

# ESCOBAR - URIBE ASOCIADOS

A B O G A D O S

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2786/PCT

## SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO DIVISION DE NUEVAS CREACIONES

E.

S.

D.

SUPERINTENDENCIA Y COMERCIO

Radicación: 05.020.332 000000004

Folios: 10

Fecha (PMD): 2005-08-24 14:16:21

Trámite: 011 PCT-PATENT 379 FASE NAL 444 REMESA

Dependencia: 2005 DIVISION DE NUEVAS CREACIONES

Re: Expediente No. 05.020.332  
Solicitud de patente a nombre de  
SANDOZ AG

Yo, JIMENA ESCOBAR URIBE, identificada como aparece al pie de mi firma, domiciliada en la carrera 11 A No. 94-76, of. 305, obrando como apoderada de la sociedad SANDOZ AG, domiciliada en Basilea, Suiza, solicitante de la patente de la referencia, en respuesta al oficio No.13135 notificado por fijación en lista el día 1 de julio de 2005, atentamente me permito presentar:

1. Reporte del examen preliminar internacional junto con su traducción al español.
2. Notificación de la inscripción de un cambio en el cual consta el cambio de la sociedad solicitante. Al respecto es importante señalar que la sociedad SANDOZ AG, es la titular de la solicitud en fase nacional como así se indicó en el formato de solicitud.

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,

  
JIMENA ESCOBAR URIBE  
C.C.39.779.452 de Usaqué  
T.P. 68228

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**TRATADO DE COOPERACION EN MATERIA DE PATENTES**  
**PCT**  
**INFORME EXAMEN PRELIMINAR INTERNACIONAL**  
**(PCT artículo 36 y regla 70)**

|                                                                                                                                                               |                                                                                                                        |                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Referencia del solicitante o agente<br><b>G-32603A/GPI</b>                                                                                                    | Ver notificación de la transmisión del examen preliminar Internacional (formato PCT/IPEA/416)<br><b>PARA PROSEGUIR</b> |                                                       |
| No. Solicitud Internacional<br><b>PCT/US03/22312</b>                                                                                                          | Fecha de presentación internacional (día/mes/año)<br><b>17/07/2003</b>                                                 | Fecha de prioridad (día/mes/año)<br><b>05/08/2002</b> |
| Clasificación Internacional de Patentes (IPC) o clasificación nacional e IPC<br><b>IPC(7): A81K 31/4545; C07D 401/04; A81P 37/08 y US Cl: 514/290; 546/93</b> |                                                                                                                        |                                                       |
| Solicitante<br><b>SANDOZ INC.</b>                                                                                                                             |                                                                                                                        |                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Este examen preliminar internacional ha sido preparado por esta Autoridad encargada del Examen Preliminar Internacional y es transmitida al solicitante de acuerdo con el artículo 36.</p> <p>2. Este INFORME consiste de un total de 4 páginas, incluyendo esta hoja.</p> <p>___ Este informe también está acompañado por ANEXOS, esto es hojas de la descripción, reivindicaciones y/o dibujos, los cuales han sido modificados y son la base para este informe y/o hojas que contienen rectificaciones presentadas ante esta Autoridad (ver Regla 70.16 y Sección 807 de las Instrucciones Administrativas bajo el PCT).</p> <p>Estos anexos consisten en un total de hojas.</p>                                                                       |
| <p>3. Este informe contiene indicaciones que se relacionan con los siguientes puntos:</p> <p>I. <u>  X  </u> Base del Informe</p> <p>II. <u>      </u> Prioridad</p> <p>III. <u>      </u> El no-establishment de opinión en relación con la novedad, nivel inventivo y aplicación industrial</p> <p>IV. <u>      </u> Falta de unidad de invención</p> <p>V. <u>  X  </u> Declaración motivada bajo el Art. 35(2) con relación a la novedad, nivel inventivo o aplicación industrial; citaciones y explicaciones que soportan dicha declaración</p> <p>VI. <u>      </u> Ciertos documentos citados</p> <p>VII. <u>      </u> Ciertos defectos en la solicitud internacional</p> <p>VIII. <u>  X  </u> Ciertas observaciones en la solicitud internacional</p> |

