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SEÑOR

SUPERINTENDENTE DE INDUSTRIA Y COMERCIO

E.

S.

D.

REF:

EXPEDIENTE 10-098-064

TÍTULO SOLICITADO:

**PREPARACION DE CAPSULA QUE CONTIENE LOS
INGREDIENTES FARMACEUTICAMENTE ACTIVOS
LIQUIDOS Y SOLIDOS, LA CUAL PRESENTA
EXCELENTES PROPIEDADES DE LOS
INGREDIENTES FARMACEUTICAMENTE ACTIVOS.**

PUBLICACIÓN:

**Gaceta 629 de 20/06/2011, número de publicación
641.**

SOLICITANTE:

TAKEDA PHARMACEUTICALS COMPANY LIMITED.

APODERADO:

LUZ CLEMENCIA SUAREZ DE PAEZ.

TRÁMITE:

SUSTENTACION DE OPOSICIÓN.

JOSÉ LUIS REYES VILLAMIZAR, mayor de edad, identificado como aparece al pie de mi firma, abogado en ejercicio, titular de la tarjeta profesional número 44655 del Consejo Superior de la Judicatura, obrando en calidad de apoderado de la sociedad **TECNOQUÍMICAS S.A.** dentro del trámite de la referencia, en ejercicio de lo dispuesto por el artículo 42 inciso 2º de la Decisión 486 de 2000, por medio del presente escrito, procedo a sustentar y complementar la oposición presentada el 16 de septiembre de 2011, en los siguientes términos:

I. RATIFICACIÓN

- ❖ Ante la reivindicación de una combinación farmacológica en la solicitud colombiana en trámite, es relevante mencionar el concepto de la Doctora en Bioquímica Silvia Susana Giarcovich¹, en su opinión escrita acerca de "Asociaciones y Patentes" en el cual se afirma que las asociaciones farmacológicas están restringidas por ciertos principios y lineamientos preestablecidos por varias entidades, puesto que dichas combinaciones deben estar bajo el precepto de eficacia, seguridad y eficiencia terapéutica.

En otras palabras, se puede considerar que todo efecto sinérgico o terapéutico entre fármacos no se refiere propiamente a una invención, sino que corresponde mejor a la categoría de un descubrimiento, dado que dicho efecto pretendidamente sinérgico o terapéutico, conseguido mediante la simple combinación de fármacos, ocurre dentro del organismo, y se hace evidente a través de los respectivos ensayos preclínicos y/o clínicos, razón por la cual, en toda combinación de fármacos, resulta rutinario valorar las variables mencionadas. **De igual manera, es importante reiterar que la combinación de fármacos para tratar ciertas patologías, hace parte de las actividades propias de la profesión médica, y no de las actividades industriales, que al menos bajo la óptica subregional andina, son las llamadas a protegerse por la vía de las patentes de invención.**

- ❖ De otro lado, cabe mencionar que la patente mexicana MX PA01013210, publicada el **3 de junio de 2004**, y la patente americana US 2007/0185198 publicada el **9 de agosto de 2007**, revelan que la combinación entre etil ésteres de ácido omega 3-grasos, tales como EPA y DHA, en combinación con inhibidores de la HMG-CoA reductasa, para el tratamiento de trastornos cardiovasculares, cerebrovasculares y otros relacionados a la hiperlipidemias, ya se reconocían con anterioridad en el estado de la técnica, e inclusive se sugería con anterioridad, la posibilidad de incluir dicha combinación farmacológica en cápsulas blandas.
- ❖ Así las cosas, teniendo en cuenta que la solicitud de la referencia reivindica una cápsula blanda, que contiene principios activos líquidos en su interior, y

¹ Profesora Regular Adjunta del Departamento de Farmacología de la Facultad de Farmacia y Bioquímica de la UBA y Directora Técnica y Gerente de Estudios Clínicos de DIFFUCAP-EURAND SACIFI

que a su vez contiene principios activos sólidos dispersos en el exterior de la capa de la cubierta que forma la cápsula, específicamente en sus reivindicaciones 2 a 5, es del caso anotar que la patente española ES 8406185, publicada el 20 de septiembre de 1982, revela las mismas características técnicas de las cápsulas reivindicadas por la solicitud colombiana en trámite, es decir, reivindica cápsulas que pueden contener una composición líquida en su interior, mientras que superficialmente pueden contener otras sustancias activas a través de la película que forma la cápsula misma. Inclusive anticipa la obtención de cápsulas transparentes de este tipo.

