

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 14-139392- -2	FECHA: 2016-05-20 09:18:41
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 1 REGISTRO/DEPOSITO/CONCESION/DEPOSITO
TRA: 2 PATENTES DE INVENCION	FOLIOS: 3
ACT: 519 TRASLADOINFORME	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
CAROLINA MERCEDES DAZA MONTALVO

Asunto: Radicación: 14-139392- -2
Trámite: 2
Evento: 1
Actuación: 519
Oficio: 6049
Folios: 3

Patente de Invención	X			Patente de Modelo de Utilidad	
Vía Nacional	X				
Vía PCT (Fase Nacional)		Capítulo I		Capítulo II	
No. Solicitud Internacional					
Fecha de Presentación Internacional					

Como resultado del examen de fondo realizado, con fundamento en el Artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se comunica:

1. Documentos estudiados

Descripción:	Rad. N° 14-139392-00000-0000	27/junio/2014
Reivindicaciones:	Rad. N° 14-139392-00000-0000	27/junio/2014
Dibujos:	Rad. N° 14-139392-00000-0000	27/junio/2014

2. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del Capítulo Primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por el solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. Por lo tanto, se estudiarán las reivindicaciones 1 a 9 (Páginas 16 a 19, radicado N° 14-139392-00000-0000).

Título de la solicitud: “Equipo y método para la preparación de emulsiones de agua en crudo vivo” (Página 1, radicado N° 14-139392-00000-0000).

El problema planteado en esta solicitud, consiste en la necesidad de proporcionar un dispositivo y método que permita estudiar la reología de las emulsiones de agua en crudo, preparando dichas mezclas que emulen las emulsiones naturales a condiciones de yacimiento y que además sean lo suficientemente estables para poder tener tiempo de estudiarlas en el laboratorio.

Para resolver este problema técnico, la solicitud en estudio propone un equipo y procedimiento para para la creación de área interfacial entre las fases aceite y agua, esta área interfacial disminuye de tamaño mediante la combinación de las técnicas de homogenización a alta presión y microfluidización, utilizando la caída de presión por el uso de válvulas, codos, líneas y “tes” (homogenización a alta presión) y utilizando adicionalmente filtros de diferentes tamaños de orificio, que internamente producen una combinación de efectos entre caída de presión y cambios de dirección y velocidad del fluido (microfluidización), la mencionada tecnología permite obtener emulsiones que permanecen estables, aún después de meses de haber sido preparadas.

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): F23K 5/12.

3. De la solicitud de patente

Titulo

El título contiene el término “vivo” el cual no es claro y no aplica al campo técnico de la invención, por lo cual se sugiere al Solicitante hacer la corrección necesaria.

Reivindicaciones (Art 30 D 486)

El capítulo reivindicatorio no es claro porque:

- Las reivindicaciones 1 y 9, presentan en el preámbulo el término “vivo”, el cual no es claro y no aplica al campo técnico de la invención se sugiere realizar aclaraciones al caso.
- Los términos de las reivindicaciones 3, 8 y 9, “cualquier cilindro”, “a alta”, “alta”, “por cualquier dispositivo”, “al menos”, “por lo menos”, “la cantidad de aceite necesaria”, “volumen de emulsión requerido”, “una presión superior a la presión de burbuja”, “misma condición”, “mínimo en”, “por encima”, “misma presión”, “se observe”, “presión constante”, “condición de presión establecida”, “ajustar la presión de este dispositivo”, “hasta la temperatura deseada”, “tamaño de gota requerido”, son imprecisos, por lo cual no permite distinguir la invención del estado de la técnica. Se sugiere sustituirlo por un término preciso o un rango concreto.
- Las reivindicaciones 3 a 7 y 9, presentan características funcionales del método como lo es: “que permita el drenaje de fluidos”, “para obtener el volumen de emulsión requerido”, “para las pruebas a una presión superior a la presión de burbuja del aceite utilizado (mínimo 13789,52 Kpa)”, “a fin de llenar las líneas de conexión”, “para purgar la salmuera o agua de formación inyectada”, “para el control de la presión”, “y reservarlo para la realización de las pruebas requeridas”, “para obtener el tamaño de gota requerido”, “y garantizar la estabilidad de la presión”, “para la operación a alta presión”, “y operan a alta presión y control de flujo”, “diseñado para mantener la presión del cilindro receptor”, “diseñados para operar a alta presión”, “para obtener el contenido de agua de interés para la emulsión objetivo”, “para la preparación de la emulsión”, es importante recordar que aunque estas características funcionales pueden ir dentro de las reivindicaciones, su función es dar claridad a las mismas, por lo que no le pueden

dar novedad o nivel inventivo ya que no se consideran características técnicas esenciales.

- En la reivindicación 9, las expresiones: *“Ajustar la presión”, “Hacer vacío”, “Ajustar el arreglo”*, son generales y no definen con claridad las cantidades o productos a los cuales se refieren, por lo tanto, incluyen todas las posibles alternativas presentes o futuras, se sugiere remplazarlo por las características esenciales para definir con precisión lo que se desea proteger.
- En la reivindicación 9 las expresiones *“que permita la cuantificación”, “cuantificar el volumen drenado de salmuera o agua de formación”, “Cuantificar el volumen de aceite inyectado”*, no es claro que parte del equipo es el encargado de realizar la acción, se sugiere realizar aclaraciones al caso.

4. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de presentación de la solicitud de patente nacional: 27 de junio de 2014 y no se encontraron documentos relevantes que anticipen el objeto de esta solicitud y que afecte su patentabilidad. Sin embargo se recomienda modificar las reivindicaciones 1, 3 a 9 que están afectadas por claridad según el Art. 30 de la Decisión 486 para continuar el trámite de esta solicitud.

Cabe mencionar que el capítulo reivindicatorio debe ser claro y conciso, superando todas las observaciones realizadas, de manera que sean claras las características técnicas esenciales del proceso para las cuales se reclama la protección legal mediante la solicitud de patente.

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta (60) días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Si como respuesta a este requerimiento el solicitante llegara a modificar: i) el capítulo reivindicatorio, ii) la descripción de la invención a proteger, iii) o presente un nuevo capítulo reivindicatorio, y desee que se realice un nuevo examen de patentabilidad a esta modificación, no deberá pagar la tasa de modificación voluntaria pero sí la correspondiente a la tasa de examen de patentabilidad. En todo caso, el número de requerimientos por no patentabilidad estará supeditado a que el término del estudio de patentabilidad no sea superior a 18 meses, contados desde la publicación de la solicitud de patente de invención. Adicionalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones deberá pagar la tasa por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.


JESÚS FERNEL GARCÍA GARCÍA
Director de Nuevas Creaciones (E)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2016-05-24

Elaboró: Lady Paola Cortes

Revisó: Olga Ximena Benavides Salazar

INFORME DE BÚSQUEDA DE PATENTES PARA EL No de Radicación: 14-139392						
CRITERIOS PARA LA BÚSQUEDA (anexar pantallazo o reporte en PDF, junto con los boleanos utilizados)						
Palabras clave utilizadas		Microfluidization, high pressure, petroleum, oil, emulsion, preparation of emulsions, petroleum, equipment.				
CLASIFICACIONES INTERNACIONALES UTILIZADAS PARA LA BÚSQUEDA		F23K5/12				
BASES DE DATOS CONSULTADAS.						
ESPACENET		USPTO		JPO		Patent scope
Patbase		Kipo				
INFORMES DE EXÁMENES REALIZADOS EN OTRAS OFICINAS (documentos patentes, literatura no patente etc...)						
Oficina	Fecha del examen o de reporte de búsqueda de documentos	Anterioridades encontradas para el examen o reportados en el examen de búsqueda(relacionarlos todos)	Reiv. afectadas	RELEVANCIA (requisito que afecta)	FUERON TENIDOS EN CUENTA PARA EL EXAMEN EN LA OFICINA COLOMBIANA	
					SI	NO
DOCUMENTOS ADICIONALES ENCONTRADOS POR EL EXAMINADOR DE ACUERDO A LOS CRITERIOS DE BÚSQUEDA.						
Microfluidized oil-in-water emulsions and vaccine compositions US 20040258701						
Compositions and Methods for Making and Using Nanoemulsions US 20080274195						
Botulinum nanoemulsions US 20120164182						
Compositions and methods for the preparation of nanoemulsions US 20110206739						
Circulation of components during microfluidization and/or homogenization emulsions WO 2011067673						
Couette device and method to study solids deposition from flowing fluids US 20040255649						
Manufacturing system of emulsion fuel oils using ultrasonication for secondary mixing KR101000070						
Crude oil electro-desalting dynamic test simulation system device CN102086405						
Systems and methods for evaluating asphaltene deposition inhibitors US2011203353						
Emulsification method and apparatus EP0322097						
One-pass method for preparing paper size emulsions US 6296696						
cell-case machine US658930						
Emulsifying system US 4117550						
Method for preparing an emulsified fuel and implementing device US 6589301						
Production method for emulsion fuel and apparatus therefor JP2002294260						
Observaciones						
Fecha del reporte de búsqueda:		02/05/2016				

[illegible]

US PATENT & TRADEMARK OFFICE		
PATENT APPLICATION FULL TEXT AND IMAGE DATABASE		
Help	Home	
Patent	Manual	
FAQ List	Database	
View Document Code	Search Document Code	
Images		
(1 of 1)		
United States Patent Application		
Kind Code	A1	
Edebon; Jonathan ; et al.	June 28, 2012	
Botulinum nanoemulsions		
Abstract		
The embodiment described herein are related nanoemulsions comprising botulinum toxins. In one embodiment, the nanoemulsions are prepared by high pressure microfluidization and comprise a particle size distribution exclusively between 10 and 300 nm. The nanoemulsions contemplated by the present invention are useful for the cosmetic and medical treatment of muscular contracture states. For example, botulinum toxin may relax facial muscles such that skin wrinkles become smoother and less noticeable. Further, the present invention contemplates a cosmetic formulation that may be self-administered, for example, in the privacy of one's home and without medical supervision.		
Inventors:	Edebon; Jonathan (Scarolete, NJ); Nicolosi; Robert (Nashua, NH)	
Assignee:	University of Massachusetts	
Family ID:	39283314	
Appl. No.:	11/607436	
Filed:	December 1, 2006	
Related U.S. Patent Documents		
Application Number	Filing Date	Patent Number
60741139	Dec 1, 2005	
Current U.S. Class:		
Current CPC Class:	A61K 8/06 20130101; A61K 8/64 20130101; A61K 38-4893 20130101; B82Y 5/00 20130101; A61K 2800-413 20130101; A61K 2800-91 20130101; A61Q 19-08 20130101; A61K 2800-21 20130101	
Class at Publication:	424-400 ; 514-118	
International Class:	A61K 8/64 20060101; A61K 208-63; A61O 18/00 20060101; A61O 018-00; A61O 18/08 20060101; A61O 018-05; A61K 8/06 20060101	

[Espacenet - Bibliographic](#)
[Espacenet - Patent Application](#)
[United States Patent App.](#)
[Espacenet - Bibliographic](#)
[Espacenet - Bibliographic](#)
[Publication Details](#)
[Biblio/CC=WO/6NR=2011067673A3&C=A3&FT=D](#)



Espacenet
 European
 Patent Office
 service européen
 des brevets

Espacenet
Patent search

Deutsch English Français

Contact

Change colour ▾

[About Espacenet](#)
[Other EPO online services ▾](#)

[Search](#)
[Result list](#)
[My patents list \(1\)](#)
[Query history](#)
[Settings](#)
[Help](#)

Bibliographic data: WO2011067673 (A3)

[Bibliographic data](#)
[Description](#)
[Claims](#)
[Inventors](#)
[Original document](#)
[Cited documents](#)
[Citing documents](#)
[INPADOC legal status](#)
[Espacenet patent family](#)

[Quick help](#)
 • What is meant by 'brevetabilité' (not a trademark)
 • What does A1, A2, A3 and B stand for after a European publication number?
 • What happens if I click on 'In my patents list'?
 • What happens if I click on 'In my patents list'?
 • Why are some keyword options deactivated for certain documents?
 • How can I bookmark this page?
 • Why does a list of documents with the tagline 'Also published as' sometimes appear and what are these documents?
 • Why do I sometimes find the content of a corresponding document?
 • What happens if I click on the red 'patent translate' button?
 • What is a 'class' document?

Bibliographic data: WO2011067673 (A3) — 2012-05-10

★ In my patents list > EPO Register Report data error Print

CIRCULATION OF COMPONENTS DURING MICROFLUIDIZATION AND/OR HOMOGENIZATION EMULSIONS

Page bookmark: [WO21067673 \(A3\) - CIRCULATION OF COMPONENTS DURING MICROFLUIDIZATION AND/OR HOMOGENIZATION EMULSIONS](#)

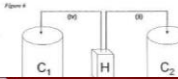
Inventors: RUECK, HARALD [DE] SCHEFFCZIK, HANNO [DE] ±
Applicants: NOVARTIS AG [CH] RUECK, HARALD [DE] SCHEFFCZIK, HANNO [DE] ±
Classification: International: [A61K39/39](#); [A61K9/107](#)
 Cooperative: [A61K39/39](#); [A61K9/107](#); [B01F7/00766](#); [A61K9/55566](#); [A61K9/1075](#)
Application number: WO2010803104 2010/203
Priority number(s): US2009023518P 2009/1203
Also published as: JP2011067673 (A2) US2011/425393 (A1) US8895620 (B2) SM201100044 (B) SI2056942 (T1) 2008

Abstract of WO2011067673 (A3)

Translate this text into: 1
 Speech [patenttranslate](#) (powered by EPO and Google)

An improved method for the manufacture of an oil-in-water emulsion involves circulation of emulsion components between a first container and a second container via a homogenizer and/or via a microfluidization device. Likewise, all of the emulsion components from the first container are emptied before being returned.

Figure 1



[worldwide.espacenet.com/publicationDetails/biblio/CC=WO/6NR=2011067673A3&C=A3&FT=D](#)
[Espacenet - results view](#)
[Traductor de Google](#)
[Espacenet - Bibliographic](#)
[Búsqueda patenta](#)
[Navega patenta](#)

Espacenet - results page > Traduction de l'anglais > Espacenet - Bibliographie > Espacenet - Recherche

worldwide.espacenet.com/publicationDetails/biblio?CC=US&NR=2004255649A1&C=A1&FT=D

Espacenet
Patent search
Deutsch English Français
Contact
Change country ▼

About Espacenet Other EPO online services ▼

Search Result list My patents list (1) Query history Settings Help

US2004255649 (A1)

Bibliographic data

- Description
- Claims
- Abstracts
- Original document
- Cited documents
- Citing documents
- INPADOC legal status
- INPADOC patent family

Quick help:

- * What is meant by high quality text as "abstract"?
- * What does A1, A2 and B stand for after a European publication number?
- * What happens if I click on "In my patents list"?
- * What happens if I click on the "translate" button?
- * Why are some abstract options deactivated for certain documents?
- * How can I bookmark this page?
- * Why does a list of documents with the heading "also published as" sometimes appear and what are these documents?
- * Why do I sometimes find the abstract of a corresponding document?
- * What happens if I click on the red "inferred language" button?
- * What is Global Dossier?

Bibliographic data: US2004255649 (A1) — 2004-12-23

★ In my patents list ● Global Dossier ⓘ Report data error ⓘ Print

Couette device and method to study solids deposition from flowing fluids

Page bookmark: [US2004255649 \(A1\) - Couette device and method to study solids deposition from flowing fluids](#)

Inventors: ZOUGARI MOHAMMED I [CA]; HAMBAHI AHMED [CA]; KARAN KUNAL [CA]; JACOBS SCOTT [CA]; RATULOWSKI JOHN [CA]

Applicant(s): ZOUGARI MOHAMMED I ; HAMBAMI AHMED ; KARAN KUNAL ; JACOBS SCOTT ; RATULOWSKI JOHN ; SCHLUMBERGER TECHNOLOGY CORPORATION.

Classification: International: G01N15/04; G01N33/28; G01N33/44; G01N11/14; G01N33/18; G01N33/22 (IPC-7); G01N15/04; G01N33/00

cooperative: G01N15/06; G01N33/28(2); G01N33/44(2); G01N11/16; G01N33/18; G01N33/22

Application number: US20030405493 20030619

Priority number(s): US20030405493 20030619

Also published as: [US6950568 \(B2\)](#) * [MY134815 \(A\)](#) [WO2004111601 \(A2\)](#) [WO2004111601 \(A3\)](#)

Abstract of US2004255649 (A1)

Translate this text into powered by EPO and Google

We disclose a method of measuring an emulsion or solids deposition in a fluid sample, comprising charging the sample to a Couette device, subjecting the sample to the Couette device at a pressure, a temperature, and a shear comparable to field conditions, changing at least one of the pressure, temperature, composition, or shearing of the sample, and quantifying the type and amount of solids deposited on the interior walls of the Couette device. We also disclose Couette devices which can be used in the method.

Espacenet - results view

[Espacenet](#) - [results view](#)

worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&aadjacent=true&locale=en_EP&FT=D&date=20121210&CC=KR&NR=101000070B1&KC=B1

Deutsch English Français Contact Change country ▼

Espacenet
Patent search

European Patent Office
Office européen des brevets

About Espacenet Other EPO online services ▼

Search Result list My patents list (1) Query history Settings Help

Before search → Results → KR101000070 (B1)

Bibliographic data

- Description
- Claims
- Abstract
- Original document
- Cited documents
- Citing documents
- INPADOC legal status
- INPADOC patent family

Quick help

- What is meant by high quality first document?
- What does A1, A2, A3 and B stand for after a European publication number?
- What happens if I click on my patents list?
- What happens if I click on the citation button?
- Why are some website options deactivated for certain documents?
- How can I download this page?
- Why does a list of documents with the legend "Not published as spontaneous document" appear?
- Why do I sometimes find the abstract of a corresponding document?
- What happens if I click on the patent translation button?
- What is a Global Dossier?

Bibliographic data: KR101000070 (B1) — 2010-12-10

★ In my patents list EP Register Report data error Print

MANUFACTURING SYSTEM OF EMULSION FUEL OILS USING ULTRASONICATION FOR SECONDARY MIXING

Page bookmark Y0101000070.B1 - MANUFACTURING SYSTEM OF EMULSION FUEL OILS USING ULTRASONICATION FOR SECONDARY MIXING

Inventor(s): CHOE YEON HO [KR]; MOK YOUNG IL [KR]; LEE GAE KUK [KR]

Applicant(s): WELLS CHAS CORP LTD [KR]; LEE GAE KUK [KR]; MOK YOUNG IL [KR]; CHOE YEON HO [KR]

Classification: International: B01F3/00; B01F7/00; C10L1/10; C10L1/32
Cooperative:

Application number: KR20100039607 20100429

Priority number(s): KR20100039607 20100429

Abstract of KR101000070 (B1)

Translate this text into:
Spanish Patent Translate powered by Google

PURPOSE: An emulsible oil manufacturing device is provided to prevent the recombination of droplets with water, and the separation of water from oil inside generated emulsion oil. CONSTITUTION: An emulsible oil manufacturing device comprises a first high speed crash mixer unit 300, a second high speed crash mixer unit 400, a return lance 300 connecting the mixers, and oscillators 307, 308, 309, 310, 311. The first high speed crash mixer unit includes the following: a first center unit 304 including a hollow shoe pipe 302 and more than one micro needles 305; a first annular unit 303 connected to the first center unit using the micro needles, a water pipe 302 inserting water to the first annular unit, and an air pipe 301 inserting air to the first annular unit.

Espace.net - Bibliographic

worldwide.espacenet.com/publicationDetails/biblio?CC=KR&NR=101000070&B1=K&FT=D&ND=38&date=20101210&DB=EPODOC&locale=en,EP

Espace.net
Patent search

Deutsch English Français

Contact

Change country ▾

[About Espacenet](#)
[Other EPO online services](#)

[Search](#)
[Result list](#)
[My patents list \(1\)](#)
[Query history](#)
[Settings](#)
[Help](#)

KR101000070 (B1)

Bibliographic data

Description

Claims

Abstract

Original document

Cited documents

Citing documents

INPADOC legal status

INPADOC patent family

Quick help

- What's meant by high quality list as in item 2?
- What does A1, A2, A3 and B stand for after a European publication number?
- What happens if I click on "In my patents list"?
- What happens if I click on the "Register" button?
- Why are some additional options available to select documents?
- How can I bookmark this page?
- Why does a list of documents with the heading "also published as" sometimes appear, and what are these documents?
- Why do I sometimes find the abstract of a correspondence document?
- What happens if I click on the red patent family button?
- What is a global document?

Bibliographic data: KR101000070 (B1) — 2010-12-10

[★ In my patents list](#)
[EP Register](#)
[Report data error](#)
[Print](#)

MANUFACTURING SYSTEM OF EMULSION FUEL OILS USING ULTRASONICATION FOR SECONDARY MIXING

Page bookmark [KR101000070 \(B1\) - MANUFACTURING SYSTEM OF EMULSION FUEL OILS USING ULTRASONICATION FOR SECONDARY MIXING](#)

Inventor(s): CHOE YEON HO [KR]; MOK YOUNG S. [KR]; LEE GAE KUK [KR]; [+](#)

Applicant(s): WELL OHAS CORP LTD [KR]; LEE GAE KUK [KR]; MOK YOUNG IL [KR]; CHOE YEON HO [KR]; [+](#)

Classification:

- international: [B01F3/06](#); [B01F7/00](#); [C10L1/18](#); [C10L1/22](#)
- cooperative:

Application number: KR20100039001 20100429

Priority number(s): KR20100039001 20100429

Abstract of KR101000070 (B1)

Translate this text into

powered by EPO and Google

PURPOSE: An emulsion oil manufacturing device is provided to prevent the recombination of droplets with water, and the separation of water from oil made generated emulsible oil. **CONSTITUTION:** An emulsion oil manufacturing device comprises a first high speed crash mixer unit(30), a second high speed crash mixer unit(60), a return band(360) connecting the mixers, and oscillators(307, 306, 309, 310, 311). The first high speed crash mixer unit includes the following: a first center unit(304) including a hollow hole unit and more than one micro nozzles(305), a first annular unit(303) connected to the first center unit using the micro nozzles, a water pipe(302) inserting water to the first annular unit, and an oil pipe(301) inserting oil to the first annular unit.

ES

10:44 am

10/10/2010

Original document: CN102086405 (A) — 2011-06-08

Crude oil electro-desalting dynamic test simulation system device

Figure 1: Schematic diagram of the crude oil electro-desalting dynamic test simulation system device. The diagram shows a cross-section of a cylindrical vessel. At the top, there is an inlet labeled '进油口' (Inlet). Inside the vessel, there is a central vertical pipe with a valve labeled '电液调节阀' (Electro-hydraulic regulating valve). The vessel is filled with a liquid, and there is a layer of oil on top. The bottom of the vessel has an outlet labeled '出油口' (Outlet). The diagram is labeled '说明书附图' (Figure of the description) and '2/2'.

Bibliographic data: US2011203353 (A1) — 2011-08-25

Systems and methods for evaluating asphaltene deposition inhibitors

Page bookmark: US2011203353 (A1) - Systems and methods for evaluating asphaltene deposition inhibitors

Inventor(s): HOUGH LAWRENCE A [US]; CASTANGO JEAN-CHRISTOPHE [US]; WOODWARD GARY [GB]; PABLAN RUELA TALINGTONG [US]; DE CAMPO FLORIAN [CN]

Applicant(s): HOUGH LAWRENCE A.; CASTANGO JEAN-CHRISTOPHE.; WOODWARD GARY.; PABLAN RUELA TALINGTONG.; DE CAMPO FLORIAN.; RHODIA OPERATIONS

Classification: - international: G01N23/26
- cooperative: G01N23/26; B01J35/02

Application number: US20110932366 20110224

Priority number(s): US20110932366 20110224; US2010033828P 20100224

Also published as: US8564513 (B2); WO2011106088 (A2); WO2011106088 (A3); MX2011009724 (A); EP2530708 (A2); D02B

Abstract of US2011203353 (A1)

Disclosed are methods of determining the effectiveness of an asphaltene deposition inhibitor in oilfield applications. Such methods typically comprising the steps of introducing an oil well fluid into a microfluidic/mimetic system, introducing a mixture of an asphaltene deposition inhibitor and carrier into the microfluidic/mimetic system, introducing a precipitating agent typically comprising heptane, into the microfluidic/mimetic system, and optionally introducing toluene into the microfluidic/mimetic system, then observing the

Claims: EP0322097 (A1) — 1989-06-28

Emulsification method and apparatus.

Claims of EP0322097 (A1)

A high quality text as facsimile in your desired language may be available amongst the following family members:

US605650 (B2); CA1326725 (C); DE3889910 (T2); ES2048205 (T3); GB215635 (A); JP61408 (B1); JP2532027 (B2); NO171449 (B); NZ226065 (A); NZ26789 (A); US611770 (A).

Original claims

Claims tree

1. A method for the continuous production of an oil/water emulsion explosive composition which method is characterised by simultaneously and continuously introducing into a mixing chamber separable liquid streams of a continuous phase component and an immiscible discontinuous phase component, the said immiscible discontinuous phase component being introduced into the said continuous phase through turbulence inducing means which restricts the flow of said immiscible discontinuous phase such as to cause its disruption to form fine droplets of a desired size upon its emergence into the mixing chamber, said turbulence inducing means further causing said immiscible discontinuous phase to emerge in a flow pattern and at a flow rate sufficient to cause the droplets so formed to entrain a sufficient quantity of the continuous phase component to provide for mixing thereof with the droplets to achieve stabilisation of same in the continuous phase and thereby continuously form said emulsion.

2. A method according to claim 1 characterised in that the means for causing disruption of the discontinuous phase comprises an orifice through which said discontinuous phase is caused to pass under pressure which is sufficient to cause droplet formation within about 0.5 mm of passing through said orifice.



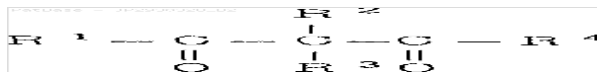
Lady Cortes

Search history

- Search 1: TAC=(CO7310172) (Results 0)
- Search 2: TAC=(ecopetrol) (Results 27)
- Search 3: [SP]: The present invention discloses how to prepare, and then analyze, emulsions water / oil emulsions emulate natural reservoir conditions and that are stable enough to have time to study in the laboratory. For this provides a computer and a protocol for the preparation of such emulsions. The equipment comprises, among others, cylinders floating piston positive displacement (C1, C2 and C3), any cylinder designed for operation at high pressure and high temperature, positive displacement pumps (manual and / or automatic) (B1 and B2), any cylinder designed for high pressure operation to have a precise minimum volume of 0.1 cc, valves ?? manual and / or automatic, any valves designed to operate at high pressure and which is special for flow control connections (lines, you, connectors), any component designed to operate at high pressure that meets international standards of manufacturing a back-pressure regulator, any device designed to maintain pressure in the slave cylinder and can be used as replacement B2 positive displacement pump, filters, metal filters designed to operate at high pressure and orifice sizes between 0.5 and 100 .mu.m. Additionally, the application presents the protocol or method for the preparation of emulsions containing the steps of: Step a. Preparation of fluids and equipment Step b. Preparation of the premix Step c. Mounting and tuning of Stage D team. Emulsion Preparation (Results 0)
- Search 4: TAC=(oil) (Results 100000)
- Search 5: TAC=(high pressure) (Results 100000)
- Search 6: TAC=(microfluidization) (Results 226)
- Search 7: TAC=(4 and 5 and 6) (Results 25)
- Search 8: TAC=(emulsion) (Results 100000)
- Search 9: TAC=(4 and 6 and 8) (Results 38)
- Search 10: TAC=(EQUIPMENT) (Results 100000)
- Search 11: TAC=(Petroleum) (Results 100000)
- Search 12: TAC=(8 and 10 and 11) (Results 235)
- Search 13: TAC=(PREPARATION OF EMULSIONS) (Results 336)
- Search 14: TAC=(10 and 11 and 13) (Results 1)
- Search 15: TAC=(4 and 10 and 13) (Results 3)

Title: SYNDIOTACTIC 1,2-POLYBUTADIENE LATEX**Abstract:**

Source: US4902741A This invention reveals a technique for preparing syndiotactic 1,2-polybutadiene latex. It more specifically discloses a process for synthesizing syndiotactic 1,2-polybutadiene latex by polymerizing 1,3-butadiene in an aqueous medium in the presence of (1) at least one emulsifier, (2) a catalyst **emulsion** composition which is prepared by a **microfluidization** or microemulsification process, and (3) at least one member selected from the group consisting of carbon disulfide and phenyl isothiocyanate. Such syndiotactic 1,2-polybutadiene latices can be utilized in preparing blends of syndiotactic 1,2-polybutadiene with rubbers which are prepared by **emulsion** polymerization.

**Classifications:**

International (IPC 8-9): C08F136/06 C08F2/22 C08F36/06 C08F4/60 C08F4/622 C08F4/70 C08L9/10 (Advanced/Invention);

C08F136/00 C08F2/12 C08F36/00 C08F4/00 (Core/Invention)

International (IPC 1-7): C08F136/06 C08F2/22 C08F279/02 C08F291/02 C08F36/06 C08F4/622 C08F4/70 C08J11/02 C08L9/04 C08L9/08 C08L9/10

CPC: Y10S526/903 C08F136/06

European: C08F136/06

US: 502/108 502/111 502/117 502/162 502/167 502/170 502/171 524/836 526/903 526/92 526/93

Family:

Publication number	Publication date	Application number	Application date
AU198940189 A1	19900301	AU19890040189	19890823
AU612953 B2	19910718	AU19890040189	19890823
BRPI8904159 A	19900410	BR1989PI04159	19890818
CA1334195 A1	19950131	CA19890609145	19890823
DE68919596 D1	19950112	DE19896019596	19890811
DE68919596 T2	19950511	DE19896019596T	19890811
EP0357535 A1	19900307	EP19890630131	19890811
EP0357535 B1	19941130	EP19890630131	19890811
JP2102202 A2	19900413	JP19890218449	19890824
JP2930328 B2	19990803	JP19890218449	19890824
US4902741 A	19900220	US19880235397	19880824
US5021381 A	19910604	US19890435856	19891113

Priority:

US19880235397 19880824

CA19890609145 19890823

US19890435856 19891113

Probable Assignee: GOODYEAR TIRE AND RUBBER

Assignee(s): (std): GOODYEAR TIRE AND RUBBER

Assignee(s): GOODYEAR TIRE AND RUBBER CO ; GOODYEAR TIRE AND RUBBER CO A CORP OF OH ; GOODYEAR TIRE AND RUBBER CO THE ; GOODYEAR TIRE AND RUBBER COMPANY THE ; GUJARATHI RAMESH N ; GUTSUDOIYAA TAIYA ANDO RABAA CO ZA ; THE GOODYEAR TIRE AND RUBBER COMPANY ; THE GOODYEAR TIRE AND RUBBER CO ; THE GOODYEAR TIRE AND RUBBER CO AKRON OHIO US ; MAGOUN GEORGE FREDRICK ; BURROWAY GARY LEE

Inventor(s): (std): BURROWAY GARY L ; BURROWAY GARY LEE ; GEIRII RII BAAROU EI ; GUJARATHI RAMESH N ; JIYO OJI FUREDERITSUKU MAGOON ; MAGOUN GEORGE F ; MAGOUN GEORGE FREDRICK ; RAMESHIYU ENU GUJIYARASHI

Inventor(s): RAMESHU ENU GUJARASHI ; MAGOUN GEORGE FREDRICK AKRON OHIO 44313 US ; RAMESH N GUJARATHI ; JOOJI FUREDERITSUKU MAGOON ; GEORGE FREDRICK MAGOUN ; BURROWAY GARY LEE DOYLESTOWN OHIO 44230 US ;

GARY LEE BURROWAY ; GEIRII RII BAAROEI

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR

Designated states: DE FR GB IT

Title: Water-based water repellent coating compositions

Abstract:

Source: US5338345A There is provided a water based water repellent coating composition, method of making and method of use. The coating composition comprises an **emulsion** having water as the continuous phase and, as the discontinuous phase, droplets of a nonvolatile organic water repellent composition, the **emulsion** containing an **emulsion** stabilizing amount of a hydrophobically modified polyacrylic acid polymer wherein the viscosity of the **emulsion** is less than about 100 Cps and the particle size of the droplets is less than about 50 microns. The relatively low viscosity and small particle size provides for easy application and excellent penetration into porous substrates. The process of making the compositions involves the making of a conventional **emulsion** of this type and then high kinetic energy processing so as to produce the desired viscosity and particle size. The method of use involves the application of the composition to a substrate followed by evaporation of the water and any volatile components from the composition.



Classifications:

International (IPC 8-9): B27K3/34 C08L33/00 C08L33/02 C08L33/04 C09D123/00 C09D133/02 C09D191/06 C09D201/00 C09D201/08 C09D5/00 C09D5/02 C09K3/18

E04B1/64 (Advanced/Invention);

B27K3/34 C08L33/00 C09D133/02 C09D201/00 C09D5/00 C09K3/18 E04B1/64 (Advanced/Non-invention)

International (IPC 1-7): B01F17/52 B01F3/08 B27K3/34 C08J3/03 C08L33/00 C08L33/02 C09D123/00 C09D133/02 C09D191/06 C09D201/08 C09D23/00 C09D5/02 C09D5/20 C09D5/34 C09K3/18 E04B1/64

CPC: C09D5/022

European: C09D5/02E

US: 106/2 106/271 106/285 106/287.23 106/287.24 427/372.2 427/384

Family:

Publication number	Publication date	Application number	Application date
AT163448 E	19980315	AT19940106852T	19940502
AU199461866 A1	19941110	AU19940061866	19940504
AU690098 B2	19980423	AU19940061866	19940504
CA2121208 AA	19941104	CA19942121208	19940413
CA2121208 C	19970930	CA19942121208	19940413
DE69408594 D1	19980402	DE19946008594	19940502
EP0623656 A2	19941109	EP19940106852	19940502
EP0623656 A3	19950222	EP19940106852	19940502
EP0623656 B1	19980225	EP19940106852	19940502
JP2642867 B2	19970820	JP19940093441	19940502
JP6345930 A2	19941220	JP19940093441	19940502
US5338345 A	19940816	US19940191240	19940203

Priority:

US19930059082 19930503
US19940191240 19940203

US19930059082 19930505
CA19942121208 19940413

US19940091240 19940203

Probable Assignee: SHERWIN WILLIAMS CO

Assignee(s): (std): EASTMAN KODAK CO ; THOMPSON MINWAX COMPANY ; THOMPSON MINWAX CO

Assignee(s): SHERWIN WILLIAMS CO ; THE THOMPSON MINWAX COMPANY ; CZEKAI DAVID ALAN ; THE THOMPSON MINWAX CO ; THE THOMPSON MINWAX CO MONTVALE N J US ; POWELL JEFFERY E G ; SCARBOROUGH VICTORIA DENISE ; EASTMAN KODAK COMPANY ; IISUTOMAN KODATSUKU CO

Inventor(s): (std): BIKUTORIA DENISU SUKAABOROO ; CZEKAI DAVID A ; CZEKAI DAVID ALAN ; CZEKAI DAVID ALAN C O EASTMAN ; JIEFURII II JII PAUERU ; POWELL JEFFERY

E G ; POWELL JEFFERY E G C O EASTMAN ; SCARBOROUGH VICTORIA D ;
SCARBOROUGH VICTORIA D C O EAS ; SCARBOROUGH VICTORIA DENICE ;
SCARBOROUGH VICTORIA DENISE ; DEBITSUDO ARAN CHIETSUKAI

Inventor(s):

JEFFERY E G POWELL ; JEFURII II JII PAUERU ; VICTORIA DENICE
SCARBOROUGH ; POWELL JEFFERY EG ; DAVID ALAN CZEKAI ; DEBITSUDO
ARAN CHETSUKAI

Agent(s):

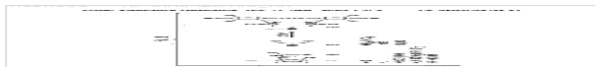
PHILLIPS ORMONDE FITZPATRICK; GOWLING LAFLEUR HENDERSON LLP

Designated states:

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

Title: BLOOD-POOL CARRIER FOR LIPOPHILIC IMAGING AGENTS**Abstract:**

Source: US2004258744A A surface-modified lipoprotein-like **oil**-in-water **emulsion** useful as a blood-pool selective delivery vehicle for lipophilic imaging agents or lipophilic derivatives of water-soluble imaging agents. The blood-pool selective delivery vehicle remains in the blood for several hours, shows very little early hepatic sequestration, and is cleared from the blood within 24 hours. The mean diameter of the **oil** phase is less than 150 nm which minimizes sequestration by the reticuloendothelial system. The surface of the **oil** phase is modified with a polyethyl glycol-modified phospholipid to prevent normal interactions with the receptor sites of the hepatocytes. In radiographic imaging, radioactive or stable, synthetic or semi-synthetic polyhalogenated triglycerides, such as 2-oleoylglycerol-1,3-bis[7-(3-amino-2,4,6-triiodophenyl)heptanoate], or lipid soluble derivatives of traditional water-soluble contrast agents, such as aliphatic esters of iopanoic, diatrizoic, and acetrizic acid, may be incorporated into the lipophilic core of a lipoprotein-like **emulsion** particle.

