



No. 07-075855- -00002-0000

Dep. 2020 NUECREACIONE
Ha. 11 PATENTEYII Eve: 379 FASENACIONALII
Act. 444 RESPUESTAREQUE Folios: 10

Clarke, Modet & Cº

COLOMBIA

SEÑORES
DIVISIÓN DE NUEVAS CREACIONES
SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
E. S. D.

REF. EXPEDIENTE No. 07075855
FECHA DE LA SOLICITUD: julio 25, 2007
SOLICITANTE: DSM IP ASSETS B.V.
TITULO: PROCEDIMIENTO PARA PREPARAR CICLOHEXANONA
Y CICLOHEXANOL

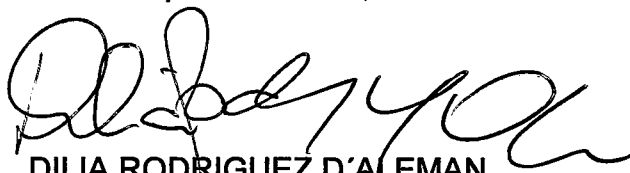
ASUNTO: CONTESTACIÓN A REQUERIMIENTO OFICIAL

DILIA RODRIGUEZ D'ALEMAN, identificada como aparece al pie de mi firma, domiciliada en la carrera 11 No. 86-53, piso 6, obrando como apoderada de la sociedad solicitante de la patente de la referencia, en respuesta al oficio No. 13100 notificado por fijación en lista el día 12 de Diciembre de 2007, me permito presentar los siguientes documentos y aclaraciones:

- El documento en el que consta la CESIÓN del derecho a la patente otorgado por los inventores al solicitante. debidamente legalizados.
- Su traducción oficial al Español debidamente avalada por el Ministerio de Relaciones Exteriores.
- Se aclara que la presente solicitud corresponde al capítulo I del PCT, por este motivo se adjunta el IPRP Capítulo I, expedido por la Oficina Internacional.
- Se le informa a ese Despacho que, como se aclaró en el punto anterior, la solicitud pertenece al capítulo I del PCT, por esta razón no existe reporte de Examen Preliminar Internacional ni anexos de dicho reporte.

Espero con esto haber dado cabal cumplimiento a lo solicitado por ese despacho y de conformidad con lo indicado en los artículos 3º., inciso 3, 35 inciso 2 y 59 inciso 2 del CCA, al analizar este memorial, atentamente ruego se traten todas las cuestiones planteadas con motivo del mismo.

Señor Superintendente,


DILIA RODRIGUEZ D'ALEMAN
C.C. 41.654.882 de Bogotá
T.P. 20824
ADM/srr
P. 967 OK

Clarke, Modet & C^o

COLOMBIA

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SANTAFÉ DE BOGOTÁ, A.A. 92397 COLOMBIA

24139COWO / PXCO00610/2007
20647COWO / PXCO00610/2007

P. 967
P. 968
63

CESION

ASSIGNMENT

El (la) abajo firmante (En adelante EL CEDENTE)

The undersigned (Hereinafter THE ASSIGNOR)

WYATT, Larry Walker

en su carácter de inventor /diseñador

Inventor /designor of
PROCESS FOR PREPARING
CYCLOHEXANONE AND CYCLOHEXANOL

con domicilio en:

domiciled at
111 Hillside Court
Martinez
GA 30907 Augusta Georgia
UNITED STATES OF AMERICA

por el presente documento declara que cede todos y cada uno de los derechos que le corresponden o puedan corresponderle sobre la siguiente invención , modelo de utilidad, diseño industrial

do hereby declares that it assigns all and each of his rights and privileges on the following invention, industrial design, utility model

a:

to
DSM IP Assets B.V.

con domicilio en

with domicile in
Het Overloon 1
6411 TE HEERLEN
NETHERLANDS

En prueba de la mutua aceptación de esta cesión ambas partes CEDENTE y CESIONARIO firman el presente documento.

As a proof of the mutual acceptance of this assignment, both parties ASSIGNOR and ASSIGNEE sign the present document.

Dado y firmado en

A los Días de De

Granted and signed at

on this 30 day of November of 2007

El Cedente /The Assignor

El Cedente /The Assignor

L.W. Wyatt

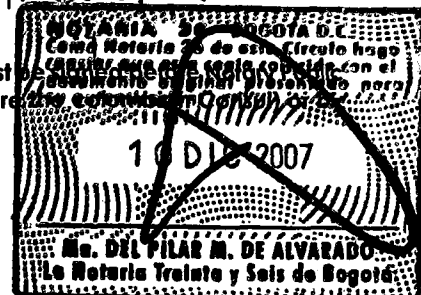
El Cesionario/The Assignee

El Cesionario/The Assignee

P.M. Breepoel

Este documento debe ser otorgado ante Notario público y legalizado por el Cónsul de Colombia) o por Apostilla

(This document must be signed before a Notary and legalized before the Colombian Consulate or by Apostille



Handwritten signature or mark.