- ❖ De igual manera, la solicitud en trámite carece de los requisitos fundamentales para que pueda serle otorgado el privilegio de patente de invención, en primer lugar porque reivindica una combinación farmacológica evidente para cualquier persona medianamente versada en la materia y reconocida, además, con anterioridad en el estado de la técnica; y en segundo lugar, porque como ya se ha demostrado, existe suficiente información técnica anterior, directamente relacionada con la obtención del mismo tipo de formulaciones que las reivindicadas por la solicitud que nos ocupa, información a partir de la cual, cualquier persona medianamente versada en la formulación de productos farmacéuticos podría derivar las formulaciones allí reivindicadas.

II. COMPLEMENTO DE INFORMACION.

En adición a los argumentos planteados, es del caso anotar cómo la patente americana US 4,690,816, publicada el 1 de septiembre de 1987 revela:

This application is a continuation of application Ser. No. 534,109, filed Sept. 20, 1983, now abandoned.

This invention relates to a new type of soft capsule which comprises wrapping an oily substance with a film containing a water-soluble medicinal substance.

(...)

The inventors of this invention have attempted to resolve this kind of problem, and finally got an idea to add the water-soluble medicinal substance to a film.

Such an idea could be obtained by breaking down the ordinary knowledge that medicinal substance is contained in an oily phase of a soft capsule. The soft capsule of this invention has a different constitution from the conventional soft capsule defined in pharmacopoeia, and accordingly the soft capsule presented by this invention is called a "new type of soft capsule" in this specification.

(...)

The main component of the film is not restricted, but usually the film consists of gelatin optionally treated with a organic or inorganic acid or alkaline substance. Conventional additives to the film such as coloring agents, plasticizers, antiseptics, wetting agents, solubilizing agents, disintegrants, flavorants, antioxidizing agents, and the like can be optionally added to the film component.

(...)

In addition to the above, beautiful soft capsules can be obtained when both the oily substance and the film are transparent, because the medicinal substance is not suspended in the oily substance but rather is dissolved in the film component.

The method for preparing the new type soft capsule of this invention is explained in more detail in the following Examples.

(...)

Como se puede apreciar claramente, en esta anterioridad se revelan cápsulas transparentes que comprenden ingredientes activos encapsulados e ingredientes activos que se adicionan a la superficie de dicha capsula, lo que sin duda afecta, en forma insalvable, el Nivel Inventivo de las reivindicaciones 1 a 14 de la solicitud en trámite.

De otro lado, y teniendo en cuenta que la solicitud en cuestión se refiere a la fase nacional de una solicitud PCT-PATENTE DE INVENCION CAPITULOS I Y II, y que uno de los requisitos para el ingreso a fase nacional, cuando la solicitud no haya sido presentada ni publicada en el idioma oficial de la oficina a través de la cual se esté solicitando la protección, debe presentarse una traducción de la solicitud internacional, y teniendo en cuenta que el resumen en inglés de la publicación internacional relacionada (WO 2009/087938) revela:

(57) Abstract: Disclosed is a capsule formulation containing liquid and solid pharmaceutically active ingredients, which has excellent release properties of the pharmaceutically active ingredients. Specifically disclosed is a seamless capsule containing liquid and solid pharmaceutically active ingredients, wherein the liquid pharmaceutically active ingredient is sealed within the capsule in the form of a liquid pharmaceutical composition, and the solid pharmaceutically active ingredient is dispersed in a capsule shell layer.

Mientras que el resumen traducido al español en la solicitud colombiana revela:

"La presente invención proporciona la siguiente preparación de cápsula, que es superior en la característica de disolución y similares de un ingrediente farmacéuticamente activo y contiene los ingredientes farmacéuticamente activos líquidos y sólidos una cápsula transparente que contiene los ingredientes farmacéuticamente activos líquidos y sólidos, en donde el ingrediente líquido farmacéuticamente activo se encapsula en forma de composición farmacéutica líquida, y el ingrediente sólido farmacéuticamente activo se dispersa en una capa de cubierta de cápsula."