**Classifications:**

International (IPC 8-9): A61K47/14 A61K49/00 A61K49/04 A61K49/18 A61K51/00 A61K51/04 A61K51/12 A61K9/107 A61K9/127 A61M36/14 (Advanced/Invention);
A61K47/14 A61K49/00 A61K49/04 (Advanced/Non-invention);
A61K47/14 A61K49/00 A61K49/04 A61K49/06 A61K51/02 A61K51/12 A61K9/107
A61K9/127 (Core/Invention)

International (IPC 1-7): A61K101/02 A61K123/00 A61K47/14 A61K49/00 A61K49/04 A61K49/18 A61K51/00 A61K51/04 A61K51/06 A61K51/12 A61K9/107 A61K9/127 A61M36/14 B01F3/00 B01J13/00

CPC: A61K51/04 Y10S514/893 Y10S514/894 Y10S514/938 Y10S514/941 Y10S516/923 Y10S516/93 Y10S977/829 Y10S977/905 Y10S977/927 Y10S977/93 A61K49/0461 A61K9/1075 A61K9/1275 A61K49/0433 A61K49/1806 A61K51/0406 A61K51/0478 A61K51/1217 B82Y5/00

European: A61K49/04H A61K49/04H8F A61K49/18K A61K51/04 A61K51/04D4 A61K51/04L8 A61K51/12E A61K9/107D A61K9/127M B82Y5/00

US: 252/312 252/314 424/1.11 424/1.13 424/1.21 424/1.29 424/1.85 424/1.89 424/401 424/450 424/450P 424/9.37 424/9.4 424/9.45 514/744 514/893 514/894 514/938 514/941 516/53 516/56 516/923 516/930 977/829 977/905 977/927 977/930

Family:

Publication number	Publication date	Application number	Application date
AT299695 E	20050815	AT19950919814T	19950516
AU199525490 A1	19951205	AU19950025490	19950516
AU199871087 A1	19981111	AU19980071087	19980410
CA2190509 AA	19961115	CA19952190509	19950516
CA2190509 C	20080930	CA19952190509	19950516
CA2286138 AA	19991008	CA19982286138	19980410
DE69534326 D1	20050825	DE19956034326	19950516
DE69534326 T2	20060420	DE19956034326T	19950516
EP0871431 A2	19981021	EP19950919814	19950516
EP0871431 B1	20050720	EP19950919814	19950516
EP0973553 A2	20000126	EP19980918097	19980410
JP10504021 T2	19980414	JP19950529797T	19950516
JP2001524957 T2	20011204	JP19980544108T	19980410
KR20010006195 A	20010126	KR19997009275	19991008
US2004258744 AA	20041223	US20030692311	20031023
US5851510 A	19981222	US19940243596	19940516
US5985941 A	19991116	US19950497283	19950630
US6103216 A	20000815	US19960737429	19961115
US6126946 A	20001003	US19970899411	19970723
US6645463 BA	20031111	US19980058715	19980410
US7582279 BB	20090901	US20030692311	20031023

WO9531181 A1	19951123	WO1995US05974	19950516
WO9846275 A2	19981022	WO1998US07239	19980410
WO9846275 A3	19990128	WO1998US07239	19980410

Priority:

US19940243596 19940516 WO1995US05974 19950516 US19950497283 19950630
WO1998US07239 19980410 US19960737429 19961115 US19970899411 19970723
US19950497613 19950630 US19980058715 19980410 US19970043305P 19970411
US20030692311 20031023

Probable Assignee: UNIV MICHIGAN

Assignee(s): (std): BAKAN DOUGLAS A ; COUNSELL RAYMOND E ; LONGINO MARC A ; THE BOARD OF REGENTS OF THE UNIVERSITY OF MICHIGAN ; UNIV MICHIGAN ; UNIV MICHIGAN BOARD OF REG ; WEICHERT JAMEY P ; UNIV MICHIGAN THE BOARD OF REG ; UNIV MICHIGAN ANN ARBOR BOARD

Assignee(s): THE BOARD OF REGENTS OF THE UNIVERSITY OF MICHIGAN ANN ARBOR ; UNIVERSITY OF MICHIGAN ; UNIVERSITY OF MICHIGAN THE BOARD OF REGENTS ; MICHIGAN UNIV OF BOARD OF ; THE BOARD OF REGENTS ACTING FOR AND ON BEHALF OF THE UNIVERSITY OF MICHIGAN ; THE BOARD OF REGENTS ACTING FOR AND ON BEHALF OF THE UNIVERSITY OF MICHIGAN ; OF MICHIGAN BOARD OF REGENTS ACTING FOR AND ON BEHALF OF C O TECHNOLOGY MANAGEMENT OFFICE UNIV ; BOARD OF UNIV OF MICHIGAN GAN ; OF MICHIGAN UNIV ; OF MICHIGAN BOARD OF REGENTS UNIV ; BOARD OF UNIV OF MICHIGAN THE ; OF MICHIGAN BOARD OF REGENTS ACTING FOR AND ON BEH ; MICHIGAN UNIV ; THE BOARD OF REGENTS ACTING FOR AND ON BEHALF OF T ; BOARD OF REGENTS ACTING FOR AND ON BEHALF OF UNIV OF MICHIGAN ; BOARD OF REGENTS ACTING FOR AND ON BEHALF OF UNIV OF MICHIGAN ; BOARD OF REGENTS OF THE UNIVERSITY OF MICHIGAN THE ; BOARD OF UNIV OF MICHIGAN ; BOARD OF UNIV OF MICHIGAN ANN ARBOR

Inventor(s): (std): BAKAN A ; BAKAN DOUGLAS ; BAKAN DOUGLAS A ; COUNSELL E ; COUNSELL RAYMOND E ; DOUGLAS A BAKAN ; JAMEY P WEICHERT ; LONGINO A ; LONGINO MARC A ; MARC A LONGINO ; RAYMOND E COUNSELL ; WEICHERT JAMEY P ; WEICHERT P

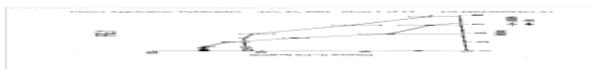
Inventor(s): WEICHERT JAMEY P ; LONGINO MARCA ; COUNSELL RAYMONDE

Agent(s): SMART AND BIGGAR ; MORGAN LEWIS AND BOCKIUS LLP

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

Title: COMPOSITION AND METHOD FOR TREATING INFLAMMATORY DISEASES

Abstract: Source: US2002009454A A protein which exhibits a therapeutic effect on inflammation and is useful for treating IL-1-mediated inflammatory diseases, particularly diseases of the joint.



Classifications:

International (IPC 8-9): A61K31/56 A61K38/00 A61K38/16 A61K38/17 A61K38/20 A61K39/395 A61K45/00 A61K47/30 A61K47/32 A61K47/36 A61K47/38 A61K47/48 A61P1/04 A61P1/18 A61P11/00 A61P11/06 A61P13/12 A61P17/02 A61P17/04 A61P19/00 A61P19/02 A61P19/08 A61P21/00 A61P25/00 A61P25/04 A61P25/08 A61P25/28 A61P29/00 A61P3/02 A61P3/10 A61P31/04 A61P35/00 A61P35/02 A61P37/06 A61P43/00 A61P9/10 C07K14/435 C07K14/54 C07K16/46 C07K19/00 C12P21/02 (Advanced/Invention); A61K38/00 A61K45/00 A61K47/36 A61P29/00 C07K19/00 (Advanced/Non-invention); A61K31/56 A61K38/00 A61K38/16 A61K38/17 A61K38/20 A61K39/395 A61K45/00 A61K47/30 A61K47/32 A61K47/36 A61K47/38 A61K47/48 A61P1/00 A61P11/00 A61P13/00 A61P17/00 A61P19/00 A61P21/00 A61P25/00 A61P29/00 A61P3/00 A61P31/00 A61P35/00 A61P37/00 A61P43/00 A61P9/00 C07K14/435 C07K16/46 C07K19/00 C12P21/02 (Core/Invention); A61K38/00 (Core/Non-invention)

International (IPC 1-7): A61K31/70 A61K38/00 A61K38/16 A61K38/20 A61K39/395 A61K45/00 A61K47/30 A61K47/32 A61K47/36 A61K47/38 A61P29/00 C07K1/00 C07K14/715 C07K16/46 C07K19/00

CPC: C07K14/54 A61K38/00 A61K47/48423 A61K47/48507 C07K2319/00 C07K2319/30 A61K31/00 A61K31/728 A61K9/0019 A61K38/20 A61K39/3955 A61K47/32 A61K47/36 A61K47/38

European: A61K31/00 A61K31/728 A61K38/17C A61K38/20 A61K39/395C2 A61K47/32 A61K47/36 A61K47/38 A61K47/48T2C12K A61K47/48T4 A61K9/00M5 C07K14/54 K61K38/00 M07K207/00 M07K319/00 M07K319/30

US: 424/134.1 424/178.1 424/178.100P 514/12 514/12.2 514/16.6 514/16.8 514/17.9 514/2.7 514/20.9 514/21.2 514/62 530/324 530/351

Family:

Publication number	Publication date	Application number	Application date
AR005737 AA	19990714	AR1997P100479	19970207
AT448797 E	20091215	AT19970906551T	19970210
AU199721213 A1	19970828	AU19970021213	19970210
AU724960 B2	20001005	AU19970021213	19970210
AU724960 C	20020815	AU19970021213	19970210
BRPI9707325 A	19990413	BR1997PI07325	19970210
CA2244664 AA	19980729	CA19972244664	19970210
CA2244664 C	20080603	CA19972244664	19970210
CA2539273 AA	19970814	CA19972539273	19970210
CA2539273 C	20140204	CA19972539273	19970210
CN1215340 A	19990428	CN19971093632	19970210
CZ299025 B6	20080402	CZ19980002373	19970210
CZ9802373 A3	19990915	CZ19980002373	19970210
DE69739656 D1	20091231	DE19976039656	19970210
EA001792 B1	20010827	EA19980000694	19970210
EP0904112 A1	19990331	EP19970906551	19970210
EP0904112 B1	20091118	EP19970906551	19970210
ES2334726 T3	20100315	ES19970906551T	19970210
HU230160 B1	20150928	HU19990002612	19970210
HU9902612 AB	19991129	HU19990002612	19970210
HU9902612 AC	20011128	HU19990002612	19970210

IL125552 A0	19990312	IL19970125552	19970210
JP2001500472 T2	20010116	JP19970528741T	19970210
JP2007211027 A2	20070823	JP20070136048	20070522
JP4344404 B2	20091014	JP19970528741T	19970210
KR19990082399 A	19991125	KR19980706131	19980808
KR20040010739 A	20040131	KR20037016565	20031218
MX9806191 A1	19981031	MX19980006191	19980731
NO983543 A	19981008	NO19980003543	19980731
NO983543 A0	19980731	NO19980003543	19980731
NZ331163 A	20000728	NZ19970331163	19970210
NZ503548 A	20010928	NZ19970503548	19970210
SK103698 A3	20010118	SK19980001036	19970210
SK288144 B6	20131202	SK19980001036	19970210
US2002009454 AA	20020124	US20010784623	20010215
US6096728 A	20000801	US19970798414	19970207
US6294170 BA	20010925	US19980131247	19980807
US6733753 BB	20040511	US20010784623	20010215
WO9728828 A1	19970814	WO1997US02131	19970210

Priority:

US19960011419P 19960209	US19960032789P 19961206	CA19972244664 19970210
US19970036241P 19970123	US19970789414 19970207	US19970798414 19970207
JP19970528741 19970210	US19980131247 19980807	US19970055185P 19970808
US20010784623 20010215	WO1997US02131 19970210	CA19972539273 19970210
CA20062244664 20060406		

Probable Assignee: SWEDISH ORPHAN BIOVITRUM AB PUBL

Assignee(s): (std): AMGEN BOULDER INC ; AMGEN BULDER INC ; AMGEN INC ; AMGEN INC
THOUSAND OAKS ; BEVILACQUA MICHAEL P ; COLLINS DAVID S ; SWEDISH
ORPHAN BIOVITRUM AB PUBL

Assignee(s): SWEDISH BIOVITRUM AB PUBL ; AMGEN INC THOUSAND OAKS KALIFORNIA

Inventor(s): (std): BEVILACQUA M P ; BEVILACQUA MICHAEL ; BEVILACQUA MICHAEL P ; BOONE
THOMAS C ; COLLINS D S ; COLLINS DAVID ; COLLINS DAVID S ; D S COLLINS
; DAVID S COLLINS ; HERSHENSON SUSAN ; M P BEVILACQUA ; MICHAEL P
BEVILACQUA

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; GOWLING LAFLEUR HENDERSON LLP;
GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER
ANWALTSSOZIETAET

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CN CU CZ DE DK EE
ES FI FR GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV
MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR
TT UA UG US UZ VN

Title: FLAVOR DELIVERY SYSTEM**Abstract:**

Source: EP0815743A2 The present invention is directed to a method for producing a microcapsule flavor delivery system. In the method, a mixture of a flavoring material selected from the group consisting of an **oil** soluble flavor dissolved in an **oil**, a water soluble flavor or a combination of the two, and a protein solution is provided. The mixture is subjected to low shear mixing to provide an o/w pre-**emulsion** or a w/o/w multiple **emulsion**. The pre-**emulsion** or multiple **emulsion** is subjected to high shear mixing or sonication to provide either an o/w **emulsion** having a coating of protein around the **oil** droplets or a w/o/w multiple **emulsion** having a coating of protein around the w/o droplets, respectively. The microcapsule flavor delivery system is incorporated into a food product to improve the flavor perception.

Classifications:**International (IPC 8-9):** A23L1/22 A23L1/226 A23L27/00 (Advanced/Invention);

A23L1/22 (Core/Invention)

International (IPC 1-7): A23L1/22 A23L1/226 A23L1/234**CPC:** A23L1/22016**European:** A23L1/22B2**Family:**

Publication number	Publication date	Application number	Application date
AU199727544 A1	19980115	AU19970027544	19970626
AU720371 B2	20000601	AU19970027544	19970626
CA2207941 AA	19971227	CA19972207941	19970616
EP0815743 A2	19980107	EP19970304326	19970619
EP0815743 A3	20000119	EP19970304326	19970619

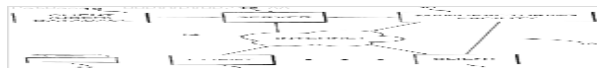
Priority:

US19960670542 19960627 CA19972207941 19970616

Probable Assignee: KRAFT FOODS INC**Assignee(s):** (std): KRAFT FOODS INC**Assignee(s):** MERCHANT ZOHAR M ; NICHOLSON VIKKI J ; TUFTS HELEN MARION ; GAONKAR ANILKUMAR G**Inventor(s):** (std): MERCHANT ZOHAR M ; MERCHANT ZOHAR MOHAMED ; NICHOLSON VIKKI J ; NICHOLSON VIKKI JEANNINE ; TUFTS HELEN MARION ; GAONKAR ANILKUMAR G ; GAONKAR ANILKUMAR GANAPATI**Inventor(s):** HELEN MARION TUFTS ; ANILKUMAR GANAPATI GAONKAR ; VIKKI JEANNINE NICHOLSON ; ZOHAR MOHAMED MERCHANT**Agent(s):** GRIFFITH HACK; MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP**Designated states:** AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: Method and system for producing customized cosmetic and pharmaceutical formulations on demand

Abstract: Source: US2002082745A A method and system for selecting and producing a customized cosmetic or pharmaceutical



formulation is disclosed below. The system can be implemented in an Internet based system or a stand-alone version, such as a Kiosk. An improved method of custom formulation is presented which utilizes the user's preferences and profile, as well as external factors. The customized formulation can be directed to a manufacturing facility for on-demand production. Alternatively, a printout of the formulation can be provided for subsequent use at point-of-sale locations, such as a cosmetics store or a pharmacy. The custom formulation software can also be provided in conjunction with a cosmetics manufacturing kit for use in home or business application.

Classifications:

International (IPC 8-9): A61K47/04 A61K47/32 A61K47/36 A61K47/38 A61K47/42 A61K8/00 A61K8/02 A61K8/04 A61K8/06 A61K8/14 A61K8/34 A61K8/58 A61K8/70 A61K8/72 A61K8/73 A61K8/81 A61K8/86 A61K8/97 A61K9/00 A61K9/10 A61K9/16 A61K9/26 A61K9/70 A61Q1/00 A61Q1/02 A61Q17/00 A61Q17/04 A61Q19/00 A61Q5/00 A61Q90/00 B01F13/10 G06F17/00 G06Q30/00 H04L12/16 (Advanced/Invention); A61K8/02 A61K9/10 A61K9/70 A61Q17/00 G06Q30/00 (Advanced/Non-invention); A61K8/04 A61K8/30 A61K8/72 A61Q17/04 A61Q19/00 B01F13/00 (Core/Invention); A61Q17/00 (Core/Non-invention)

International (IPC 1-7): A61K47/04 A61K47/32 A61K47/36 A61K47/38 A61K47/42 A61K7/00 A61K7/02 A61K7/021 A61K7/48 A61K8/00 A61K9/00 A61K9/10 A61K9/14 A61K9/16 A61K9/26 G06F17/00 G06F17/60 G06F19/00 G06K19/00 H04L12/16

CPC: A61K8/044 A61K8/068 A61K8/585 A61K8/70 A61K8/73 A61K8/731 A61K8/732 A61K8/735 A61K8/737 A61K8/97 A61K9/7015 A61Q17/00 A61Q17/04 A61Q19/00 B01F13/1055 B01F13/1061 B01F13/1063 G06Q30/02 G06Q30/06 A61K8/345 A61K8/86 A61Q19/007 G06Q50/22

European: A61K8/04C A61K8/06M A61K8/34D A61K8/58C A61K8/70 A61K8/73 A61K8/73C A61K8/73F A61K8/73L A61K8/73R A61K8/86 A61K8/97 A61Q17/04 A61Q19/00 B01F13/10G B01F13/10G6 B01F13/10G6B G06F17/60B G06F17/60B2 G06Q30/02 G06Q30/06 G06Q50/22 K61K9/70D K61Q17/00 K61Q17/04 K61Q19/00P

US: 424/401 424/401P 424/489 424/489S 700/233 700/233P 700/236 700/236S 700/239 700/239S 705/2 705/2S

Family:

Publication number	Publication date	Application number	Application date
AT326205 E	20060615	AT20010905275T	20010131
AU2001233174 AA	20010807	AU20010233174	20010131
AU200133174 A5	20010807	AU20010033174	20010131
AU200133181 A5	20010820	AU20010033181	20010131
AU774311 B2	20040624	AU20010033181	20010131
CA2366458 AA	20011004	CA20012366458	20010131
CA2399229 AA	20020731	CA20012399229	20010131
DE60119693 D1	20060622	DE20016019693	20010131
DE60119693 T2	20070426	DE20016019693T	20010131
EP1166225 A1	20020102	EP20010905283	20010131
EP1253903 A2	20021106	EP20010905275	20010131
EP1253903 B1	20060517	EP20010905275	20010131
JP2004501068 T2	20040115	JP20010555642T	20010131
KR20020043455 A	20020610	KR20017012667	20011004
MXPA01009966 A1	20030910	MX2001PA09966	20010131
MXPA02007415 A1	20040910	MX2002PA07415	20010131
US2002082745 AA	20020627	US20010972848	20011001

US2003215471 AA	20031120	US20020203055	20021126
US2005021174 AA	20050127	US20040916199	20040811
US6782307 BB	20040824	US20010972848	20011001
WO0154663 A2	20010802	WO2001US03157	20010131
WO0154663 A3	20011220	WO2001US03157	20010131
WO0154663 C2	20021031	WO2001US03157	20010131
WO0158238 A2	20010816	WO2001US03168	20010131
WO0158238 C2	20021017	WO2001US03168	20010131

Priority:

US20000179057P 20000131 US20000191878P 20000323 US20000216847P 20000707
WO2001US03168 20010131 WO2001US03157 20010131 US20010972848 20011001
US20020203055 20021126 US20040916199 20040811

Probable Assignee: LAB21 INC

Assignee(s): (std): COLLABORATIVE TECHNOLOGIES INC ; CRAWFORD TIMOTHY K ; ENGELHARD CORP ; AUST DUNCAN T ; HAYWARD JAMES A ; LAB21 INC ; WILMOTT JAMES M

Assignee(s): L 21 INC AB ; COLLABORATIVE TECHNOLOGIES INC AB ; COLLABORATIVE LABORATORIES INC ; ENGELHARD CORP ISELIN

Inventor(s): (std): DUNCAN T AUST ; WILMOTT M ; TIMOTHY K CRAWFORD ; JAMES M WILMOTT ; HAYWARD JAMES A ; HAYWARD A ; CRAWFORD K ; AUST T ; WILMOTT JAMES M ; CRAWFORD TIMOTHY K ; AUST DUNCAN T

Inventor(s): JAMES A HAYWARD ; WILMOTT JAMES ; AUST DUNCAN ; CRAWFORD TIMOTHY

Agent(s): DAVIES COLLISON CAVE; GOUDREAU GAGE DUBUC; DARBY AND DARBY PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Title: PREPARATION OF SUBMICRON SIZED NANOPARTICLES VIA DISPERSION LYOPHILIZATION

Abstract: Source: US2003059472A The present invention relates to a process for preparing submicron sized nanoparticles of a poorly water soluble compound by lyophilizing a dispersion or microdispersion of a multiphase system having an organic phase and an aqueous phase, the organic phase having the poorly water soluble organic compound therein. The method is preferably used to prepare nanoparticles of a poorly water soluble, pharmaceutically active compound suitable for in vivo delivery, particularly by parenteral routes.

Classifications:

International (IPC 8-9): A61K A61K31/496 A61K45/00 A61K47/02 A61K47/06 A61K47/10 A61K47/12 A61K47/14 A61K47/18 A61K47/20 A61K47/24 A61K47/28 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/42 A61K9/00 A61K9/10 A61K9/14 A61K9/19 A61K9/51 B01J13/02 B01J13/04 (Advanced/Invention);
A61K31/496 A61K45/00 A61K47/10 A61K47/12 A61K47/14 A61K47/16 A61K47/20 A61K47/24 A61K47/28 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/42 A61K9/10 A61K9/14 A61K9/19 A61K9/51 B01J13/02 B01J13/04 (Core/Invention);
A61K (Subclass/Invention)

International (IPC 1-7): A61F13/00 A61K A61K31/496 A61K45/00 A61K47/10 A61K47/12 A61K47/14 A61K47/18 A61K47/20 A61K47/24 A61K47/28 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/42 A61K9/00 A61K9/127 A61K9/14 A61K9/19 A61K9/51 B01J13/02 B01J13/04 B29B9/00

CPC: A61K9/145 B01J13/04 A61K9/14 A61K9/5192 A61K9/5169

European: A61K9/10 A61K9/14H4 A61K9/51H6H A61K9/51P B01J13/04

US: 264/4.1 264/4.100 264/5 424/422 424/450 424/489

Family:

Publication number	Publication date	Application number	Application date
AU2002337692 AA	20030407	AU20020337692	20020925
AU2002337692 BB	20070913	AU20020337692	20020925
BRPI0212833 A	20041013	BR2002PI12833	20020925
CA2461349 AA	20040323	CA20022461349	20020925
CA2461349 AA	20030403	CA20022461349	20020925
CA2461349 C	20111129	CA20022461349	20020925
CN1558755 A	20041229	CN20028018959	20020925
EP1429749 A2	20040623	EP20020773579	20020925
EP2016938 A1	20090121	EP20080075760	20020925
IL160570 A0	20040725	IL20020160570	20020925
IL196631 A0	20091118	IL20090196631	20090121
IL196631 A1	20140630	IL20020196631	20020925
IN00608DN2004 A	20091030	IN2004DN00608	20040310
JP2005504090 T2	20050210	JP20030530248T	20020925
MXPA04002446 A1	20040723	MX2004PA02446	20020925
US2003059472 AA	20030327	US20020183035	20020626
US2005013868 AA	20050120	US20040920578	20040817
US2005037083 AA	20050217	US20010964273	20010926
US2005037083 AA	20050217	US20020964273	20020510
US2005037083 AA	20050217	US20010964273	20010926
US2006003012 A9	20060105	US20010964273	20010926
US6835396 BB	20041228	US20020183035	20020626
US8722091 BB	20140513	US20040920578	20040817
WO03026611 A2	20030403	WO2002US30447	20020925

Priority:

US20010964273 20010926

US20020964273 20020510

EP20020773579 20020925

US20040920578 20040817

US20020183035 20020626

WO2002US30447 20020925

Probable Assignee: BAXTER INT**Assignee(s):** (std): BRYNJELSEN SEAN ; BAXTER INT ; DOTY MARK ; STERNBERG SHMUEL ;
DUNHAM ANDY ; JAYSWAL NAILESH ; KIPP JAMES E ; NARAYANAN
KRISHNASWAMY**Assignee(s):** DUNHAM ANDREW J ; DOTY MARK J ; BAXTER INT INC ; BAXTER INT
INCORPORATED ; BAXTER INTIONAL ; BAXTER INTERNATIONAL INC ; BAXTER
INTERNATIONAL INCORPORATED**Inventor(s):** (std): DUNHAM ANDREW J ; DOTY MARK J ; SHMUEL STERNBERG ; SEAN
BRYNJELSEN ; NAILESH JAYSWAL ; KRISHNASWAMY NARAYANAN ;
NARAYANAN KRISHNASWAMY ; STERNBERG SHMUEL ; KIPP JAMES E ;
JAYSWAL NAILESH ; DUNHAM ANDY ; DOTY MARK ; BRYNJELSEN SEAN**Inventor(s):** ANDREW J DUNHAM ; JAMES E KIPP ; KIPP JAMES ; MARK J DOTY**Agent(s):** PETER MAXWELL AND ASSOCIATES; SIM AND MCBURNEY; DEE IAN MARK;
REINHOLD COHN AND PARTNERS; BELL BOYD AND LLOYD LLC; ASSISTANT
GENERAL COUNSEL BAXTER INT INC; MARSHALL GERSTEIN AND BORUN LLP**Designated states:** AE AG AL AM AT AU AZ BA BB BE BG BR BY BZ CA CH CN CO CR CU CY CZ DE
DK DM DZ EC EE ES FI FR GB GD GE GH GM GR HR HU ID IE IL IN IS IT JP KE
KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK MN MW MX MZ NL NO
NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN
YU ZA ZM ZW

Title: GEL CAPSULES CONTAINING ACTIVE INGREDIENTS AND USE THEREOF

Abstract:

Source: US2004247664A A gel capsule charged with an active substance or component in the form of a matrix or storage system containing the active substance or component, the capsule having at least one **oil** phase containing the active substance or component in a gel matrix based on at least one block copolymer, the active substance or component itself being the **oil** phase or being dissolved in a carrier **oil**. Also, a process for making the gel capsules.

Classifications:

International (IPC 8-9): A61K8/06 A61K8/11 A61K8/36 A61K8/40 A61K8/46 A61K8/72 A61K8/81 A61K8/86 A61K8/90 A61K9/52 A61K9/64 B01J13/02 B01J13/04 (Advanced/Invention);

A61K8/04 A61K8/11 A61K8/30 A61K8/72 A61K9/52 B01J13/02 B01J13/04 (Core/Invention)

International (IPC 1-7): A61K7/00 A61K9/48 A61K9/52 A61K9/64 B01J13/02 B01J13/04 C11D17/00 C11D3/37

CPC: B01J13/02

European: B01J13/02

US: 264/4.1 264/41 424/452

Family:

Publication number	Publication date	Application number	Application date
AU2002342907 AA	20030610	AU20020342907	20021114
DE10157755 A1	20030612	DE20011057755	20011127
EP1448296 A1	20040825	EP20020779555	20021114
JP2005510344 T2	20050421	JP20030547039T	20021114
US2004247664 AA	20041209	US20040855918	20040527
WO03045545 A1	20030605	WO2002EP12737	20021114

Priority:

DE20011057755 20011127 WO2002EP12737 20021114

Probable Assignee: HENKEL AUF AKTIEN HENKEL KGAA KG

Assignee(s): (std): BUHL ANDREAS ; DREJA MICHAEL ; HENKEL KGAA ; KLINK CLAUDIA ; HENKEL AUF AKTIEN KG

Assignee(s): HENKEL KG ; HENKEL KOMMANDITGESELLSCHAFT AUF AKTIEN ; HENKEL AG AND CO KGAA ; HENKEL AUF AKTIEN (HENKEL KGAA) KG ; HENKEL AUF AKTIEN HENKEL KGAA KG

Inventor(s): (std): ANDREAS BUHL ; BUHL ANDREAS ; CLAUDIA KLINK ; DREJA MICHAEL ; KLINK CLAUDIA ; MICHAEL DREJA

Designated states: AT AU BE BG BR BY CA CH CN CY CZ DE DK DZ EE ES FI FR GB GR HU ID IE IL IN IT JP KR LI LU MC MX NL NO NZ PL PT RO RU SE SG SI SK TR UA US UZ VN YU ZA

Title: NOVEL FORMULATIONS OF DIGITALIS GLYCOSIDES FOR TREATING CELL-PROLIFERATIVE AND OTHER DISEASES

Abstract: Source: US2004082521A The present invention provides methods, preparations, and uses of a variety of liposomal-digitalis glycoside compositions. The present invention also provides protein-stabilized nanoparticle formulations containing liposomal-digitalis glycosides such as Oleandrin, digitoxin, and digoxin with reduced toxicity, high drug to lipid ratio, long circulating time in the bloodstream and the ability to deliver the drug to tumor sites. In another aspect, the present invention provides an effective method to reduce the growth of cancers or reduce the incidence of metastases.

Classifications:

International (IPC 8-9): A61K31/704 A61K9/127 A61K9/14 (Advanced/Invention);
A61K31/7028 A61K9/127 A61K9/14 (Core/Invention)

International (IPC 1-7): A61K31/704 A61K9/127

CPC: A61K31/7048 A61K9/1271 A61K9/1272 A61K9/148 A61K31/704

European: A61K31/704 A61K31/7048 A61K9/127B A61K9/14H8 K61K9/127B2

US: 424/450 424/450S 514/26 514/26P

Family:

Publication number	Publication date	Application number	Application date
US2004082521 AA	20040429	US20030404902	20030331

Priority:

US20020368880P 20020329 US20030404902 20030331

Probable Assignee: AZAYA THERAPEUTICS INC

Assignee(s): (std): AZAYA THERAPEUTICS INC

Inventor(s): (std): SINGH CHANDRA U

Title: PROTEIN-STABILIZED LIPOSOMAL FORMULATIONS OF PHARMACEUTICAL AGENTS

Abstract: Source: US2004247660A The present invention relates to protein stabilized liposomes. Specifically, the present invention discloses compositions and methods for protein stabilized liposomes, the creation of protein stabilized liposomes, and the administration of protein stabilized liposomes.

Classifications:

International (IPC 8-9): A61K31/16 A61K31/337 A61K31/365 A61K31/366 A61K31/437 A61K31/4745 A61K31/575 A61K31/704 A61K31/7048 A61K38/00 A61K38/13 A61K38/28 A61K38/38 A61K38/42 A61K38/46 A61K38/47 A61K39/395 A61K45/00 A61K47/24 A61K47/26 A61K47/28 A61K47/42 A61K9/127 A61K9/19 A61K9/48 A61P1/08 A61P11/00 A61P11/06 A61P11/08 A61P17/04 A61P19/02 A61P19/06 A61P23/00 A61P25/02 A61P25/16 A61P25/18 A61P25/20 A61P25/22 A61P25/24 A61P29/00 A61P3/10 A61P3/14 A61P31/04 A61P31/10 A61P31/12 A61P35/00 A61P37/02 A61P43/00 A61P7/02 A61P7/04 A61P9/00 A61P9/10 A61P9/12 (Advanced/Invention);

A61K47/42 A61K9/19 (Advanced/Non-invention);

A61K31/4738 A61K31/7028 A61K31/7042 A61K39/395 (Core/Invention)

International (IPC 1-7): A61K9/127 A61K9/48

CPC: A61K9/0019 A61K9/127 A61K9/1271 A61K9/1272 A61K9/1277 A61K9/19 A61K47/42

European: A61K47/42 A61K9/00M5 A61K9/127B A61K9/127B2 A61K9/127P A61K9/19 K61K9/127

US: 424/133.1 424/133.100 424/450 424/469 424/94.6 424/94.600 424/94.61 424/94.610 514/11 514/12 514/13.2 514/13.6 514/14.9 514/15.2 514/15.7 514/16.4 514/17.6 514/18.3 514/19.1 514/19.2 514/19.3 514/2 514/2.4 514/20.5 514/26 514/27 514/283 514/3 514/3.3 514/3.7 514/34 514/449 514/453 514/5.7 514/5.9 514/6 514/6.9 514/7.4 514/7.7 514/9.3 977/907

Family:

Publication number	Publication date	Application number	Application date
AU2003287526 AA	20040603	AU20030287526	20031106
AU2003287526 AH	20040603	AU20030287526	20031106
CA2505520 AA	20050506	CA20032505520	20031106
CA2505520 C	20120717	CA20032505520	20031106
EP1585504 A2	20051019	EP20030781768	20031106
EP1585504 A4	20090715	EP20030781768	20031106
JP2006508126 T2	20060309	JP20040551766T	20031106
US2004247660 AA	20041209	US20030703187	20031106
US2007166368 AA	20070719	US20070619526	20070103
US7179484 BB	20070220	US20030703187	20031106
WO04043363 A2	20040527	WO2003US35297	20031106
WO04043363 A3	20040812	WO2003US35297	20031106
WO04043363 C1	20050728	WO2003US35297	20031106

Priority:

US20020424230P 20021106 WO2003US35297 20031106 US20030703187 20031106
US20070619526 20070103

Probable Assignee: AZAYA THERAPEUTICS INC

Assignee(s): (std): AZAYA THERAPEUTICS INC ; SINGH CHANDRA U

Inventor(s): (std): CHANDRA U SINGH ; SINGH CHANDRA U

Inventor(s): SINGH CHANDRA

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; DAVID L PARKER FULBRIGHT AND JAWORSKI LLP; FULBRIGHT AND JAWORSKI LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV
MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO
RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC
VN YU ZA ZM ZW

Title: MICROFLUIDIZED OIL-IN-WATER EMULSIONS AND VACCINE COMPOSITIONS

Abstract:

Source: US2004258701A This invention provides submicron oil-in-water emulsions useful as a vaccine adjuvant for enhancing the immunogenicity of antigens. The present invention also provides vaccine compositions containing an antigen combined with such emulsions intrinsically or extrinsically. Methods of preparing the emulsions and vaccines are also provided by the present invention.