|                                                                                                                                                                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Fecha de presentación de la demanda<br><b>11/02/2004</b>                                                                                                                                                                                | Fecha en que se completó este informe<br><b>14.05.2005</b>                  |
| Nombre y dirección de la autoridad encargada del examen preliminar Internacional:<br><br><b>Mail Stop PCT, Attn: IPEA/US<br/>Commissioner for Patent<br/>P. O. Box 1450<br/>Alexandria, Virginia 22313-1450<br/>Fax: (703) 305-3230</b> | Oficial autorizado<br><br><b>Evelyn Huang</b><br><br>Teléfono: 571-272-1800 |

### 1. En relación con los elementos de la solicitud internacional

**CAPITULO DESCRIPTIVO, PAGINAS:**

**1-8** **Como fueron presentadas originalmente**

**REIVINDICACIONES. No.:**

**9-10** Como fueron presentadas originalmente

2. En relación con el idioma, todos los elementos marcados anteriormente fueron suministrados a esta Autoridad en el idioma en que la solicitud internacional fue presentada, a menos que se indique lo contrario bajo este punto.

**Estos elementos fueron suministrados o estaban disponibles para esta autoridad en el siguiente idioma, el cual es:**

- El idioma de la traducción aportada a efectos de la búsqueda internacional (bajo la Regla 23.1(b))
- El idioma de publicación de la solicitud internacional (bajo la Regla 48.3(b))
- El idioma de la traducción suministrada para efecto del examen preliminar internacional (bajo la Regla 55.2 y/o 55.3)

- 3. Respecto a cualquier secuencia nucleótido y/o aminoácido revelado en la solicitud internacional, el examen preliminar internacional fue llevado a cabo con base en la lista de secuencias:**

- ☐ **Contenidas en la solicitud internacional de forma escrita**
- ☐ **Presentadas junto con la solicitud internacional en forma legible por computador**
- ☐ **Aportada posteriormente a esta Autoridad en forma escrita**
- ☐ **Suministrada posteriormente a esta Autoridad en forma legible por computador**
- ☐ **La declaración de que la lista de secuencias aportada posteriormente en forma escrita no va más allá que lo revelado en la solicitud internacional como fue presentada.**
- ☐ **La declaración de que la información inscrita en forma legible por computador es idéntica a la lista de secuencias en forma escrita aportada.**

- 4. Las modificaciones han resultado en la cancelación de:**

- \_\_\_ El capítulo descriptivo**                      páginas:
- \_\_\_ Las reivindicaciones**                        Nos.:
- \_\_\_ Los dibujos**                                     hojas:

5.        Este informe ha sido establecido como si (algunas de) las modificaciones no hubieran sido efectuadas debido a que se ha considerado que van más allá de lo reivindicado mediante la solicitud Internacional.

**(A cualquier hoja de reemplazo que contenga dichas modificaciones debe hacerse referencia bajo el punto 1 y ser anexada a este informe)**

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**INFORME DEL EXAMEN  
PRELIMINAR INTERNACIONAL**

Solicitud internacional No. PCT/US03/22312

**V. Declaración motivada, bajo el Art. 35(2) con relación a la novedad, nivel inventivo o aplicación industrial; citaciones y explicaciones que sustentan dicha declaración**

**1. Declaración**

|                              |                                    |
|------------------------------|------------------------------------|
| <b>Novedad</b>               | <b>SI:</b> Reivindicaciones 1-8    |
|                              | <b>NO:</b> Reivindicaciones 11, 15 |
| <b>Nivel inventivo</b>       | <b>SI:</b> Reivindicaciones 1-8    |
|                              | <b>NO:</b> Reivindicaciones 2-5    |
| <b>Aplicación Industrial</b> | <b>SI:</b> Reivindicaciones 1-8    |
|                              | <b>NO:</b> Reivindicaciones        |