Es relevante indicar que el término "seamless" traducido al español significaría "sin costura" o "sin uniones", y no transparente, como es evidente en el resumen indicado en la solicitud traducida para Colombia.

Ello es aún más relevante, debido a que dicha característica es la que define prácticamente todo el capítulo reivindicatorio de la solicitud colombiana en cuestión, cuando la reivindicación 1 revela textualmente "Una cápsula transparente que comprende una o más clases de ingredientes líquidos farmacéuticamente activos y una o más clases de ingredientes sólidos farmacéuticamente activos."

TRANSPARENTE según la RAE es:

1. adj. Dicho de un cuerpo: A través del cual pueden verse los objetos claramente.
2. adj. Dicho de un cuerpo: translúcido.

Mientras que COSTURA:

4. f. Serie de puntadas que une dos piezas cosidas.

O UNIÓN:

10. f. Inmediación de una cosa a otra.

De lo que se sobreentiende que una cápsula “sin costuras” o “sin uniones” se refiere a que dicho cuerpo de la cápsula es íntegro, de una sola pieza y que por lo tanto no consta de uniones o costuras;**lo que a todas luces es muy diferente a lo que sería al hacerse referencia a una cápsula transparente.**

Lo anteriormente expuesto deja en evidencia que dicha imprecisión puede tener efectos sobre la lectura técnica de la solicitud en cuestión, y una mala interpretación de las reales características de lo solicitado, puede conllevar a que no se haga un análisis correcto tanto de la novedad como del nivel inventivo de dicha solicitud de patente.

Por lo anteriormente citado, solicito comedidamente al Despacho que revise nuevamente la solicitud, a fin de establecer si la misma cumple con los requisitos de forma (en especial con lo referido a la oportuna traducción y a la precisión de la misma), para que se dé por cumplido lo referido al 39 de la Decisión 486 que expresa que *“Si del examen de forma resulta que la solicitud no contiene los requisitos establecidos en los artículos 26 y 27, la oficina nacional competente notificará al solicitante para que complete dichos requisitos dentro del plazo de dos meses siguientes a la fecha de notificación. A solicitud de parte dicho plazo será prorrogable por una sola vez, por un período igual, sin que pierda su prioridad.”* Y conforme a lo anterior se dé una nueva orden de publicación de acuerdo con lo establecido en el artículo 40 de la misma Decisión.

En adición a lo expuesto anteriormente, llamo la atención del Despacho a que el artículo 46 de la Decisión 486 dispone que *“La oficina nacional competente podrá requerir el informe de expertos o de organismos científicos o tecnológicos que se consideren idóneos, para que emitan opinión sobre la patentabilidad de la invención. Asimismo, cuando lo estime conveniente, podrá requerir informes de otras oficinas de propiedad industrial. De ser necesario, a efectos del examen de patentabilidad y a requerimiento de la oficina nacional competente, el solicitante proporcionará, en un plazo que no excederá de 3 meses, uno o más de los siguientes documentos relativos a una o más de las solicitudes extranjeras referidas total o parcialmente a la misma invención que se examina (...) Si el solicitante no presentara los documentos requeridos dentro del plazo señalado en el presente artículo la oficina nacional competente denegará la patente.”*

Con base en la norma transcrita, y teniendo en cuenta que el lenguaje utilizado por varias de las solicitudes de patente relevantes para la valoración de la solicitud que nos ocupa, **es el japonés**, se ruega exigir al solicitante **aportar traducción** de las solicitudes mencionadas en el reporte de búsqueda internacional de la solicitud internacional equivalente, así como en la opinión escrita de la autoridad de búsqueda internacional, específicamente de los siguientes documentos:

- Document 1: JP 59-053410 A (Morishita Jintan Co., Ltd.), 28 March 1984
- Document 2: JP 63-238015 A (Morishita Jintan Co., Ltd.), 04 October 1988
- Document 3: JP 01-193216 A (Fuji Capsule Kabushiki Kaisha), 03 August 1989
- Document 4: JP 54-088880 A (Yugen Kaisha Eru Emu Asoshieito), 14 July 1979
- Document 5: JP 05-155761 A (Eisai Co., Ltd.), 22 June 1993
- Document 6: JP 01-186815 A (Tokai Capsule Co., Ltd.), 26 July 1989
- Document 7: JP 07-053356 A (Morishita Jintan Co., Ltd.), 28 February 1995
- Document 8: WO 2005/102294 A1 (Kyowa Hakko Kogyo Co., Ltd.), 03 November 2005
- Document 9: JP 2005-046054 A (Nippon Kayaku Co., Ltd.), 24 February 2005
- Document 10: JP 08-023912 A (Yoshinobu UMEDA), 30 January 1996
- Document 11: Masanobu ASADA, "Seamless Capsule no Kiso to Oyo", Shokuhin Hydrocolloid Symposium, 2005, vol. 16th, pages 34 to 38
- Document 12: JP 2003-504333 A (Laxdale Ltd.), 04 February
- Document 13: JP 59-157018 A (Freund Industrial Co., Ltd.), 06 September 1984
- Document 14: JP 64-000015 A (Freund Industrial Co., Ltd.), 05 January 1989

Document 15: WO 2006/073147 A1 (Mochida Pharmaceutical Co., Ltd.), 13 July 2006

Document 16: WO 2004/112777 A1 (Mochida Pharmaceutical Co., Ltd.), 29 December 2004

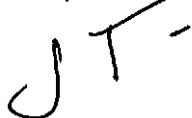
Document 17: JP 2007-238594 A (Mochida Pharmaceutical Co., Ltd.), 20 September 2007

Así mismo, rogamos al Despacho que tenga en cuenta el concepto emitido por dicha oficina, en la mencionada opinión escrita, en cuanto a la Novedad y el Nivel Inventivo de las 14 reivindicaciones de la solicitud en cuestión, a la luz de los documentos japoneses antes citados.

III. ANEXOS

- Copia de la patente americana US 4,690,816 publicada el 01 de septiembre de 1987.
- Traducción al Inglés del Informe preliminar internacional sobre la patentabilidad del capítulo I (IB/373) para la solicitud internacional PCT/JP2008/073875 equivalente al expediente 10 098.064 colombiano.
- Traducción al Inglés de la opinión escrita de la Administración de búsqueda internacional para la solicitud internacional PCT/JP2008/073875 equivalente al expediente 10 098.064 colombiano.

Señor Superintendente,



JOSE LUIS REYES VILLAMIZAR
C.C. 79.152.473 de Usaquén
T.P. 44.655 del C. S de la J.

United States Patent [19]

Hata et al.

[11] Patent Number: 4,690,816

[45] Date of Patent: Sep. 1, 1987

[54] TYPE SOFT CAPSULE

[75] Inventors: Takehisa Hata, Mukou; Nobuto Kanagawa, Kyogo; Takashi Morishita; Toshiyuki Suzuki, both of Osaka, all of Japan

[73] Assignees: Fujisawa Pharmaceutical Co., Ltd.; Morishita Jintan Co., Ltd., both of Osaka, Japan

[21] Appl. No.: 798,360

[22] Filed: Nov. 18, 1985

Related U.S. Application Data

[63] Continuation of Ser. No. 534,109, Sep. 20, 1983, abandoned.

[30] Foreign Application Priority Data

Sep. 20, 1982 [JP] Japan 57-164706

[51] Int. Cl.⁴ A61K 9/48

[52] U.S. Cl. 424/456; 514/962

[58] Field of Search 424/37; 514/774, 786, 514/277

[56] References Cited

U.S. PATENT DOCUMENTS

2,183,053 12/1939 Taylor 424/37
2,643,209 6/1953 Goett 424/37
2,691,619 10/1954 Bavley 424/37
2,987,444 6/1961 Allardice 424/37
3,312,594 4/1967 Norman et al. 424/360
3,344,028 9/1967 Personeus et al. 424/360
3,445,563 5/1969 Clegg et al. 424/37
3,676,363 7/1972 Mosier 424/37
4,428,927 1/1984 Ebert et al. 424/37

FOREIGN PATENT DOCUMENTS

799450 11/1968 Canada 424/37
1037073 7/1955 Fed. Rep. of Germany 424/360
76774 9/1969 Fed. Rep. of Germany 424/360
4629745 12/1969 Japan 424/360
56-97220 12/1979 Japan 424/360
58-62120 10/1981 Japan 424/360

Primary Examiner—Shep K. Rose
Attorney, Agent, or Firm—Oblon, Fisher, Spivak, McClelland & Maier

[57] ABSTRACT

A soft capsule which is prepared by wrapping an oily substance which is a member selected from the group consisting of tricaprylic acid glyceride and sesame oil, with a gelatin film containing sodium picosulfate.