Classifications:

International (IPC 8-9): A61K31/14 A61K31/575 A61K31/70 A61K39/00 A61K39/02 A61K39/09 A61K39/108 A61K39/12 A61K39/15 A61K39/155 A61K39/245 A61K39/295 A61K39/39 A61K45/00 A61K47/06 A61K47/24 A61K47/26 A61K9/00 A61K9/08 A61K9/10 A61K9/107 A61K9/113 A61K9/127 A61K9/50 A61P37/02 A61P37/04 (Advanced/Invention); A61K39/39 A61K9/08 (Advanced/Non-invention); A61K39/00 A61K9/113 (Core/Invention); A61K (Subclass/Invention)

International (IPC 1-7): A61K39/00 A61K39/02 A61K39/09 A61K39/108 A61K39/12 A61K39/15 A61K39/155 A61K39/245 A61K39/295 A61K39/38 A61K39/39 A61K47/12 A61K47/14 A61K47/34 A61K9/10 A61K9/107 A61K9/113 A61P37/04

CPC: A61K2039/70 A61K39/092 A61K9/1075 A61K39/0225 A61K39/0258 A61K39/12 A61K39/39 A61K2039/55511 A61K2039/55555 A61K2039/55566 A61K2039/55577 A61K2039/521 A61K2039/55505 C12N2770/24334

European: A61K39/02D A61K39/02T1 A61K39/09 A61K39/09A A61K39/108 A61K39/12 A61K39/155 A61K39/245 A61K39/295 A61K39/39 A61K9/00N10 A61K9/107D K61K39/555B K61K39/555B13 K61K39/555B5 K61K39/555B8 M12N770/24134

US: 424/184.1 424/184.100P 424/218.1 424/218.100S 424/234.1 424/234.100S 424/244.1 424/244.100S 424/257.1 424/257.100S 424/278.1 424/280.1 424/450 514/182 514/182S 514/23 514/23P 514/642 514/642S

Family:

Publication number	Publication date	Application number	Application date
AR043803 AA	20050810	AR2004P101078	20040331
AU2004226591 AA	20041014	AU20040226591	20040322
AU2004226591 BB	20090604	AU20040226591	20040322
BRPI0408635 A	20060328	BR2004PI08635	20040322
CA2521051 AA	20050930	CA20042521051	20040322
CA2521051 C	20120320	CA20042521051	20040322
CL2004000691 A1	20050506	CL20040000691	20040331
CN1767854 A	20060503	CN200480008618	20040322
CN1767854 B	20130724	CN200480008618	20040322
DK1613346 T3	20130107	DK20040722345T	20040322
EP1613346 A2	20060111	EP20040722345	20040322
EP1613346 B1	20121128	EP20040722345	20040322
EP1613346 B8	20130109	EP20040722345	20040322
ES2398235 T3	20130314	ES20040722345T	20040322
HK1086484 A1	20140404	HK20060106499	20060607
HK1086484 A3	20060922	HK20060106499	20060607
IL170885 A0	20060221	IL20050170885	20050915
IN01340DN2010 A	20100806	IN2010DN01340	20100225
IN03847DN2005 A	20070817	IN2005DN03847	20050830
IN239704 B	20100409	IN2005DN03847	20050830
JP2006522090 T2	20060928	JP20060506403T	20040322
KR100720213 B1	20070521	KR20057018729	20050930
KR20060006909 A	20060120	KR20057018729	20050930

MXPA05010697 A1	20051212	MX2005PA10697	20040322
NO20054376 A	20060103	NO20050004376	20050921
NO20054376 A0	20050921	NO20050004376	20050921
NZ542576 A	20081128	NZ20040542576	20040322
PT1613346 T	20130129	PT20040722345T	20040322
RU2005130646 A	20060127	RU20050130646	20040322
RU2009113834 A	20101020	RU20090113834	20090413
RU2009113834 A	20101020	RU20090113834	20040322
RU2541809 C2	20150220	RU20090113834	20040322
SI1613346 T1	20130228	SI20040031984T	20040322
TH71477 A	20051027	TH20041001194	20040402
TW200509966 A	20050316	TW20040109274	20040402
TWI353850 B	20111211	TW20040109274	20040402
US2004258701 AA	20041223	US20040818433	20040405
US2010173854 AA	20100708	US20090650715	20091231
US8771727 BB	20140708	US20090650715	20091231
UY28256 A1	20041130	UY20040028256	20040402
WO04087204 A2	20041014	WO2004IB00937	20040322
WO04087204 A3	20041223	WO2004IB00937	20040322
ZA200507994 A	20070328	ZA20050007994	20051003

Priority:

US20030460301 20030404 US20030460301P 20030404 WO2004IB00937 20040322
US20090650715 20091231 US20040818433 20040405 EP20040722345 20040322

Probable Assignee: ZOETIS SERVICES LLC

Assignee(s): (std): DOMINOWSKI PAUL JOSEPH ; KLOSE PAMELA K ; KLOSE PAMELA KAY ; PFIZER PROD INC ; KREBS RICHARD LEE ; MANNAN RAMASAMY MANNAR ; PFIZER ; PFIZER PRODUCTS INC SA ORGANIZ ; PAH USA 15 LLC ; PFIZER PRODUCTS INC ORGANIZ SA ; MANNAN RAMASAMY M ; KREBS RICHARD L ; DOMINOWSKI PAUL J ; PHARMACIA AND UPJOHN CO LLC ; ZOETIS P LLC ; ZOETIS LLC ; ZOETIS PI LLK

Assignee(s): AH USA 42 LLC ; PFIZER PRODUCTS INC SOC ANONIMA ORGANIZADA BAJO LAS LEYES DEL ESTADO DE CONNECTICUT ; ZOETIS SERVICES LLC ; PFIZER PRODUCTS INC SOCIEDAD ANONIMA ORGANIZADA BAJO LAS LEYES DEL ESTADO DE CONNECTICUT ; ZOETIS P AND U LLC ; DOMINOWSKI PAUL J PFIZER GLOBAL RESEARCH AND DEV ; PHARMACIA AND UPJOHN COMPANY LLC ; MANNAN RAMASAMY M PFIZER GLOBAL RESEARCH AND DEV ; KREBS RICHARD LEE PFIZER GLOBAL RESEARCH AND DEV ; KREBS RICHARD LEE PFIZER PROD INC DOMINOWSKI ; PFIZER INC ; KLOSE PAMELA KAY PFIZER GLOBAL RESEARCH AND DEV ; PFIZER PRODUCTS INC

Inventor(s): (std): DOMINOWSKI POL DZHOZEJ ; DOMINOVWSKI PAUL JOSEPH ; DOMINOWSKI PAUL J ; DOMINOWSKI PAUL JOSEPH ; KLOSE PAMELA ; KLOSE PAMELA K ; KLOSE PAMELA KAY ; KLOUZ PAMELA KEJ ; KREBS RICHARD L ; KREBS RICHARD LEE ; KREBS RICHARD LI ; MANNAN RAMASAMI MANNAR ; MANNAN RAMASAMY ; MANNAN RAMASAMY M ; MANNAN RAMASAMY MANNAR ; RAMASAMY DOMINOWSKI PAUL J KLO ; PAUL JOSEPH DOMINOWSKI RICHARD ; MANNAN MANNAN RAMASAMY ; LEE KREBS RICHARD ; KAY KLOSE PAMELA

Inventor(s): RAMASAMY M MANNAN ; RAMASAMY MANNAR MANNAN ; RICHARD LEE KREBS ; PAUL JOSEPH DOMINOWSKI RICHARD LEE KREBS PAMELAKAY KLOSE RAMASAMY MANNAR MANNAN ; MANNAN RAMASAMY MV ; PAMELA KAY KLOSE ; PAUL J DOMINOWSKI ; PAUL JOSEPH DOMINOVWSKI ; PAUL JOSEPH DOMINOWSKI ; MANNAN RAMASAMY M PFIZER GLOBAL RESEARCH AND DEV ; MANNAN RAMASAMY M V ; KREBS RICHARD LEE PFIZER GLOBAL RESEARCH AND DEV ; KLOSE PAMELA KAY PFIZER GLOBAL RESEARCH AND DEV ; DOMINOWSKI PAUL J KLOSE PAMELA KREBS RICHARD L MAN ; DOMINOWSKI PAUL J PFIZER GLOBAL RESEARCH AND DEV

Agent(s): ALLENS PATENT AND TRADE MARK ATTORNEYS; ALLENS ARTHUR ROBINSON
PATENT AND TRADE MARKS ATTORNEYS; TORYS LLP; Pfizer; PFIZER;
CARPINTERO MARIO; PHARMACIA AND UPJOHN; VYACHESLAV V

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV
MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT
RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ
VC VN YU ZA ZM ZW

Title: STABLE INJECTABLE COMPOSITION OF ALPHA TOCOPHERYL SUCCINATE, ANALOGUES AND SALTS THEREOF

Abstract: Source: US2006024360A The present invention provides compositions that comprise alpha-tocopheryl succinate or its analogue or salt and methods for preparing and using such compositions.



Classifications:

International (IPC 8-9): A61K31/337 A61K31/355 A61K45/00 A61K47/14 A61K47/24 A61K47/44 A61K9/10 A61K9/127 A61P35/00 A61P35/02 A61P43/00 (Advanced/Invention);

A61K31/355 A61K9/127 (Advanced/Non-invention);

A61K31/337 A61K31/352 A61K45/00 A61K47/14 A61K47/24 A61K47/44 A61K9/10 A61K9/127

A61P35/00 A61P43/00 (Core/Invention);

C07C (Subclass/Invention)

International (IPC 1-7): A61K31/355

CPC: A61K9/0019 A61K9/10 A61K9/1075 A61K31/337 A61K31/355

European: A61K31/337 A61K31/355 A61K9/00M5 A61K9/10 A61K9/107D

US: 424/450 424/450P 514/449 514/449S 514/458 514/458S

Family:

Publication number	Publication date	Application number	Application date
AU2005269383 AA	20060209	AU20050269383	20050728
CA2575216 AA	20070125	CA20052575216	20050728
CN1925853 A	20070307	CN200580002072	20050728
CN1925853 B	20110126	CN200580002072	20050728
EP1778217 A2	20070502	EP20050779446	20050728
EP1778217 A4	20081008	EP20050779446	20050728
IL180741 A0	20070704	IL20070180741	20070116
IN00331KN2007 A	20070706	IN2007KN00331	20070129
JP2008508302 T2	20080321	JP20070523807T	20050728
KR20070059072 A	20070611	KR20077004963	20070228
NO20070983 A	20070227	NO20070000983	20070221
RU2007107359 A	20080910	RU20070107359	20050728
US2006024360 AA	20060202	US20050192439	20050728
WO06015120 A2	20060209	WO2005US26783	20050728
WO06015120 A3	20060518	WO2005US26783	20050728

Priority:

US20040592097 20040728 US20040592097P 20040728 US20050192439 20050728
WO2005US26783 20050728

Probable Assignee: SD PHARMACEUTICALS INC

Assignee(s): (std): CHEN ANDREW XIAN ; SD PHARMACEUTICALS INC ; XIAN CHEN

Assignee(s): CHEN XIAN

Inventor(s): (std): CHEN ADREW XIAN ; CHEN ANDREW X ; CHEN ANDREW XIAN ; XIAN CHEN

Inventor(s): CHEN XIAN ; CHEN ANDREW ; ANDREW XIAN CHEN

Agent(s): DAVIES COLLISON CAVE; BORDEN LADNER GERVAIS LLP; SEED INTELLECTUAL PROPERTY LAW GROUP PLLC

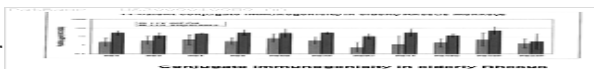
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU

LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH
PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA
UG US UZ VC VN YU ZA ZM ZW

Title: PNEUMOCOCCAL POLYSACCHARIDE CONJUGATE VACCINE

Abstract: Source: US2009010959A The present invention is in the field of pneumococcal capsular saccharide conjugate vaccines. Specifically, a

multivalent Streptococcus pneumoniae immunogenic composition is provided with various conjugated capsular saccharides from different S. pneumoniae serotypes conjugated to 2 or more different carrier proteins, where the composition comprises serotype 19F capsular saccharide conjugated to diphtheria toxoid (DT) or CRM197, optionally wherein 19F is the only saccharide in the composition conjugated to diphtheria toxoid (DT) or CRM197.

**Classifications:**

International (IPC 8-9): A61K39/00 A61K39/02 A61K39/05 A61K39/08 A61K39/09 A61K39/10 A61K39/102 A61K39/116 A61K39/385 A61K39/39 A61K47/42 A61K47/48 A61P11/00 A61P25/00 A61P27/02 A61P27/14 A61P27/16 A61P29/00 A61P31/04 A61P37/00 A61P37/04 A61P43/00 A61P7/00 (Advanced/Invention);

C12N15/09 (Advanced/Non-invention);

A61K39/00 A61K39/02 A61K39/05 A61K39/08 A61K39/09 A61K39/10 A61K39/102 A61K39/116 A61K39/385 A61K39/39 A61K47/42 A61K47/48 A61P11/00 A61P25/00 A61P27/00 A61P29/00 A61P31/00 A61P37/00 A61P43/00 A61P7/00 (Core/Invention);

C12N15/09 (Core/Non-invention)

International (IPC 1-7): A61K39/00 A61K39/02 A61K39/09 A61P31/04 A61P43/00

CPC: A61K47/48261 A61K2039/545 A61K2039/55 A61K2039/555 A61K2039/62 A61K2039/6037 A61K2039/6068 A61K2039/627 A61K2039/64 A61K2039/70 A61K47/4833 A61K39/385 A61K39/092

European: A61K39/09A A61K47/48R2D A61K47/48R2V K61K39/545 K61K39/55 K61K39/555 K61K39/60P10 K61K39/60P20 K61K39/62

US: 424/197.11 424/244.1

Family:

Publication number	Publication date	Application number	Application date
AR058706 AA	20080220	AR2006P105675	20061220
AR058707 AA	20080220	AR2006P105676	20061220
AU2006327036 AA	20070628	AU20060327036	20061220
AU2006327036 BB	20121115	AU20060327036	20061220
AU2006327040 AA	20070628	AU20060327040	20061220
AU2006327040 BB	20100819	AU20060327040	20061220
AU2006327041 AA	20070628	AU20060327041	20061220
AU2006327041 BB	20100826	AU20060327041	20061220
AU2012216698 AA	20120927	AU20120216698	20120906
AU2012216698 BB	20140306	AU20120216698	20120906
CA2633772 AA	20080618	CA20062633772	20061220
CA2633772 C	20150915	CA20062633772	20061220
CA2634885 AA	20080623	CA20062634885	20061220
CA2634885 C	20160419	CA20062634885	20061220
CA2634887 AA	20080623	CA20062634887	20061220
CA2634887 C	20160119	CA20062634887	20061220
EA014107 B1	20101029	EA20080001367	20061220
EA014165 B1	20101029	EA20080001344	20061220
EA014649 B1	20101230	EA20080001374	20061220
EA200801344 A1	20081230	EA20080001344	20061220
EA200801367 A1	20081230	EA20080001367	20061220
EA200801374 A1	20081230	EA20080001374	20061220
EP1962899 A2	20080903	EP20060830743	20061220
EP1962899 B1	20110817	EP20060830743	20061220

EP1968631 A2	20080917	EP20060841492	20061220
EP1968631 B1	20150408	EP20060841492	20061220
EP1973564 A2	20081001	EP20060830744	20061220
JP2009520759 T2	20090528	JP20080546439T	20061220
JP2009520760 T2	20090528	JP20080546441T	20061220
JP2009520761 T2	20090528	JP20080546442T	20061220
JP5579387 B2	20140827	JP20080546441T	20061220
JP5792920 B2	20151014	JP20080546442T	20061220
KR20080081060 A	20080905	KR20087017937	20061220
KR20080081061 A	20080905	KR20087017942	20061220
KR20080081063 A	20080905	KR20087018023	20061220
MX2008008140 A1	20080924	MX20080008140	20080620
MX2008008140 A1	20080924	MX20080008140	20061212
MX2008008140 A1	20080924	MX20080008140	20061220
NO20082646 A	20080916	NO20080002646	20080605
NO20082647 A	20080918	NO20080002647	20080605
NO20082718 A	20080916	NO20080002718	20080613
US2009010959 AA	20090108	US20060097303	20061220
US2009017059 AA	20090115	US20060097631	20061220
US2009017072 AA	20090115	US20060097611	20061220
WO07071707 A2	20070628	WO2006EP69974	20061220
WO07071707 A3	20070913	WO2006EP69974	20061220
WO07071710 A2	20070628	WO2006EP69977	20061220
WO07071710 A3	20071129	WO2006EP69977	20061220
WO07071710 C1	20080904	WO2006EP69977	20061220
WO07071711 A2	20070628	WO2006EP69979	20061220
WO07071711 A3	20071108	WO2006EP69979	20061220

Priority:

GB20050026232	20051222	GB20060007087	20060407	GB20060007088	20060407
GB20060009902	20060518	GB20060020336	20061012	WO2006EP69977	20061220
WO2006EP69974	20061220	WO2006EP69979	20061220	GB20060020337	20061012
GB20060020815	20061019	GB20060020816	20061019	WO2006GB04634	20061212
AU20060325377	20061212	AU20060327036	20061220	AU20120216698	20120906

Probable Assignee: GLAXOSMITHKLINE BIOLOGICALS SA

Assignee(s): (std): BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE ;
GLAXOSMITHKLINE BIOLOG SA ; VAN MECHELEN MARCELLE PAULETTE ;
HERMAND PHILIPPE VINCENT ; POOLMAN JAN

Assignee(s): GLAXOSMITHKLINE BIOLOGICALS S A ; GLAXOSMITHKLINE BIOLOGICALS SA

Inventor(s): (std): BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE ; HERMAND
PHILIPPE VINCENT ; MECHELEN MARCELLE PAULETTE VAN ; NATHALIE GARCON
; VAN MECHELEN MARCELLE PAULETTE ; GARCON NATHALIE MARIE JOSEPHINE
; GARCON NATALIE MARIE JOSEPHE ; BIEMANS RALPH LEON ; POOLMAN JAN

Inventor(s): RALPH LEON BIEMANS ; NATHALIE MARIE JOSEPHE GARCON ; PHILIPPE
VINCENT HERMAND ; JAN POOLMAN ; MARCELLE PAULETTE VAN MECHELEN

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; PHILLIPS ORMONDE FITZPATRICK;
OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE FULBRIGHT CANADA LLP
SENCRL SRL; LUBIENSKI MICHAEL JOHN; JOHNSTON CAROLINE LOUISE;
JOHNSTON CAROLINE LOUISE ET AL; FUJITA TAKASHI; ISHII SADAJI; HIRAKI
YUSUKE; GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY MAI B482

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI
LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI

NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ
TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: PNEUMOCOCCAL POLYSACCHARIDE CONJUGATE VACCINE

Abstract: Source: CA2816182A The present invention is in the field of pneumococcal capsular saccharide conjugate vaccines. Specifically, a multivalent Streptococcus pneumoniae immunogenic composition is provided with various conjugated capsular saccharides from different S. pneumoniae serotypes conjugated to 2 or more different carrier proteins, where the composition comprises serotype 19F capsular saccharides conjugated to diphtheria toxoid (DT) or CRM197, optionally wherein 19F is the only saccharide in the composition conjugated to diphtheria toxoid (DT) or CRM197.

Classifications:

International (IPC 8-9): A61K39/05 A61K39/09 A61K39/102 A61K39/116 A61K39/385 A61P31/04 A61P37/04 (Advanced/Invention)

CPC: A61K2039/6037 A61K2039/6068 A61K2039/627 A61K2039/64 A61K2039/70 A61K47/4833 A61K39/385 A61K39/092

Family:

Publication number	Publication date	Application number	Application date
CA2816182 AA	20070628	CA20062816182	20061220

Priority:

GB20050026232 20051222	GB20060007087 20060407	GB20060007088 20060407
GB20060009902 20060518	GB20060020336 20061012	GB20060020337 20061012
GB20060020815 20061019	GB20060020816 20061019	WO2006GB04634 20061212
CA20062816182 20061220	CA20062633772 20061220	CA20132633772 20130627

Probable Assignee: GLAXOSMITHKLINE BIOLOG SA

Assignee(s): (std): GLAXOSMITHKLINE BIOLOG SA

Assignee(s): GLAXOSMITHKLINE BIOLOGICALS SA ; POOLMAN JAN ; VAN MECHELEN MARCELLE PAULETTE ; HERMAND PHILIPPE VINCENT ; BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE

Inventor(s): (std): BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE ; HERMAND PHILIPPE VINCENT ; POOLMAN JAN ; VAN MECHELEN MARCELLE PAULETTE

Agent(s): NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL

Title: BOTULINUM NANOEMULSIONS**Abstract:**

Source: US2012164182A The embodiment described herein are related nanoemulsions comprising botulinum toxins. In one embodiment, the nanoemulsions are prepared by high pressure **microfluidization** and comprise a particle size distribution exclusively between 10 and 300 nm. The nanoemulsions contemplated by the present invention are useful for the cosmetic and medical treatment of muscular contracture states. For example, botulinum toxin may relax facial muscles such that skin wrinkles become smoother and less noticeable. Further, the present invention contemplates a cosmetic formulation that may be self-administered, for example, in the privacy of one's home and without medical supervision.

Classifications:

International (IPC 8-9): A61K A61K38/00 A61K38/48 A61K39/08 A61K39/40 A61K8/06 A61K8/34 A61K8/64 A61K9/00 A61K9/06 A61K9/10 A61K9/107 A61K9/12 A61K9/14 A61K9/66 A61K9/70 A61P17/00 A61P17/18 A61Q19/00 A61Q19/08 B82Y5/00 (Advanced/Invention); A61K38/00 A61K39/00 A61K39/08 A61K8/30 A61K9/00 A61K9/107 A61P17/00 A61Q19/00 (Core/Invention);

A61K A61P A61Q B82Y (Subclass/Invention)

International (IPC 1-7): A61K39/08

CPC: A61K8/06 A61K8/64 A61K38/4893 A61K2800/21 A61K2800/413 A61K2800/91 A61Q19/08 B82Y5/00

European: A61K38/48N1 A61K8/06 A61K8/64 A61Q19/08 B82Y5/00 K61K201/103 K61K800/21 K61K800/413 K61K800/91

US: 424/167.1 424/239.1 424/400 424/400P 424/455 514/18.8 514/18.800S

Family:

Publication number	Publication date	Application number	Application date
AU2006349377 AA	20080417	AU20060349377	20061201
AU2006349377 BB	20130627	AU20060349377	20061201
AU2013234398 AA	20131024	AU20130234398	20130927
BRPI0619134 A2	20110913	BR2006PI19134	20061201
CA2631927 AA	20080602	CA20062631927	20061201
CA2631927 C	20150818	CA20062631927	20061201
CN101374498 A	20090225	CN200680052147	20061201
CN103919690 A	20140716	CN201410072019	20061201
EP1959994 A2	20080827	EP20060851782	20061201
EP1959994 A4	20120801	EP20060851782	20061201
HK1200016 A1	20150731	HK20150100428	20150115
IL191734 A0	20081229	IL20080191734	20080527
IL224678 A0	20130324	IL20130224678	20130212
IL224678 A0	20130324	IL20060224678	20061201
IN03410CN2008 A	20090306	IN2008CN03410	20080701
JP2009518307 T2	20090507	JP20080543532T	20061201
JP2013189444 A2	20130926	JP20130097704	20130507
JP2016006065 A2	20160114	JP20150142742	20150717
KR20080071615 A	20080804	KR20087015490	20080625
KR20130122016 A	20131106	KR20137026661	20061201
MX2008006750 A1	20080903	MX20080006750	20061201
US2012164182 AA	20120628	US20060607436	20061201
US8318181 BB	20121127	US20060607436	20061201
WO08045107 A2	20080417	WO2006US46236	20061201
WO08045107 A3	20080828	WO2006US46236	20061201

Priority:

US20050741139P	20051201	WO2006US46236	20061201	US20060607436	20061201
JP20080543532	20061201	AU20060349377	20061201	JP20080543532T	20061201
AU20130234398	20130927	JP20130097704	20061201		

Probable Assignee: OF MASSACHUSETTS LOWELL UNIV**Assignee(s):** (std): NICOLOSI ROBERT ; NICOLOSI ROBERT J ; EDELSON JONATHAN ; UNIV MASSACHUSETTS ; UNIV MASSACHUSETTS LOWELL ; UNIV OF MASSACHUSETTS LOWELL**Assignee(s):** UNIV ; OF MASSACHUSETTS UNIV ; UNIVERSITY OF MASSACHUSETTS LOWELL ; MASSACHUSETTS LOWELL UNIV ; MASSACHUSETTS UNIV ; OF MASSACHUSETTS LOWELL UNIV ; UNIVERSITY OF MASSACHUSETTS**Inventor(s):** (std): EDELSON JONATHAN ; JONATHAN EDELSON ; NICOLOSI ROBERT ; NICOLOSI ROBERT J ; ROBERT NICOLOSI**Agent(s):** DAVIES COLLISON CAVE; OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; CROOKS ELIZABETH CAROLINE ET AL; ARAI EIICHI; FUJITA TAKASHI; TANAKA NATSUO; FUJII AI; HIRAKI YUSUKE; MCCARTER AND ENGLISH LLP; DANIELLE; MARCIE B; DECONTI GIULIO A JR**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: VACCINE COMPRISING STREPTOCOCCUS PNEUMONIAE CAPSULAR POLYSACCHARIDE CONJUGATES

Abstract: Source: US2010183662A The present invention is in the field of pneumococcal capsular saccharide conjugate vaccines. Specifically, an immunogenic composition is provided comprising a multivalent Streptococcus pneumoniae vaccine comprising 13 Streptococcus pneumoniae capsular saccharide conjugates. Methods of making and uses thereof are also described.



Classifications:

International (IPC 8-9): A61K39/09 A61K39/116 A61K39/385 A61K39/39 A61K39/395 A61K47/48 A61P11/00 A61P25/00 A61P27/16 A61P29/00 A61P31/04 A61P37/04 (Advanced/Invention); A61K39/09 A61K39/395 A61P31/04 C07K14/11 C07K14/195 C07K14/285 C12N15/09 C12N15/117 (Advanced/Non-invention);

A61K39/00 A61K39/09 A61K39/385 A61K39/395 A61P31/00 A61P37/00 (Core/Invention)

International (IPC 1-7): A61K39/09 A61K39/09

CPC: A61K39/09 A61K39/116 A61K47/4833 A61K39/092 A61K2039/55 A61K2039/55555 A61K2039/55566 A61K2039/6037 A61K2039/6068

European: A61K39/09A K61K39/55 K61K39/555B5 K61K39/555B8 K61K39/60P10 K61K39/60P20

US: 424/197.11 424/197.110P

Family:

Publication number	Publication date	Application number	Application date
AU2008267208 AA	20081231	AU20080267208	20080624
AU2008267208 BB	20120119	AU20080267208	20080624
AU2008267210 AA	20081231	AU20080267210	20080624
AU2008267210 BB	20120119	AU20080267210	20080624
BRPI0813307 A2	20141223	BR2008PI13307	20080624
BRPI0813644 A2	20141223	BR2008PI13644	20080624
CA2690707 AA	20091214	CA20082690707	20080624
CA2690708 AA	20081231	CA20082690708	20080624
CA2690710 AA	20081231	CA20082690710	20080624
CN101784282 A	20100721	CN200880104210	20080624
CN101784282 B	20150708	CN200880104210	20080624
CN101883583 A	20101110	CN200880105100	20080624
CN104873965 A	20150902	CN201510292244	20080624
DK2167121 T3	20151123	DK20080761319T	20080624
EA020817 B1	20150227	EA20090001576	20080624
EA200901576 A1	20100630	EA20090001576	20080624
EA200901576 A8	20140930	EA20090001576	20080624
EA200901578 A1	20100830	EA20090001578	20080624
EA201391788 A1	20140829	EA20130091788	20080624
EP2167120 A2	20100331	EP20080761318	20080624
EP2167121 A1	20100331	EP20080761319	20080624
EP2167121 B1	20150902	EP20080761319	20080624
EP2170379 A2	20100407	EP20080774248	20080624
EP2687228 A2	20140122	EP20130189338	20080624
EP2687228 A3	20140430	EP20130189338	20080624
ES2552366 T3	20151127	ES20080761319T	20080624
GB200712420 A0	20070808	GB20070012420	20070626
GB200712428 A0	20070808	GB20070012428	20070626
GB200712435 A0	20070808	GB20070012435	20070626

HR20151122 T1	20151120	HR20150001122	20151023
IN04363KN2009 A	20100702	IN2009KN04363	20091216
IN04364KN2009 A	20100702	IN2009KN04364	20091216
JP2010531329 T2	20100924	JP20100513882T	20080624
JP2010531330 T2	20100924	JP20100513883T	20080624
JP2010531331 T2	20100924	JP20100513884T	20080624
JP2014139192 A2	20140731	JP20140033491	20140225
JP5476295 B2	20140423	JP20100513884T	20080624
JP5489993 B2	20140514	JP20100513882T	20080624
JP5848790 B2	20160127	JP20140033491	20140225
KR101579947 B1	20151228	KR20107001798	20080624
KR20100045445 A	20100503	KR20107001794	20080624
KR20100045446 A	20100503	KR20107001798	20080624
MX2009013949 A1	20100524	MX20090013949	20080624
PT2167121 T	20151202	PT20080761319T	20080624
RS54349 B1	20160229	RS20150000702	20080624
SI2167121 T1	20151231	SI20080031522T	20080624
US2010183662 AA	20100722	US20080665291	20080624
US2010209450 AA	20100819	US20080665350	20080624
US2010239604 AA	20100923	US20080665247	20080624
WO09000824 A2	20081231	WO2008EP57997	20080624
WO09000824 A3	20090305	WO2008EP57997	20080624
WO09000825 A2	20081231	WO2008EP57998	20080624
WO09000825 A3	20090625	WO2008EP57998	20080624
WO09000826 A1	20081231	WO2008EP57999	20080624

Priority:

GB20070012420 20070626	GB20070012428 20070626	GB20070012435 20070626
WO2008EP57997 20080624	WO2008EP57999 20080624	WO2008EP57998 20080624
EP20080774248 20080624	JP20100513882 20080624	CN200880104210 20080624
JP20100513882T 20080624	EP20080761319 20080624	

Probable Assignee: GLAXOSMTHKLINE BIOLOGICALS SA

Assignee(s): (std): BIEMANS RALPH LEON ; GLAXOSMITHKLINE BIOLOG SA ; HERMAND PHILIPPE VINCENT ; POOLMAN JAN

Assignee(s): GLAXOSMTHKLINE BIOLOGICALS SA ; GLAXOSMITHKLINE BIOLOGICALS S A ; GLAXOSMITHKLINE BIOLOGICALS SA

Inventor(s): (std): HERMAND PHILIPPE VINCENT ; JAN POOLMAN ; LEON BIEMANS RALPH ; PHILIPPE VINCENT HERMAND ; POOLMAN JA ; POOLMAN JAN ; BIEMANS RALPH LEON ; VINCENT HERMAND PHILIPPE

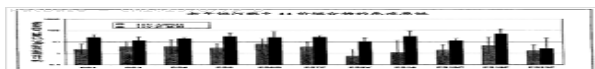
Inventor(s): BIEMANS RALPH ; HERMAND PHILIPPE ; RALPH LEON BIEMANS

Agent(s): PHILLIPS ORMONDE FITZPATRICK; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; JOHNSTON CAROLINE LOUISE; WHETTON LUCY; CARPINTERO MARIO; ARAI EIICHI; FUJITA TAKASHI; ISHII SADAJI; TANAKA NATSUO; HIRAKI YUSUKE; GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY MAI B482; GLAXOSMITHKLINE GLOBAL PATENTS C2111F; JOHNSTON CAROLINE LOUISE ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: VACCINE

Abstract: Source: IN02571KN2008A The present invention is in the field of pneumococcal capsular saccharide conjugate vaccines. Specifically, an immunogenic composition for infants is provided comprising a multivalent Streptococcus pneumoniae vaccine comprising 2 or more capsular saccharide conjugates from different serotypes, wherein the composition comprises a serotype 22F saccharide conjugate. Such a vaccine may be used in infant populations to reduce the incidence of elderly pneumococcal disease such as exacerbations of COPD and/or IPD.

**Classifications:****International (IPC 8-9):** A61K39/09 A61K39/385 (Advanced/Invention);

A61K39/09 A61K39/385 (Core/Invention)

International (IPC 1-7): A61K39/09 A61K39/09**Family:**

Publication number	Publication date	Application number	Application date
CN101374548 A	20090225	CN200680052954	20061220
CN101374548 B	20130501	CN200680052954	20061220
CN101378778 A	20090304	CN200680053111	20061220
CN101378778 B	20130206	CN200680053111	20061220
CN101378779 A	20090304	CN200680053139	20061220
CN101378779 B	20150902	CN200680053139	20061220
GB200526232 A0	20060201	GB20050026232	20051222
IN02571KN2008 A	20090130	IN2008KN02571	20080624
IN02573KN2008 A	20090130	IN2008KN02573	20080624
IN02601KN2008 A	20090123	IN2008KN02601	20080626
IN266150 B	20150410	IN2008KN02601	20080626
IN271080 B	20160205	IN2008KN02573	20080624

Priority:

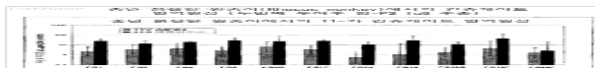
GB20050026232	20051222	GB20060007088	20060407	GB20060007087	20060407
GB20060009902	20060518	GB20060020336	20061012	WO2006EP69979	20061220
WO2006EP69977	20061220	WO2006EP69974	20061220	GB20060020337	20061012
GB20060020815	20061019	GB20060020816	20061019	WO2006GB04634	20061212

Probable Assignee: GLAXOSMITHKLINE BIOLOG SA**Assignee(s):** (std): GLAXOSMITHKLINE BIOLOG SA**Assignee(s):** GLAXOSMITHKLINE BIOLOGICALS S A ; GLAXOSMITHKLINE BIOLOGICALS SA

Inventor(s): (std): BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE ; HERMAND PHILIPPE VINCENT ; JAN POOLMAN ; LEON BIEMANS RALPH ; MECHELEN MARCELLE PAULETTE VAN ; PAULETTE MECHELEN MARCELLE VAN ; POOLMAN JAN ; VAN MECHELEN MARCELLE PAULETTE ; VINCENT HERMAND PHILIPPE

Title: VACCINE COMPRISING CAPSULAR POLYSACCHARIDES CONJUGATES FROM STREPTOCOCCUS PNEUMONIAE SEROTYPES 19A AND 19F

Abstract: Source: NZ569076A An immunogenic composition that comprises Streptococcus pneumoniae capsular saccharides from serotypes 19A and 19F conjugated to bacterial toxoids. The composition further comprises conjugates of the S. pneumoniae capsular saccharides 4, 6B, 9V, 14, 18C, 22F and 23F. The bacterial toxoids can be from pneumolysin and diphtheria toxin. The composition can be used as a vaccine to treat or prevent S. pneumoniae infection or diseases.



Classifications:

International (IPC 8-9): A61K A61K39/00 A61K39/09 A61K39/12 A61K39/145 A61K39/385

A61K39/39 A61P11/00 A61P31/04 A61P37/00 (Advanced/Invention);

A61P27/02 A61P27/16 C12N15/09 (Advanced/Non-invention);

A61K (Subclass/Invention)

International (IPC 1-7): A61K39/09

CPC: A61K47/48261 A61K2039/545 A61K2039/55 A61K2039/555 A61K2039/62 A61K2039/6037

A61K2039/6068 A61K2039/627 A61K2039/64 A61K2039/70 A61K47/4833 A61K39/385 A61K39/092

European: A61K39/09A K61K39/60P10 K61K39/60P20

Family:

Publication number	Publication date	Application number	Application date
BRPI0620193 A2	20111101	BR2006PI20193	20061220
HK1120230 A1	20111209	HK20090101006	20090204
HK1120230 A3	20090327	HK20090101006	20090204
HK1122502 A3	20090522	HK20090102888	20090325
HK1126113 A3	20090828	HK20090102494	20090316
IL219641 A0	20120628	IL20120219641	20120508
IL219641 A0	20120628	IL20060219641	20061220
IL219641 A0	20120628	IL20120219641	20120508
JP5461838 B2	20140402	JP20080546439T	20061220
KR101365001 B1	20140221	KR20087017942	20061220
KR101367237 B1	20140314	KR20087017937	20061220
KR101441368 B1	20140924	KR20137023760	20061220
KR20130103831 A	20130924	KR20137023760	20061220
NZ569076 A	20110826	NZ20060569076	20061220
VN10510 A1	20120925	VN20080001863	20061220

Priority:

GB20050026232	20051222	GB20060007088	20060407	GB20060007087	20060407
GB20060009902	20060518	GB20060020336	20061012	GB20060020337	20061012
GB20060020816	20061019	GB20060020815	20061019	WO2006GB04634	20061212
WO2006EP69977	20061220	WO2006EP69974	20061220		

Probable Assignee: GLAXOSMITHKLINE BIOLOG SA

Assignee(s): (std): GLAXOSMITHKLINE BIOLOG SA

Assignee(s): GLAXOSMITHKLINE BIOLOGICALS S A ; GLAXOSMITHKLINE BIOLOGICALS SA

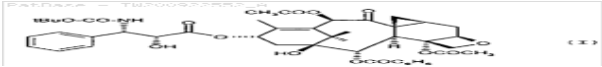
Inventor(s): (std): BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE ; HERMAND PHILIPPE VINCENT ; MECHELEN MARCELLE PAULETTE VAN ; POOLMAN JAN ; VAN MECHELEN MARCELLE PAULETTE

Inventor(s): RALPH LEON BIEMANS ; NATHALIE MARIE JOSEPHE GARCON ; PHILIPPE VINCENT HERMAND ; JAN POOLMAN ; MARCELLE PAULETTE VAN MECHELEN

Title: NOVEL TAXOID-BASED COMPOSITIONS

Abstract:

Source: US2010311825A The disclosure relates to novel taxoid-based compositions comprising injectable formulations of these derivatives in the form of an emulsion.



