

Señora

Alix Carmenza Céspedes de Vergel

Jefe de División de Nuevas Creaciones

SUPERINTENDENCIA DE INDUSTRIA Y COMI

E. _____ S. _____

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 08-083735- -00001-0000

Fecha: 2008-09-17 16:34:56 Dep. 2020 NUECREACION
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 329 CTOINFORMACION Folios: 9

Referencia: Expediente No. 08.083.735

Solicitud de Patente de Invención titulada: "Métodos para preparar alcoholes
sulfonamida sustituidos e intermediarios de estos"

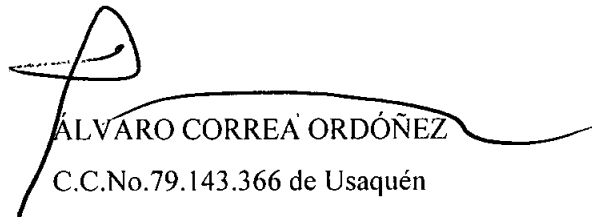
Solicitante: Wyeth

MEMORIAL DE ALCANCE

ÁLVARO CORREA ORDÓÑEZ, mayor de edad y vecino de Bogotá D.C., identificado según aparece al pie de mi firma, en mi condición de apoderado de la sociedad en referencia, manifiesto lo siguiente:

El día 12 de agosto de 2008, bajo el número de radicación 08.083.735, presenté la solicitud de patente de invención de la referencia, para la cual adjunto informe preliminar internacional sobre patentabilidad, capítulo I del tratado de cooperación en materia de patentes.

Atentamente,


ÁLVARO CORREA ORDÓÑEZ
C.C.No.79.143.366 de Usaquén
T.P.20.281

Anexo: Informe preliminar internacional sobre patentabilidad, capítulo I

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PATENT COOPERATION TREATY

PCT/US2007/004090

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

KODROFF, Cathy, A.
Howson and Howson
501 Office Center Drive
Suite 210
Fort Washington, PA 19034
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year)
28 August 2008 (28.08.2008)

Applicant's or agent's file reference
AM-102687PCT

IMPORTANT NOTICE

International application No.
PCT/US2007/004090

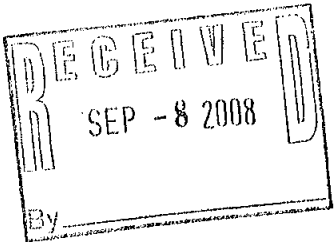
International filing date (day/month/year)
15 February 2007 (15.02.2007)

Priority date (day/month/year)
17 February 2006 (17.02.2006)

Applicant

WYETH et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)



The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Philippe Becamel

Facsimile No. +41 22 338 82 70

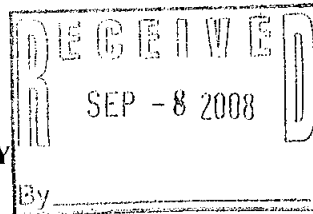
e-mail: pt12.pct@wipo.int

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 AM-102687PCT	FOR FURTHER ACTION See item 4 below	
International application No. PCT/US2007/004090	International filing date (day/month/year) 15 February 2007 (15.02.2007)	Priority date (day/month/year) 17 February 2006 (17.02.2006)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant WYETH		

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:

- | | |
|--|---|
| ☒ 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 |

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).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 19 August 2008 (19.08.2008)
	Authorized officer Philippe Becamel e-mail: pt12.pct@wipo.int

PATENT COOPERATION TREATY

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.
PCTUS2007/004090

International filing date (day/month/year)
15.02.2007

Priority date (day/month/year)
17.02.2006

International Patent Classification (IPC) or both national classification and IPC
INV. C07C213/00 C07C215/08 C07D333/34

Applicant
WYETH

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 Patentlaan 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 opinion

see form
PCT/ISA/210

Authorized Officer

Fitz, Wolfgang

Telephone No. +31 70 340-4359



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2007/004090

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:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2007/004090

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	<u>2-8,11,12,15-30</u>
	No: Claims	<u>1,9,10,13,14</u>
Inventive step (IS)	Yes: Claims	=
	No: Claims	<u>1-30</u>
Industrial applicability (IA)	Yes: Claims	<u>1-30</u>
	No: Claims	=

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2007/004090

- D1: AVERSA, MARIA C. ET AL: JOURNAL OF ORGANIC CHEMISTRY, 70(6), 1986 - 1992 CODEN: JOCEAH; ISSN: 0022-3263, 2005, XP002440357
D2: DONDONI, ALESSANDRO ET AL: JOURNAL OF ORGANIC CHEMISTRY, 64(3), 933 -944 CODEN: JOCEAH; ISSN: 0022-3263, 1999, XP002440358
D3: SHAM, HING L. ET AL: JOURNAL OF MEDICINAL CHEMISTRY, 31(2), 284 -95 CODEN: JMCMAR; ISSN: 0022-2623, 1988, XP002440359
D4: WO 2004/092155 A
D5: WO 03/103660 A

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.) D1 and D2 disclose processes for preparing an amino alcohol starting from an aminoester which have all the features specified in present claim 1. The relevant passages are indicated in the search report.

Accordingly, the subject-matter of present claim 1 is not new, Article 33(2) PCT.