De afzender aanvaardt de afzenderaansprakelijkheid van de handtekening van:

2000

Schrift von:

[illegible]

30 NOVEMBER 2007

...ent ist, auf der

GRECOEL PETER MARIA
NYAT LARRY WALKER



Amos

APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Land Country: NEDERLAND

Land County: NEBRASKA
Deze openbare akte **This public document**

2. is on vertekend door **has been signed by:**

Mr. J. H. P. Morris

3. handende in hoedanigheid van

acting in the capacity of:

acting in the capacity of: *Jellen*
Mohamud K. Sittareh

4. in voorzien van het zegel/stempel van

4. are the ~~real~~ jump of:

are the seal stamp of:
 Mr. J. J. P. Moers, notary to Sittard - Geleen

Voor echt verklaard **Certified**

5. to of MAAS' NIGHT 6. de the 30-11-2007

7. door : de griffier van de rechtbank Maastricht

by : the clerk of the court of Maastricht

8. order nr. 10: of 1995 10. Ondertekening Signature

1000

1950

L. HENDR



APOSTILLA

(Convention de La Haye du 5 octobre 1961)

1. País: Países Bajos
El presente documento público
2. Ha sido firmado por: Sr. J J M P Moers
3. Actuando en calidad de: Notario de Sittard - Geleen
4. Lleva el sello/estampilla de: Sr. J J M P Moers - Notario de Sittard - Geleen.
Certificado
5. En: Maastricht.
6. El: 30 de November de 2007
7. Por: El Registrador de la Corte de Maastricht
8. Bajo el No.: 07/995
9. Sello / estampilla: "Rechtbank - Maastricht"
10. Firma: Firmado. L. Hendriks

Certificación:

Certifico que la presente es una traducción verdadera y completa del documento adjunto: "Apostille Paises B."

Fecha: 7 de Diciembre de 2007.

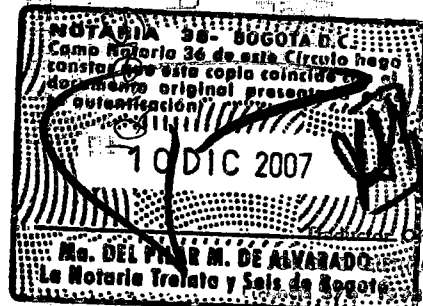
Traductor: Jorge Enrique Sierra Reyes.

Licencia No. 376 de 1993, del Ministerio de Justicia.

Dirección: Carrera 15 No. 99-13 Oficina 411. Bogotá, Colombia.

Teléfono: (57-1) 2182308, (57-1) 6232925.

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 20647WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2006/000521	International filing date (day/month/year) 17 January 2006 (17.01.2006)	Priority date (day/month/year) 25 January 2005 (25.01.2005)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant DSM IP ASSETS B.V.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																	
2.	This REPORT consists of a total of 7 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																	
3.	This report contains indications relating to the following items: <table><tr><td>☒ Box No. I</td><td>Basis of the report</td></tr><tr><td>☐ Box No. II</td><td>Priority</td></tr><tr><td>☐ Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td>☐ Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td>☒ Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td>☐ Box No. VI</td><td>Certain documents cited</td></tr><tr><td>☐ Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td>☐ Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		☒ Box No. I	Basis of the report	☐ Box No. II	Priority	☐ Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	☐ Box No. IV	Lack of unity of invention	☒ Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	☐ Box No. VI	Certain documents cited	☐ Box No. VII	Certain defects in the international application	☐ Box No. VIII	Certain observations on the international application
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☐ Box No. IV	Lack of unity of invention																	
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☐ Box No. VI	Certain documents cited																	
☐ Box No. VII	Certain defects in the international application																	
☐ Box No. VIII	Certain observations on the international application																	
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																	

	Date of issuance of this report 31 July 2007 (31.07.2007)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Ellen Moyse e-mail: pt05.pct@wipo.int

PATENT COOPERATION TREATY

REC'D 19 APR 2006

WIPO

PCT

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing

(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/EP2006/000521International filing date (day/month/year)
17.01.2006Priority date (day/month/year)
25.01.2005International Patent Classification (IPC) or both national classification and IPC
INV. C07C35/08 C07C49/403 C07C29/132 C07C45/53Applicant
DSM IP ASSETS B.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaag 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Date of completion of
this opinionSee form
PCT/ISA/210

Authorized Officer

Wright, M

Telephone No. +31 70 340-3124



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2006/000521

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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material:

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material:

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing:

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2006/000521

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	1-13
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations

see separate sheet

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Re Item V.