Classifications:

International (IPC 8-9): A01N43/02 A61K31/165 A61K31/335 A61K31/337 A61K47/04 A61K47/10 A61K47/12 A61K47/14 A61K47/22 A61K47/24 A61K47/44 A61K9/00 A61K9/107 A61P33/00 A61P35/00 C07D305/00 C07D305/06 C07D407/00 C07D493/00 (Advanced/Invention); A61K31/337 A61K47/24 A61K9/107 (Advanced/Non-invention); A61K31/335 A61K31/337 A61K47/00 A61K47/24 A61K47/44 A61K9/00 A61K9/107 A61P33/00 A61P35/00 C07D305/00 (Core/Invention); A61K (Subclass/Invention)

International (IPC 1-7): A61K31/335 A61K31/337 A61K47/24 A61K47/44 A61K9/00 A61K9/107

CPC: A61K9/0019 A61K9/107 A61K9/1075 A61K47/24 A61K47/44

European: A61K47/24 A61K47/44 A61K9/00M5 A61K9/107D K61K9/107

US: 514/449 549/510

Family:

Publication number	Publication date	Application number	Application date
AR072333 AA	20100825	AR2008P104386	20081008
AT534406 E	20111215	AT20080868434T	20081009
AU2008345527 AA	20090709	AU20080345527	20081009
BRPI0818597 A2	20150422	BR2008PI18597	20081009
CA2701789 AA	20090709	CA20082701789	20081009
CL2008003002 A1	20091016	CL20080003002	20081009
CN101820918 A	20100901	CN200880110996	20081009
CO6260107 A2	20110322	CO20100041381	20100409
CR11335 A	20100813	CR20100011335	20100324
CY1112388 T1	20151209	CY20121100186T	20120223
DK2197492 T3	20120312	DK20080868434T	20081009
DOP2010000098 A	20100430	DO20100000098	20100408
EA016619 B1	20120629	EA20100070448	20081009
EA201070448 A1	20100830	EA20100070448	20081009
EP2197492 A1	20100623	EP20080868434	20081009
EP2197492 B1	20111123	EP20080868434	20081009
ES2377352 T3	20120326	ES20080868434T	20081009
FR2922107 A1	20090417	FR20070007092	20071010
FR2922107 B1	20100226	FR20070007092	20071010
GT2010000075 A	20120411	GT201000000075	20100406
HR20120165 T1	20120331	HR20120000165	20120220
IL204950 A0	20101130	IL20100204950	20100408
IL204950 A0	20101130	IL20080204950	20081009
IN01195KN2010 A	20100723	IN2010KN01195	20100405
JP2011500542 T2	20110106	JP20100528443T	20081009
JP5574965 B2	20140820	JP20100528443T	20081009
KR20100075490 A	20100702	KR20107007728	20100409
MA31840 B1	20101101	MA20100032825	20100510
MX2010003914 A1	20100517	MX20100003914	20081009
NZ584544 A	20120427	NZ20080584544	20081009
PA8798101 A1	20090723	PA20080087981	20081008

PE09622009 A1	20090810	PE20080001737	20081007
PT2197492 T	20120220	PT20080868434T	20081009
RS52131 B	20120831	RS20120000058	20081009
SI2197492 T1	20120330	SI20080030554T	20081009
TH103208 A	20100811	TH20081005151	20081008
TN2010000129 A1	20110926	TN20100000129	20100322
TW200922552 A	20090601	TW20080136649	20080924
UA97418 C2	20120210	UA20100005592	20081009
US2010311825 AA	20101209	US20100757255	20100409
US8481589 BB	20130709	US20100757255	20100409
UY31386 A1	20090529	UY20080031386	20081010
WO09083664 A1	20090709	WO2008FR01410	20081009
WO09083664 A8	20100514	WO2008FR01410	20081009

Priority:

FR20070007092 20071010 WO2008FR01410 20081009 EP20080868434 20081009

Probable Assignee: AVENTIS PHARMA SA

Assignee(s): (std): GACHON CARINE ; RORTAIS PATICIA ; RORTAIS PATRICIA ; SANOFI AVENTIS ; AVENTIS PHARMA SA ; AVENTIS PHARMA SA SA

Assignee(s): AVENTIS PHARMA SA SOCIETE ANONYME ; AVENTIS PHARMA S A ; SANOFI AVENTIS DE COLOMBIA SA

Inventor(s): (std): CARINE GACHON ; GACHON CARINE ; PATICIA RORTAIS ; PATRICIA RORTAIS ; PORTAIS PATRICIA ; RORTAIS PATICIA ; RORTAIS PATRICIA

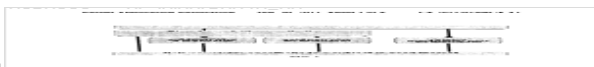
Inventor(s): PATRICIA PORTAIS

Agent(s): A J PARK; AJ PARK; SARGENT; LUZ CLEMENCIA DE PAEZ; GASLONDE AUDE; SANOFI; SANOFI AVENTIS; KAWAGUTI AND PARTNERS; ANDREA Q RYAN SANOFI AVENTIS US LLC; HAMILTON BROOK SMITH AND REYNOLDS PC; LE PENNEC MAGALI

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: VOLATILE ANESTHETIC COMPOSITIONS AND METHODS OF USE**Abstract:**

Source: US2011159078A The present invention provides methods for reducing pain in a subject in need thereof by delivering a volatile anesthetic in a solution or an **emulsion** that can additionally include an extractive solvent in an amount effective to reduce pain without substantially interfering with motor function. Chronic or acute pain may be treated, or the volatile anesthetic may be delivered as a regional anesthetic to a subject to anesthetize a portion of the subject prior to surgery. Dosing regimes including a one-time administration, continuous and/or periodic administration are contemplated.

**Classifications:**

International (IPC 8-9): A61K31/02 A61K31/075 A61K31/08 A61K33/00 A61K45/00 A61K47/02 A61K47/06 A61K47/10 A61K47/16 A61K47/20 A61K47/22 A61K47/24 A61K47/28 A61K47/40 A61K47/42 A61K47/44 A61K9/08 A61K9/10 A61K9/127 A61M31/00 A61P23/00 A61P25/04 A61P29/00 (Advanced/Invention); A61K31/075 A61M31/00 (Core/Invention)

CPC: A61K31/08 A61K9/0014 A61K9/0019 A61K9/0024 A61K9/0085 A61K9/107 A61K31/075

European: A61K31/075 A61K9/00M22 A61K9/00M3 A61K9/00M5 A61K9/00M5D A61K9/107

US: 424/400 424/450 424/450P 514/722 514/722S

Family:

Publication number	Publication date	Application number	Application date
AU2009206391 AA	20090730	AU20090206391	20090122
AU2014277860 AA	20150122	AU20140277860	20141222
CA2712516 AA	20100719	CA20092712516	20090122
CN102006903 A	20110406	CN200980110827	20090122
EP2244783 A2	20101103	EP20090704014	20090122
EP2244783 A4	20110309	EP20090704014	20090122
JP2011510092 T2	20110331	JP20100544419T	20090122
JP2014240420 A2	20141225	JP20140174830	20140829
JP5835542 B2	20151224	JP20100544419T	20090122
US2011159078 AA	20110630	US20090863757	20090122
US2013273141 AA	20131017	US20120722880	20121220
WO09094460 A2	20090730	WO2009US31707	20090122
WO09094460 A3	20091230	WO2009US31707	20090122

Priority:

US20080011898P 20080122	US20080011898 20080122	WO2009US31707 20090122
US20090863757 20090122	AU20090206391 20090122	JP20100544419 20090122
US20120722880 20121220	US20110863757 20110309	AU20140277860 20141222
JP20100544419T 20090122		

Probable Assignee: BOARD OF REGENTS UNIV OF TEXAS SYSTEM

Assignee(s): (std): BURTON ALLEN ; OZSOY HATICE ; PHAN PHILLIP C ; CAPELLI CHRISTOPHER C ; VAPOGENIX INC ; UNIV TEXAS

Assignee(s): BOARD OF REGENTS THE UNIV OF TEXAS SYSTEM ; BOARD OF REGENTS UNIV OF TEXAS SYSTEM

Inventor(s): (std): ALLEN BURTON ; BURTON ALLEN ; HATICE OZSOY ; OZSOY HATICE ; PHAN PHILLIP C ; CAPELLI CHRISTOPHER C

Inventor(s): PHILLIP C PHAN

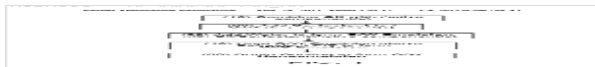
Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAUESSER ANWALTSSOZIETAET; KAWAMOTO KAZUYA; SHIMIZU

HATSUSHI; OSAKABE SUGURU; NGUYEN QUANG D ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH
CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE
GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ
LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY
MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL
SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: COMPOSITIONS AND METHODS FOR THE PREPARATION OF NANOEMULSIONS**Abstract:**

Source: US2011206739A The disclosure relates to compositions and methods of forming nanoemulsions, e.g., containing an active component, in combination with lipophilic components such as **oils**, hydrophilic components such as water, and one or more surfactants capable of causing a temperature-dependent phase inversion, such as a nonionic polyethoxylated surfactant. Nanoemulsions containing the active component can be produced having average **oil** droplet sizes of less than 100 nm, 50 nm, or 25 nm without the need for high energy **emulsion** forming methods (such as **microfluidization**) by combining the surfactant and the **oil** in specified weight ratios (e.g., at least 3:1) prior to forming the nanoemulsion.

**Classifications:**

International (IPC 8-9): A61K A61K31/045 A61K31/12 A61K31/337 A61K31/352 A61K31/355 A61K31/37 A61K31/513 A61K31/655 A61K38/28 A61K47/34 A61K47/44 A61K9/107 A61P35/00 A61P39/06 A61P5/50 (Advanced/Invention); A61K31/337 A61K47/34 A61K47/44 A61K9/107 (Advanced/Non-invention); A61K31/337 A61K31/352 A61K38/28 A61K47/34 A61K47/44 A61K9/107 (Core/Invention); A61K (Subclass/Invention)

CPC: A61K31/355 A61K9/1075 A61K31/337 A61K38/28 A61K47/14 A61K47/46 A61K49/0039 A61K49/0078

European: A61K31/337 A61K31/355 A61K38/28 A61K47/14 A61K47/46 A61K49/00P12 A61K49/00P12C8B A61K49/00P4F4C14 A61K9/107D

US: 424/400 424/400P 514/151 514/151S 514/274 514/274S 514/449 514/449S 514/456 514/456S 514/457 514/457S 514/5.9 514/5.900S 514/679 514/679S 514/729 514/729S

Family:

Publication number	Publication date	Application number	Application date
CA2719803 AA	20091001	CA20092719803	20090330
EP2271314 A2	20110112	EP20090724172	20090330
EP2271314 A4	20131225	EP20090724172	20090330
IL208457 A0	20101230	IL20100208457	20101003
IL208457 A0	20101230	IL20090208457	20090330
IN06931DN2010 A	20110909	IN2010DN06931	20100930
KR20100135857 A	20101227	KR20107024177	20090330
US2011206739 AA	20110825	US20090935180	20090330
WO09121069 A2	20091001	WO2009US38835	20090330
WO09121069 A3	20091223	WO2009US38835	20090330

Priority:

US20080040482P 20080328 US20090144237P 20090113 US20090144246P 20090113
WO2009US38835 20090330 US20090935180 20090330

Probable Assignee: OF MASSACHUSETTS LOWELL UNIV

Assignee(s): (std): KAKUMANU SRIKANTH ; KUO FONGHSU ; NICOLASI ROBERT J ; UNIV MASSACHUSETTS

Assignee(s): THE UNIVERSITY OF MASSACHUSETTS ; OF MASSACHUSETTS LOWELL UNIV ; OF MASSACHUSETTS UNIV ; UNIVERSITY OF MASSACHUSETTS

Inventor(s): (std): KAKUMANU SRI KANTH ; KAKUMANU SRIKANTH ; KONECNI SHAWN ; KUO FONGHSU ; LAWTON CARL W ; NICOLASI ROBERT J

Agent(s): HOFFMANN EITLE; FASSE J PETER ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY

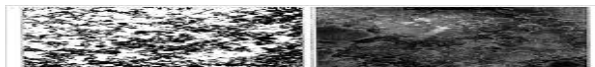
MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL
SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: COMPOSITION AND METHOD FOR PREPARING STABLE UNILAMELLAR LIPOSOMAL SUSPENSION**Abstract:**

Source: US2010086573A Compositions and methods

for producing and using stable transparent to

translucent unilamellar liposomal suspensions are described. The suspensions include a liposome preparation having a uniform plurality of unilamellar liposomal particles with a mean particle size between about 50 nm to about 290 nm. The particles are suspended in an external phase composition that has a density between about 0.95 g/cc and about 1.25 g/cc, and that is present in an amount between about 30 percent to about 75 percent of the weight of the liposomal suspension. The liposome preparation is formed from an aqueous liposomal solution that includes an **oil**-soluble composition and a water-soluble composition. The **oil**-soluble composition is present at a concentration between about 5 percent to about 33 percent by weight of the liposomal solution and the water-soluble composition is present at a concentration between about 67 percent to about 95 percent by weight of the liposomal solution.

**Classifications:****International (IPC 8-9):** A61K31/355 A61K31/56 A61K47/24 A61K8/14 A61K8/34 A61K8/55

A61K8/63 A61K8/67 A61K8/68 A61K9/08 A61K9/127 A61Q19/00 B01J13/00 (Advanced/Invention);

A61K8/14 A61K8/34 A61K8/55 A61K9/127 (Advanced/Non-invention);

A61K31/352 A61K9/127 (Core/Invention);

A61K31/355 A61K31/56 A61K9/08 A61K9/127 (Core/Non-invention)

International (IPC 1-7): A61K31/355 A61K9/127**CPC:** A61K8/14 A61K8/345 A61K8/553 A61K8/63 A61K8/678 A61K8/68 A61K9/0014 A61K9/06

A61K9/1271 A61K9/1277 A61K2800/262 A61K2800/413 A61Q19/00 A61Q19/08 B82Y5/00

European: A61K8/14 A61K8/34D A61K8/55C A61K8/63 A61K8/67L A61K8/68 A61K9/00M3

A61K9/06 A61K9/127B A61K9/127P A61Q19/00 A61Q19/08 B82Y5/00 K61K201/012 K61K201/103

K61K800/262 K61K800/413

US: 424/401 424/401P 424/450 424/450S 514/458 514/458S**Family:**

Publication number	Publication date	Application number	Application date
CN102170853 A	20110831	CN200980139560	20090922
JP2012504620 T2	20120223	JP20110530105T	20090922
JP5706326 B2	20150422	JP20110530105T	20090922
KR20110073495 A	20110629	KR20117007886	20090922
TH117391 A	20121115	TH20091004455	20090930
TW201018498 A	20100516	TW20090133149	20090930
US2010086573 AA	20100408	US20080245528	20081003
WO10039490 A2	20100408	WO2009US57820	20090922
WO10039490 A3	20110324	WO2009US57820	20090922

Priority:

US20080245528 20081003 WO2009US57820 20090922

Probable Assignee: ACCESS BUSINESS GROUP INT LLC**Assignee(s):** (std): ACCESS BUSINESS GROUP INT BV ; ACCESS BUSINESS GROUP INT LLC ; ANDERSON PENELOPE M**Assignee(s):** ACCESS BUSINESS GROUP INTERNATIONAL LLC ; ACCESS BUSINESS GROUP INTERNATIONAL LLCUS**Inventor(s):** (std): ANDERSON PENELOPE M**Agent(s):** IN RE 28533 BRINKS HOFER GILSON AND LIONE; BRUNOVSKIS PETER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI

SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA
ZM ZW

Title: METHOD FOR FORMING CYCLODEXTRIN POLYMER AND LIPOPHILIC COMPOUND **EMULSIONS**, RESULTING **EMULSIONS**, AND COMPOSITIONS INCLUDING SAID **EMULSIONS**

Abstract:

Source: US2012107252A The present invention relates to a method for preparing a cyclodextrin polymer and/or a hydrophilic polymer **emulsion** having cyclodextrins as well as lipophilic compounds, the **emulsions** having a remarkable stability. In particular, the method includes: (i) adding a lipophilic compound into an aqueous solution of a cyclodextrin unit polymer or hydrophilic polymer having cyclodextrins; (ii) forming an **emulsion** from the mixture resulting from step (i). The invention also relates to the resulting **emulsions**, i.e. stabilized **emulsions** by a non-covalent and non-crystalline inclusion complex consisting of (i) a cyclodextrin unit polymer or a hydrophilic polymer having cyclodextrins and (ii) a lipophilic compound. The invention also relates to the use of said **emulsions** in the cosmetic, pharmaceutical and/or agri-food fields.

Classifications:

International (IPC 8-9): A23K1/00 A61K31/724 A61K47/40 A61K47/44 A61K8/06 A61K8/11 A61K8/37 A61K8/49 A61K8/73 A61K8/91 A61K8/92 A61K9/107 A61K9/14 A61P17/04 A61P17/08 A61P17/10 A61P17/12 A61P23/00 A61P25/04 A61P29/00 A61P31/00 A61P31/04 A61P31/10 A61P31/12 A61P33/00 A61P35/00 A61Q17/04 (Advanced/Invention)

CPC: A61K47/40 A61K9/107 A61K8/06 A61K8/11 A61K8/738 A61K8/91 A61Q17/04

European: A61K8/11 A61K8/73T A61K8/91 A61Q17/04

US: 424/488 424/59 424/59P 426/658 426/658S 512/1 512/1S 514/58 514/58S

Family:

Publication number	Publication date	Application number	Application date
DE602010030543 D1	20160324	DE201060030543T	20100423
EP2421495 A2	20120229	EP20100718245	20100423
EP2421495 B1	20160210	EP20100718245	20100423
FR2944699 A1	20101029	FR20090001983	20090423
FR2944700 A1	20101029	FR20090056088	20090907
FR2944700 B1	20120810	FR20090056088	20090907
US2012107252 AA	20120503	US20100265550	20100423
US8741347 BB	20140603	US20100265550	20100423
WO10122246 A2	20101028	WO2010FR00330	20100423
WO10122246 A3	20110407	WO2010FR00330	20100423

Priority:

FR20090001983 20090423 FR20090056088 20090907 WO2010FR00330 20100423
EP20100718245 20100423

Probable Assignee: PARIS SUD UNIV

Assignee(s): (std): AMIEL CATHERINE ; CENTRE NAT RECH SCIENT ; UNIV PARIS SUD 11 ; GREF RUXANDRA ; LAZA KNOERR ANCA LUCIA ; COUVREUR PATRICK ; CT NAT DE LA RECH SCIENTIFIQUE CNRS ; PARIS SUD UNIV

Assignee(s): UNIVERSITE PARIS SUD 11 ; PARIS SUD 11 UNIV ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE C N R S ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

Inventor(s): (std): COUVREUR PATRICK ; GREF RUXANDRA ; LAZA KNOERR ANCA LUCIA ; AMIEL CATHERINE

Inventor(s): ANCA LUCIA LAZA KNOERR ; CATHERINE AMIEL ; PATRICK COUVREUR ; RUXANDRA GREF

Agent(s): NOVAGRAAF TECHNOLOGIES; NOVAGRAAF IP; BLANK ROME LLP; NOVAGRAFF TECHNOLOGIES

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD

GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP
KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW
MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG
SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN
ZA ZM ZW

Title: NOVEL FORMULATIONS OF VOLATILE ANESTHETICS AND METHODS OF USE FOR REDUCING INFLAMMATION

Abstract: Source: US2012171281A The present invention provides methods for treating inflammation or a wound in a subject in need of such wound treatment or inflammation treatment by delivering a volatile anesthetic to the wound or the inflammation site.



Classifications:

International (IPC 8-9): A61K31/00 A61K31/02 A61K31/075 A61K31/08 A61K33/00 A61K45/00 A61K47/10 A61K47/16 A61K47/20 A61K47/22 A61K47/24 A61K47/34 A61K47/44 A61K9/00 A61K9/107 A61K9/127 A61L15/00 A61L26/00 A61M31/00 A61P1/04 A61P13/08 A61P13/10 A61P17/02 A61P19/02 A61P21/00 A61P23/00 A61P23/02 A61P29/00 A61P9/00 (Advanced/Invention); A61M31/00 (Advanced/Non-invention)

CPC: A61K33/00 A61K9/107 A61K9/127 A61K31/02 A61K31/08 A61K47/10 A61K47/16 A61K47/20 A61K47/24 A61K47/26 A61K47/44 A61L26/0066 A61L2300/202 A61L2300/402 A61L2300/626 A61K9/0014

European: A61K31/02 A61K31/08 A61K33/00 A61K9/00M3 A61K9/107 A61K9/127 A61L26/00H2 K61K47/10 K61K47/16 K61K47/20 K61K47/24 K61K47/26 K61K47/44 K61L300/202 K61L300/402 K61L300/626

US: 424/450 424/450P 424/600 424/600S 514/722 514/722S 514/743 514/743S

Family:

Publication number	Publication date	Application number	Application date
AU2010245932 AA	20101111	AU20100245932	20100505
AU2010245932 BB	20150806	AU20100245932	20100505
CA2760775 AA	20111102	CA20102760775	20100505
CN102458557 A	20120516	CN201080030510	20100505
EP2427243 A1	20120314	EP20100772774	20100505
EP2427243 A4	20121121	EP20100772774	20100505
IN08573DN2011 A	20130927	IN2011DN08573	20111104
JP2012526133 T2	20121025	JP20120509951T	20100505
JP2016047834 A2	20160407	JP20150212498	20151029
US2012171281 AA	20120705	US20100318591	20100505
WO10129686 A1	20101111	WO2010US33746	20100505

Priority:

US20090175751P 20090505 WO2010US33746 20100505 US20100318591 20100505
JP20120509951T 20100505

Probable Assignee: BOARD OF REGENTS UNIV OF TEXAS SYSTEM

Assignee(s): (std): OZSOY HATICE ; SPAKEVICIUS DANGUOLE ; VAPOGENIX INC ; UNIV TEXAS

Assignee(s): BOARD OF REGENTS UNIV OF TEXAS SYSTEM

Inventor(s): (std): DANGUOLE SPAKEVICIUS ; HATICE OZSOY ; OZSOY HATICE ; SPAKEVICIUS DANGUOLE

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAUESSER; KAWAMOTO KAZUYA; SHIMIZU HATSUSHI; OSAKABE SUGURU; DOYLE KATHRYN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW

MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG
SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN
ZA ZM ZW

Title: VACCINE**Abstract:** Source: AU2010241281A The present invention is in the field of pneumococcal capsular saccharide conjugate vaccines. Specifically, animmunogenic composition for infants is provided comprising a multivalent *Streptococcus pneumoniae* vaccine comprising 2 or more capsular saccharide conjugates from different serotypes, wherein the composition comprises a serotype 22F saccharide conjugate. Such a vaccine may be used in infant populations to reduce the incidence of elderly pneumococcal disease such as exacerbations of COPD and/or IPD.**Classifications:****International (IPC 8-9):** A61K39/09 A61K39/385 (Advanced/Invention)**CPC:** A61K2039/6037 A61K2039/6068 A61K2039/627 A61K2039/64 A61K2039/70 A61K47/4833 A61K39/385 A61K39/092**European:** A61K39/09A K61K39/60P10 K61K39/60P20**Family:**

Publication number	Publication date	Application number	Application date
AU2010241281 AA	20101125	AU20100241281	20101105
AU2010241281 BB	20121206	AU20100241281	20101105

Priority:

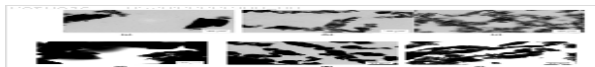
GB20050026232 20051222	GB20060020336 20061012	GB20060007088 20060407
GB20060007087 20060407	GB20060009902 20060518	AU20060327041 20061220
AU20100241281 20101105	WO2006GB04634 20061212	WO2006EP69979 20061220
GB20060020337 20061012	GB20060020815 20061019	GB20060020816 20061019

Probable Assignee: GLAXOSMITHKLINE BIOLOG SA**Assignee(s):** (std): GLAXOSMITHKLINE BIOLOG SA**Assignee(s):** GLAXOSMITHKLINE BIOLOGICALS SA**Inventor(s):** (std): BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE ; HERMAND PHILIPPE VINCENT ; MECHELEN MARCELLE PAULETTE VAN ; POOLMAN JAN ; VAN MECHELEN MARCELLE PAULETTE**Inventor(s):** RALPH LEON BIEMANS ; NATHALIE MARIE JOSEPHE GARCON ; PHILIPPE VINCENT HERMAND ; JAN POOLMAN ; MARCELLE PAULETTE VAN MECHELEN**Agent(s):** SHELSTON IP; SHELSTON IP PTY LTD

Title: ELECTRICALLY CONDUCTIVE **oil** BASE DRILLING FLUIDS CONTAINING CARBON NANOTUBES

Abstract:

Source: US2011111988A Electrically conductive **oil** base drilling fluids with carbon nanotubes have either an organic base (**oil**) or a base that is an **emulsion** of water in **oil** (invert **emulsion**) and contains carbon nanotubes dispersed in **oil**. These drilling fluids may be prepared by either (1) the addition of electrically conductive dispersions of carbon nanotubes in **oil** to conventional **oil** base drilling fluids (unweighted or weighted) or (2) the sonication of the mixture of **oil** pre-wetted carbon nanotubes with unweighted conventional **oil** base drilling fluids. The electrically conductive dispersions of carbon nanotubes in **oil** may be prepared by sonication or by **microfluidization**. The **oil** may be a mineral **oil**, paraffin **oil**, synthetic **oil**, or diesel **oil**. The electrically conductive **oil**-based drilling fluids may further contain ionic, non-ionic or polymeric surfactants.



Classifications:

International (IPC 8-9): C09K8/34 C09K8/36 E21B21/00 E21B49/00 (Advanced/Invention); B82Y99/00 (Advanced/Non-invention)

CPC: C09K8/34 C09K8/36

European: C09K8/34 C09K8/36

US: 507/103 507/103P 507/140 507/140S 977/742 977/742S

Family:

Publication number	Publication date	Application number	Application date
US2011111988 AA	20110512	US20100942866	20101109
WO11054111 A1	20110512	WO2010CA01794	20101109

Priority:

US20090259330P 20091109 US20100942866 20101109

Probable Assignee: NEWPARK CANADA INC

Assignee(s): (std): FATSEYEU ARKADZ ; IONESCU VASII LUMINITA LILIANA ; NEWPARK CANADA INC

Inventor(s): (std): IONESCU VASII LUMINITA LILIANA ; FATSEYEU ARKADZ

Agent(s): BERESKIN AND PARR

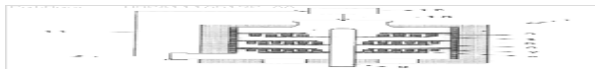
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHODS FOR PRODUCING VACCINE ADJUVANTS

Abstract:

Source: US2011165192A An improved method for the manufacture of an oil-in-water emulsion involves

three procedures: (i) preparation of a preliminary emulsion; (ii) microfluidization of the preliminary emulsion to reduce its droplet size; and (iii) filtration of the microfluidized emulsion through a hydrophilic membrane.



Classifications:

International (IPC 8-9): A61K A61K31/01 A61K31/164 A61K39/00 A61K39/145 A61K39/39 A61K47/06 A61K47/10 A61K47/14 A61K47/24 A61K47/26 A61K47/34 A61K47/44 A61K9/00 A61K9/107 A61K9/113 A61P31/16 B01F13/10 B01F7/00 (Advanced/Invention);

A61K39/00 (Advanced/Non-invention);

A61K39/00 A61K9/00 (Core/Invention);

A61K (Subclass/Invention)

CPC: A61K39/39 A61K9/0019 A61K9/107 A61K31/164 A61K47/14 A61K47/26 A61K2039/55555

A61K9/1075 A61K2039/55566 B01F7/00766 B01F13/1016

European: A61K31/164 A61K39/39 A61K47/14 A61K47/26 A61K9/00M5 A61K9/107 B01F13/10B2 B01F7/00G1A K61K39/555B5 K61K39/555B8 K61K9/107D

US: 424/184.1 424/184.100S 424/209.1 424/209.100P 424/278.1 424/278.100S 424/283.1 424/400 514/763

Family:

Publication number	Publication date	Application number	Application date
AU2010325752 AA	20110609	AU20100325752	20101203
AU2010325752 BB	20131219	AU20100325752	20101203
AU2013202706 AA	20130502	AU20130202706	20130405
AU2013202706 BB	20160211	AU20130202706	20130405
BR112012013427 A2	20160405	BR20121113427	20101203
CA2782511 AA	20110609	CA20102782511	20101203
CA2782511 C	20131112	CA20102782511	20101203
CL2012001399 A1	20130308	CL20120001399	20120530
CN102753149 A	20121024	CN201080062766	20101203
CN102753149 B	20151014	CN201080062766	20101203
CN105055311 A	20151118	CN201510552611	20101203
DE102009056883 A1	20110609	DE200910056883	20091203
DE102009056883 B4	20120816	DE200910056883	20091203
DE602010005108 D1	20130418	DE201060005108T	20101203
DE602010030966 D1	20160414	DE201060030966T	20101203
DK2356983 T3	20130311	DK20100252043T	20101203
EA201290426 A1	20121130	EA20120090426	20101203
EP2356983 A1	20110817	EP20100252043	20101203
EP2356983 B1	20130220	EP20100252043	20101203
EP2506834 A2	20121010	EP20100812803	20101203
EP2506834 B1	20160302	EP20100812803	20101203
EP2638895 A2	20130918	EP20130155782	20101203
EP2638895 A3	20140219	EP20130155782	20101203
ES2402569 T3	20130506	ES20100252043T	20101203
HK1160396 A1	20131018	HK20120100892	20120201
HR20130398 T1	20130630	HR20130000398	20130507
IL219984 A0	20120731	IL20120219984	20120524
IL219984 A0	20120731	IL20100219984	20101203
IN01379MN2012 A	20120824	IN2012MN01379	20120604

JP2013512892 T2	20130418	JP20120541596T	20101203
JP2015193656 A2	20151105	JP20150149196	20150729
JP5820390 B2	20151124	JP20120541596T	20101203
KR101523215 B1	20150527	KR20127017218	20101203
KR20120099750 A	20120911	KR20127017218	20101203
MX2012006216 A1	20120712	MX20120006216	20101203
NZ600323 A	20131220	NZ20100600323	20101203
PT2356983 T	20130423	PT20100252043T	20101203
RS52748 B	20130830	RS20130000158	20101203
SG10201501611Q A1	20150429	SG20151001611	20101203
SG181096 A1	20120730	SG20120039160	20101203
SI2356983 T1	20130531	SI20100030181T	20101203
SMT201300044 B	20130709	SM20130000044T	20130417
US2011165192 AA	20110707	US20100928163	20101203
US2013142833 AA	20130606	US20100513564	20101203
US2016113870 AA	20160428	US20140478864	20140905
US8871816 BB	20141028	US20100928163	20101203
US8895629 BB	20141125	US20100513564	20101203

Priority:

US20090283518P 20091203	DE200910056883 20091203	US20100928163 20101203
WO2010IB03394 20101203	AU20100325752 20101203	US20100513564 20101203
AU20130202706 20130405	EP20100252043 20101203	JP20120541596T 20101203
CN201080062766 20101203	JP20150149196 20150729	EP20100812803 20101203
US20140478864 20140905	US20130513564 20130220	

Probable Assignee: NOVARTIS AG

Assignee(s): (std): NOVARTIS AG ; NOVARTIS INT AG ; NOVARTIS VACCINES AND DIAGNOSTIC ; RUECKL HARALD ; SANTRY BARBARA ; SCHEFFCZIK HANNO

Assignee(s): NOVARTIS VACCINES AND DIAGNOSTICS GMBH ; NOVARTIS VACCINES AND DIAGNOSTICS GMBH AND CO KG

Inventor(s): (std): BARBARA SANTRY ; HANNO SCHEFFCZIK ; HARALD RUECKL ; SCHEFFCZIK HANNO ; SANTRY BARBARA ; RUECKL HARALD

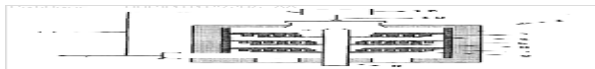
Inventor(s): SANTRY BARBARA DRUMREE

Agent(s): FB RICE; BORDEN LADNER GERVAIS LLP; ESTUDIO CLARKE; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; CARPMAELS AND RANSFORD; Carpmaels &, Ransford; MARSHALL CAMERON JOHN; CARPMAELS AND RANSFORD LLP; DREW AND NAPIER LLC; ROBERTA L; ATSUKO; ATSUKO N

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: HYDROPHILIC FILTRATION DURING MANUFACTURE OF VACCINE ADJUVANTS**Abstract:**

Source: US2013129786A An improved method for the manufacture of an oil-in-water emulsion involves three procedures: (i) preparation of a preliminary emulsion; (ii) micro fluidization of the preliminary emulsion to reduce its droplet size; and (iii) filtration of the microfluidized emulsion through a hydrophilic membrane. The emulsions are useful as vaccine adjuvants.

**Classifications:**

International (IPC 8-9): A61K A61K39/102 A61K39/12 A61K39/145 A61K39/39 A61K47/06 A61K47/10 A61K47/14 A61K47/24 A61K47/34 A61K9/107 A61P31/12 A61P31/16

C07C11/21 (Advanced/Invention);

A61K39/00 A61K9/00 (Core/Invention);

A61K (Subclass/Invention)

CPC: A61K9/107 A61K9/1075 A61K39/39 A61K2039/55566 B01F7/00766 B01F13/1016 A61K39/12

European: A61K39/39 B01F13/10B2 B01F7/00G1A K61K39/555B8 K61K9/107D

US: 424/209.1 424/283.1 424/400

Family:

Publication number	Publication date	Application number	Application date
AU2010325748 AA	20110609	AU20100325748	20101203
AU2010325748 BB	20140417	AU20100325748	20101203
AU2013202690 AA	20130502	AU20130202690	20130405
AU2013202690 BB	20160211	AU20130202690	20130405
CA2780425 AA	20110609	CA20102780425	20101203
CA2780425 C	20140204	CA20102780425	20101203
CL2012001268 A1	20120803	CL20120001268	20120515
CN102858322 A	20130102	CN201080056000	20101203
CN102858322 B	20150429	CN201080056000	20101203
CN104688687 A	20150610	CN201510144280	20101203
DE602010007774 D1	20130808	DE201060007774T	20101203
DE602010013853 D1	20140410	DE201060013853T	20101203
DE602010028156 D1	20151119	DE201060028156T	20101203
DK2343052 T3	20130902	DK20100252044T	20101203
EA201270519 A1	20121228	EA20120070519	20101203
EP2343052 A1	20110713	EP20100252044	20101203
EP2343052 B1	20130612	EP20100252044	20101203
EP2506832 A2	20121010	EP20100807661	20101203
EP2506832 B1	20140226	EP20100807661	20101203
EP2601933 A1	20130612	EP20130157613	20101203
EP2601933 B1	20151007	EP20130157613	20101203
ES2426969 T3	20131028	ES20100252044T	20101203
ES2461852 T3	20140521	ES20100807661T	20101203
ES2558056 T3	20160201	ES20130157613T	20101203
HK1159995 A1	20140117	HK20120100448	20120113
HK1175407 A1	20141031	HK20130102772	20130306
HR20130623 T1	20130930	HR20130000623	20130703
IL219627 A0	20120731	IL20120219627	20120507
IL219627 A0	20120731	IL20100219627	20101203
IN01203MN2012 A	20131004	IN2012MN01203	20120515
JP2013512890 T2	20130418	JP20120541594T	20101203
JP2015098499 A2	20150528	JP20150040914	20150303

JP5754860 B2	20150729	JP20120541594T	20101203
KR101616735 B1	20160429	KR20127012098	20101203
KR20120101652 A	20120914	KR20127012098	20101203
KR20150041812 A	20150417	KR20157008289	20101203
MX2012005598 A1	20120529	MX20120005598	20101203
NZ599881 A	20140131	NZ20100599881	20101203
PT2343052 T	20130828	PT20100252044T	20101203
SG10201501612R A1	20150429	SG20151001612	20101203
SI2506832 T1	20140630	SI20100030614T	20101203
SI2601933 T1	20151231	SI20100031055T	20101203
US2013129786 AA	20130523	US20100508986	20101203
WO11067669 A2	20110609	WO2010IB03273	20101203
WO11067669 A3	20110804	WO2010IB03273	20101203

Priority:

US20090283517P	20091203	WO2010IB03273	20101203	AU20100325748	20101203
US20100508986	20101203	EP20100807661	20101203	CN201080056000	20101203
AU20130202690	20130405	JP20120541594	20101203	JP20120541594T	20101203
EP20130157613	20101203	EP20100252044	20101203		

Probable Assignee: NOVARTIS AG

Assignee(s): (std): ESKES ROBERT ; KRAUS GOTTFRIED ; NOVARTIS AG ; NOVARTIS INT AG

Assignee(s): NOVARTIS VACCINES AND DIAGNOSTICS GMBH

Inventor(s): (std): ESKES ROBERT ; GOTTFRIED KRAUS ; KRAUS GOTTFRIED ; ROBERT ESKES

Inventor(s): KRAUS GOTTFRIED ESKES ROBERT

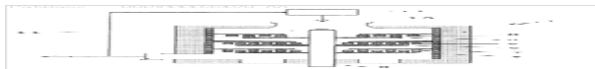
Agent(s): FB RICE; BORDEN LADNER GERVAIS LLP; ESTUDIO CLARKE MODET; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; MARSHALL CAMERON JOHN; CARPMAELS AND RANSFORD; CARPMAELS AND RANSFORD LLP; IZQUIERDO JOSE; IZQUIERDO MARIA ALICIA; DREW AND NAPIER LLC; MARSHALL CAMERON JOHN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHODS FOR PRODUCING VACCINE ADJUVANTS**Abstract:**

Source: US2011165193A An improved method for the manufacture of an oil-in-water emulsion involves

three procedures: (i) preparation of a preliminary emulsion; (ii) microfluidization of the preliminary emulsion to reduce its droplet size; and (iii) filtration of the microfluidized emulsion through a hydrophilic membrane.