**2. Citaciones y explicaciones**

## PATENT COOPERATION TREATY

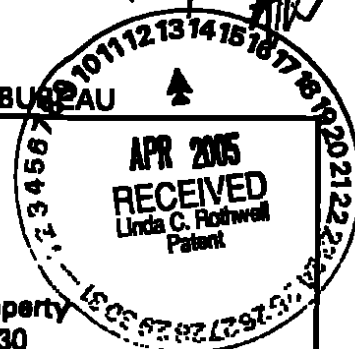
PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

THALLEMER, John, D.  
Novartis  
Corporate Intellectual Property  
One Health Plaza, Bldg. 430  
East Hanover, NJ 07936-1080  
United States of America



|                                                                |                                                                         |
|----------------------------------------------------------------|-------------------------------------------------------------------------|
| Date of mailing (day/month/year)<br>05 April 2005 (05.04.2005) | IMPORTANT NOTIFICATION                                                  |
| Applicant's or agent's file reference<br>RG/G-32603A/          |                                                                         |
| International application No.<br>PCT/US2003/022312             | International filing date (day/month/year)<br>17 July 2003 (17.07.2003) |

## 1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

## Name and Address

GENEVA PHARMACEUTICALS, INC.  
508 Carnegie Center, Suite 400  
Princeton, NJ 08540  
United States of America

## State of Nationality

US

## State of Residence

US

Telephone No.

Facsimile No.

Teleprinter No.

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☒ the person ☐ the name ☐ the address ☐ the nationality ☐ the residence

## Name and Address

SANDOZ AG  
Lichtstrasse 35  
CH-4056 Basel  
Switzerland

## State of Nationality

CH

## State of Residence

CH

Telephone No.

Facsimile No.

Teleprinter No.

CORRECTED  
VERSION

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

☒ the receiving Office ☐ the designated Offices concerned  
☐ the International Searching Authority ☒ the elected Offices concerned  
☒ the International Preliminary Examining Authority ☐ other:

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

Facsimile No. (41-22) 338.89.95

## Authorized officer

Céline Faust (Fax 338-8995)

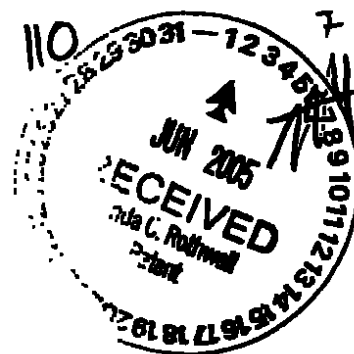
Telephone No. (41-22) 338 9728

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                |                                                                                                                               |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--|
| Applicant's or agent's file reference<br><b>G-32603A/GPI</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEPA/416) |  |
| International application No.<br><b>PCT/US03/22312</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | International filing date (day/month/year)<br><b>17 July 2003 (17.07.2003)</b> | Priority date (day/month/year)<br><b>05 August 2002 (05.08.2002)</b>                                                          |  |
| International Patent Classification (IPC) or national classification and IPC<br><b>IPC(7): A61K 31/4545; C07D 401/04; A61P 37/08 and US Cl.: 514/290; 546/93</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                |                                                                                                                               |  |
| Applicant<br><b>SANDOZ INC.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                |                                                                                                                               |  |
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>                                                                                                                                                       |                                                                                |                                                                                                                               |  |
| <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input checked="" type="checkbox"/> Certain observations on the international application</p> |                                                                                |                                                                                                                               |  |
| Date of submission of the demand<br><b>11 February 2004 (11.02.2004)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                | Date of completion of this report<br><b>14 May 2005 (14.05.2005)</b>                                                          |  |
| Name and mailing address of the IPEA/US<br>Mail Stop PCT, Attn: IPEA/US<br>Communications for Patents<br>P.O. Box 1450<br>Alexandria, Virginia 22313-1450<br>Facsimile No. (703) 305-3230                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                | Authorized officer<br>Evelyn Huang <i>J. Roberts for</i><br>Telephone No. 571-272-1600                                        |  |

Form PCT/PEPA/409 (cover sheet)(July 1998)

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## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed.
- ☒ the description:  
pages 1-8 \_\_\_\_\_ as originally filed  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages 2 and 10 \_\_\_\_\_, as originally filed  
pages NONE \_\_\_\_\_, as amended (together with any statement) under Article 19  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages NONE \_\_\_\_\_, as originally filed  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages NONE \_\_\_\_\_, as originally filed  
pages NONE \_\_\_\_\_, filed with the demand  
pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under Item 1 and annexed to this report.