2 Claims, No Drawings

TYPE SOFT CAPSULE

This application is a continuation of application Ser. No. 534,109, filed Sept. 20, 1983, now abandoned.

This invention relates to a new type of soft capsule which comprises wrapping an oily substance with a film containing a water-soluble medicinal substance.

The object of this invention is to provide a new type soft capsule which can be applied to a water-soluble medicinal substance.

It has been known to prepare soft capsules by wrapping an oily substance containing a medicinal substance with gelatin film.

When the medicinal substance is water-soluble, soft capsules have been prepared by wrapping a suspension of the water-soluble medicinal substance in oil with a gelatin film.

According to this method, however, it is inevitable that the quality of the capsule deteriorates in the equality of the content of the medicinal substance in each capsule, because it is difficult to maintain the level of equality of suspension to be filled in each capsule during the preparation thereof.

This tendency becomes more and more remarkable as the content of the medicinal substance is decreased, and sometimes results in serious problems with the quality of the medicine.

The inventors of this invention have attempted to resolve this kind of problem, and finally got an idea to add the water-soluble medicinal substance to a film. Such an idea could be obtained by breaking down the ordinary knowledge that medicinal substance is contained in an oily phase of a soft capsule. The soft capsule of this invention has a different constitution from the conventional soft capsule defined in pharmacopoeia, and accordingly the soft capsule presented by this invention is called a "new type of soft capsule" in this specification.

The new type soft capsule of this invention can be prepared by wrapping an oily substance with a film containing a water-soluble medicinal substance.

The main component of the film is not restricted, but usually the film consists of gelatin optionally treated with an organic or inorganic acid or alkaline substance. Conventional additives to the film such as coloring agents, plasticizers, antiseptics, wetting agents, solubilizing agents, disintegrants, flavorants, antioxidizing agents, and the like can be optionally added to the film component.

This invention can be applied to a water-soluble medicinal substance which can be dissolved in the film component. In case the medicinal substance cannot be easily dissolved in the film component, a solubilizing agent can optionally be used. Accordingly, the water-soluble medicinal substance of this invention includes not only ones which can be easily dissolved in water, but also ones which can be dissolved in water by using solubilizing agent. The content of the medicinal substance contained in the film can be selected according to a dose of the medicine in a range where the medicinal substance can be dissolved in the film component.

The oily substance to be wrapped by the film as mentioned above may be a conventional one such as vegetable oil (e.g. olive oil, safflower oil, corn oil, sunflower oil, cotton seed oil, tsubaki oil, rice bran oil, soybean oil, sesame oil, wheat germ oil, coconut oil, peanut oil, rape oil, etc.), fish oil (e.g. cuttlefish oil, cod oil, etc.), liver oil (e.g. shark liver oil, cod liver oil, etc.), blubber oil (e.g. seal oil, blue whale oil, etc.), conchiferas oil (e.g. abalone oil, oyster oil, etc.), a mixture of these animal oils, a medicinal oily substance (e.g. liver oil, castor oil,

fatty acid glyceride, vitamin E, vitamin A, vitamin K, etc.), polyethylene glycol, or the like.

These oily substances can optionally contain medicinal substances which can be dissolved therein.

The new type soft capsule of this invention can be prepared by a conventional method, and preferably by the method described in the specification of Japanese Patent Publication No. 1067/1978, according to which the new type soft capsule equalized in the weight of the film can be easily prepared.

The new type soft capsule of this invention possesses superior effects as follows. That is, the content of the medicinal substance in each capsule can be easily equalized even though the medicinal substance is water-soluble. And further, the medicinal substance can be dissolved in a short time after administration, since the substance is contained in the surface part of the soft capsule.

In addition to the above, beautiful soft capsules can be obtained when both the oily substance and the film are transparent, because the medicinal substance is not suspended in the oily substance but rather is dissolved in the film component.

The method for preparing the new type soft capsule of this invention is explained in more detail in the following Examples.