**Classifications:**

International (IPC 8-9): A61K A61K39/00 A61K39/102 A61K39/145 A61K39/39 A61K47/06 A61K47/10 A61K47/20 A61K47/22 A61K47/34 A61K47/44 A61K9/00 A61K9/107 A61P31/16 A61P37/04 B01F13/00 B01F13/10 B01F3/08 B01F5/00 B01F5/06 B01F5/10 B01F7/00 B01J13/00 B01J8/00 (Advanced/Invention);

A61K39/00 A61K9/00 B01F13/00 B01F3/00 B01F5/00 B01F7/00 (Core/Invention);

A61K B01F (Subclass/Invention)

CPC: B01F13/0071 A61K47/44 A61K2039/55566 B01F3/0807 B01F5/0644 B01F5/104 B01F7/00766

B01F13/0059 B01F13/1025 B01F13/1027 B01F13/103 B01F2215/0431 B01F2215/045

B01F2215/0468 B01F2215/0472 B01F2215/0477 B01F2215/0481 A61K9/1075 A61K39/145

A61K39/39 A61K9/0019 A61K9/107 A61K31/164 A61K47/14 A61K47/26 A61K2039/55555

B01F13/1016

European: A61K31/164 A61K39/145 A61K39/39 A61K47/14 A61K47/26 A61K9/00M5 A61K9/107

B01F13/00M B01F13/10C B01F13/10C2 B01F13/10C2B B01F3/08C B01F5/06B3C4 B01F5/10C

B01F7/00G1A K61K39/555B5 K61K39/555B8 L01F215/04F2F L01F215/04F4F L01F215/04F4N

L01F215/04F4P L01F215/04F4R L01F215/04F4T M12N760/16134 M12N760/16234

US: 366/304 366/336 366/337 422/224 424/184.1 424/184.100S 424/209.1 424/209.100P

424/210.1 424/278.1 424/283.1 424/283.100S 53/428

Family:

Publication number	Publication date	Application number	Application date
AU2010325751 AA	20110609	AU20100325751	20101203
AU2010325751 BB	20140508	AU20100325751	20101203
AU2013213678 AA	20130822	AU20130213678	20130806
BR112012013426 A2	20160405	BR20121113426	20101203
CA2782650 AA	20110609	CA20102782650	20101203
CA2782650 C	20140204	CA20102782650	20101203
CL2012001398 A1	20120810	CL20120001398	20120530
CN102740832 A	20121017	CN201080063020	20101203
CN102740832 B	20160113	CN201080063020	20101203
CN104997730 A	20151028	CN201510415506	20101203
DE102009056884 A1	20110609	DE200910056884	20091203
DE602010002771 D1	20121108	DE201060002771T	20101203
DE602010015276 D1	20140528	DE201060015276T	20101203
EA201290429 A1	20121228	EA20120090429	20101203
EP2380558 A1	20111026	EP20100252052	20101203
EP2380558 B1	20120912	EP20100252052	20101203
EP2506833 A2	20121010	EP20100812802	20101203
EP2506833 B1	20140416	EP20100812802	20101203
ES2393182 T3	20121219	ES20100252052T	20101203
ES2477230 T3	20140716	ES20100812802T	20101203
HK1163505 A1	20130531	HK20120103981	20120423
HR20120965 T1	20130228	HR20120000965	20121127
IL220082 A0	20120924	IL20120220082	20120531
IL220082 A0	20120924	IL20100220082	20101203
IN01311MN2012 A	20120824	IN2012MN01311	20120528

JP2013512891 T2	20130418	JP20120541595T	20101203
JP2015145007 A2	20150813	JP20150032546	20150223
JP5751678 B2	20150722	JP20120541595T	20101203
KR101579088 B1	20151221	KR20147030586	20101203
KR20120102736 A	20120918	KR20127017217	20101203
KR20140133961 A	20141120	KR20147030586	20101203
MX2012006214 A1	20120619	MX20120006214	20101203
NZ600254 A	20131025	NZ20100600254	20101203
PT2380558 T	20121127	PT20100252052T	20101203
RS52565 B	20130430	RS20120000517	20101203
SG10201501613S A1	20150429	SG20151001613	20101203
SI2380558 T1	20121231	SI20100030089T	20101203
SI2506833 T1	20140731	SI20100030642T	20101203
SMT201300026 B	20130506	SM20130000026T	20130227
US2011165193 AA	20110707	US20100928165	20101203
US2013189311 AA	20130725	US20100513560	20101203
US2015017206 AA	20150115	US20140329499	20140711
US2015258191 AA	20150917	US20150657165	20150313
US8778275 BB	20140715	US20100928165	20101203

Priority:

US20090283548P 20091203	DE200910056884 20091203	US20100928165 20101203
WO2010IB03390 20101203	EP20100252052 20101203	US20100513560 20101203
AU20100325751 20101203	AU20130213678 20130806	EP20100812802 20101203
US20140329499 20140711	JP20120541595 20101203	US20130513560 20130228
CN201080063020 20101203	JP20120541595T 20101203	US20150657165 20150313
JP20150032546 20150223		

Probable Assignee: NOVARTIS AG

Assignee(s): (std): NOVARTIS AG ; NOVARTIS INT AG ; NOVARTIS VACCINES AND DIAGNOSTIC ; RUECKL HARALD ; SANTRY BARBARA ; SCHEFFCZIK HANNO

Assignee(s): NOVARTIS VACCINES AND DIAGNOSTICS GMBH ; NOVARTIS VACCINES AND DIAGNOSTICS GMBH AND CO KG

Inventor(s): (std): BARBARA SANTRY ; HANNO SCHEFFCZIK ; HARALD RUECKL ; RUECKI HARALD ; RUECKL HARALD ; SANTRY BARBARA ; SCHEFFCZIK HANNO

Agent(s): FB RICE; BORDEN LADNER GERVAIS LLP; ESTUDIO CLARKE; BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; CARPMAELS AND RANSFORD; CARPMAELS AND RANSFORD LLP; IZQUIERDO JOSE; DREW AND NAPIER LLC; REGINA; HELEN

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

Title: CIRCULATION OF COMPONENTS DURING HOMOGENIZATION OF **EMULSIONS**

Abstract:

An improved method for the manufacture of an **oil**-in-water **emulsion** involves circulation of **emulsion** components between a first container and a second container via a homogenizer and/or via a **microfluidization** device. Usefully, all of the **emulsion** components from the first container are emptied before being returned.



Classifications:

International (IPC 8-9): A61K39/39 A61K9/107 (Advanced/Invention)

CPC: A61K9/107 A61K39/39 A61K9/1075 A61K2039/55566 B01F7/00766 B01F13/1016

European: A61K39/39 B01F13/10B2 B01F7/00G1A K61K39/555B8 K61K9/107D

Family:

Publication number	Publication date	Application number	Application date
WO11067673 A2	20110609	WO2010IB03394	20101203
WO11067673 A3	20120510	WO2010IB03394	20101203

Priority:

US20090283518P 20091203

Probable Assignee: NOVARTIS AG

Assignee(s): (std): NOVARTIS AG ; RUECKL HARALD ; SCHEFFCZIK HANNO

Inventor(s): (std): RUECKL HARALD ; SCHEFFCZIK HANNO

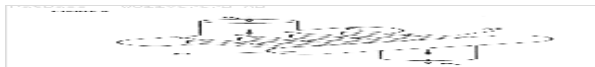
Agent(s): MARSHALL CAMERON JOHN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: ARRANGING INTERACTION AND BACK PRESSURE CHAMBERS FOR **MICROFLUIDIZATION**

Abstract:

An improved method for the manufacture of an **oil**-in-water **emulsion** comprises using a microfluidisation device whose interaction chamber comprises a plurality of Z-type channels upstream of a back pressure chamber.



Classifications:

International (IPC 8-9): A61K39/39 A61K9/107 B01F13/00 (Advanced/Invention)

CPC: B01F13/0071 A61K9/0019 A61K9/107 A61K2039/55566 B01F3/0807 B01F5/0644 B01F5/104 B01F7/00766 B01F13/0059 B01F13/1025 B01F13/1027 B01F13/103 B01F2215/0431 B01F2215/045 B01F2215/0468 B01F2215/0472 B01F2215/0477 B01F2215/0481 A61K39/39

European: A61K39/145 A61K9/00M5 A61K9/107 B01F13/00M B01F13/10C B01F13/10C2 B01F13/10C2B B01F3/08C B01F5/06B3C4 B01F5/10C B01F7/00G1A K61K39/555B8 L01F215/04F2F L01F215/04F4F L01F215/04F4N L01F215/04F4P L01F215/04F4R L01F215/04F4T M12N760/16134 M12N760/16234

Family:

Publication number	Publication date	Application number	Application date
WO11067672 A2	20110609	WO2010IB03390	20101203
WO11067672 A3	20111201	WO2010IB03390	20101203

Priority:

US20090283548P 20091203

Probable Assignee: NOVARTIS AG

Assignee(s): (std): NOVARTIS AG ; RUECKL HARALD ; SANTRY BARBARA ; SCHEFFCZIK HANNO

Inventor(s): (std): RUECKL HARALD ; SANTRY BARBARA ; SCHEFFCZIK HANNO

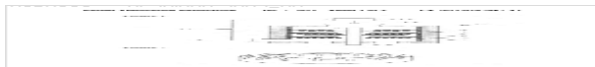
Agent(s): MARSHALL CAMERON JOHN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHODS FOR PRODUCING VACCINE ADJUVANTS

Abstract:

Source: US2011162982A An improved method for the manufacture of an oil-in-water emulsion involves three procedures: (i) preparation of a preliminary emulsion; (ii) microfluidization of the preliminary emulsion to reduce its droplet size; and (iii) filtration of the microfluidized emulsion through a hydrophilic membrane. The emulsions are useful as vaccine adjuvants.



Classifications:

International (IPC 8-9): A61K39/00 A61K39/145 A61K39/39 A61K47/44 A61K9/00 A61K9/107 A61P31/16 B01F3/08 B65D69/00 (Advanced/Invention)

CPC: A61K9/0019 A61K9/1075 A61K39/39 A61K47/06 A61K2039/55566 B01F7/00766 B01F13/1013 B01F13/1016

European: A61K39/39 A61K47/06 A61K9/00M5 A61K9/107D B01F13/10B B01F13/10B2 B01F7/00G1A K61K39/555B8

US: 206/223 424/184.1 424/184.100S 424/206.1 424/206.100S 424/283.1 424/283.100S 424/400 424/400S

Family:

Publication number	Publication date	Application number	Application date
DE102009056871 A1	20110622	DE200910056871	20091203
US2011162982 AA	20110707	US20100928164	20101203
US8678184 BB	20140325	US20100928164	20101203

Priority:

US20090283517P 20091203 DE200910056871 20091203 US20100928164 20101203

Probable Assignee: NOVARTIS AG

Assignee(s): (std): ESKES ROBERT ; KRAUS GOTTFRIED ; NOVARTIS AG ; NOVARTIS VACCINES AND DIAGNOSTIC

Assignee(s): NOVARTIS VACCINES AND DIAGNOSTIC GMBH AND CO KG ; NOVARTIS VACCINES AND DIAGNOSTICS GMBH

Inventor(s): (std): ESKES ROBERT ; KRAUS GOTTFRIED

Agent(s): REGINA; HELEN

Title: STREPTOCOCCUS PNEUMONIAE POLYSACCHARIDE CONJUGATE VACCINE COMPRISING 19F-DT CONJUGATE

Abstract: Source: NZ569168A Disclosed are immunogenic compositions of Streptococcus pneumoniae that comprise 10 or more capsular

saccharides from different carrier proteins. The composition comprises the serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F conjugates but does not comprise capsular saccharide from serotype 19A. The serotype 19F capsular saccharide is conjugated to the diphtheria toxoid (DT). The composition is used for the treatment and prevention of disease caused by S. pneumoniae infection by serotype 19A strains.

Classifications:

International (IPC 8-9): A61K39/09 A61K39/116 A61K39/385 A61K47/48

A61P31/04 (Advanced/Invention)

CPC: A61K2039/6037 A61K2039/6068 A61K2039/627 A61K2039/64 A61K2039/70 A61K47/4833 A61K39/385 A61K39/092

European: A61K39/09A K61K39/60P10 K61K39/60P20



Family:

Publication number	Publication date	Application number	Application date
BRPI0620163 A2	20111101	BR2006PI20163	20061220
CN103251940 A	20130821	CN201310036445	20061220
DK1962899 T3	20111031	DK20060830743T	20061220
MY147495 A	20121214	MY20080002270	20061220
NZ569168 A	20120224	NZ20060569168	20061220

Priority:

GB20050026232 20051222	GB20060007087 20060407	GB20060007088 20060407
GB20060009902 20060518	GB20060020336 20061012	GB20060020337 20061012
GB20060020815 20061019	GB20060020816 20061019	WO2006GB04634 20061212
WO2006EP69974 20061220		

Probable Assignee: GLAXOSMITHKLINE BIOLOG SA

Assignee(s): (std): GLAXOSMITHKLINE BIOLOG SA

Assignee(s): GLAXOSMITHKLINE BIOLOGICALS S A ; GLAXOSMITHKLINE BIOLOGICALS SA

Inventor(s): (std): BIEMANS RALPH LEON ; GARCON NATHALIE MARIE JOSEPHE ; HERMAND PHILIPPE VINCENT ; POOLMAN JAN ; VAN MECHELEN MARCELLE PAULETTE

Inventor(s): RALPH LEON BIEMANS ; JAN POOLMAN ; MARCELLE PAULETTE VAN MECHELEN ; NATHALIE MARIE JOSEPHE GARCON ; PHILIPPE VINCENT HERMAND

Title: PHOSPHOLIPID DEPOT**Abstract:**

Source: US2012046220A The present invention provides a clear depot comprising at least one hydrophilic water-soluble pharmaceutically active agent selected from the group consisting of vancomycin, gentamicin, a pharmaceutically acceptable salt thereof and a mixture thereof, water, a phospholipid, an **oil**, optionally a pH adjusting agent, and a viscosity modifying agent selected from the group consisting of ethanol, isopropanol, and a mixture thereof, wherein the water present in the depot is no more than about 4 wt percent relative to the total weight of the depot and the depot has a pH of between about 3 and about 6, method of making and administering same.

**Classifications:**

International (IPC 8-9): A61K31/7036 A61K38/00 A61K38/14 A61K47/04 A61K47/10 A61K47/12 A61K47/18 A61K47/20 A61K47/22 A61K47/24 A61K47/44 A61K9/00 A61K9/107 A61K9/14 A61K9/16 A61P31/00 A61P31/04 C07F9/10 C07H15/234 (Advanced/Invention)

CPC: A61K9/0019 A61K9/0024 A61K9/1075 A61K9/145 A61K9/16 A61K9/1617 A61K9/1682 A61K38/14 A61K31/7036

US: 514/2.3 514/2.300P 514/20.9 514/20.900S 514/40 514/40S

Family:

Publication number	Publication date	Application number	Application date
AU2010359346 AA	20120223	AU20100359346	20101217
AU2010359346 BB	20150129	AU20100359346	20101217
AU2015202240 AA	20150521	AU20150202240	20150429
CA2809022 AA	20130220	CA20102809022	20101217
CN103179951 A	20130626	CN201080069723	20101217
CN103179951 B	20160120	CN201080069723	20101217
EP2605751 A1	20130626	EP20100795596	20101217
JP2013534244 T2	20130902	JP20130524832T	20101217
JP5752248 B2	20150722	JP20130524832T	20101217
KR20130112870 A	20131014	KR20137006779	20101217
MX2013002005 A1	20130624	MX20130002005	20101217
NZ608210 A	20150227	NZ20100608210	20101217
RU2013112353 A	20140927	RU20130112353	20101217
US2012046220 AA	20120223	US20110242778	20110923
US2015306173 AA	20151029	US20150793552	20150707
US9132144 BB	20150915	US20110242778	20110923
WO12023955 A1	20120223	WO2010US61015	20101217

Priority:

US20100375502P 20100820	WO2010US61015 20101217	US20110242778 20110923
AU20100359346 20101217	AU20150202240 20150429	US20100061015 20101217
US20150793552 20150707		

Probable Assignee: REDDYS LAB LTD DR**Assignee(s):** (std): CHEN ANDREW XIAN ; CHEN HAILIANG ; SURAKANTI DUSHYANTH ; OKUMU FRANKLIN ; REDDYS LAB LTD DR ; REDDY S LAB LTD DR**Assignee(s):** DR REDDY S LABORATORIES LTD ; DR REDDY'S LABORATORIES LTD**Inventor(s):** (std): ANDREW XIAN CHEN ; CHEN ANDREW XIAN ; CHEN HAILIANG ; DUSHYANTH SURAKANTI ; FRANKLIN OKUMU ; HAILIANG CHEN ; OKUMU FRANKLIN ; SURAKANTI DUSHYANTH**Agent(s):** GRIFFITH HACK; MARKS AND CLERK; BATES PHILIP IAN; STITES AND HARBISON PLLC; MANDY W; TESCHNER MICHAEL H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH
CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD
GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP
KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW
MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG
SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN
ZA ZM ZW

Title: PULSATILLA CHINENSIS TOTAL SAPONIN ORAL **EMULSION** AND PREPARATION METHOD THEREOF

Abstract:

Source: CN103690618A The invention belongs to the technical field of medicine, and relates to a pulsatilla chinensis total saponin oral **emulsion** and a preparation method thereof. The **emulsion** comprises the following components: 0.13 percent -13.5 percent of pulsatilla chinensis total saponins, 5 percent -50 percent of medicinal **oil**, 1 percent -30 percent of emulsifiers, 0-10 percent of auxiliary emulsifiers, 0.1 percent -15 percent of anti-oxidants, and the balance of purified water. The **emulsion** can be prepared by methods such as phase inversion emulsification method, PIT emulsification method, alternate liquid feeding emulsification method, ultrasonic wave emulsification method, low-energy emulsification method, micro-fluidization method, and the like. The pulsatilla chinensis total saponins provided by the invention are indissolvable drugs, and have irritation to gastrointestinal tracts. The dispersity of **emulsion** droplets in the **emulsion** is great, which facilitates drug absorption and increases bioavailability; the **emulsion** enables the drugs to be located in **oil**-water interfacial films or **oil** drop nuclei, which prevents direct contact of the drugs with gastrointestinal tracts, and thus reduces the gastrointestinal tract irritation of the drugs. The **emulsion** is a good carrier of pulsatilla chinensis total saponins; the addition of the auxiliary emulsifiers solves the problem of poor stability of common **emulsions**; when the **emulsion** is centrifuged at a rotating speed of 4000 r/min for 30 min, no layering phenomenon is caused; the bioavailability is high; and the stability is good.



Classifications:

International (IPC 8-9): A61K36/71 A61K47/36 A61K47/38 A61K47/44 A61K9/107
A61P35/00 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
CN103690618 A	20140402	CN201310059867	20130226

Priority:

CN201310059867 20130226

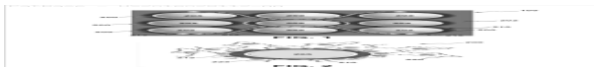
Probable Assignee: JIANGXI HERBFINE HI TECH CO

Assignee(s): (std): JIANGXI HERBFINE HI TECH CO ; JIANGXI HERBFINE HI TECH CO LTD

Inventor(s): (std): YANG SHILIN ; WANG QI ; LUO XIAOJIAN ; LIU WEI ; LI XIANG ; JIAN HUI ; FAN MEIMEI

Title: GUM-LIKE ELECTROLYTES AND METHODS OF MAKING THE SAME

Abstract: Source: US2016028112A A gum like electrolyte composition and methods for making the composition are disclosed herein. The gum-like electrolyte composition may include a mixture of at least one wax particle, at least one electrolyte, and a polymer matrix comprising at least one polymer, wherein the wax particle and the electrolyte are dispersed in the polymer matrix, and wherein mixture is a malleable material.



Classifications:

International (IPC 8-9): H01B1/00 H01G9/02 H01G9/032 H01M10/0565 (Advanced/Invention)

CPC: H01G11/54 H01B1/12 Y02E60/13 Y02T10/7022 H01M10/0565 H01G9/032 H01M2300/0082 H01G11/56

Family:

Publication number	Publication date	Application number	Application date
CN105190778 A	20151223	CN201480026163	20140123
US2016028112 AA	20160128	US20140777282	20140123
WO14149181 A1	20140925	WO2014US12727	20140123

Priority:

US20130789972P 20130315 US20130823377P 20130514 WO2014US12727 20140123
US20140777282 20140123

Probable Assignee: WASHINGTON STATE UNIV

Assignee(s): (std): UNIV WASHINGTON STATE

Assignee(s): WASHINGTON STATE UNIV

Inventor(s): (std): LI BIN ; WANG YU ; ZHONG WEI HONG ; ZHONG WEIHONG ; ZHONG WIE HONG

Agent(s): PISANO ANTHONY L

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: HIGH-DISPERSION PHYTOSTEROL ESTER MICROCAPSULE, AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF

Abstract:

Source: CN105124604A The invention belongs to the technical field of food processing, and discloses a high-dispersion phytosterol ester microcapsule, as well as a preparation method and application thereof. The preparation method comprises the following steps: firstly, dispersing lactose and soy isolate protein in water, sufficiently hydrating to obtain a wall material solution; secondly, dissolving phytosterol ester in an **oil** phase to form a core material solution; thirdly, mixing the core material with the wall material; and finally, homogenizing the mixed liquid, performing micro-fluidization to form micro-**emulsion** having fine particles, and drying by spray to coat the composite wall material of the soy isolate protein and lactose with the **oil** phase and the phytosterol ester so as to obtain the high-dispersion phytosterol ester microcapsule. The preparation method is simple and can be used in continuous production, and the microcapsule has good water solubility and can be applied to processing preparation of foods, health-care products and medicines as an ingredient.

Classifications:

International (IPC 8-9): A23L1/30 A61K31/56 A61K47/26 A61K47/42 A61K9/50 A61P13/08 A61P3/06 A61P35/00 A61P37/02 A61P9/00 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
CN105124604 A	20151209	CN201510600673	20150918

Priority:

CN201510600673 20150918

Probable Assignee: UNIV SOUTH CHINA TECH

Assignee(s): (std): SOUTH CHINA UNIV OF TECHNOLOGY ; UNIV SOUTH CHINA TECH

Inventor(s): (std): CAO WENJUN ; TANG CHUANHE

Title: Nano-level Pickering **emulsion** fracturing fluid and its preparation method (Machine translation)

Abstract:

Source: CN105504182A The present invention provides a nanoscale Pickering **emulsion** fracturing fluid and its preparation method. The method comprises: a water-soluble nonionic monomers, two kinds of functional monomers, water-soluble polymeric emulsifier, mixed salts, dissolved in deionized water to form an aqueous phase; **oil**-soluble emulsifier and **oil** phase are mixed to form an **oil**; aqueous phase and **oil** phase are mixed and heated and nitrogen was added nanoparticles and a polymerization initiator, while using a high speed disperser or a high pressure homogenizer combined high pressure **microfluidization** the mixture is dispersed to form a dispersion, whereby a dispersion was prepared by diluting the skin nanoscale Brooklyn **emulsion** fracturing fluid. The fracturing fluid has an excellent drag reducing cleanup, clay stabilizer, suspending sand, ability to reduce surface activity, can effectively reduce the use of clay stabilizing agent and drainage aid, reducing operating costs, reduced working time, increase the pressure crack efficiency; while introducing nanoparticles effectively improve the stability of the fracturing fluid.

Classifications:

International (IPC 8-9): C08F2/30 C08F2/44 C08F220/34 C08F220/54 C08F220/56 C08F226/02 C08F283/06 C09K8/68 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
CN105504182 A	20160420	CN201610006853	20160104

Priority:

CN201610006853 20160104

Probable Assignee:

PETROCHINA CO LTD

Assignee(s): (std):

PETROCHINA CO LTD

PatBase - Search results 02 May 2016

Search query (17): [SP]: method for preparing an emulsified fuel and implementing device a process and apparatus for industrial-scale preparation of an emulsified fuel including a water phase in a continuous organic phase which contains less than 20 percent by volume of water, and at least one additive necessary for forming the emulsified fuel. the fuel is formed by mixing and homogenizing the organic phase and the additives, forming a volume v , inside an homogenization tank with internal circulation rate q_c , such that q_c/v greater than or equal to 100 h^{-1} , circulating the homogenized fluid in a branch loop emerging from the tank at a rate q_{circ} , and through at least one emulsifying system located on said loop, at a rate such that $0\text{ h}/q_{circ}$ less than or equal to 2 h , feeding the aqueous phase into the branch loop upstream of the emulsifying system, and maintaining the homogenization in the tank and the circulation of the liquid in the branch loop until the emulsion acquires a desired characteristic of storage stability.

Results: 43

Lady Cortes

Search history

Search 1: TAC=(CO7310172) (Results 0)

Search 2: TAC=(ecopetrol) (Results 27)

Search 3: [SP]: The present invention discloses how to prepare, and then analyze, emulsions water / oil emulsions emulate natural reservoir conditions and that are stable enough to have time to study in the laboratory. For this provides a computer and a protocol for the preparation of such emulsions. The equipment comprises, among others, cylinders floating piston positive displacement (C1, C2 and C3), any cylinder designed for operation at high pressure and high temperature, positive displacement pumps (manual and / or automatic) (B1 and B2), any cylinder designed for high pressure operation to have a precise minimum volume of 0.1 cc, valves ?? manual and / or automatic, any valves designed to operate at high pressure and which is special for flow control connections (lines, you, connectors), any component designed to operate at high pressure that meets international standards of manufacturing a back-pressure regulator, any device designed to maintain pressure in the slave cylinder and can be used as replacement B2 positive displacement pump, filters, metal filters designed to operate at high pressure and orifice sizes between 0.5 and $100\text{ }\mu\text{m}$. Additionally, the application presents the protocol or method for the preparation of emulsions containing the steps of: Step a. Preparation of fluids and equipment Step b. Preparation of the premix Step c. Mounting and tuning of Stage D team. Emulsion Preparation (Results 0)

Search 4: TAC=(oil) (Results 100000)

Search 5: TAC=(high pressure) (Results 100000)

Search 6: TAC=(microfluidization) (Results 226)

Search 7: TAC=(4 and 5 and 6) (Results 25)

Search 8: TAC=(emulsion) (Results 100000)

Search 9: TAC=(4 and 6 and 8) (Results 38)

Search 10: TAC=(EQUIPMENT) (Results 100000)

Search 11: TAC=(Petroleum) (Results 100000)

Search 12: TAC=(8 and 10 and 11) (Results 235)

Search 13: TAC=(PREPARATION OF EMULSIONS) (Results 336)

Search 14: TAC=(10 and 11 and 13) (Results 1)

Search 15: TAC=(4 and 10 and 13) (Results 3)

Search 16: TAC=(EQUIPMENT and PREPARATION OF EMULSIONS and Petroleum) (Results 1)

Search 17: [SP]: method for preparing an emulsified fuel and implementing device a process and apparatus for industrial-scale preparation of an emulsified fuel including a water phase in a continuous organic phase which contains less than 20 percent by volume of water, and at least one additive necessary for forming the emulsified fuel. the fuel is formed by mixing and homogenizing the organic phase and the additives, forming a volume v , inside an homogenization tank with internal circulation rate q_c , such that q_c/v greater than or equal to 100 h^{-1} , circulating the homogenized fluid in a branch loop emerging from the tank at a rate $q_{c\text{circ}}$, and through at least one emulsifying system located on said loop, at a rate such that $0\text{ h}/q_{c\text{circ}}$ less than or equal to 2 h , feeding the aqueous phase into the branch loop upstream of the emulsifying system, and maintaining the homogenization in the tank and the circulation of the liquid in the branch loop until the emulsion acquires a desired characteristic of storage stability. (Results 43)

Title: Method and apparatus for making emulsions

Abstract: Source: GB441537A A method of making emulsions consists in severing sections from the end of a stream of material to be emulsified and dispersing these in a circulating stream of previously made emulsion. Preferably the latter stream is subdivided, and material to be emulsified is added to one portion and water and emulsifying agent to the other, after which the two portions are recombined. In the illustrated apparatus emulsion from the vessel 42 is circulated via the passage 19, the two outlets 21, and the passages 35, 37 back to the vessel. Each passage 21 contains two sets of rotating helical blades 26, 27 separated by a set of fixed radial blades 32; opposite the periphery of the blades 26 are passages (not shown), supplying respectively water and material to be emulsified. These materials are cut into sections by the blades 26 and dispersed in the circulating emulsion by the blades 27, 32. Specification 438,680 is referred to.

Classifications:

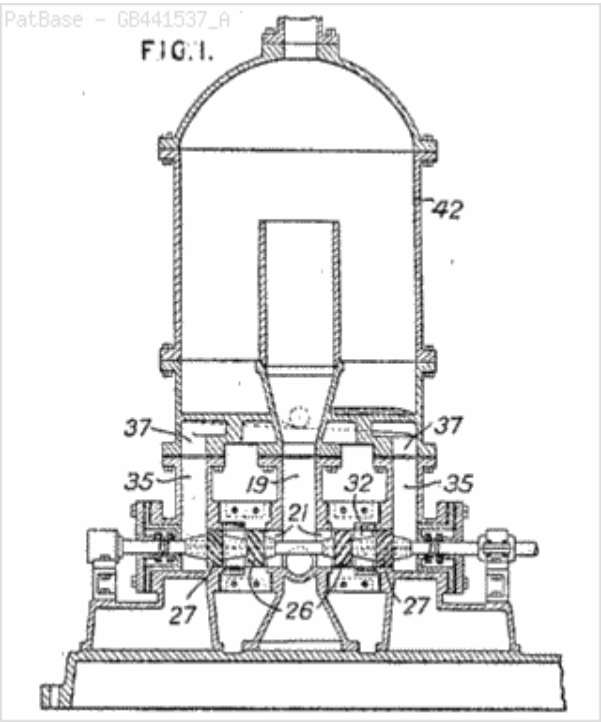
International (IPC 8-9):

B01F5/10 (Advanced/Invention);
B01F5/00 (Core/Invention)

International (IPC 1-7): B01F5/06 B44C1/20

CPC: B01F5/102

European: B01F5/10B



Family:

Publication number	Publication date	Application number	Application date
GB441537 A	19360121	GB19350027244	19341012

Probable Assignee: LANCASTER PROCESSES INC

Assignee(s): (std): LANCASTER PROCESSES INC

Title: METHOD OF OPERATING AN INTERNAL COMBUSTION ENGINE

Abstract: Source: GB502171A [Class 91] Motor fuel contains a total of up to 0A085 per cent by weight of one or more #-diketone derivatives of the following metals, whereby no immediate anti-knock effect is produced but a deposit is gradually formed in the engine by continued use which deposit is effectively anti-knock. The metal may be cobalt, nickel, iron, manganese, copper, uranium, molybdenum, vanadium, zirconium, beryllium, platinum, palladium, thorium, chromium, aluminium, and cerium or other rare earth metal. The engine may first be run with fuel containing the higher percentages, e.g. 0A04-0A75 of diketone derivative to build up the deposit, then on fuel containing only sufficient derivative e.g. 0A001-0A04 per cent to maintain the deposit and/or even for some time on fuel containing no diketone derivative. Lead alkyl compounds, e.g. 0A1-5A0 cc. of lead tetraethyl per gallon, and non-corrosive organic sulphur compounds, e.g. 0A01-2A0 per cent of methyl, ethyl, or butyl sulphides or disulphides, carbon disulphide, or cyclic sulphur compounds may also be present. The preferred diketone compounds are the acetylacetonates, propionyl-acetonates, and formylacetonates; they may be halogenated. Fuels specified are gasoline, benzene, kerosene, fuel oils, alcohols, and mixtures thereof. For example, 0A04 per cent of a mixture of the propionyl-acetates of nickel, cobalt, and cerium with the acetyl-acetonates of thorium, zirconium, uranium, and chromium, with or without 2 cc. of tetraethyl lead or 7A5 cc. per gallon of CS₂, is used with gasoline. Specification 287,192, [Class 91], is referred to. The Specification as open to inspection under Sect. 91 describes the invention broadly as the use of fuel containing so small a concentration of organo-metallic compound that it has no effect on the combustion of the fuel but during continued operation of the engine forms therein a catalytic deposit improving the combustion. Reference is made to the use of proportions higher than 0A085 per cent; and specified metallic compounds include amyl amine nickel chloride, manganese naphthenate, and palladium diethyl sulphide. This subject-matter does not appear in the Specification as accepted.

Classifications:

International (IPC 8-9): C10L1/06 C10L1/14 C10L1/18 (Advanced/Invention);
C10L1/30 (Advanced/Non-invention);
C10L1/00 C10L1/10 (Core/Invention)

International (IPC 1-7): C10L1/06 C10L1/14 C10L1/18 F02B51/02

CPC: C10L1/06 C10L1/14 C10L1/1814 C10L1/305

European: C10L1/06 C10L1/14 C10L1/18T M10L1/14 M10L1/18T M10L1/30B

US: 123/198A 123/1A 44/362

Family:

Publication number	Publication date	Application number	Application date
FR823791 A	19380126		19370630
GB502171 A	19390307	GB19370018918	19370707
US2086775 A	19370713	US19360090387	19360713

Priority:

US19360090387 19360713

Probable Assignee: LEO CORP

Assignee(s): (std): LEO CORP

Inventor(s): (std): MCKONE LEO J ; LYONS WILLARD E

Title: METHOD OF OPERATING INTERNAL COMBUSTION ENGINES

Abstract: Source: US2151432A 1. The method of operating an internal combustion engine to improve the efficiency thereof which comprises introducing into a combustion chamber of said engine a fuel charge containing a relatively small concentration of an organometallic compound and burning said charge therein, the concentration of said organometallic compound being so small as to have in itself no substantial improving effect upon the combustion of the fuel with which said compound is immediately associated but being capable of forming a catalytic deposit within said combustion chamber effective by augmentation during continued operation of said engine with a like fuel charge to increase the efficiency of combustion within said engine. The metal of said organometallic compound being selected from the group consisting of selenium, antimony, arsenic, bismuth, cadmium, tellurium, thallium, tin, barium, boron, cesium, indium, lanthanum, potassium, sodium, tantalum, titanium, tungsten and zinc.

Classifications:

International (IPC 8-9): C10L1/14 (Advanced/Invention);

C10L1/18 C10L1/24 C10L1/30 (Advanced/Non-invention);

C10L1/10 (Core/Invention)

International (IPC 1-7): C10L1/14

CPC: C10L1/14 C10L1/1814 C10L1/188 C10L1/19 C10L1/24 C10L1/2406 C10L1/301 C10L1/303

C10L1/305 C10L1/306

European: C10L1/14 M10L1/14 M10L1/188 M10L1/18T M10L1/19 M10L1/24 M10L1/24A M10L1/30A

M10L1/30A1 M10L1/30B M10L1/30B1

US: 123/1A 44/329 44/358 44/362 44/363 44/368 44/439 534/15 534/16 556/1 556/105 556/106 556/108 556/130 556/131 556/132 556/133 556/135 556/40 556/42 556/44 556/54 556/55 556/57 556/61 556/62 556/76 556/77 556/78 556/79 556/80 556/81 568/7

Family:

Publication number	Publication date	Application number	Application date
US2151432 A	19390321	US19370151836	19370703

Priority:

US19370151836 19370703

Probable Assignee: LEO CORP

Assignee(s): (std): LEO CORP

Inventor(s): (std): LYONS WILLARD E ; MCKONE LEO J

Title: EMULSIFIED MOTOR FUEL

Abstract: Source: US2920948A (Claim 1) 1. An emulsified motor fuel consisting essentially of motor fuel hydrocarbon fraction and water and containing from 0.5% to 5.0% by weight of an emulsifier, said emulsifier comprising an alkylphenol ethenoxy product in which the alkyl radical contains from 8 to carbon atoms and the condensation product contains on the average 6 to 9 ethenoxy (-C₂H₄O-) groups.