- 1 Reference is made to the following documents:

D1: EP-A-659726

D2: EP-A-4105.

- 2 Novelty.

D1 (see page 5, lines 11 to 47 and fig. 1) discloses a process for preparing cyclohexanone and cyclohexanol in which a cyclohexane oxidation product (1) is neutralised (A) by addition of aqueous base (5) and, after discharge of at least a part of the aqueous phase (6), decomposed (B) after the optional further addition of aqueous base (7). Any aqueous phase from the neutralisation step not discharged is passed to the decomposition step. D1 also discloses separation (C) of the decomposition product (3) into aqueous (8) and organic (4) phases; a part of the aqueous phase may be recirculated (9 and 10) to the decomposition and/or the neutralisation stages.

In the process according to D1 the feeding of aqueous phase from (A) to (B), the addition of base (7) to (B) and the recirculation of aqueous phase from (C) to A are all optional steps; three selections have to be made to arrive at steps (a)-(f) of claim 1 of the present application. Furthermore, in the process according to D1 a separate aqueous phase with a pH of >8.5 is present during the decomposition, this aqueous phase being any residual part of the aqueous phase resulting from the neutralisation step not discharged via (6) and any aqueous phase added via (7). Thus a pH of >8.5 for the aqueous phase resulting from the neutralisation step is only derivable from the teaching of D1 for the case in which it alone forms the aqueous phase in the decomposition, i.e. if no further aqueous base (7) is added to the decomposition step.

The subject-matter of claim 1 of the present application is thus novel over D1.

D2 (see example 1 and fig.1) discloses a process for preparing cyclohexanone and cyclohexanol that corresponds to steps (a)-(f) of claim 1 of the present application.

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The entire aqueous phase resulting from the neutralisation step is purged (D2, fig. 1, line 11). The subject-matter of claim 1 of the present application is therefore novel over D2 by virtue of feeding a part of the aqueous phase resulting from the neutralisation step to the decomposition step.

Dependent claims also relate to novel subject-matter.

3 Inventive step.

D1 relates to the problem of prolonging decomposition catalyst activity, the catalyst being a metal chosen from Mn, Fe, Co, Ni and Cu immobilized on an inert support.

D2 relates to the problem of producing cyclohexanone and cyclohexanol in high yield with low alkali consumption.

The process of the present invention results in a high selectivity for cyclohexyl hydroperoxide decomposition and very low (<5 ppm) levels of residual sodium in the organic phase after separation of the decomposition product.

D2 is seen as the closest prior art and the problem to be solved is considered to be the provision of an improved process for producing cyclohexanone and cyclohexanol from cyclohexyl hydroperoxide.

The process according to claim 1 of the present application results in an improved separation of the cyclohexyl hydroperoxide decomposition mixture. There is no indication in the prior art that this effect was to be expected. D1 discloses carrying out the decomposition step at a pH >8.5 but is silent as to the separation of the resulting mixture.

Inventive step for claims 1-13 is acknowledged.

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REPUBLICA DE COLOMBIA
SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

Folio 72

2020
Bogotá D.C.,

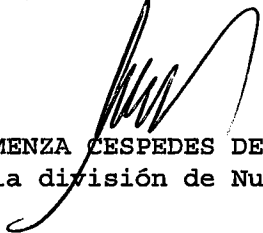
Doctor(a)
RODRIGUEZ DILIA MARIA
Apoderado(a) y/o Representante de
DSM IP ASSETS B.V.

REFERENCIA	Radicación No.	07 75855
	Solicitud internacional	PCT/EP2006/000521
	Fecha inicio fase nacional	25/08/2007
	Trámite	11
	Evento	379
	Actuación	416
	Oficio No.	6451
	Folios	1

Teniendo en cuenta que la solicitud de privilegio de patente que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en la Decisión 486 de la Comisión de la Comunidad Andina, el Tratado de Cooperación en Materia de Patentes (PCT), el Reglamento y la Circular Única de la Superintendencia de Industria y Comercio, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial.

Cúmplase
Dado en Bogotá DC,

25 JUL. 2008


ALIX CARMENZA CESPEDES DE VERGEL
Jefe de la división de Nuevas Creaciones

adpa10