EXAMPLE 1

(Film Components)

Sodium picosulfate: 1.5 mg,
Gelatin: 7 mg,
D-Sorbitol: 1 mg,
Glycerol: 2 mg,
Ethylparaben: 0.03 mg,
Propylparaben: 0.01 mg,
Reddish coloring agent: q.s.

(Oily Substance)

Tricaprylic acid glyceride: 23 mg,

New type soft capsules with a diameter of 4 mm were prepared by the method described in the specification of Japanese Patent Publication No. 1067/1978 by using the film components and the oily substance in the ratio as described above.

EXAMPLE 2

New type soft capsules were prepared by the method described in the specification of Japanese Patent Publication No. 1067/1978 by using sesame oil instead of tricaprolic acid glyceride in Example 1.

EXAMPLE 3

New type soft capsules were prepared by the method described in the specification of Japanese Patent Publication No. 1067/1978 by using maleic acid chlorpheniramine (2 mg) instead of sodium picosulfate in Example 1.

We claim:

1. A soft capsule which is prepared by wrapping an oily substance which is a member selected from the group consisting of tricaprolic acid glyceride and sesame oil, with a gelatin film containing sodium picosulfate.

2. A soft capsule comprising:

a film containing gelatin, wherein said gelatin has dissolved therein sodium picosulfate, said film wrapped around a core which consists of tricaprolic acid glyceride, said capsule having a diameter of about 4 mm.

* * * * *

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 091334	FOR FURTHER ACTION		See item 4 below
International application No. PCT/JP2008/073875	International filing date (<i>day/month/year</i>) 29 December 2008 (29.12.2008)	Priority date (<i>day/month/year</i>) 10 January 2008 (10.01.2008)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant TAKEDA PHARMACEUTICAL COMPANY LIMITED			

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 8 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 10 August 2010 (10.08.2010)
	Authorized officer Masashi Honda e-mail: pt08.pct@wipo.int

PATENT COOPERATION TREATY

TRANSLATION

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

091334

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2008/073875

International filing date (day/month/year)

29.12.2008

Priority date (day/month/year)

10.01.2008

International Patent Classification (IPC) or both national classification and IPC

Applicant

TAKEDA PHARMACEUTICAL COMPANY LIMITED

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 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/JP

Date of completion of this opinion

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2008/073875

Box No. 1

Basis of this 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. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. 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
4. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) 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.
5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2008/073875

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)	Claims	3, 6-14	YES
	Claims	1, 2, 4, 5	NO
Inventive step (IS)	Claims		YES
	Claims	1-14	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO
2. Citations and explanations:			
Document 1: JP 59-053410 A (Morishita Jintan Co., Ltd.), 28 March 1984			
Document 2: JP 63-238015 A (Morishita Jintan Co., Ltd.), 04 October 1988			
Document 3: JP 01-193216 A (Fuji Capsule Kabushiki Kaisha), 03 August 1989			
Document 4: JP 54-088880 A (Yugen Kaisha Eru Emu Asoshieito), 14 July 1979			
Document 5: JP 05-155761 A (Eisai Co., Ltd.), 22 June 1993			
Document 6: JP 01-186815 A (Tokai Capsule Co., Ltd.), 26 July 1989			
Document 7: JP 07-053356 A (Morishita Jintan Co., Ltd.), 28 February 1995			
Document 8: WO 2005/102294 A1 (Kyowa Hakko Kogyo Co., Ltd.), 03 November 2005			
Document 9: JP 2005-046054 A (Nippon Kayaku Co., Ltd.), 24 February 2005			
Document 10: JP 08-023912 A (Yoshinobu UMEDA), 30 January 1996			
Document 11: Masanobu ASADA, "Seamless Capsule no Kiso to Oyo", Shokuhin Hydrocolloid Symposium, 2005, vol. 16th, pages 34 to 38			
Document 12: JP 2003-504333 A (Laxdale Ltd.), 04 February			

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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

2003

Document 13: JP 59-157018 A (Freund Industrial Co., Ltd.),
06 September 1984

Document 14: JP 64-000015 A (Freund Industrial Co., Ltd.),
05 January 1989

Document 15: WO 2006/073147 A1 (Mochida Pharmaceutical Co.,
Ltd.), 13 July 2006

Document 16: WO 2004/112777 A1 (Mochida Pharmaceutical Co.,
Ltd.), 29 December 2004

Document 17: JP 2007-238594 A (Mochida Pharmaceutical Co.,
Ltd.), 20 September 2007

***Claims 1-3**

The invention as in claims 1 and 2 is not novel and does not involve an inventive step in the light of documents 1-6 cited in the ISR, and the invention as in claim 3 does not involve an inventive step in the light of documents 1-7.