Classifications:

International (IPC 8-9): C10L1/32 (Advanced/Invention);

C10L1/32 (Core/Invention)

International (IPC 1-7): C10L1/32

CPC: Y10S516/01 C10L1/328

European: C10L1/32D

US: 44/301 516/DIG.1

Family:

Publication number	Publication date	Application number	Application date
US2920948 A	19600112	US19550542084	19551021

Priority:

US19550542084 19551021

Probable Assignee: MONSANTO CHEMICALS

Assignee(s): (std): MONSANTO CHEMICALS

Assignee(s): MONSANTO CHEMICAL CO ; MONSANTO CHEMICAL COMPANY

Inventor(s): (std): WEEKS LLOYD E

Title: SILOXANE-POLYOXYALKYLENE COPOLYMERS AS ANTI-FOAM AGENTS

Abstract: Source: US3233986A (Claim 1) What is claimed is: 1. An anhydrous hydrocarbon composition comprising (A) a non-lubricating, liquid hydrocarbon having a tendency to foam and (B) from 5 parts to 2000 parts by weight per million parts by weight of said liquid of a copolymer that is insoluble in said liquid and that consists essentially of (1) at least one siloxane block comprising at least two siloxane groups that are represented by the formula: $\text{EbSiO}_{4-b}\text{R}_b$ wherein R is a member selected from the group consisting of the monovalent hydrocarbon groups and the divalent hydrocarbon groups and b has a value from 1 to 3 inclusive, said siloxane block having at least one divalent hydrocarbon group represented by R, and (2) at least one polyoxyalkylene block comprising at least two oxyalkylene groups that are represented by the formula: $\text{-(O-R)}_n\text{-}$ wherein R is a monovalent hydrocarbon group, and b degrees " has a value from 1 to 3 inclusive. 5.

Classifications:

International (IPC 8-9): B01D19/04 C10L1/28 (Advanced/Invention);

B01D19/02 C10L1/10 (Core/Invention)

International (IPC 1-7): B01D19/04

CPC: B01D19/0409 C10L1/285

European: 39B22S6 B01D19/04D2 C10L1/28P

US: 44/320 516/124

Family:

Publication number	Publication date	Application number	Application date
US3233986 A	19660208	US19620200619	19620607

Priority:

US19620200619 19620607

Probable Assignee: UNION CARBIDE CORP

Assignee(s): (std): UNION CARBIDE CORP

Inventor(s): (std): MOREHOUSE EDWARD L

Title: Method for improving the working properties of metals

Abstract: Source: GB1037021A Lubricants for metal-forming operations are esters of C10- 22 fatty acids substituted in the acyl



chain with oxyalkylene radicals having at least 2 oxyalkylene groups, each oxyalkylene radical being adjacent to a hydroxy group or to another such oxyalkylene radical, each alkylene containing 2-4 carbon atoms (see Division C2). In Example I, aqueous solutions of the reaction product of epoxidized soybean oil with ethoxylated nonyl phenol are stated to be of value as a lubricant at a metal-metal interface. ALSO: The invention comprises esters of C10- 22 fatty acids, the acyl chain being substituted with oxyalkylene radicals having at least two oxyalkylene groups, each oxyalkylene radical being adjacent to a hydroxy group or to another such oxyalkylene radical, each alkylene containing 2-4 carbon atoms; and their production by reacting an epoxidized ester with an oxyalkylene ether or ester in the presence of a strong Lewis acid or a tertiary amine (or with a polyoxyalkylene glycol). Preferred starting materials are epoxidized triglycerides; other esters, including esters of polyhydric alcohols, are specified. ALSO: The invention comprises esters of C10- 22 fatty acids, the acyl chain being substituted with oxyalkylene radicals having at least 2, e.g. 2-200, oxyalkylene groups, each oxyalkylene radical being adjacent to a hydroxy group or to another such oxyalkylene radical, each alkylene containing 2-4 carbon atoms; and their production by reacting an epoxidized fatty ester with an oxyalkylene ether or ester in the presence of a strong Lewis acid or a tertiary amine (or with a polyoxyalkylene glycol). Specified reactants include alkylphenol - polyoxyalkylene glycol adducts. ALSO: Emulsifying systems comprise an ester of C10-22 fatty acid substituted in the acyl chain with oxyalkylene radicals having at least 2 oxyalkylene groups, each oxyalkylene radical being adjacent to a hydroxy group or to another such oxyalkylene radical, each alkylene containing 2-4 carbon atoms (see Division C2); together with an anionic emulsifier, e.g. a salt of an alkyl, aryl or alkaryl sulphonic acid, a mono- or diester of orthophosphoric acid, or a mono- or diester of sulphuric acid, e.g. salts of Ca, Ba, Mg, Sr, Be, Zn, Al, Cr and amines. The material emulsified may be an organic oil-soluble pesticide. Examples refer to the emulsification of mineral oil and a mixture of castor oil and unsaturated fatty acids.

Classifications:

International (IPC 8-9): A01N25/30 B01F17/00 C07C233/16 C07C235/02 C09C3/08 C10M173/02 (Advanced/Invention);

A01N25/30 B01F17/00 C07C233/00 C07C235/00 C09C3/08 (Core/Invention)

International (IPC 1-7): C07C69/22 C10M173/02

CPC: C01P2006/60 C09C3/08 C10M2201/02 C10M2209/104 C10M2209/105 C10M2209/106 C10M2221/043 C10N2240/40 C10N2240/402 C10N2240/403 C10N2240/404 C10N2240/405 C10N2240/406 C10N2240/407 C10N2240/408 C10N2240/409 C10N2250/02 C10M173/02 Y10S516/07 Y10S516/03 A01N25/30 B01F17/0085 C07C233/16 C07C235/02

European: 124AK20 124B69/66C 124B69/66C2B2D2 124BG12B3D2B2B3 A01N25/30 B01F17/00Z C07C233/16 C07C235/02 C09C3/08 C10M173/02 M01P6/60 M10M201/02 M10M209/104 M10M209/105 M10M209/106 M10M221/043 M10N240/40 M10N240/402 M10N240/403 M10N240/404 M10N240/405 M10N240/406 M10N240/407 M10N240/408 M10N240/409 M10N250/02

US: 252/49.5 508/486 508/501 508/555 510/502 516/15 516/203 516/56 516/59 516/65 516/66 516/DIG.3 516/DIG.7 549/561 549/562 554/213 554/218 554/227 554/64 568/608 568/613 568/622

Family:

Publication number	Publication date	Application number	Application date
GB1037021 A	19660720	GB19630009000	19630306
GB1037022 A	19660720	GB19650046939	19630306
US3242200 A	19660322	US19620177968	19620307
US3243382 A	19660329	US19620200357	19620606
US3281438 A	19661025	US19620196868	19620523

US3364143 A	19680116	US19650510360	19651129
-------------	----------	---------------	----------

Priority:

US19620177968 19620307 US19620196868 19620523 US19620200357 19620606
US19650510360 19651129

Probable Assignee: SWIFT AND CO

Assignee(s): (std): SWIFT AND CO

Assignee(s): SWIFT AND COMPANY

Inventor(s): (std): JOHNSON KEITH L ; JOHNSON KEITH LIDDELL ; LIDDELL JOHNSON KEITH

Title: FEED UNIT FOR A FUEL BURNER

Abstract: Source: US3658302A A feed unit for a fuel burner has first and second conduit means for supplying liquid hydrocarbon and an

emulsifying liquid, for example water, to a premixing chamber from which the premixture is conducted to a mixing chamber in which there is an injection nozzle with an opening through which a jet of the emulsion is emitted and causes a member located in the path of the jet to be vibrated so as to emulsify the emulsion.



Classifications:

International (IPC 8-9): F23D11/10 F23K5/12 (Advanced/Invention);

F23D11/10 F23K5/02 (Core/Invention)

International (IPC 1-7): B01F11/02 B01F5/02 B01F5/04 F23D11/16 F23D5/00 F23K5/00

CPC: F23D11/10 F23K5/12

European: F23D11/10 F23K5/12

US: 137/604 239/427 239/432 239/434 259/18 259/4 259/DIG.43 366/119 44/301

Family:

Publication number	Publication date	Application number	Application date
AT297901 B	19720410	AT19690012122	19691230
BE743866 A	19700630		19691230
CH516768 A	19711215	CH19690019427	19691230
DE1964582 A1	19700709	DE19691964582	19691223
DE1964582 B2	19721123	DE19691964582	19691223
DE1964582 C3	19730614	DE19691964582	19691223
ES375101 A1	19720316	ES19690375101	19691231
FR1600187 A	19700720	FR19680182516	19681231
GB1266799 A	19720315		19691231
LU60114 A	19700302		19691229
NL6919578 A	19700702	NL19690019578	19691230
SE351026 B	19721113	SE19690018117	19691230
US3658302 A	19720425	US19690889623	19691231
ZA6908987 A	19710630	ZA19690008987	19691229

Priority:

FR19680182516 19681231

Probable Assignee: CIE FRANCAISE DE RAFFINAGE S A

Assignee(s): (std): CIE FRANCAISE DE RAFFINAGE S A ; CLAUDE JEAN MARIE SEQUELA ; CO FRANCAISE DE RAFFINAGE SA ; W J GREENE ; LOUIS DUTHION ; RAFFINAGE CIE FRANCAISE

Assignee(s): SA CO FRANCAISE DE RAFFINAGE ; FRANCAISE DE RAFFINAGE COMP SA ; COMPAGNIE FRANCAISE DE RAFFINAGE ; COMPAGNIE FRANCAISE DE RAFFINAGE S A ; CO FRANCAISE DE RAFFINAGE ; CIE FRANCAISE DE RAFFINAGE

Inventor(s): (std): DUTHION L ; DUTHION LOUIS ; JEAN MARIE SEQUELA ; LOUIS DUTHION ; MARIE SEQUELA JEAN ; SEQUELA CLAUDE JEAN MARIE ; SEQUELA J ; SEQUELA JEAN MARIE ; SEQUELA J

Inventor(s): CLAUDE JEAN MARIE SEQUELA

Title: SMOG CONTROL SYSTEM AND METHOD**Abstract:** Source: US3818876A A fuel system for reducing nitrogen oxides and carbon monoxide in the exhaust gas emissions of an

internal combustion engine includes a storage tank for gasoline and a dissolved emulsifying agent, a storage tank for deionized water, and means for pumping controlled volumes of the gasoline and emulsifying agent and the water to an emulsifying chamber and thence to the engine. In one form of the invention, rotary stirring means within the emulsifying chamber emulsify the water in gasoline, and the emulsion is then introduced into the engine carburetor. In another form of the invention, a centrifugal pump emulsifies the water in the gasoline. The emulsion is then pumped into the engine cylinders by direct fuel injection. The emulsion substantially reduces the reaction temperature of gasoline and air in the engine cylinders, and thereby reduces the formation of nitrogen oxides which are a major cause of air pollution.

Classifications:**International (IPC 8-9):** F02M25/00 F02M25/022 (Advanced/Invention);
F02M25/00 (Core/Invention)**International (IPC 1-7):** F02M25/04**CPC:** F02M25/00**European:** F02M25/00**US:** 123/25E 123/25R**Family:**

Publication number	Publication date	Application number	Application date
US3818876 A	19740625	US19730364646	19730529

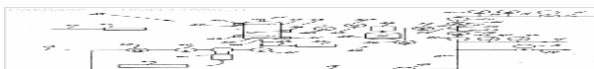
Priority:

US19710172088 19710816 US19730364646 19730529

Probable Assignee: VOOGD M**Assignee(s):** (std): VOOGD M**Assignee(s):** VOOGD M US**Inventor(s):** (std): VOOGD M**Inventor(s):** VOOGD M US

Title: EMULSIFYING SYSTEM**Abstract:** Source: US4117550A An emulsifying system for mixing accurate ratios of two or more liquids to form an emulsion. The liquids are

preferably, but not exclusively, water and oil. A supply circuit delivers accurate mixtures of the two or more liquids. An emulsifier emulsifies the mixture to form an emulsion. A container stores a quantity of the emulsion that may vary between predetermined limits and an output circuit is provided to draw the emulsion from the storage container. The emulsion storage container permits the supply of the mixture and the emulsion to the storage container at a rate independent of the rate at which the emulsion is drawn from the output circuit.

**Classifications:**

International (IPC 8-9): B01F3/08 B01F5/04 C10L1/32 F23K5/12 (Advanced/Invention);
B01F3/08 B01F5/04 C10L1/32 F23K5/02 (Core/Invention)

International (IPC 1-7): B01F15/02 B01F5/10

CPC: B01F5/045 B01F3/088 B01F5/0463 C10L1/328 F23K5/12 Y10T137/0318 Y10T137/85954

European: B01F3/08P B01F5/04C13 B01F5/04C13S2 C10L1/32D F23K5/12

US: 137/1 137/563 366/136 366/145 366/176.1 366/336

Family:

Publication number	Publication date	Application number	Application date
US4117550 A	19780926	US19770768171	19770214

Priority:

US19770768171 19770214

Probable Assignee: FOLLAND ENERTEC LTD

Assignee(s): (std): FOLLAND ENERTEC LTD

Inventor(s): (std): FOLLAND ROY E ; MILLAR RICHARD C

Title: EMULSIFIER BLEND AND AQUEOUS FUEL OIL EMULSIONS

Abstract: Source: US4162143A {PG,1 The present invention is directed to water-in-oil type fuel oil emulsions which are particularly useful in firing boilers in ships, locomotives and industrial power plants. Furthermore, the invention is directed to aqueous particulate slurries dispersed in fuel oil. Specifically, the invention is directed to aqueous/oil slurries of combustible or non-combustible particulate having improved burning characteristics. Of specific interest are stable aqueous/oil slurries of coal dust. These emulsions and slurries are achieved through the use of a novel blend of cationic, nonionic and anionic surfactants to which the invention is also directed.

Classifications:

International (IPC 8-9): B01F17/00 B01F17/42 C10L1/14 C10L1/32

C10L10/18 (Advanced/Invention);

B01F17/42 (Advanced/Non-invention);

B01F17/00 B01F17/42 C10L1/32 C10L10/00 (Core/Invention)

International (IPC 1-7): B01F17/00 C07C93/14 C08G14/12 C08G73/02 C10L1/14 C10L1/32

CPC: Y10S516/06 Y10S516/07 B01F17/0085 C10L1/324 C10L1/328

European: 124BG5C3B21 B01F17/00Z C10L1/32B C10L1/32D

US: 44/281 44/301 44/51 516/22 516/24 516/25 516/26 516/27 516/DIG.6 516/DIG.7

Family:

Publication number	Publication date	Application number	Application date
AU197944999 A1	19790920	AU19790044999	19790309
AU519833 B2	19811224	AU19790044999	19790309
CA1122096 A1	19820420	CA19790321114	19790208
DE2963556 D1	19821014	DE19792963556	19790312
EP0004195 A2	19790919	EP19790300377	19790312
EP0004195 A3	19791031	EP19790300377	19790312
EP0004195 B1	19820818	EP19790300377	19790312
JP1052027 C3	19810630	JP19790021791	19790226
JP54125206 A2	19790928	JP19790021791	19790226
JP55042853 B4	19801101	JP19790021791	19790226
US4162143 A	19790724	US19780885758	19780313

Priority:

US19780885758 19780313 CA19790321114 19790208

Probable Assignee: ICI AMERICA INC

Assignee(s): (std): ICI AMERICA INC

Assignee(s): ICI AMERICAS INC ; YOUNT JOSEPH B III

Inventor(s): (std): BUFFINGTON YOUNT III JOSEPH ; JIYOSUFU BAFUINGUTON YANTO ZA ; YOUNT J B ; YOUNT JOSEPH B ; YOUNT JOSEPH B III ; YOUNT JOSEPH BUFFINGTON III

Inventor(s): JOSEPH BUFFINGTON YOUNT III ; J B YOUNT ; JB YOUNT

Agent(s): D A FRECKLETON

Designated states: DE FR GB

Title: FIRE-SAFE HYDROCARBON FUELS

Abstract: Source: US4173455A A stabilized, fire-safe, aqueous hydrocarbon fuel emulsion prepared by mixing: a diesel fuel; an emulsifier (consisting of oleyl diethanolamide, diethanolamine, and diethanolamine soap of oleic acid) which has been treated with about 0-71/2 of oleic acid. A modified version of this fuel also contains 0-0.5 percent of an antimisting agent, and water.

Classifications:

International (IPC 8-9): C10L1/10 C10L1/18 C10L1/22 C10L1/32 C10L10/18 (Advanced/Invention); C10L1/12 C10L1/22 F02B3/06 (Advanced/Non-invention); C10L1/10 C10L1/32 C10L10/00 (Core/Invention); F02B3/00 (Core/Non-invention)

International (IPC 1-7): C10L1/18 C10L1/22 C10L1/32

CPC: C10L1/10 C10L1/125 C10L1/2225 C10L1/224 C10L1/328 C10L10/02 F02B3/06

European: C10L1/10 C10L1/32D C10L10/02 M10L1/10 M10L1/12D2 M10L1/222B2 M10L1/224 R02B3/06

US: 44/301 44/51 516/27

Family:

Publication number	Publication date	Application number	Application date
BE879321 A1	19800201	BE19790197572	19791010
BR7908847 A	19810804	BR19790008847	19790913
CA1115054 A1	19811229	CA19790333587	19790810
DK168380 A	19800421	DK19800001683	19800421
EP0020449 A1	19810107	EP19790901246	19800422
EP0020449 A4	19810309	EP19790901246	19800422
JP55500780 T2	19801016	JP19790501593T	19790913
US4173455 A	19791106	US19780950501	19781011
WO8000710 A1	19800417	WO1979US00722	19790913

Priority:

US19780950501 19781011 CA19790333587 19790810 WO1979US00722 19790913

Probable Assignee: US ARMY

Assignee(s): (std): US HEALTH ; US ARMY ; US SEC DEPARTMENT OF ; US OF AMERICA REPRESENTE PAR T ; USA ; US GOVERNMENT ; US COMMERCE

Assignee(s): WRIGHT BERNARD R ; WEATHERFORD WILLIAM D JR ; ESTADOS UNIDOS DA AMERICA REPRESENTADO PELO SECRETARIO D ; FODOR GEORGE E ; SECRETARY US DEPARTM ENT OF COMMERCE US GOV ; SECRETARY US DEPARTMENT OF COMMERCE US GOV ; THE UNITED STATES OF AMERICA REPRESENTE PAR THE SECRETARY U S DEPARTMENT OF COMMERCE ; THE UNITED STATES OF AMERICA REPRESENTED BY THE SECRETARY U S DEPARTMENT OF COMMERCE ; U S OF AMERICA ARMY SECRETARY ; UNITED STATES OF AMERICA ; UNITED STATES OF AMERICA REPRESENTE PAR SECRETARY USDEPARTMENT OF COMMERCE

Inventor(s): (std): FODOR G ; FODOR G E ; FODOR GEORGE E ; FODOR GEORGE EMERIC ; WEATHERFORD W ; WEATHERFORD W D ; WEATHERFORD W JR ; WEATHERFORD WILLIAM D JR ; WEATHERFORD WILLIAM DEWEY JR ; WRIGHT B ; WRIGHT B R ; WRIGHT BERNARD R ; WRIGHT BERNARD RAY

Inventor(s): WEATHERFORD WILLIAM D

Agent(s): ALLEN JOHN A

Designated states: AT BR CH DE DK FR GB JP LU NL SE SU

Title: Method and apparatus for improving combustion, thermal efficiency and reducing emissions by treating fuel

Abstract: Source: US4629472A Apparatus and processes are disclosed for treating liquid fuels to include precious metal catalysts dispersed

within a liquid which is dispersed within the fuels. The precious metal catalysts are preferably present at a level of from about 0.005 to 0.5 ppm by weight of the treated fuel, and the liquid is preferably present at a level of from about 3 to about 15 percent by volume of the fuel. The fuel is treated prior to introduction into a chamber for combustion.



Classifications:

International (IPC 8-9): C10L1/32 (Advanced/Invention);

C10L1/32 (Core/Invention)

International (IPC 1-7): C10L1/32

CPC: C10L1/328

European: C10L1/32D

US: 44/301 44/51 44/68

Family:

Publication number	Publication date	Application number	Application date
US4629472 A	19861216	US19850810076	19851217

Priority:

US19830516094 19830722

US19850746551 19850619

US19850810076 19851217

Probable Assignee: CLEAN DIESEL TECHNOLOGIES INC

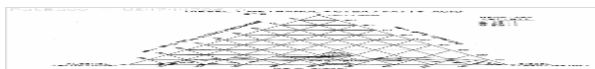
Assignee(s): (std): FUEL TECH INC

Assignee(s): PLATINUM PLUS INC ; PLATINUM PLUS INC 111 ROWAYTON AVENUE
ROWAYTON CT ; CLEAN DIESEL TECHNOLOGIES INC ; CLEN DIESEL
TECHNOLOGIES INC

Inventor(s): (std): HANEY III WILLIAM M ; SULLIVAN JAMES C

Title: Microemulsion fuel system

Abstract: Source: US4744796A Stable microemulsion fuel compositions are provided which comprise (a) a hydrocarbon fuel such as diesel fuel, jet fuel, gasoline, or fuel oil; (b) water and/or methanol; and (c) a novel cosurfactant combination of tertiary butyl alcohol and an ionic or nonionic surfactant. The compositions of the invention exhibit a high degree of phase stability even over wide variations of temperature, greatly improved salt tolerance and reduce smoke particulate and NO_x emissions.



Classifications:

International (IPC 8-9): C10L1/32 (Advanced/Invention);

F02B3/06 (Advanced/Non-invention);

C10L1/32 (Core/Invention);

F02B3/00 (Core/Non-invention)

International (IPC 1-7): C10L1/32

CPC: C10L1/328 F02B3/06

European: C10L1/32D R02B3/06

US: 44/302 44/51 44/53 44/57

Family:

Publication number	Publication date	Application number	Application date
US4744796 A	19880517	US19860825841	19860204

Priority:

US19860825841 19860204

Probable Assignee: LYONDELL CHEMICAL TECHNOLOGY LP

Assignee(s): (std): ARCO CHEM CO

Assignee(s): ARCO CHEMICAL CO ; ARCO CHEMICAL COMPANY ; ARCO CHEMICAL TECHNOLOGY INC ; ARCO CHEMICAL TECHNOLOGY INC A CORP OF DE ; ARCO CHEMICAL TECHNOLOGY LP A PARTNERSHIP OF DE ; ATLANTIC RICHFIELD CO ; LYONDELL CHEMICAL TECHNOLOGY LP

Inventor(s): (std): GREY ROGER A ; HAZBUN EDWARD A ; SCHON STEVEN G

Title: Fire resistant microemulsions containing phenyl alcohols as cosurfactants

Abstract: Source: US4770670A Stable microemulsion compositions are provided especially fire resistant fuel compositions comprising (a) a hydrocarbon such as diesel fuel, jet fuel, gasoline, or fuel oil; (b) water; and (c) a novel cosurfactant combination of a phenyl alcohol and an ionic or nonionic surfactant. Methods are provided for destabilization and separation of the microemulsions directly before use.

Classifications:

International (IPC 8-9): C10L1/32 (Advanced/Invention);

F02B3/06 (Advanced/Non-invention);

C10L1/32 (Core/Invention);

F02B3/00 (Core/Non-invention)

International (IPC 1-7): C10L1/02 C10L1/08

CPC: C10L1/328 F02B3/06

European: C10L1/32D R02B3/06

US: 44/301 44/51 44/53

Family:

Publication number	Publication date	Application number	Application date
US4770670 A	19880913	US19860944900	19861222

Priority:

US19860944900 19861222

Probable Assignee: LYONDELL CHEMICAL TECHNOLOGY LP

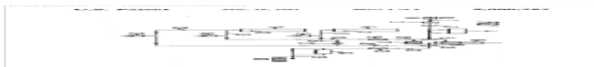
Assignee(s): (std): ARCO CHEM CO

Assignee(s): ARCO CHEMICAL CO ; ARCO CHEMICAL COMPANY ; ARCO CHEMICAL TECHNOLOGY INC ; ARCO CHEMICAL TECHNOLOGY INC A CORP OF DE ; ATLANTIC RICHFIELD CO ; ARCO CHEMICAL TECHNOLOGY LP A PARTNERSHIP OF DE ; LYONDELL CHEMICAL TECHNOLOGY LP ; JPMORGAN CHASE BANK NA ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s): (std): HAZBUN EDWARD A ; SCHON STEVEN G

Title: Preparation and combustion of fuel oil emulsions

Abstract: Source: US5000757A Apparatus for the preparation of emulsions of oil in water comprises: (a) an oil feed line, (b) a source of concentrated surfactant solution, (c) a source of water, (d) a first low shear mixer for mixing concentrated surfactant and water to form a dilute surfactant solution, (e) means for uniting the flows of dilute surfactant solution and oil in a controlled manner, (f) a second low shear mixer for mixing the united flow streams of oil and dilute surfactant solution to form an emulsion of oil in water, (g) a third low shear mixer for mixing the emulsion of oil in water to form a dilute emulsion, and, (h) an arrangement of water feed lines and control valves such that, firstly, water can be supplied either to the first low shear mixer only or, secondly, to both first and third low shear mixers. The apparatus is particularly suitable for the preparation of emulsions of fuel oil in water from oils within a wide range of viscosities which burn with low emissions of NO x and particulates.



Classifications:

International (IPC 8-9): B01F3/00 B01F3/08 B01J13/00 C10L1/32 C10L10/18 (Advanced/Invention); B01F3/00 B01J13/00 (Advanced/Non-invention);

B01F3/00 B01F3/08 B01J13/00 C10L1/32 C10L10/00 (Core/Invention)

International (IPC 1-7): B01F13/10 B01F3/00 B01F3/08 B01J13/00 C10L1/32

CPC: B01F3/088 C10L1/328

European: B01F3/08P C10L1/32D

US: 431/4 44/301 44/442

Family:

Publication number	Publication date	Application number	Application date
AU198820001 A1	19890202	AU19880020001	19880726
AU609501 B2	19910502	AU19880020001	19880726
BRPI8803726 A	19890214	BR1988PI03726	19880727
DE3879309 D1	19930422	DE19883879309	19880721
DE3879309 T2	19930722	DE19883879309T	19880721
EP0301766 A1	19890201	EP19880306723	19880721
EP0301766 B1	19930317	EP19880306723	19880721
GB8717836 A0	19870903	GB19870017836	19870728
JP1048894 A2	19890223	JP19880185679	19880727
JP64048894 A2	19890223	JP19880185679	19880727
NO174330 B	19940110	NO19880003283	19880722
NO883283 A	19890130	NO19880003283	19880722
NO883283 A0	19880722	NO19880003283	19880722
RU1793953 C	19930207	SU19884356252	19880727
SU1793953 A3	19930207	SU19884356252	19880727
US5000757 A	19910319	US19880224421	19880726

Priority:

GB19870017836 19870728

Probable Assignee: BRITISH PETROLEUM CO PLC

Assignee(s): (std): BRITISH PETROLEUM CO ; BRITISH PETROLEUM CO PLC

Assignee(s): BRITISH PETROLEUM CO PLC THE ; BRITISH PETROLEUM COMPANY P L C ; BRITISH PETROLEUM COMPANY PLC THE ; THE BRITISH PETROLEUM CO P L C LONDON GB ; THE BRITISH PETROLEUM COMPANY P L C ; THE BRITISH PETROLEUM COMPANY PLC

Inventor(s): (std): PATTOCK SIMON DZHON ; PUTTOCK SIMON J ; PUTTOCK SIMON JOHN ; PUTTOCK SIMON JOHN BRITISH ; PUTTOCK SIMON JOHN THE BRITISH ; AIAN

DANIERU SAMAABIRU ; SAIMON JIYON PATOTSUKU ; SOMERVILL YAN DENIEL ;
SOMERVILLE IAN D ; SOMERVILLE IAN D BRITISH P ; SOMERVILLE IAN D THE
BRITISH P ; SOMERVILLE IAN DANIEL

Inventor(s): YAN DENIEL SOMERVILL GB ; SOMERVILLE IAN D THE BRITISH PETR COMP P L
; SOMERVILLE IAN D THE BRITISH PETR COMP P L C ; SOMERVILLE IAN D THE
BRITISH PETR COMP P L MIDDLES ; SIMON DZHON PATTOK GB ; SIMON JOHN
PUTTOCK ; IAN DANIEL SOMERVILLE ; PUTTOCK SIMON JOHN THE BRITISH
PETR COMP ; PUTTOCK SIMON JOHN THE BRITISH PETR COMP P L C

Agent(s): E F WELLINGTON AND CO

Designated states: BE DE FR GB IT NL SE

Title: Diesel fuel additives and diesel fuels containing soluble platinum group metal compounds and use in diesel engines

Abstract: Source: US4892562A The invention provides diesel fuel additive compositions comprising solutions of diesel fuel-soluble platinum group metal compounds in solvents miscible in the fuel, the platinum group metal complex being present in an amount sufficient to supply from 0.01 to 1.0 parts per million of the platinum group metal when added to a predetermined amount of fuel. Fuel compositions and methods employing them are also provided.

Classifications:

International (IPC 8-9): C07F15/00 C10L1/14 C10L1/18 C10L1/30 C10L10/02

C10L3/00 (Advanced/Invention);

C10L1/16 C10L1/22 F02B3/06 (Advanced/Non-invention)

International (IPC 1-7): C10L1/30

CPC: C07F15/0086 C10L1/14 C10L1/1608 C10L1/1814 C10L1/1824 C10L1/1852 C10L1/1855

C10L1/1857 C10L1/231 C10L1/301 C10L1/305 C10L3/003 C10L10/02 F02B3/06

European: C07F15/00N7 C10L1/14 C10L1/18T C10L1/30A C10L1/30B C10L10/02 C10L3/00B M10L1/14 M10L1/16A M10L1/182B2 M10L1/185B M10L1/185B1 M10L1/185C M10L1/18T M10L1/23B M10L1/30A M10L1/30B R02B3/06

US: 44/324 44/325 44/326 44/333 44/358 44/361 44/367 987/10

Family:

Publication number	Publication date	Application number	Application date
US4892562 A	19900109	US19860897864	19860819

Priority:

US19840677954 19841204

US19850790738 19851024

US19850796428 19851108

US19860897864 19860819

Probable Assignee: CLEAN DIESEL TECHNOLOGIES INC

Assignee(s): (std): FUEL TECH INC

Assignee(s): PLATINUM PLUS INC ; FUEL TECH INC A CORP OF MA ; FUEL TECH INC A CORP OF MASSACHUSETTS ; PLATINUM PLUS INC 111 ROWAYTON AVENUE ROWAYTON CT ; CLEAN DIESEL TECHNOLOGIES INC ; CLEN DIESEL TECHNOLOGIES INC

Inventor(s): (std): BOWERS WAYNE E ; SPRAGUE BARRY N

Title: AQUEOUS FUEL FOR INTERNAL COMBUSTION ENGINE AND METHOD OF COMBUSTION

Abstract: Source: US5156114A An aqueous fuel for an internal combustion engine is provided. The fuel comprises water from about 20 percent to about 80 percent by volume of the total volume of said fuel, and a carbonaceous fuel selected from the class consisting of ethanol, methanol, gasoline, kerosene fuel, diesel fuel, carbon-containing gaseous or liquid fuel, or mixtures thereof. A method for combusting an aqueous fuel in an internal combustion engine is provided. The method produces approximately as much power as the same volume of gasoline. The method comprises introducing air and aqueous fuel into a fuel introduction system for the engine. The fuel comprises water from about 20 percent to about 80 percent by volume of the total volume of the fuel, and a carbonaceous fuel from ethanol, methanol, gasoline, kerosene fuel, diesel fuel, carbon-containing gaseous or liquid fuel, or mixtures thereof, and introducing and combusting said air/fuel mixture in a combustion chamber or chambers in the presence of a hydrogen producing catalyst to operate the engine.

Classifications:

International (IPC 8-9): C10L1/02 C10L1/32 F02B1/02 F02B3/06 F02B47/02 F02B51/02 F02D19/12 F02M25/02 F02M25/022 F02M25/025 F02M27/02 F02M31/02 F02M31/04

F02P9/00 (Advanced/Invention);

F02B3/06 (Advanced/Non-invention);

C10L1/00 C10L1/32 F02B1/00 F02B47/00 F02D19/00 F02M25/00 F02M27/00 F02M31/02

F02P9/00 (Core/Invention);

F02B3/00 (Core/Non-invention)

International (IPC 1-7): C10L C10L1/00 C10L1/02 C10L1/10 C10L1/12 C10L1/14 C10L1/18 C10L1/32 C10L3/00 F02B F02B1/02 F02B47/02 F02B51/02 F02D19/00 F02D19/12 F02M25/02 F02M25/022 F02M25/025 F02M27/02 F02M31/02 F02M31/04 F02P23/02 F02P9/00 F23D5/00 F23K5/02 F23N1/02

CPC: Y10S123/12 C10L1/023 C10L1/026 C10L1/328 F02P9/00 F02B1/02 F02B3/06 F02B47/02 F02M25/0227 F02M25/0228 F02M27/02 Y02T10/126 Y02T10/121

European: C10L1/02B C10L1/02D C10L1/32D F02B1/02 F02B47/02 F02M25/022E F02M27/02 F02P9/00 R02B3/06

US: 123/1.00A 123/143.00B 123/143B 123/1A 123/556 123/DIG.12

Family:

Publication number	Publication date	Application number	Application date
AT137529 E	19960515	AT19900121745T	19901113
AU199067302 A1	19910613	AU19900067302	19901105
AU199179779 A1	19920526	AU19910079779	19910517
AU199463375 A1	19940721	AU19940063375	19940526
AU654941 B2	19941201	AU19900067302	19901105
BRPI9007865 A	19920908	BR1990PI07865	19901105
CA2029654 AA	19910523	CA19902029654	19901109
CA2029654 C	19990223	CA19902029654	19901109
CN1051928 A	19910605	CN19901009356	19901122
CN1061463 A	19920527	CN19911003560	19910529
CN1098765 A	19950215	CN19941002349	19901122
CZ282364 B6	19970716	CS19900005490	19901107
CZ9005490 A3	19930714	CS19900005490	19901107
DE69026797 D1	19960605	DE19906026797	19901113
DE69026797 T2	19960905	DE19906026797T	19901113
DK0431357 T3	19960729	DK19900121745T	19901113
EG19428 A	19950629	EG19910000312	19910520
EP0431357 A1	19910612	EP19900121745	19901113
EP0431357 B1	19960501	EP19900121745	19901113
ES2088942 T3	19961001	ES19900121745T	19901113

FI922307 A	19920521	FI19920002307	19920521
FI922307 A0	19920521	FI19920002307	19920521
GR3020480 T3	19961031	GR19960401848T	19960709
IE62459 B	19950208	IE19910001726	19910521
IE911726 A1	19921104	IE19910001726	19910521
IL98263 A0	19920621	IL19910098263	19910524
JP3233630 B2	20011126	JP19900515711T	19901105
JP5502920 T2	19930520	JP19900515711T	19901105
KR0140975 B1	19980701	KR19920072313	19920522
MA22158 A1	19911231	MA19910022429	19910522
MX172598 B	19940103	MX19900023361	19901116
NO305289 B1	19990503	NO19920002007	19920521
NO922007 A	19920722	NO19920002007	19920521
NO922007 A0	19920521	NO19920002007	19920521
NZ250641 A	19950726	NZ19910250641	19910522
PL165835 B1	19950228	PL19900287705	19901109
PL287705 A1	19911021	PL19900287705	19901109
PT97742 A	19930730	PT19910097742	19910522
PT97742 B	19990331	PT19910097742	19910522
RU2085756 C1	19970727	SU19905052362	19901105
SG43320 A1	19971017	SG19960008303	19901113
SK280027 B6	19990712	SK19900005490	19901107
SK549090 A3	19990712	SK19900005490	19901107
US5156114 A	19921020	US19910695304	19910503
USRE35237 E	19960514	US19940326610	19941020
WO9107579 A1	19910530	WO1990US06395	19901105
WO9207922 A1	19920514	WO1991US03475	19910517
YU119691 A	19940120	YU19910001196	19910708
YU48376 B	19980710	YU19910001196	19910708
ZA9008921 A	19910925	ZA19900008921	19901107
ZA9103901 A	19920325	ZA19910003901	19910523

Priority:

US19890440224 19891122	WO1990EP06395 19901105	AU19900067302 19901105
US19910689988 19910423	WO1990US06395 19901105	CA19902029654 19901109
WO1991US03475 19910517	NZ19910238232 19910522	US19940326610 19941020
US19910695304 19910503		

Probable Assignee: TALISMAN CAPITAL TALON FUND LTD

Assignee(s): (std): GUNNERMAN RUDOLF W ; GUNNERMAN RUDOLF WILHELM ; GUNNERMAN RUDOLPH W ; RUDOLPH W GUNNERMAN ; RUDOLF W GUANNERMAN ; RUDOLF W GUNNERMAN ; RUDOLF V GUNNERMAN ; RUDOLF W GUNNEZMAN

Assignee(s): RUDOL'F V.GUNNERMAN[US] ; STAFFORD TOWNE LTD ; TALISMAN CAPITAL TALON FUND LTD ; CAPITAL STRATEGIES FUND LTD ; GUNNERMAN RUDOLF ; GUNNERMAN RUDOLPH W SACRAMENTO CALIF US

Inventor(s): (std): DEMANDEUR ; GUANNERMAN RUDOLF W ; GUNNERMAN R W ; GUNNERMAN RUDOLF ; GUNNERMAN RUDOLF W ; GUNNERMAN RUDOLF WILHELM ; GUNNERMAN RUDOLPH W ; RUDOLF VGUNNERMAN ; RUDOLF W GUANNERMAN ; RUDOLF W GUNNERMAN ; RUDOLPH W GUNNERMAN

Inventor(s): RUDOL'F V.GUNNERMAN[US] ; RUDOLF V GUNNERMAN ; GUNNERMAN RUDOLPH W SACRAMENTO CALIF US

Agent(s): FB RICE; OYEN WIGGS GREEN AND MUTALA LLP

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM DE DK ES FI FR GA GB GR HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO PL RO SD SE SN SU TD TG US

Title: APPARATUS FOR MAKING CONCENTRATED EMULSIONS

Abstract: An apparatus for continuously making a concentrated water-in-oil emulsion, such as one which can be effectively employed as an



additive to hydrocarbon fuels, comprises a circulating loop vessel (4) having an inlet (11) for the continuous phase, an inlet (12) for the discontinuous phase and a circulating pump (14), all arranged to produce a concentrated emulsion. An outlet (15) is provided for the continuous removal of the emulsion product. Once charged, the apparatus can make uniform and consistent emulsion product intermittently or continuously as desired. Additional inlets can be provided for additives or other components. The inlets (11, 12) employ metering pumps while the circulating pump (14) produces a large flow through the loop compared to the volume of product produced at the product outlet (15).