Each of D1 or D2 can be considered to represent the closest prior art for claim 1. Since claim 1 is not novel over D1 and D2, it cannot be considered as involving an inventive step over these documents, Article 33(3) PCT.

Dependent claims 2-14, 16 and 17 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1-D5 and the corresponding passages cited in the search report.

2.) For claim 15, D4 is considered to represent the closest prior art, since D4 also discloses a process for preparing 4,4,4-trifluoro-2-(1-phenethylamino)-3-trifluormethylbutan-1-ol.

The process of present claim 15 differs from the process of D4 in that the aminoester is added to diisobutylaluminium hydride at -60°C to -10°C (whereas in D4, cf. example 13, diisobutylaluminium hydride is added to the aminoester, at a lower temperature).

Accordingly, the subject-matter of present claim 15 is new over D4, Art. 33(2) PCT.

In view of D4 and in the absence of a demonstrated surprising effect, the problem underlying present claim 15 is seen as the provision of a further process for preparing 4,4,4-trifluoro-2-(1-phenethylamino)-3-trifluormethylbutan-1-ol.

The solution that is proposed by present claim 1, i.e. adding the aminoester to diisobutylaluminium hydride, at a somewhat higher temperature as compared to D4, is considered obvious in view of the following:

D1-D3 disclose the reduction of related amino esters to the amino alcohols with hydride reducing agents, including diisobutylaluminium hydride, at higher temperatures and/or also a mode of addition whereas the aminoester is added to the hydride reducing agent. The relevant passages are indicated in the search report.

Accordingly, the subject-matter of claim 15 is considered as lacking an inventive step in the sense of Art. 33(3) PCT.

3.) For claim 18, D4 is considered to represent the closest prior art, since D4 also discloses a process for preparing a sulfonamide which involves the reduction of a protected aminoester to the corresponding amino alcohol.

The process of present claim 18 mainly differs from the process of D4 in that in the reduction step the aminoester is added to diisobutylaluminium hydride, at -60°C to -10°C (whereas in D4, cf. example 13, diisobutylaluminium hydride is added to the aminoester, at a lower temperature).

Accordingly, the subject-matter of present claim 18 is new over document D4, Art. 33(2) PCT.

In view of D4 and in the absence of a demonstrated effect that would be credible over the whole scope, the problem underlying present claim 18 is seen as the provision of a further process for preparing a sulfonamide.

The solution that is proposed by present claim 1, i.e. in the reduction step adding the aminoester to diisobutylaluminium hydride, at a somewhat higher temperature as compared to D4, is considered obvious in view of the following:

D1-D3 disclose the reduction of related amino esters to the amino alcohols with hydride reducing agents, including diisobutylaluminium hydride, at higher temperatures and/or also a mode of addition whereas the aminoester is added to the hydride reducing agent. The relevant passages are indicated in the search report.

Accordingly, the subject-matter of claim 18 is considered as lacking an inventive step in the

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2007/004090

sense of Art. 33(3) PCT.

Dependent claims 19-30 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D1-D5 and the corresponding passages cited in the search report.

4.) The claimed methods allow for the synthesis of pharmaceutically interesting compounds. Accordingly, the subject-matter of claims 1-30 is considered as industrially applicable.

Re Item VIII

Certain observations on the international application

5.) Claims 1 and 18 are broad in terms of the starting material and product ("an aminoester", "an amino alcohol", "a N-protected aminoester", "a sulfonamide substituted alcohol") and/or in terms of the reagent ("a hydride reducing agent"). It should be ensured that the scope is commensurate with the disclosure and the support, Art. 5 and 6 PCT.

6.) The word "about", which is used throughout the claims, is vague and blurs the scope of the claims, Art. 6 PCT.

7.) The vague and imprecise statement in the description on page 22, last paragraph, implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them.

REPUBLICA DE COLOMBIA
SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

Folio 91

2020
Bogotá D.C.,

Doctor(a)
CORREA ORDOÑEZ ALVARO
Apoderado(a) y/o Representante de
WYETH

REFERENCIA	Radicación No.	8 83735
	Solicitud internacional	PCT/US2007/004090
	Fecha inicio fase nacional	17/09/2008
	Trámite	11
	Evento	378
	Actuación	416
	Oficio No.	6845
	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,

02 OCT. 2008

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

adpall

DIVISIÓN DE NUEVAS CREACIONES

RADICACIÓN EXPEDIENTE No.08-083735

EL EXTRACTO DE LA PRESENTE SOLICITUD DE **PATENTE DE INVENCION**
FUE PUBLICADO EN LA GACETA DE PROPIEDAD INDUSTRIAL No **599** DE
FECHA **31 DE DICIEMBRE DE 2008** EL TÉRMINO HÁBIL SEÑALADO POR LA
LEY EXPIRA EL **30 DE MARZO DEL 2009**

NOTA: Dentro del plazo de los seis (6) meses siguientes a partir de la fecha de publicación en la gaceta de Propiedad Industrial, deberá solicitar y cancelar el examen de patentabilidad so pena de que la solicitud caiga en abandono, de acuerdo con lo establecido en el Artículo 44 de la Decisión 486/2000.

SE PRESENTARON OPOSICIONES POR PARTE DE TERCEROS.

SI _____ NO ☒ _____