Documents 1-6 disclose seamless capsules wherein a pharmaceutically active ingredient such as a fatty acid ester is sealed in the form of a liquid in the capsules, and another pharmaceutically active ingredient is contained in the capsule shell layer. The invention as in claims 1 and 2 of the present application is indistinguishable from the invention disclosed in documents 1-6.

It is also common practice to provide an additional covering layer on the exterior of such seamless capsules (see document 7), and a person skilled in the art therefore could easily achieve the invention as in claim 3.

***Claims 1 and 4**

The invention as in claims 1 and 4 is not novel and

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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

does not involve an inventive step in the light of documents 8-12 cited in the ISR.

Documents 8-12 disclose seamless capsules wherein various pharmaceutically active ingredients are sealed in the form of a liquid in the capsules, and another pharmaceutically active ingredient is present in a dispersed state therein. The invention as in claims 1 and 4 of the present application is indistinguishable from the invention disclosed in documents 8-12.

***Claims 1 and 5**

The invention as in claims 1 and 5 is not novel and does not involve an inventive step in the light of documents 13 and 14 cited in the ISR.

Documents 13 and 14 disclose preparations wherein seamless capsules enclosing a pharmaceutically active ingredient in the form of a liquid are coated with another pharmaceutically active ingredient. The invention as in claims 1 and 5 of the present application is indistinguishable from the invention disclosed in documents 13 and 14.

***Claims 6-14**

The invention as in claims 6-14 does not involve an inventive step in the light of documents 1-17 cited in the ISR.

Because the preparation technology disclosed in documents 1-14 is clearly applicable to a variety of publicly known pharmaceutically active ingredients, a person skilled in the art could appropriately attempt to use EPA ethyl esters or the like (publicly known to be sealed in seamless capsules such as those disclosed in

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citations and explanations supporting such statement

documents 15-17) as a liquid pharmaceutically active ingredient and to furthermore use a drug for the treatment of hyperlipidemia (publicly known to be used concomitantly with that ingredient) as another pharmaceutically active ingredient. A review of the disclosure of the initial description is not found to reveal that the invention of the present application would thereby produce a particularly remarkable effect.

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INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2008/073875

Box No. VI

Certain documents cited

1. Certain published documents (Rule 43bis.1 and 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
PCT/JP2008/052554	24.07.2008	17.01.2008	17.01.2007
[P, X]			

2. Non-written disclosures (Rule 43bis.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)
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PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference
091334

FOR FURTHER ACTION
See paragraph 2 below

International application No. PCT/JP2008/073875	International filing date (day/month/year) 29.12.2008	Priority date (day/month/year) 10.01.2008
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International Patent Classification (IPC) or both national classification and IPC

Applicant
TAKEDA PHARMACEUTICAL COMPANY LIMITED

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 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/JP	Date of completion of this opinion	Authorized officer
Facsimile No.		Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

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Box No. 1

Basis of this 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. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a)).
3. 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
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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2008/073875

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Document 9: JP 2005-046054 A (Nippon Kayaku Co., Ltd.), 24 February 2005			
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***Claims 1-3**

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***Claims 1 and 4**

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***Claims 1 and 5**

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***Claims 6-14**

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
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documents 15-17) as a liquid pharmaceutically active ingredient and to furthermore use a drug for the treatment of hyperlipidemia (publicly known to be used concomitantly with that ingredient) as another pharmaceutically active ingredient. A review of the disclosure of the initial description is not found to reveal that the invention of the present application would thereby produce a particularly remarkable effect.

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INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2008/073875

Box No. VI

Certain documents cited

1. Certain published documents (Rule 43bis.1 and 70.10)

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PCT/JP2008/052554	24.07.2008	17.01.2008	17.01.2007
[P, X]			

2. Non-written disclosures (Rule 43bis.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)
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