Classifications:

International (IPC 8-9): B01F3/08 B01F5/10 (Advanced/Invention);
B01F3/08 B01F5/00 (Core/Invention)

International (IPC 1-7): B01F5/04

CPC: B01F3/0807 B01F5/102 B01F2215/0088

European: B01F3/08C B01F5/10B L01F215/00A108

Family:

Publication number	Publication date	Application number	Application date
AU199191748 A1	19920817	AU19910091748	19911226
WO9211927 A1	19920723	WO1991US09530	19911226

Priority:

US19900634238 19901226 WO1991US09530 19911226

Probable Assignee: H2OIL CORP

Assignee(s): (std): H2OIL CORP

Inventor(s): (std): HICKS RICHARD H ; SONG BEN C

Inventor(s): BEN C SONG ; RICHARD H HICKS

Designated states: AT AU BE BR CA CH CS DE DK ES FR GB GR IT JP KR LU MC NL PL RO RU SE US

Title: Enhanced lubricity fuel oil emulsions

Abstract: Source: US5284492A An improved lubricity water and fuel oil emulsion is presented. The emulsion is used as fuel for an electric power generating turbine, and includes a lubricity additive selected from the group consisting of dimer acids, trimer acids, phosphate esters, sulfurized castor oil, and mixtures thereof. Also included is a method for improving the combustion efficiency of a turbine, using the inventive additives.

Classifications:

International (IPC 8-9): C10L1/32 (Advanced/Invention);

C10L1/32 (Core/Invention)

International (IPC 1-7): C10L1/18 C10L1/32

CPC: C10L1/328

European: C10L1/32D

US: 44/301 44/302

Family:

Publication number	Publication date	Application number	Application date
AU199227539 A1	19930503	AU19920027539	19920923
CA2120241 AA	19940329	CA19922120241	19920923
US5284492 A	19940208	US19920958567	19921008
WO9307238 A1	19930415	WO1992US08083	19920923
WO9409095 A1	19940428	WO1993US09605	19931007

Priority:

US19910770979 19911001 WO1992US08083 19920923 US19920958567 19921008

Probable Assignee: NALCO FUEL TECH

Assignee(s): (std): NALCO FUEL TECH

Assignee(s): WEGRZYN JOSEPH B ; DUBIN LEONARD

Inventor(s): (std): WEGRZYN JOSEPH B ; DUBIN LEONARD

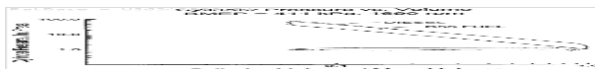
Inventor(s): JOSEPH B WEGRZYN ; LEONARD DUBIN

Agent(s): SMART AND BIGGAR

Designated states: AT AU BE CA CH DE DK ES FR GB GR IE IT KR LU MC NL PT SE

Title: Aqueous fuel for internal combustion engine and method of preparing

Abstract: Source: US6302929B An aqueous fuel having at least two phases for an internal combustion engine with 20-80 vol. percent water, carbonaceous fuel, 2 to less than 20 vol. percent alcohol, about 0.3 to 1 vol. percent of a nonionic emulsifier, and which may contain up to about 0.1 vol. percent of a fuel lubricity enhancer, and up to about 0.03 vol. percent of an additive to resist phase separation at elevated temperatures. The fuel has an external water phase and is substantially nonflammable outside the engine. Also disclosed is a method of producing the fuel which includes mixing the carbonaceous fuel and emulsifier together prior to mixing with water and the other components.



Classifications:

International (IPC 8-9): C10L1/00 C10L1/10 C10L1/32 C10L10/08 C10L10/18 (Advanced/Invention); C10L1/00 C10L1/02 C10L1/10 C10L10/08 (Advanced/Non-invention); C10L1/00 C10L1/10 C10L1/32 C10L10/00 C10L10/08 (Core/Invention)

International (IPC 1-7): C10L C10L1/00 C10L1/02 C10L1/10 C10L1/32

CPC: C10L1/328

European: C10L1/32D

US: 44/302 44/320

Family:

Publication number	Publication date	Application number	Application date
AT231907 E	20030215	AT19950915449T	19950329
AU199522324 A1	19951023	AU19950022324	19950329
AU687189 B2	19980219	AU19950022324	19950329
BG100888 A	19970731	BG19960100888	19961004
BG63466 B1	20020228	BG19960100888	19961004
BRPI9507273 A	19970923	BR1995PI07273	19950329
CA2187076 AA	19961003	CA19952187076	19950329
CA2187076 C	20030729	CA19952187076	19950329
CN1084377 C	20020508	CN19951092951	19950329
CN1147830 A	19970416	CN19951092951	19950329
CZ296211 B6	20060215	CZ19960002916	19950329
CZ9602916 A3	19970312	CZ19960002916	19950329
DE69529518 D1	20030306	DE19956029518	19950329
EP0754214 A1	19970122	EP19950915449	19950329
EP0754214 A4	19980128	EP19950915449	19950329
EP0754214 B1	20030129	EP19950915449	19950329
FI963957 A	19961203	FI19960003957	19961003
FI963957 A0	19961003	FI19960003957	19961003
HU217788 B	20000428	HU19960002719	19950329
HU76441 A2	19970828	HU19960002719	19950329
HU9602719 A0	19961128	HU19960002719	19950329
IL113176 A0	19950629	IL19950113176	19950329
IL113176 A1	19990714	IL19950113176	19950329
JP2968589 B2	19991025	JP19950525824	19950329
JP9511540 T2	19971118	JP19950525824T	19950329
KR100201204 B1	19990615	KR19960705638	19961004
KR19970702351 A	19970513	KR19960705638	19961004
MD1883 B2	20020331	MD19960000335	19950329
MX9604555 A1	19980228	MX19960004555	19950329

MY115345 A	20030531	MY19950000829	19950331
NO317238 B1	20040927	NO19960004163	19961002
NO964163 A	19961204	NO19960004163	19961002
NO964163 A0	19961002	NO19960004163	19961002
NZ283877 A	19970922	NZ19950283877	19950329
PL179945 B1	20001130	PL19950316690	19950329
PL316690 A1	19970203	PL19950316690	19950329
RO119312 B1	20040730	RO19960001926	19950329
RU2134715 C1	19990820	RU19960121786	19950329
RU96121786 A	19990120	RU19960121786	19961104
SK126296 A3	19970709	SK19960001262	19950329
SK284555 B6	20050602	SK19960001262	19950329
US6302929 BA	20011016	US19940222477	19940404
VN1793 A1	20010326	VN19960090331	19961104
WO9527021 A1	19951012	WO1995US03912	19950329
ZA9502753 A	19951221	ZA19950002753	19950404

Priority:

US19940222477 19940404 WO1995US03912 19950329

Probable Assignee: TALISMAN CAPITAL TALON FUND LTD

Assignee(s): (std): GUNNERMAN RUDOLF W ; GUNNERMAN RUDOLF WILHELM ; GUNNERMANN RUDOLF W ; GUNNERMAN ; RUDOL F V GUNNERMAN ; RUDOLFW GUNNERMAN

Assignee(s): TALISMAN CAPITAL TALON FUND LTD ; RUDOL'F V.GUNNERMAN ; RUDOLF WGUNNERMAN ; GUNNERMAN Rudolf ; CAPITAL STRATEGIES FUND LTD ; GANAAMAN RUDORUFU DABURYU ; RUDOLF W GUNNERMAN ; STAFFORD TOWNE LTD ; GUNNERMAN RUDOLPH W

Inventor(s): (std): GUNNERMAN RUDOLF W ; GUNNERMAN RUDOLPH W ; GUNNERMANN RUDOLF W ; RUDOL F V GUNNERMAN ; RUDOL F VGUNNERMAN ; RUDOLF W GUNNERMAN ; RUDOLFW GUNNERMAN

Inventor(s): GANAAMAN RUDORUFU DABURYU ; RUDOL'F V.GUNNERMAN

Agent(s): FB RICE; FETHERSTONHAUGH AND CO; REINHOLD COHN AND PARTNERS

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LI LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA UG US UZ VN

Title: THE REDUCTION OF NITROGEN OXIDES EMISSIONS FROM VEHICULAR DIESEL ENGINES

Abstract: The present invention relates to a process for reducing nitrogen oxides emissions from a diesel engine which comprises preparing

an emulsion (80) of water in diesel fuel which contains a catalytically effective amount of catalyst composition (26) and a lubricity additive and supplying said emulsion to a diesel engine for combusting therein, whereby combustion of the emulsion leads to a reduction in the nitrogen oxides emissions from the diesel engine when compared with combustion of diesel fuel alone.



Classifications:

International (IPC 8-9): C10L1/10 C10L1/32 C10L10/00 C10L10/02 F01N3/20

F02M27/02 (Advanced/Invention);

C10L1/12 C10L1/16 C10L1/18 C10L1/20 C10L1/22 C10L1/24 C10L1/26 C10L1/30

F02B3/06 (Advanced/Non-invention)

International (IPC 1-7): C10L1/10 C10L1/32 C10L10/00 F02M27/02

CPC: C10L1/10 C10L1/1208 C10L1/1233 C10L1/1241 C10L1/125 C10L1/1266 C10L1/1275

C10L1/1608 C10L1/1616 C10L1/1691 C10L1/1802 C10L1/1814 C10L1/1824 C10L1/1828

C10L1/1832 C10L1/1852 C10L1/1855 C10L1/1857 C10L1/188 C10L1/1881 C10L1/1883 C10L1/1886

C10L1/1888 C10L1/19 C10L1/191 C10L1/198 C10L1/1985 C10L1/201 C10L1/2222 C10L1/2225

C10L1/224 C10L1/23 C10L1/231 C10L1/232 C10L1/238 C10L1/2437 C10L1/2493 C10L1/2641

C10L1/2683 C10L1/301 C10L1/305 C10L1/306 C10L1/328 C10L10/02 C10L10/04 C10L10/08

F01N3/023 F01N3/206 F01N2430/04 F02B3/06

European: C10L1/10 C10L1/32D C10L10/02 C10L10/04 C10L10/08 F01N3/20D M10L1/10

M10L1/12A M10L1/12D M10L1/12D1 M10L1/12D2 M10L1/12E M10L1/12F M10L1/16A M10L1/16B

M10L1/16W M10L1/182B2 M10L1/182D M10L1/183B M10L1/185B M10L1/185B1 M10L1/185C

M10L1/188 M10L1/188B M10L1/188B2 M10L1/188F M10L1/188H M10L1/18F M10L1/18T M10L1/19

M10L1/198 M10L1/198F M10L1/19D M10L1/20A M10L1/222B M10L1/222B2 M10L1/224 M10L1/23

M10L1/232 M10L1/238 M10L1/23B M10L1/24C1 M10L1/24W M10L1/26B1 M10L1/26P3 M10L1/30A

M10L1/30B M10L1/30B1 R01N3/023 R01N430/04 R02B3/06

Family:

Publication number	Publication date	Application number	Application date
CA2191755 AA	19961129	CA19952191755	19950531
WO9533023 A1	19951207	WO1995US06813	19950531

Priority:

US19940251520 19940531 WO1995US06813 19950531

Probable Assignee: FUEL TECH NV

Assignee(s): (std): FUEL TECH NV ; PETER HOBLYN JEREMY D ; VALENTINE JAMES M

Assignee(s): PLATINUM PLUS INC ; CLEAN DIESEL TECHNOLOGIES INC ; FUEL TECH N V

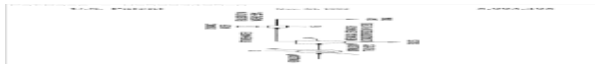
Inventor(s): (std): PETER HOBLYN JEREMY D ; VALENTINE JAMES M

Agent(s): PHENIX DONALD F

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG US UZ VN

Title: WATER IN VISCOUS HYDROCARBON EMULSION COMBUSTIBLE FUEL FOR DIESEL ENGINES AND PROCESS FOR MAKING SAME

Abstract: Source: US5725609A A combustibile fuel for diesel engines and a process for forming same in the form of a water in hydrocarbon emulsion wherein the mean water drop diameter is $\leq 4 \mu\text{m}$ with a maximum diameter of $\leq 10 \mu\text{m}$.



Classifications:

International (IPC 8-9): B01F17/42 B01F3/08 C10L1/04 C10L1/08 C10L1/32 C10L10/02 C10L10/18 F02B47/02 F02M25/025 (Advanced/Invention);

F02B3/06 (Advanced/Non-invention);

B01F17/42 B01F3/08 C10L1/00 C10L1/32 C10L10/00 F02B47/00 F02M25/00 (Core/Invention);

F02B3/00 (Core/Non-invention)

International (IPC 1-7): B01F17/42 B01F3/08 C10G31/08 C10L1/00 C10L1/04 C10L1/08 C10L1/10 C10L1/32 F02B47/02 F02D19/12 F02M25/025 F23K5/10 F23K5/12

CPC: B01F3/0811 B01F2215/0088 C10L1/328 C10L10/02 F02B3/06 F02B47/02 F02M25/0228 Y02T10/121

European: B01F3/08C1 C10L1/32D C10L10/02 F02B47/02 F02M25/022 F02M25/022E L01F215/00A108 R02B3/06

US: 123/25.00A 123/25A 252/312 431/4 44/301 44/302 516/30

Family:

Publication number	Publication date	Application number	Application date
BRPI9700893 A	19980825	BR1997PI00893	19970205
BRPI9900789 A	20000111	BR1999PI00789	19990223
CN1128857 C	20031126	CN19971000711	19970205
CN1137963 C	20040211	CN19991003141	19990223
CN1160745 A	19971001	CN19971000711	19970205
CN1233645 A	19991103	CN19991003141	19990223
DE19704874 A1	19970814	DE19971004874	19970210
DE19704874 B4	20041021	DE19971004874	19970210
DE69928847 D1	20060119	DE19996028847	19990220
DE69928847 T2	20060921	DE19996028847T	19990220
DK0937768 T3	20060418	DK19990103347T	19990220
DK10897 A	19970810	DK19970000108	19970130
DK175936 B1	20050725	DK19970000108	19970130
EP0937768 A2	19990825	EP19990103347	19990220
EP0937768 A3	20000329	EP19990103347	19990220
EP0937768 B1	20051214	EP19990103347	19990220
FI107466 B	20010815	FI19970000481	19970205
FI970481 A	19970810	FI19970000481	19970205
FI970481 A0	19970205	FI19970000481	19970205
GT1997000020 A	19980801	GT19970000020	19970207
GT1999000023 A	20000816	GT19990000023	19990223
GT1999000023 U	19991021	GT19990000023U	19990223
HN1997000016 A	19970618	HN19970000016	19970225
JP11279573 A2	19991012	JP19990045388	19990223
JP2974242 B2	19991110	JP19970027029	19970210
JP3098228 B2	20001016	JP19990045388	19990223
JP9310080 A2	19971202	JP19970027029	19970210
PA8426701 A1	19991227	PA19010084267	19970301

SV1997000006 A	19980130	SV19970000006	19970205
US5725609 A	19980310	US19960599305	19960209
US5976200 A	19991102	US19970967665	19971110
US5993495 A	19991130	US19980027695	19980223

Priority:

US19960599305 19960209 US19970967665 19971110 US19980027695 19980223

Probable Assignee: INTEVEP SA

Assignee(s): (std): INTEVEP SA

Assignee(s): INTEVEP SAAPARTADO ; INTEBETSUPU SA ; INTEVEP APARTADO SA ; INTEVEP S A ; INTEVEP S A CARACAS ; INTEVEP S A CARACAS VE

Inventor(s): (std): COLMENARES TULIO ; GUSUTABO EE NUNESU ; HERCILIO RIVAS ; HERUSHIRIO RIBASU ; MANUERU CHIRINOSU ; MARCANO LUIS R ; NCHEZ GERARDO A S ; NEZ GUSTAVO N ; NUNEZ GUSTAVO ; NUNEZ GUSTAVO A ; SANCHEZ GERARDO A ; SAUD RAUL ; TSURIO KORUMENARESU ; RIVAS HERCILIO ; CHIRINOS MANUEL

Inventor(s): RIVAS HERCILIO LOS PARQUES VE ; TULIO COLMENARES ; RAUL SAUD ; LUIS R MARCANO ; MANUEL CHIRINOS ; COLMENARES TULIO SANTA MONICA VE ; GERARDO A SANCHEZ ; GUSTAVO A NUNEZ ; GUSTAVO NUNEZ ; 1 GERARDO A SANCHEZ ; 3 GUSTAVO NUNEZ ; 4 RAUL SAUD ; CHIRINOS MANUEL LOS TEQUES VE

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: Emulsified fuel and one method for preparing same

Abstract: Source: US6068670A PCT No.

PCT/FR97/00475 Sec. 371 Date Nov. 23, 1998

Sec. 102(e) Date Nov. 23, 1998 PCT Filed Mar.

17, 1997 PCT Pub. No. WO97/34969 PCT Pub. Date Sep. 23, 1997A novel fuel which is an emulsion of water in at least one hydrocarbon, and which contains an emulsifying system containing at least one sorbitol ester, at least one fatty acid ester and at least one polyalkoxylated alkylphenol. The system has an overall HLB of between 6 and 8, and the emulsion contains droplets of aqueous disperse phase which are less than or equal to 3 μ m in size.

Classifications:

International (IPC 8-9): C10L1/32 (Advanced/Invention);

C10L1/32 (Advanced/Non-invention);

C10L1/32 (Core/Invention)

International (IPC 1-7): B01F17/34 B01F17/42 B01F17/52 C10L C10L1/32

CPC: C10L1/328

European: C10L1/32D

US: 366/176.1 44/301

Family:

Publication number	Publication date	Application number	Application date
AT184639 E	19991015	AT19970915509T	19970317
AU199722963 A1	19971010	AU19970022963	19970317
AU711348 B2	19991014	AU19970022963	19970317
BRPI9708074 A	20000104	BR1997PI08074	19970317
CA2248631 AA	19980911	CA19972248631	19970317
CA2248631 C	20050726	CA19972248631	19970317
CN1089364 C	20020821	CN19971093961	19970317
CN1216571 A	19990512	CN19971093961	19970317
CZ294200 B6	20041013	CZ19980002914	19970317
CZ9802914 A3	19990317	CZ19980002914	19970317
DE69700529 D1	19991021	DE19976000529	19970317
DE69700529 T2	20000323	DE19976000529T	19970317
DK0888421 T3	20000403	DK19970915509T	19970317
EP0888421 A1	19990107	EP19970915509	19970317
EP0888421 B1	19990915	EP19970915509	19970317
ES2140968 T3	20000301	ES19970915509T	19970317
FR2746106 A1	19970919	FR19960003547	19960315
FR2746106 B1	19980828	FR19960003547	19960315
GR3032123 T3	20000427	GR19990403203T	19991214
HK1019614 A1	20030417	HK19990104745	19991025
JP2000502743 T2	20000307	JP19970533202T	19970317
JP3236024 B2	20011204	JP19970533202	19970317
KR100416119 B1	20040507	KR19980707259	19980914
KR20000064594 A	20001106	KR19980707259	19980914
NO317504 B1	20041108	NO19980004254	19980914
NO984254 A	19981116	NO19980004254	19980914
NO984254 A0	19980914	NO19980004254	19980914
NZ331828 A	20000228	NZ19970331828	19970317
PL188448 B1	20050228	PL19970328827	19970317
PL328827 A1	19990215	PL19970328827	19970317

RU2167920 C2	20010527	RU19980118775	19970317
RU98118775 A	20001020	RU19980118775	19981015
TR9801826 T2	19981221	TR19970001826T	19970317
US6068670 A	20000530	US19980147031	19981123
VN3635 A1	20030825	VN19980000835	19980929
WO9734969 A1	19970925	WO1997FR00475	19970317

Priority:

FR19960003547 19960315 WO1997FR00475 19970317

Probable Assignee: ELF ANTAR FRANCE SOCIETE ANONYME

Assignee(s): (std): BROCHETTE PASCAL ; ECOTEC FRANCE ; ECOTECH FRANCE ; ELF ANTAR FRANCE ; ELF ANTAR FRANCE S A ; ELF ANTAR FRANCE SA ; SOS ETE ELF ANTAR FRANS ; HAUPAIS ALAIN ; SCHULZ PHILIPPE

Assignee(s): SOS'ETE ELF ANTAR FRANS ; ELF ANTAR FRANCE SOCIETE ANONYME ; ELF ANTAR FRANCE COURBEVOIE ; ELFAANTARAFRANCE ; ELF ANTAR FRANCE LA DEFENSE ; ELF ANTAR FRANCE SOC ANONYME

Inventor(s): (std): A HAUPAIS ; A WU PAISI ; ALAIN HAUPAIS ; BROCHETTE P ; BROCHETTE PASCAL ; BROSHETT PASKAL ; HAUPAIS A ; HAUPAIS ALAIN ; OPE ALEN ; P BROCHETTE ; P SCHULZ ; P SHULTZ ; PAISI A WU ; PASCAL BROCHETTE ; PHILIPPE SCHULZ ; SCHULZ P ; SCHULZ PHILIPPE ; SCHULZ PHILLIPPE ; SHUL TS FILIPP ; SHULTZ P

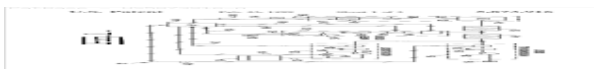
Inventor(s): SHUL'TS FILIPP ; PHILLIPPE SCHULZ ; BROSHETT PASKAL'

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; ROBIC

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GH GN GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU

Title: Fuel emulsion blending system

Abstract: Source: US5873916A A fuel emulsion blending system and method for operating the same is provided. The disclosed embodiments of



the fuel emulsion blending system includes a plurality of fluid circuits, including a hydrocarbon circuit, a fuel emulsion additive circuit, a water circuit and an optional alcohol/methanol circuit. Each of the inlet circuits are adapted for receiving the identified ingredient from a suitable source which optionally may be included as part of the blending system. The disclosed blending system further includes a first blending station adapted to mix the hydrocarbon fuel and fuel emulsion additives and a second blending station adapted to mix the hydrocarbon fuel and additive mixture received from the first blending station together with the water received from the source of water. The disclosed blending system further includes an emulsification station downstream of the blending stations which is adapted to emulsify the mixture of hydrocarbon fuel, additives and water to yield a stable fuel emulsion.

Classifications:

International (IPC 8-9): B01F13/00 B01F13/10 B01F3/08 C10L1/00 C10L1/32 F23K5/10 (Advanced/Invention);

B01F13/00 B01F13/10 (Advanced/Non-invention);

B01F3/08 C10L1/32 F23K5/02 (Core/Invention)

International (IPC 1-7): B01F3/08 C10L1/00 C10L1/32

CPC: B01F3/0807 B01F3/088 B01F13/0035 B01F13/10 C10L1/32 F23K5/10

European: B01F3/08C B01F3/08P C10L1/32 F23K5/10 L01F13/00K4 L01F13/10

US: 123/25R 44/301 443/10

Family:

Publication number	Publication date	Application number	Application date
AT280819 E	20041115	AT19990905761T	19990205
AT340839 E	20061015	AT19990959027T	19991117
AU199925850 A1	19990830	AU19990025850	19990205
AU200016283 A1	20000619	AU20000016283	19991117
AU200016283 A5	20000619	AU20000016283	19991117
AU747185 B2	20020509	AU19990025850	19990205
BRPI9908103 A	20010904	BR1999PI08103	19990205
BRPI9908103 B1	20100921	BR1999PI08103	19990205
CA2321045 AA	20000816	CA19992321045	19990205
CA2321045 C	20091208	CA19992321045	19990205
DE69921457 D1	20041202	DE19996021457	19990205
DE69921457 T2	20051013	DE19996021457T	19990205
DE69933398 D1	20061109	DE19996033398	19991117
DK1058719 T3	20050314	DK19990905761T	19990205
EP1058719 A1	20001213	EP19990905761	19990205
EP1058719 B1	20041027	EP19990905761	19990205
EP1307530 A2	20030507	EP19990959027	19991117
EP1307530 B1	20060927	EP19990959027	19991117
JP2002503758 T2	20020205	JP20000531523T	19990205
JP4491133 B2	20100630	JP20000531523	19990205
US5873916 A	19990223	US19980024916	19980217
US6447556 BA	20020910	US19980201597	19981130
WO0032721 A2	20000608	WO1999US27308	19991117
WO0032721 A3	20021003	WO1999US27308	19991117
WO9941339 A1	19990819	WO1999US02469	19990205

Priority:

US19980024916 19980217 US19980201597 19981130 WO1999US02469 19990205
WO1999US27308 19991117

Probable Assignee: TALISMAN CAPITAL TALON FUND LTD

Assignee(s): (std): CATERPILLAR INC ; CLEAN FUEL TECHNOLOGY INC ; CLEAN FUELS
TECHNOLOGY INC

Assignee(s): JAKUSH ED ; SCHEUERMANN TED W ; CORTES CARLOS H ; COLEMAN GERALD
N ; TALISMAN CAPITAL TALON FUND LTD ; STAFFORD TOWNE LTD ; CLEAN
FUEL TECHNOLOGY INC A DELAWARE CORP ; CEMENSKA RICHARD A ; CAPITAL
STRATEGIES GLOBAL FUND LP

Inventor(s): (std): CEMENSKA A ; CEMENSKA RICHARD A ; COLEMAN GERALD N ; COLEMAN N ;
CORTES CARLOS H ; CORTES H ; JAKUSH ED ; NIKOLOV ALEX ; SCHEUERMANN
TED W ; SCHEUERMANN W

Inventor(s): TED W SCHEUERMANN ; RICHARD A CEMENSKA ; ALEX NIKOLOV ; CARLOS H
CORTES ; ED JAKUSH ; GERALD N COLEMAN

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT
ATTORNEYS; SMART AND BIGGAR

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE
DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE
KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL
NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ
VN YU ZW

Title: METHOD FOR PREPARING AN EMULSIFIED FUEL AND IMPLEMENTING DEVICE

Abstract: Source: US6589301B A process and apparatus for industrial-scale preparation of an emulsified fuel including a water phase in a



continuous organic phase which contains less than 20 percent by volume of water, and at least one additive necessary for forming the emulsified fuel. The fuel is formed by mixing and homogenizing the organic phase and the additives, forming a volume V , inside an homogenization tank with internal circulation rate Q_c , such that Q_c/V greater than or equal to 100 h^{-1} , circulating the homogenized fluid in a branch loop emerging from the tank at a rate Q_{circ} , and through at least one emulsifying system located on said loop, at a rate such that $0 \text{ h} < V/Q_{\text{circ}} \leq 2 \text{ h}$, feeding the aqueous phase into the branch loop upstream of the emulsifying system, and maintaining the homogenization in the tank and the circulation of the liquid in the branch loop until the emulsion acquires a desired characteristic of storage stability.

Classifications:

International (IPC 8-9): B01F3/08 B01F5/10 B01F5/12 C10L1/32 G01R1/22 G01R1/38 G01R15/00 G01R15/18 (Advanced/Invention);

B01F3/08 C10L1/32 G01R1/22 (Advanced/Non-invention);

B01F3/08 B01F5/00 C10L1/32 G01R1/00 G01R15/00 G01R15/14 (Core/Invention)

International (IPC 1-7): B01F3/08 B01F5/10 B01F5/12 C10L1/32

CPC: C10L1/328 B01F5/106

European: B01F5/10F C10L1/32D

US: 366/176.1 44/301 44/302 44/639

Family:

Publication number	Publication date	Application number	Application date
AT269892 E	20040715	AT19990958271T	19991208
AU200015675 A1	20000626	AU20000015675	19991208
AU200015675 A5	20000626	AU20000015675	19991208
AU761001 B2	20030529	AU20000015675	19991208
BRPI9907726 A	20001017	BR1999PI07726	19991208
CA2320342 AA	20000615	CA19992320342	19991208
CA2320342 C	20090203	CA19992320342	19991208
CN1224680 C	20051026	CN19998002780	19991208
CN1290292 A	20010404	CN19998002780	19991208
DE69918269 D1	20040729	DE19996018269	19991208
DE69918269 T2	20050804	DE19996018269T	19991208
DK1051464 T3	20041101	DK19990958271T	19991208
EP1051464 A1	20001115	EP19990958271	19991208
EP1051464 B1	20040623	EP19990958271	19991208
ES2224721 T3	20050301	ES19990958271T	19991208
FR2786780 A1	20000609	FR19980015625	19981208
FR2786780 B1	20010302	FR19980015625	19981208
HU0103523 AB	20020128	HU20010003523	19991208
HU0103523 AC	20020429	HU20010003523	19991208
JP2002531685 T2	20020924	JP20000586854T	19991208
KR100632753 B1	20061011	KR20007008623	20000807
KR20010040739 A	20010515	KR20007008623	20000807
MXPA00007747 A1	20021023	MX2000PA07747	19991208
PL190169 B1	20051130	PL19990343118	19991208
PL343118 A1	20010730	PL19990343118	19991208
PT1051464 T	20041130	PT19990958271T	19991208

RU2000120953 A	20020710	RU20000120953	19991208
RU2227155 C2	20040420	RU20000120953	19991208
TR200002295 T1	20010321	TR20000002295T	19991208
UA72201 C2	20001115	UA20000804672	19991208
US6589301 BA	20030708	US20010600171	20010305
WO0034419 A1	20000615	WO1999FR03055	19991208

Priority:

FR19980015625 19981208 WO1999FR03055 19991208 KR20007008623 20000807
EP19990958271 19991208

Probable Assignee: ELF ANTAR FRANCE

Assignee(s): (std): EHL F ANTAR FRANS ; ELF ANTAR FRANCE ; ELF ANTAR FRANCE S A ;
PRUDHOMME JEAN BERNARD ; MAGNIN CESAR ; SCHULZ PHILIPPE

Assignee(s): ELF ANTER FRANCE ; ELF ANTAR FRANCE SA ; ELF ANTAR FRANCE
COURBEVOIE ; EHL'F ANTAR FRANS

Inventor(s): (std): MAGNIN C ; MAGNIN CESAR ; MAN IN SEZAR ; PRUDHOMME J B ; PRUDHOMME
JEAN BERNARD ; SCHULZ P ; SCHULZ PHILIPPE ; SHUL TS FILIPP ; PRJUDOMM
ZHAN BERNAR

Inventor(s): PRJUDOMM ZHAN-BERNAR ; SHUL'TS FILIPP ; MAN'IN SEZAR ; P SCHULZ ;
PHILIPPE SCHULZ ; C MAGNIN ; CESAR MAGNIN ; J B PRUDHOMME ; JEAN
BERNARD PRUDHOMME

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; ROBIC

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY
CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN
IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR
MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR
TT TZ UA UG US UZ VN YU ZA ZW

Title: PRODUCTION METHOD FOR EMULSION FUEL AND APPARATUS THEREFOR

Abstract: Source: JP2002294260A PROBLEM TO BE SOLVED: To provide a production method whereby a high-quality emulsion fuel can be produced without fail; and an apparatus therefor. SOLUTION: A mixing tank (1) for mixing a fuel, water, and an additive is connected to an oil storage tank (4) for storing an emulsion fuel by a liquid transport circuit (10). A liquid mixture pump (11), an emulsifying apparatus (12), and a liquid transport circuit open/close valve (13) are installed in this order in series on the liquid transport circuit (10). A circulation circuit (14) for connecting a point between the emulsifying apparatus (12) and the liquid transport circuit open/close valve (13) of the liquid transport circuit (10) to the mixing tank (1) is installed, and a circulation circuit open/close valve (15) is arranged on the circulation circuit (14). When the emulsion fuel is sent from the mixing tank (1) to the oil storage tank (4), the circulation circuit open/close valve (15) is closed and the liquid transport circuit open/close valve is opened to send the emulsion fuel from the mixing tank (1) to the oil storage tank (4) through the emulsifying apparatus (12).

Classifications:
International (IPC 8-9): C10L1/32 F23K5/12 (Advanced/Invention);
C10L1/32 F23K5/02 (Core/Invention)
International (IPC 1-7): C10L1/32 F23K5/12

Family:

Publication number	Publication date	Application number	Application date
JP2002294260 A2	20021009	JP20010094264	20010328
JP4796703 B2	20111019	JP20010094264	20010328

Priority:
JP20010094264 20010328

Probable Assignee: KOMATSU MFG CO LTD
Assignee(s): (std): KOMATSU MFG CO LTD
Assignee(s): KOMATSU LTD
Inventor(s): (std): NISHIDA AKIRA

Title: Method of converting heavy oil residuum to a useful fuel

Abstract: Source: US2002157304A A method for enabling the use of heavy oil residuum by conversion to a useful product. The method, in



one embodiment, involves the use of a heavy oil residuum which is substantially non flowable. The viscosity of the residuum is reduced and subsequently mixed with water such that the mixing is high shear mixing. This results in the formation of an emulsion of predispersed residuum in an aqueous matrix. The emulsion is formed such that the aqueous matrix is in a size distribution suitable for use as a combustible fuel.

Classifications:

International (IPC 8-9): B01F3/10 C10L1/32 (Advanced/Invention);
C10L1/32 (Advanced/Non-invention)

International (IPC 1-7): B01F3/10 C10G31/06 C10G31/08 C10L1/00 C10L1/32 C10L9/00

CPC: C10L1/326 C10L1/328

European: C10L1/32C C10L1/32D

US: 208/22 208/29 44/301 44/301P 516/20 516/38

Family:

Publication number	Publication date	Application number	Application date
AR042930 AA	20050706	AR2004P100226	20040126
AU2004200294 AA	20040909	AU20040200294	20040128
AU2004200294 BB	20090212	AU20040200294	20040128
BRPI0400661 A	20050104	BR2004PI00661	20040220
CA2381326 AA	20021027	CA20022381326	20020409
CA2381326 C	20031125	CA20022381326	20020409
EA008432 B1	20070629	EA20040000199	20040218
EP1449908 A1	20040825	EP20030026993	20031126
KR101124737 B1	20120326	KR20030088645	20031208
KR20040075689 A	20040830	KR20030088645	20031208
MXPA04001633 A1	20050425	MX2004PA01633	20040220
NZ530920 A	20040924	NZ20040530920	20040202
SG107674 A1	20041229	SG20030007014	20031128
US2002157304 AA	20021031	US20010842839	20010427
US2003131526 AA	20030717	US20030369511	20030221
US6530965 BB	20030311	US20010842839	20010427
US7279017 BB	20071009	US20030369511	20030221

Priority:

US20010842839 20010427 CA20022381326 20020409 US20030369511 20030221

Probable Assignee: WORLEYPARSONS CANADA SERVICES LTD

Assignee(s): (std): COLT ENGINEERING CORP ; COLT ENGINEERING CORP ; WARCHOL EDWARD J

Assignee(s): WORLEYPARSONS CANADA SERVICES LTD ; WARCHOL EDWARD

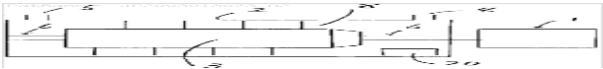
Inventor(s): (std): EDWARD WARCHOL ; KRESNYAK STEVE ; STEVE KRESNYAK ; WARCHOL EDWARD ; WARCHOL EDWARD J

Agent(s): ALLENS ARTHUR ROBINSON PATENT AND TRADE MARKS ATTORNEYS; ALLENS PATENT AND TRADE MARK ATTORNEYS; BLAKE CASSELS AND GRAYDON LLP; OGILVY RENAULT LLP; PAUL

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

Title: APPARATUS FOR PRODUCING FUEL OIL AND METHOD FOR PRODUCING FUEL OIL

Abstract: Source: JP2003013073A PROBLEM TO BE SOLVED: To treat waste edible oil, waste mineral oil or a mixture thereof as main raw materials and reproduce these oils as reusable fuel oil. SOLUTION: In this apparatus for producing fuel oil, a rotator 3 is built in a cylindrical body 2 and connected to a motor 1 and many linear projections 8 are spirally attached to the rotator, and a ratio (D/L) of an outside diameter (D) of the linear projection of the rotator 3 to a length (L) of a portion in which these linear projections are fixed is 0.5-0.8. In this method for producing the fuel oil, a raw material oil is continuously fed from a raw material feed port of the cylindrical body 2 and the rotator 3 is rotated at a high speed by the motor 1 to which the rotator is connected. As a result, cavitation is generated in the raw material oil in the cylindrical body.