**V. Reasoned statement under Rule 66.2(a)(II) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

|                               |             |     |
|-------------------------------|-------------|-----|
| Novelty (N)                   | Claims 1-6  | YES |
|                               | Claims NONE | NO  |
| Inventive Step (IS)           | Claims 1-6  | YES |
|                               | Claims 2-5  | NO  |
| Industrial Applicability (IA) | Claims 1-6  | YES |
|                               | Claims NONE | NO  |

**2. CITATIONS AND EXPLANATIONS**

Claims 2-5 lack an inventive step under PCT Article 33(3) as being obvious over US 4,659,716 A (VILLANI et al) in view of US 5,658,899 A (HANSEN et al) and/or US 4,954,503 A (STRUPCZEWSKI et al) and/or US 5,290,951 A (CONGY et al).

Villani discloses the antihistaminic descarboxylethoxyloratadine and its pharmaceutically acceptable salts, such as fumarate, for treating allergic reactions (column 26, claim 3; column 1). While Villani does not specifically describe the hemifumarate as in the instant, it is well recognized in the pharmaceutical art that hemifumarate is a pharmaceutically acceptable salt for compounds of diverse structures, as exemplified by Hansen (column 3, Example 1), by Strupczewski (column 10, Table II; columns 20-21, Examples 11-12) and by Congy (columns 17-18, Example 12; columns 21-22, Table 2, compound 56). Furthermore, Hansen specifically teaches that reproducible polymorphic crystalline hemifumarate may be derived from fumaric acid in ethanol (column 3, Example 1). At the time of the invention, one of ordinary skill in the art would be motivated to prepare the hemifumarate of Villani's descarboxyl-ethoxyloratadine according to the teachings of Hansen Strupczewski and/or Congy with the reasonable expectation of obtaining an additional reproducible crystalline salt form of descarboxylethoxyloratadine useful for treating allergic reactions.

The pharmaceutical composition comprising the instant descarboxylethoxy-loratadine hemifumarate polymorph form 1 or form 2 is the same as the pharmaceutical composition comprising the above obvious descarboxylethoxy-loratadine hemifumarate for the following reasons. In the liquid formulation, the instant crystalline polymorph form 1 or form 2 having a certain X-ray diffraction pattern would no longer exist and thus become the same as the above composition.

The use of instant polymorph form 1 or form 2 to treat allergic reaction is identical to the use of the above obvious descarboxylethoxyloratadine hemifumarate in the treatment of allergic reactions for the following reasons. In the *in vivo* physiological situation (which is mostly aqueous), the instant crystalline polymorph form 1 or form 2 having a certain X-ray diffraction pattern would no longer exist and thus become the same as the above obvious descarboxylethoxyloratadine hemifumarate.

Claims 1, 6 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the instant form 1 or form 2 descarboxylethoxyloratadine hemifumarate with the specific x-ray powder diffraction pattern or the process of making thereof.

Claims 1-6 meet the criteria set out in PCT Article 33(4), and thus find industrial applicability because the subject matter claimed can be made or used in the pharmaceutical industry as a therapeutic agent for treating allergic reactions.

**NEW CITATIONS**

US 5,658,899 A (HANSEN et al) 19 August 1997 (19.08.1997), see column 3, Example 1.

US 5,290,951 A (CONGY et al) 01 March 1994 (01.03.1994), see columns 17-18, Example 12; columns 21-22, Table 2, compound 56.

US 4,954,503 A (STRUPCZEWSKI et al) 04 September 1990 (04.09.1990), see column 10, table II; columns 20-21, Examples 11-12.

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AA**VIII. Certain observations on the international application**

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

Claims 1-2, 5, 6 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 1-2 are indefinite for the following reason(s): it is unclear whether the claims are directed to individual polymorphs (form 1 or form 2) or a mixture of polymorphs form 1 and form 2.