante: Dato no disponible	Fecha: 2008/02/21
---------------	-----------------------------	--	--------------------------

Inventores:	MARTINEZ NESTOR
Resumen:	<p>This invention is directed toward a process, method and device for the production and/or derivation of hydrogen utilizing microwave energy through use of a microwave susceptor that absorbs/assimilates microwave energy and converts it to radiant/heat energy which is imparted to iron and alters its physical characteristics such that water in contact with the iron will have one of its physical characteristics, preferably temperature, altered, and result in a reaction of the to produce/derive hydrogen. Invention also includes a progressive change to water prior to it achieving a reactive threshold with the iron element, and the progressive preparation and/or pretreatment of water, via exposure or contact of water with other materials with high thermal conductivities in lieu of iron through use of a microwave susceptor.</p>
Enlace:	http://worldwide.espacenet.com/publicationDetails/biblio? CC=US&NR=7485209B2&KC=B2&FT=D&ND=4&date=20090203&DB=EPDOC&locale=en_EP

► Synthesis of liquid fuels and chemicals from oxygenated hydrocarbons

US20080044876	País: Estados Unidos	Solicitante: VIRENT ENERGY SYSTEMS, INC	Fecha: 2008/03/07
---------------	-----------------------------	--	--------------------------

Inventores: CORTRIGHT RANDY D, ; BLOMMEL PAUL G

Resumen: Processes and reactor systems are provided for the conversion of oxygenated hydrocarbons to hydrocarbons, ketones and alcohols useful as liquid fuels, such as gasoline, jet fuel or diesel fuel, and industrial chemicals. The process involves the conversion of mono-oxygenated hydrocarbons, such as alcohols, ketones, aldehydes, furans, carboxylic acids, diols, triols, and/or other polyols, to C4+ hydrocarbons, alcohols and/or ketones, by condensation. The oxygenated hydrocarbons may originate from any source, but are preferably derived from biomass.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
CC=US&NR=8017818B2&KC=B2&FT=D&ND=4&date=20110913&DB=EPODOC&locale=en_EP](http://worldwide.espacenet.com/publicationDetails/biblio?CC=US&NR=8017818B2&KC=B2&FT=D&ND=4&date=20110913&DB=EPODOC&locale=en_EP)

► Hydrogen Producing Method and Apparatus

US20050589785	País: Japón	Solicitante: Dato no disponible	Fecha: 2005/02/17
---------------	--------------------	--	--------------------------

Inventores: MATSUMURA CHI, ; OSHITA TAKAHIRO, ; UENO SYUICHI, ; MISAWA HIDEYUKI, ; HAGIWARA MASAHIRO, ; SHIRASAWA ITARU, ; YOKOTA HIROSHI, ; UCHINO AKIRA, ; HAYAKAWA JUNICHI, ; ISAKA SHINICHI

Resumen: A method for producing hydrogen wherein use is made of a high temperature steam electrolysis apparatus having an electrolysis vessel being partitioned into the anode side and the cathode side by the use of a solid oxide electrolyte film as a diaphragm, steam is fed to the above cathode side and a reducing gas is fed to the anode side, and steam electrolysis is carried out at a high temperature, characterized in that the reducing gas and the steam fed to the electrolysis vessel has a temperature of 200 to 500 DEG C. The above temperature range for the reducing gas and the steam fed to the electrolysis vessel has been found to be an optimum temperature range, as a result of taking the heat balance within the vessel into consideration, in a high temperature steam electrolysis apparatus wherein a solid oxide electrolyte film is used, a reducing gas is fed to the anode side and steam is fed to the cathode side, an oxygen ion is allowed to react with said reducing gas on the cathode side, to thereby generate a concentration gradient for an oxygen ion and thus reduce an electrolysis voltage.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20070920&CC=US&NR=2007217995A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20070920&CC=US&NR=2007217995A1&KC=A1)

Energy crops for improved biofuel feedstocks

US20070712593	País: Estados Unidos	Solicitante: EDENSPACE SYSTEMS CORPORATION	Fecha: 2007/02/27
---------------	-----------------------------	---	--------------------------

Inventores: BLAYLOCK MICHAEL J, ; FERGUSON BRUCE W, ; LEE DAVID A

Resumen: The present invention is directed to improved systems and methods for reducing costs and increasing yields of cellulosic ethanol. In particular, the present invention provides plants genetically transformed for increased biomass, expression of lignocellulolytic enzymes, and simplification of harvesting and downstream processing. Also provided are methods for using these transgenic plants in the production of clean, marketable feedstocks for production of renewable fuels and chemicals and in other applications including phytoremediation.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20071025&CC=US&NR=2007250961A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20071025&CC=US&NR=2007250961A1&KC=A1)

Method for Obtaining Biodiesel, Alternative Fuels and Renewable Fuels Tax Credits and Treatment

US20080174314	País: Estados Unidos	Solicitante: ENDICOTT BIOFUELS II, LLC	Fecha: 2008/07/16
---------------	-----------------------------	---	--------------------------

Inventores: MORGAN WILLIAM DOUGLAS

Resumen: The present invention relates to a method of obtaining U.S. Federal and State tax credits, renewable fuel treatment under the EPA's Renewable Fuel Standard Program, and other incentives by production and sale of esters manufactured by the esterification of carboxylic acids using slurry phase, heterogeneous catalyzed, reactive distillation.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090319&CC=US&NR=2009076985A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090319&CC=US&NR=2009076985A1&KC=A1)

Condiciones de uso

La información contenida en esta "Alerta" corresponde a documentos de patentes que pueden estar concedidas o que no han concluido su tramitación, por lo que no son necesariamente son de dominio público en Chile. Por lo tanto, antes de utilizar la información deberá analizar la situación de la patente en Chile o en el territorio que se quiera utilizar.

Para patentes de dominio público puede revisar en nuestro Centro de Documentación los "Boletines de dominio público".

Esta publicación ha sido desarrollada con la ayuda financiera de la Unión Europea. Su contenido es responsabilidad exclusiva de INAPI y en ningún caso debe considerarse que refleja los puntos de vista de la Unión Europea.