Classifications:
International (IPC 8-9): B01F15/00 B01F3/08 B01F7/02 C10G31/00 C10L1/00 (Advanced/Invention); B01F15/00 B01F3/08 B01F7/02 C10G31/00 C10L1/00 (Core/Invention)
International (IPC 1-7): B01F15/00 B01F3/08 B01F7/02 C10G31/00 C10L1/00

Family:

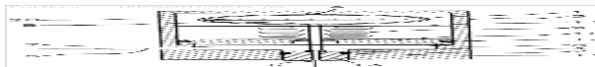
Publication number	Publication date	Application number	Application date
JP2003013073 A2	20030115	JP20010197226	20010628

Priority:
JP20010197226 20010628

Probable Assignee: ARAKAWA TAKESHI
Assignee(s): (std): ARAKAWA TAKESHI
Inventor(s): (std): ARAKAWA TAKESHI

Title: PIEZOELECTRIC VALVE

Abstract: Source: US2003159735A The valve comprises a mobile needle having a movement in the valve body which is controlled by an



amplified piezoelectric actuator. A bellows, surrounding an intermediate zone of the needle, is integral at a first end with the valve body and at a second end with the needle so as to isolate the actuator from the pressure chamber. At least one flexible guide blade of the needle is fixed on the one hand to the valve body and on the other hand to the needle. This flexible guiding enables any part sliding with respect to another part, liable to generate wear or contaminating particles, to be avoided, except for the seat and needle.

Classifications:

International (IPC 8-9): F16K31/00 F16K31/126 F16K37/00 F16K41/10 (Advanced/Invention); F16K31/00 F16K31/126 F16K37/00 F16K41/00 (Core/Invention)

International (IPC 1-7): F15B13/02 F16K31/02 F16K37/00 F16K41/10

CPC: Y10T137/8242 F16K31/004 F16K31/126 F16K41/10

European: F16K31/00E F16K31/126 F16K41/10

US: 137/554 251/129.06 251/335.3

Family:

Publication number	Publication date	Application number	Application date
DE10308294 A1	20030904	DE20031008294	20030226
FR2836536 A1	20030829	FR20020002425	20020226
FR2836536 B1	20040514	FR20020002425	20020226
US2003159735 AA	20030828	US20030369611	20030221
US6994110 BB	20060207	US20030369611	20030221

Priority:

FR20020002425 20020226

Probable Assignee: CEDRAT TECHNOLOGIES

Assignee(s): (std): CEDRAT TECHNOLOGIES ; CEDRAT TECHNOLOGIES MEYLAN

Inventor(s): (std): BARILLOT FRANCOIS ; LE LETTY RONAN ; PATIENT GILLES

Agent(s): OLIFF AND BERRIDGE PLC

Title: APPARATUS FOR PRODUCING WATER-IN-OIL EMULSIFIED FUEL AND SUPPLYING THE SAME

Abstract: Source: US2006143978A The present invention relates to an apparatus for producing and supplying water-in-oil emulsified fuel that



supplies to a boiler water-in-oil emulsified fuel, which is emulsified by mixing an emulsifier and water in crude oil such as bunker C oil or bunker A oil. The apparatus for producing and supplying water-in-oil emulsified fuel includes an additive storage tank for storing an emulsifier; an emulsion tank for storing water-in-oil emulsified; a raw material supplier for supplying at a predetermined ratio and according to predetermined values B-C oil, an emulsifier, and water, which become the raw materials for water-in-oil emulsified fuel; a first mixing section for consecutively and uniformly mixing the supplied raw materials; and a second mixing section for mixing the primarily mixed raw material oil with pre-emulsified fuel to perform emulsion. The second mixing section is realized through a circulation system that includes an emulsion tank, a mixer pump, and a double mixer. Following the supply of a predetermined amount of the raw materials, emulsified fuel mixed in the circulation system is continuously circulated even if raw material supply is stopped such that emulsified fuel that is always in a uniform state is supplied while maintaining a predetermined ratio, a predetermined moisture particle state, and a predetermined temperature.

Classifications:

International (IPC 8-9): B01F13/10 B01F3/08 B01F5/04 B01F5/06 B01F5/10 C10L1/32 C10L5/00 F23D11/16 F23K5/12 (Advanced/Invention); C10L5/00 (Core/Invention)

International (IPC 1-7): C10L1/32

CPC: B01F3/0807 B01F3/0853 B01F3/0861 B01F3/088 B01F5/0413 B01F5/043 B01F5/0615 B01F5/0646 B01F5/0655 B01F5/102 B01F13/1027 B01F13/103 C10L1/328

European: B01F13/10C2 B01F13/10C2B B01F3/08C B01F3/08D B01F3/08F B01F3/08P B01F5/04C12 B01F5/04C12S6 B01F5/06B3B6 B01F5/06B3F B01F5/06B3F16 B01F5/10B C10L1/32D

US: 44/629 44/629S 44/639 44/639P

Family:

Publication number	Publication date	Application number	Application date
AU2002349561 AA	20040504	AU20020349561	20021016
CN1293937 C	20070110	CN20028029886	20021016
CN1694946 A	20051109	CN20028029886	20021016
JP2006503254 T2	20060126	JP20040545004T	20021016
JP4084356 B2	20080430	JP20040545004T	20021016
US2006143978 AA	20060706	US20020531673	20021016
WO04035716 A1	20040429	WO2002KR01935	20021016

Priority:

WO2002KR01935 20021016

Probable Assignee: PARK GIL WON

Assignee(s): (std): HWANG SUK HA ; PARK GIL WON

Inventor(s): (std): HWANG SUK HA ; SUK HA HWANG

Agent(s): FULBRIGHT AND JAWORSKI LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: ENVIRONMENTAL ADAPTATION TYPE EMULSION FUEL AND ITS PRODUCTION METHOD AND PRODUCTION INSTALLATION

Abstract: Source: JP2006028215A PROBLEM TO BE SOLVED: To provide an environmental adaptation type emulsion fuel which can be treated and used similarly as an ordinary fuel oil, and holds a highly good emulsion state over a long period. SOLUTION: This environmental adaptation type emulsion fuel is obtained by stirring and mixing a mixture liquid comprising greater than or equal to 50 vol. percent of a fuel oil and less than or equal to 50 vol. percent of an emulsifier aqueous solution, while giving ultrasonic waves, and an environmental adaptation type emulsion fuel production installation comprises a mixing container 3 equipped with an ultrasonic wave-generating means 1 and a stirring means 2, and a water tank 4, a fuel oil tank 5, an emulsifier tank 6 and an environmental adaptation type emulsion fuel tank 7 which are connected to the mixing container 3.

Classifications:

International (IPC 8-9): C10L1/32 (Advanced/Invention);
C10L1/32 (Core/Invention)

Family:

Publication number	Publication date	Application number	Application date
JP2006028215 A2	20060202	JP20040204504	20040712

Priority:

JP20040204504 20040712

Probable Assignee:

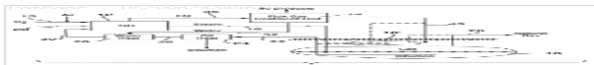
AIT KK

Assignee(s): (std):

AIT KK ; SUZUKI KENJI

Inventor(s): (std):

SUZUKI KENJI

Title: FLUE GAS INJECTION FOR HEAVY OIL RECOVERY**Abstract:** Source: US2006243448A A variety of methods for thermal recovery of natural gas and bitumen from a formation containing the latter.

In general, the methods incorporate a series of existing, but previously uncombined technologies. A modified flue gas from the steam generators conventionally used in a SAGD recovery operation is injected into the formation to enhance recovery with the produced fluids, natural gas, bitumen, inter alia are further processed. The injection of the flue gas conveniently is disposed of and further acts to repressurize the formation which otherwise becomes depressurized when depleted of natural gas. Accordingly, environmental and economic advantages are realized with the methodology.

Classifications:**International (IPC 8-9):** E21B43/18 E21B43/24 E21B43/34 (Advanced/Invention); E21B43/16 (Core/Invention)**CPC:** E21B43/168 E21B43/2406 Y02C10/14**European:** Y02C10/14**US:** 166/266 166/267 166/268 166/268S 166/272.1 166/272.100S 166/272.3 166/272.300S 166/272.7 166/303 166/305.1 166/305.100S**Family:**

Publication number	Publication date	Application number	Application date
US2006243448 AA	20061102	US20050116292	20050428
US7341102 BB	20080311	US20050116292	20050428

Priority:

US20050116292 20050428

Probable Assignee: BUNIO GARY**Assignee(s):** (std): BUNIO GARY ; COLT ENGINEERING CORP ; KRESNYAK STEVE ; PARAMOUNT RESOURCES LTD ; DIAMOND QC TECHNOLOGIES INC**Assignee(s):** PARAMOUNT RESOURCES**Inventor(s):** (std): BUNIO GARY ; KRESNYAK STEVE**Agent(s):** OGILVY RENAULT LLP; SHARPE PAUL S; PAUL S

Title: ANTAGONIST ANTI-CD40 ANTIBODY PHARMACEUTICAL COMPOSITIONS

Abstract: Source: US2009304706A Stable liquid pharmaceutical compositions comprising an antagonist anti-CD40 antibody as a

therapeutically or prophylactically active component and methods useful in their preparation are provided. These compositions comprise the antagonist anti-CD40 antibody, a buffering agent to maintain the pH of the composition between about pH 5.0 and about pH 7.0, and an amount of arginine-HCl sufficient to render the liquid composition near isotonic. The stable liquid antagonist anti-CD40 antibody-containing pharmaceutical compositions of the invention find use in methods for treating proliferative diseases and diseases having an autoimmune and/or inflammatory component.

Classifications:

International (IPC 8-9): A61K A61K35/00 A61K35/02 A61K39/395 A61K47/06 A61K47/12 A61K47/18 A61K47/20 A61K47/34 A61K9/08 A61P1/04 A61P1/16 A61P11/00 A61P11/06 A61P17/00 A61P17/04 A61P17/06 A61P19/02 A61P19/06 A61P21/04 A61P25/00 A61P25/28 A61P29/00 A61P3/10 A61P35/00 A61P35/02 A61P37/00 A61P37/02 A61P37/04 A61P37/06 A61P37/08 A61P43/00 A61P5/14 A61P7/00 A61P7/02 A61P7/06 A61P9/00 A61P9/10 C07K16/18 C07K16/28 C10G3/00 C10L1/02 C10L1/08 C10L1/10 C10L1/12 C10L1/18 C10L1/182 C10L1/22 C10L1/32 C10L10/12 C12P21/08 (Advanced/Invention); C07K16/28 C10G3/00 C10L1/08 C10L1/32 C10L10/12 C12P21/08 (Advanced/Non-invention); A61K35/00 A61K35/02 A61K39/395 A61K47/12 A61K47/16 A61K47/20 A61K47/34 A61K9/08 A61P1/00 A61P11/00 A61P17/00 A61P19/00 A61P21/00 A61P25/00 A61P29/00 A61P3/00 A61P35/00 A61P37/00 A61P5/00 A61P7/00 A61P9/00 C07K16/18 C10G3/00 C10L1/00 C10L1/10 C10L1/32 C10L10/12 (Core/Invention); A61K C10L (Subclass/Invention)

International (IPC 1-7): A61K38/0 A61K38/00 A61K9/08 A61K9/10 A61K9/8 A61P35/0 A61P35/00 C07K16/28 C10L1/02 C10L1/10 C10L1/18 C10L1/22

CPC: C10L1/328 C10L1/1802 C10L1/1811 C10L1/191 C10L1/1985 C10L1/231 C10L10/02 C07K16/2878 C07K2316/96 C07K2317/24 C07K2317/76 C07K2317/34 C07K2317/94 C10L10/12 C07K2317/73 Y02P30/20

European: C07K16/28R C10L1/32D C10L10/02 M07K316/960 M10L1/18F M10L1/18M M10L1/198F M10L1/19D M10L1/23B Y02E50/13

US: 424/130.1 424/133.1 424/135.1 424/139.1 424/141.1 424/143.1 424/144.1 424/144.100P 424/153.1 424/173.1 44/301 44/301P 530/387.1 530/387.3 530/388.1 530/388.2 530/388.22 530/388.7

Family:

Publication number	Publication date	Application number	Application date
AP200804651 A0	20081031	AP20080004651	20070410
AR060487 AA	20080618	AR2007P101626	20070417
AR060499 AA	20080625	AR2007P101525	20070411
AU2007240507 AA	20071101	AU20070240507	20070417
AU2007240507 BB	20130718	AU20070240507	20070417
AU2007243536 AA	20071108	AU20070243536	20070410
BRPI0710806 A2	20110816	BR2007PI10806	20070410
BRPI0710826 A2	20110823	BR2007PI10826	20070417
CA2649907 AA	20081020	CA20072649907	20070417
CA2650333 AA	20081024	CA20072650333	20070410
CL2007001028 A1	20070629	CL20070001028	20070411
CL2007001105 A1	20071130	CL20070001105	20070418
CN101426817 A	20090506	CN200780013973	20070417
CN101426817 B	20130710	CN200780013973	20070417
CN101506336 A	20090812	CN200780024110	20070410
CO6140066 A2	20100319	CO20080114572	20081027

CR10378 A	20090107	CR20080010378	20081020
CR10379 A	20090107	CR20080010379	20081020
CU23856 B	20121217	CU20080000196	20081021
EA018301 B1	20130730	EA20080002135	20070417
EA200802135 A1	20090428	EA20080002135	20070417
ECSP088848 A	20081230	EC2008SP08848	20081027
ECSP088903 A	20090227	EC2008SP08903	20081121
EP2010631 A2	20090107	EP20070755282	20070410
EP2010631 A4	20100317	EP20070755282	20070410
EP2019841 A2	20090204	EP20070760754	20070417
GE20125628 B	20120910	GE20070010985	20070417
GT200700034 A	20080125	GT20070000034	20070418
GT200800232 A	20090407	GT20080000232	20081024
HK1122047 A3	20090508	HK20090102116	20090304
HN2008001572 A	20110608	HN20080001572	20081021
HN2008001586 A	20110722	HN20080001586	20081024
IL194642 A0	20110801	IL20080194642	20081007
IL194642 A0	20110801	IL20070194642	20070417
IL194795 A0	20090803	IL20080194795	20081022
IN04477KN2008 A	20090313	IN2008KN04477	20081106
IN04650KN2008 A	20090417	IN2008KN04650	20081117
JP2009534401 T2	20090924	JP20090506711T	20070417
JP2009535449 T2	20091001	JP20090507709T	20070410
JP2013129673 A2	20130704	JP20130059446	20130322
JP5290152 B2	20130918	JP20090506711T	20070417
KR101317235 B1	20131015	KR20087025721	20070417
KR20090003360 A	20090109	KR20087028683	20081124
KR20090009204 A	20090122	KR20087025721	20070417
MA30470 B1	20090601	MA20080031374	20081110
MA30947 B1	20091201	MA20080031335	20081027
ME39508 A	20110210	ME20080000395	20070417
MX2008013508 A1	20081031	MX20080013508	20070417
MX2008013727 A1	20090205	MX20080013727	20070410
NO20084796 A	20081121	NO20080004796	20081113
NZ571757 A	20120112	NZ20070571757	20070417
PE00472008 A1	20080214	PE20070000442	20070411
RU2008146727 A	20100610	RU20080146727	20070410
SM200800064 A	20081126	SM20070000064	20070417
SM200800064 B	20091106	SM20070000064	20070417
SMAP200800064 A	20081126	SM20080000064T	20070417
SMP200800064 B	20091106	SM20080000064T	20070417
SV2008003071 A	20100201	SV20080003071	20081021
TH92681 A	20081219	TH20071001936	20070420
TW200808349 A	20080216	TW20070113569	20070418
UA94264 C2	20110426	UA20080103220	20070417
US2009304706 AA	20091210	US20070297382	20070417
US2010037513 AA	20100218	US20070226637	20070410
US2015110783 AA	20150423	US20140575182	20141218
US8945564 BB	20150203	US20070297382	20070417
WO07124299 A2	20071101	WO2007US66757	20070417
WO07124299 A3	20080103	WO2007US66757	20070417
WO07124299 C1	20081106	WO2007US66757	20070417
WO07127059 A2	20071108	WO2007US08955	20070410

WO07127059 A3	20080207	WO2007US08955	20070410
ZA200808955 A	20101027	ZA20080008955	20081020

Priority:

US20060794011P 20060421 US20060795365P 20060427 WO2007US66757 20070417
WO2007US08955 20070410 US20070297382 20070417 US20070226637 20070410
JP20090506711 20070417 US20140575182 20141218 US20090297382 20090220

Probable Assignee: NOVARTIS AG

Assignee(s): (std): FESTUCCIA ANDREA ; H2DIESEL INC ; LU XIAOFENG ; NEW GENERATION BIOFUELS INC ; OKHAMAFE AUGUSTUS ; NOVARTIS AG ; PETRUCCI FERDINANDO ; PTJ BIOENERGY HOLDING LTD ; XOMA TECHNOLOGY LTD ; NOVARTIS INT AG ; XOMA TECHNOLOGY LTD ; ARAYA KIDISTI ; CHEN BAO LU

Assignee(s): FERDINANDO PETRUCCI ; NOVARTIS Y XOMA TECHNOLOGY LTD AG ; NOVARTIS A G ; NOVARTIS AG ; XOMA TECHNOLOGY LTD ; NOVARTIS VACCINES AND DIAGNOSTICS INC

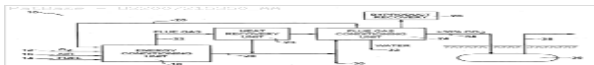
Inventor(s): (std): ARAYA KIDISTI ; AUGUSTUS OKHAMAFE ; CHEN BAO ; CHEN BAO LU ; FESTUCCIA ANDREA ; KIDISTI ARAYA ; LU XIAO FENG ; LU XIAOFENG ; OKHAMAFE AUGUSTUS ; PETRUCCI FERDINANDO ; XIAOFENG LU ; XIAOGENG LU ; FERNINANDO PETRUCCI ; FERDINANDO PETRUCCI ; ANDREA FESTUCCIA ; OKHAMAFEE AUGUSTUS ; BAO LU CHEN

Inventor(s): LU XIAOGENG

Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; PHILLIPS ORMONDE FITZPATRICK; BORDEN LADNER GERVAIS LLP; MOFFAT AND CO; CLARKE; PORZIO; LUZ HELENA VILLAMIL JIMENEZ; MAIWALD PATENTANWALTS GMBH; MARSHALL CAMERON JOHN ET AL; ALSTON AND BIRD LLP; LERNER DAVID LITTENBERG KRUMHOLZ AND MENTLIK; HERNRY LESLIE T ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Abstract: Source: US2007215350A A process for enhanced oil and gas recovery. An enriched flue gas is synthesized from utility plant flue gas.



Classifications:

International (IPC 1-7): B21B43/16

European: E21B41/00M2C E21B43/16E F23C9/00 F23L7/00D R23J900/15061 R23L900/07007
Y02C10/14 Y02E20/34D

Family:

Publication number	Publication date	Application number	Application date
AT491861 E	20110115	AT20070002353T	20070202
AU2007214212 AA	20070816	AU20070214212	20070207
AU2013205480 AA	20130523	AU20130205480	20130429
BRPI0707699 A2	20110510	BR2007PI07699	20070207
CA2576896 AA	20070807	CA20072576896	20070205
CA2576896 C	20100406	CA20072576896	20070205
CN101037937 A	20070919	CN200710003514	20070207
CN101037937 B	20131002	CN200710003514	20070207
DE602007011124 D1	20110127	DE200760011124T	20070202
EA012886 B1	20091230	EA20080001802	20070207
EA200801802 A1	20090227	EA20080001802	20070207
EP1816314 A1	20070808	EP20070002353	20070202
EP1816314 B1	20101215	EP20070002353	20070202
IN06782DN2008 A	20081024	IN2008DN06782	20080806
MX2008010132 A1	20081106	MX20080010132	20070207
US2007215350 AA	20070920	US20070702521	20070206
US7770640 BB	20100810	US20070702521	20070206
WO07090275 A1	20070816	WO2007CA00173	20070207

US20060765749	20060207	US20060765749P	20060207	WO2007CA00173	20070207
US20070702521	20070206	AU20070214212	20070207	CA20072576896	20070205
AU20130205480	20130429				

Assignee(s): (std): DIAMOND QC TECHNOLOGIES INC ; PARAMOUNT RESOURCES LTD ; KRESNYAK STEVE ; WORLEYPARSONS CANADA SERVICES LTD ; BUNIO GARY ; COLT ENGINEERING CORP

Inventor(s): (std): GARY KRESNYAK STEVE BUNIO ; KRESNYAK STEVE ; BUNIO GARY

Inventor(s): BUNIO GARY C O PARAMOUNT RESOURCES LTD ; GARY BUNIO ; KRESNYAK
STEVE BUNIO GARY ; KRESNYAK STEVE C O COLT ENGINEERING
CORPORATION ; STEVE KRESNYAK

Agent(s): SMOORENBURG PINI PATENT AND TRADE MARK ATTORNEYS; SMOORENBURG
PATENT AND TRADE MARK ATTORNEYS; BLAKE CASSELS AND GRAYDON LLP;
NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; ZARDI MARCO; OGILVY
RENAULT LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI
LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI
NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ
TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: PRODUCTION OF ADDITIVE MIXTURES

Abstract: Source: US2010293842A The invention relates to a method for producing additive mixtures for fuel oils by mixing at least two additive components in a dynamic mixer or a lamination mixer. The invention further relates to additive mixtures obtained by said method and fuel oil compositions containing said additive mixtures.

Classifications:

International (IPC 8-9): B01F1/00 C10L1/14 C10L1/195 C10L10/14 (Advanced/Invention);
B01F1/00 C10L1/10 C10L10/14 (Core/Invention)

CPC: C10L1/143 C10L1/1616 C10L1/1973 C10L10/14

European: C10L1/14B C10L10/14 M10L1/16B M10L1/197B

US: 44/393 44/393P

Family:

Publication number	Publication date	Application number	Application date
EP2235144 A1	20101006	EP20090704349	20090121
US2010293842 AA	20101125	US20090863498	20090121
WO09092730 A1	20090730	WO2009EP50652	20090121

Priority:

EP20080150496 20080122 WO2009EP50652 20090121 EP20090704349 20090121

Probable Assignee: BASF SE

Assignee(s): (std): BASF SE ; BAUDER ANDREAS ; DAISS ANDREAS ; FROHBERGER MATTHIAS ; HIRSCH STEFAN ; WILLERT SIEGFRIED ; SCHAEFFLER PETER ; SPANG PETER ; KASEL WOLFGANG ; MAEHLING FRANK OLAF ; VINCKIER ANJA ; TROETSCH SCHALLER IRENE ; HOFFMANN STEPHAN

Inventor(s): (std): BAUDER ANDREAS ; DAISS ANDREAS ; FROHBERGER MATTHIAS ; HIRSCH STEFAN ; HOFFMANN STEPHAN ; KASEL WOLFGANG ; MAEHLING FRANK OLAF ; SCHAEFFLER PETER ; SPANG PETER ; TROETSCH SCHALLER IRENE ; VINCKIER ANJA ; WILLERT SIEGFRIED

Agent(s): REITSTOETTER KINZEBACH; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT LLP; REITSTOETTER KINZEBACH AND PARTNER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: DEVICE AND METHOD TO MIX LIQUID COMPONENTS

Abstract: The invention relates to a device (10) to mix liquid components while forming a product, comprising a first container (11) for a



first component (12), a connection (17) connectable with a source of a second component, a second container (14) for the product (15), and a pump (16) connecting the first container (11), the connection (17) and the second container (14) in order to transport and mix the components and transport the product (15) formed thereby to the second container (14). The second container (14) is embedded in the first container (11) while forming an assembly comprising the first container (11) and the second container (14). The invention relates to a method to mix liquid components.

Classifications:

International (IPC 8-9): B01F15/02 B01F3/08 B01F5/12 B60S3/00 (Advanced/Invention); B01F15/02 B01F3/08 B01F5/00 B60S3/00 (Core/Invention)

CPC: B01F3/0853 B01F15/00863 B01F2003/0896 B01F5/12 B01F3/08 B01F15/027 B60S3/00

European: B01F15/00P4 B01F3/08 B01F3/08D B01F5/12 B60S3/00 L01F3/08Y6

Family:

Publication number	Publication date	Application number	Application date
SE200801167 A	20091121	SE20080001167	20080520
SE200801167 L	20091121	SE20080001167	20080520
SE532343 C2	20091222	SE20080001167	20080520
WO09142586 A1	20091126	WO2009SE50558	20090518

Priority:

SE20080001167 20080520

Probable Assignee: CLEAN PARTNER INT AB A

Assignee(s): (std): CLEAN PARTNER INT AB A ; CLEAN PARTNER INTERNAT AB A ; JANSSON JAN OLOF ; JOHANSSON ASSAR

Assignee(s): A CLEAN PARTNER INT AB ; A CLEAN PARTNER INTERNATIONAL AB

Inventor(s): (std): KNUTSSON AAKE ; JOHANSSON ASSAR ; JANSSON JAN OLOF

Inventor(s): AAKE KNUTSSON

Agent(s): CEGUMARK AB

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: FUEL EMULSIFICATION SYSTEM AND METHOD THEREOF**Abstract:** Source: KR20100120497A PURPOSE:

A decorating material from multiple glancing angle deposition and a method of manufacturing



the same are provided to save cost by not using an emulsifying agent. CONSTITUTION: A fuel emulsifier system and a method thereof comprises 1, 2, 3, 4 ultrasonic irradiator(10)(20)(30)(40), a high speed rotary mixer(50), and ultrasonic wave controller(60). The first ultrasonic irradiator emulsifies the first so that the fuel and water are coagulated. The second ultrasonic irradiator emulsifies the second so that the fuel and water are emulsified to be coagulated. The third ultrasonic irradiator emulsifies the third so that the fuel and water are emulsified to be coagulated. The fourth ultrasonic irradiator emulsifies the fourth so that the fuel and water are emulsified to be coagulated. The high speed rotary mixer is created the emulsified fuel in which the size is formed into utterly combustible 50~100 micro size.

Classifications:**International (IPC 8-9):** B01F11/02 C10L1/32 (Advanced/Invention)**Family:**

Publication number	Publication date	Application number	Application date
KR101038261 B1	20110531	KR20090039349	20090506
KR20100120497 A	20101116	KR20090039349	20090506

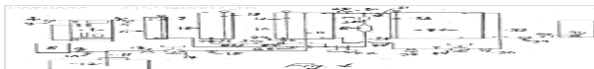
Priority:

KR20090039349 20090506

Probable Assignee: PARK SEON GKWON**Assignee(s):** (std): PARK SEON GKWON**Inventor(s):** (std): PARK SEON GKWON

Title: Plant for the production of an emulsion of water in hydrocarbons

Abstract: Source: EP2340887A1 Plant for the production of an emulsion of water in hydrocarbons, comprising: pump means (13;22)



for the drawing and mixing in a first tank (16) of dosed amounts of an hydrocarbon, or of a mixture of hydrocarbons contained in a second tank (12), with an emulsifier contained in a third tank (18); pump means (22) for drawing and introducing dosed amounts of water, drawn from a fourth tank (6) in said mixture of hydrocarbons and emulsifier contained in said first tank (16); pump means (22) for pressure circulating many times said mixture of water, hydrocarbons and emulsifier from said first tank (16) through an emulsifier device (E) and from this again in said first tank (16) until obtaining a stable emulsion of water in hydrocarbons, and for transferring said emulsion from said first tank (16) until obtaining a stable emulsion of water in hydrocarbons, and for transferring said emulsion from said first tank (16) in a stocking tank (37) from which said emulsion may be drawn for the delivery to the users.

Classifications:

International (IPC 8-9): B01F3/08 B01F3/20 B01F5/06 B01F5/10 F23K5/12 (Advanced/Invention)

CPC: B01F3/0811 B01F3/0815 B01F3/20 B01F3/2035 B01F5/0682 B01F5/0689 B01F5/10 F23K5/12

European: B01F3/08C1 B01F3/08C3 B01F3/20 B01F3/20E B01F5/06F B01F5/06F4B2 B01F5/10 F23K5/12

Family:

Publication number	Publication date	Application number	Application date
EP2340887 A1	20110706	EP20090425547	20091230

Priority:

EP20090425547 20091230

Probable Assignee: ITI S R L

Assignee(s): (std): ITI S R L

Assignee(s): ITI SRL

Inventor(s): (std): VIGLIOTTI ALBERTO

Agent(s): PORSIA ATTILIO

Designated states: AL AT BA 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

Title: METHOD OF HYDRATING POLAR MOLECULES OF OLEOPHILIC EMULSION MEDIUM**Abstract:** Source: RU2477169C FIELD: process engineering.SUBSTANCE: invention relates to producing reverse (oleophilic) emulsions and

may be used in power engineering, at transport and in construction, and production of emulsion food products from vegetable fats. In preparing the emulsion, premixing is performed to process the mix in rotary pulsating disperser. Prior to mixing with medium, water is acoustically and chemically treated in cavitation reactor at sound pressure amplitude making at least that of cavitation sine periodic mode. For treatment of one cubic metre of water of definite temperature required is definite amount of mega joules of acoustic power defined by the formula.EFFECT: continuous production of emulsion at lower power consumption.3 dwg

**Classifications:****International (IPC 8-9):** B01F11/02 (Advanced/Invention)**Family:**

Publication number	Publication date	Application number	Application date
RU2011108173 A	20120910	RU20110108173	20110302
RU2477169 C2	20130310	RU20110108173	20110302

Priority:

RU20110108173 20110302

Probable Assignee: SHESTAKOV SERGEJ DMITRIEVICH**Assignee(s):** (std): SHESTAKOV SERGEJ DMITRIEVICH**Inventor(s):** (std): SHESTAKOV SERGEJ DMITRIEVICH

Title: DIMETHOXYMETHANE (DMM) COMPOSITION USED AS BLENDED FUEL FOR VEHICLE

Abstract: Source: CN103952194A The invention discloses a dimethoxymethane (DMM) composition used as blended fuel for a vehicle. The DMM composition comprises the components in parts by weight: 88-95 parts of DMM, 5-8 parts of tert-amyl methyl ether (TAME) and 2-5 parts of functional additive, wherein the functional additive comprises the following raw materials in parts by weight: 50-65 parts of polyisobutylene succinimide, 30-40 parts of fatty acid and 5-10 parts of cerium oxide. The DMM composition disclosed by the invention is used as the blended fuel for the vehicle, so that the consumption of gasoline can be reduced, the heat utilization ratio of fuel oil can be increased, the emission of harmful gas in automobile exhaust can be reduced, and the defect existing when DMM is independently used as the blended fuel is overcome.

Classifications:

International (IPC 8-9): C10L1/12 C10L1/18 C10L1/185 C10L1/236 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
CN103952194 A	20140730	CN201410176328	20140429

Priority:

CN201410176328 20140429

Probable Assignee: CHENGDU TIANFENG CLEAN ENERGY DEV CO LTD

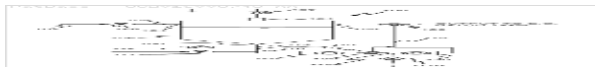
Assignee(s): (std): CHENGDU TIANFENG CLEAN ENERGY DEV CO LTD

Assignee(s): CHENGDU TIANFENG CLEAN ENERGY DEVELOPMENT CO ; CHENGDU TIANFENG CLEAN ENERGY DEVELOPMENT CO LTD

Inventor(s): (std): LIU JINCHAO

Title: A LIQUID PROCESSING MIXER

Abstract: Source: US2016008743A A liquid processing mixer is provided, comprising a mixing unit and a de-aeration vessel, the mixing unit being separated from the de-aeration vessel and in fluid connection with the de-aeration vessel, and wherein the liquid processing mixer further comprises at least one additive inlet arranged between the de-aeration vessel and a high shear mixing device of the mixing unit for introducing the additive downstream of the de-aeration vessel.



Classifications:

International (IPC 8-9): B01D19/00 B01F15/02 B01F5/06 B01F5/10 B01F7/00 (Advanced/Invention)

CPC: B01F5/106 B01F7/0075 B01F15/0258 B01D19/0063 B01F5/0661 B01F15/026 B01F2215/0014 B01F2215/0032 B01F2215/0031 B01F5/104 B01F15/0243

Family:

Publication number	Publication date	Application number	Application date
CN105026026 A	20151104	CN201480011881	20140217
EP2961522 A1	20160106	EP20140704807	20140217
US2016008743 AA	20160114	US20140770750	20140217
WO14131644 A1	20140904	WO2014EP53029	20140217

Priority:

SE20130050249 20130301 WO2014EP53029 20140217

Probable Assignee: TETRA LAVAL HOLDINGS AND FINANCE SA

Assignee(s): (std): TETRA LAVAL HOLDINGS AND FINANCE ; TETRA PAK LAVAL HOLDINGS AND FINANCES SA

Assignee(s): TETRA LAVAL HOLDINGS AND FINANCE S A ; TETRA LAVAL HOLDINGS AND FINANCE SA

Inventor(s): (std): LARSEN FREDERIK ; MORTENSEN HANS HENRIK ; PERMIN THOMAS

Agent(s): TETRA PAK PATENT ATTORNEYS SE; FREDRIKSSON ANDERS

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: A LIQUID PROCESSING MIXER

Abstract: Source: US2016008775A A liquid processing mixer is provided, comprising a mixing unit having a liquid inlet whereby a sub-pressure zone is provided upstream of the mixing unit, and wherein the liquid processing mixer further comprises at least one additive inlet connected to the sub-pressure zone for introducing the additive upstream of a high shear mixing device of the mixing unit.



Classifications:

International (IPC 8-9): B01F15/02 B01F5/06 B01F5/10 B01F7/00 (Advanced/Invention)

CPC: B01F5/106 B01F15/0258 B01F7/0075 B01F5/0661 B01F15/026 B01F2215/0014 B01F2215/0031 B01F2215/0032 B01F5/104 B01F15/0243

Family:

Publication number	Publication date	Application number	Application date
CN105188898 A	20151223	CN201480011940	20140217
EP2961523 A1	20160106	EP20140704806	20140217
US2016008775 AA	20160114	US20140770730	20140217
WO14131643 A1	20140904	WO2014EP53026	20140217

Priority:

SE20130050248 20130301 WO2014EP53026 20140217

Probable Assignee: TETRA LAVAL HOLDINGS AND FINANCE SA

Assignee(s): (std): TETRA LAVAL HOLDINGS AND FINANCE ; TETRA PAK LAVAL HOLDINGS AND FINANCES SA

Assignee(s): TETRA LAVAL HOLDINGS AND FINANCE S A ; TETRA LAVAL HOLDINGS AND FINANCE SA

Inventor(s): (std): LARSEN FREDERIK ; MORTENSEN HANS HENRIK ; PERMIN THOMAS

Agent(s): TETRA PAK PATENT ATTORNEYS SE; ASSOCIATION TETRA PAK ATTORNEYS SE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: MIXER**Abstract:** Source: US2015273413A The present application relates to a mixer and a mixing method and, more specifically, to a pipe-type

mixer for low-flow dispersion of immiscible liquids. The mixer, according to the present application, comprises: a pump(30) provided in a liquid transport section so as to supplement a deficient flow velocity, when materials to be mixed such as liquids are mixed through a continuous mixing step; and static mixers(22) suitable for the dispersion of the materials to be mixed by increasing a diameter of mixing parts(20) provided in a circulation pipe(10). Thus, a mixing rate of mixed materials can be more efficiently increased when the materials are mixed by using the static mixers(22).

Classifications:

International (IPC 8-9): B01F15/00 B01F15/02 B01F3/08 B01F5/00 B01F5/06 B01F5/10 B01F5/12 (Advanced/Invention)

CPC: B01F5/0602 B01F5/10 B01F13/1016

Family:

Publication number	Publication date	Application number	Application date
CN104853834 A	20150819	CN201480003543	20140228
JP2015533648 T2	20151126	JP20150541705T	20140228
KR20140108175 A	20140905	KR20140024162	20140228
US2015273413 AA	20151001	US20140439128	20140228
WO14133366 A1	20140904	WO2014KR01695	20140228

Priority:

KR20130022222 20130228 WO2014KR01695 20140228

Probable Assignee: LG CHEM LTD

Assignee(s): (std): LG CHEMICAL LTD

Assignee(s): LG CHEM LTD

Inventor(s): (std): CHOI JUN WON ; HONG YU SHIK ; IM YE HOON ; SONG YOUNG SOO

Agent(s): DANA PATENT LAW FIRM

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW