



GLOBAL

PATENTS

Canada

**Brevets canadiens* /
Canadian Patents* /
Patentes canadienses***

1,333,471

1,338,682

2,090,186

2,142,277

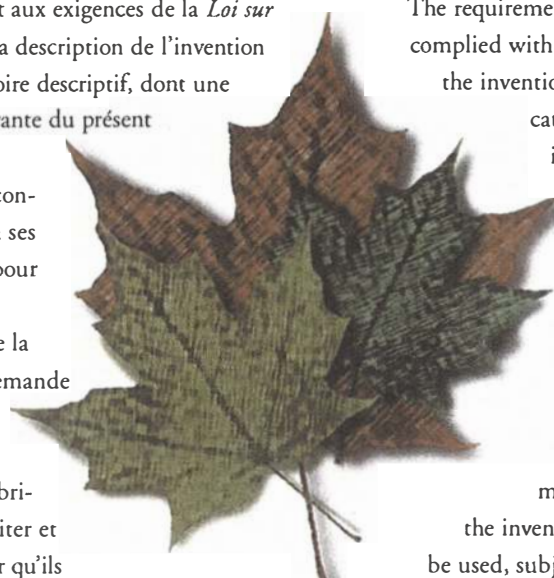
2,176,946



Brevet canadien / Canadian Patent

Le commissaire aux brevets a reçu une demande de délivrance de brevet visant une invention. Ladite requête satisfait aux exigences de la *Loi sur les brevets*. Le titre et la description de l'invention figurent dans le mémoire descriptif, dont une copie fait partie intégrante du présent document.

Le présent brevet confère à son titulaire et à ses représentants légaux, pour une période expirant vingt ans à compter de la date du dépôt de la demande au Canada, le droit, la faculté et le privilège exclusif de fabriquer, construire, exploiter et vendre à d'autres, pour qu'ils l'exploitent, l'objet de l'invention, sauf jugement en l'espèce rendu par un tribunal compétent, et sous réserve du paiement des taxes périodiques.



The Commissioner of Patents has received a petition for the grant of a patent for an invention. The requirements of the *Patent Act* have been complied with. The title and a description of the invention are contained in the specification, a copy of which forms an integral part of this document.

The present patent grants to its owner and to the legal representatives of its owner, for a term which expires twenty years from the filing date of the application in Canada, the exclusive right, privilege and liberty of making, constructing and using the invention and selling it to others to be used, subject to adjudication before any court of competent jurisdiction, and subject to the payment of maintenance fees.

B R E V E T C A N A D I E N **1,333,471** C A N A D I A N P A T E N T

Date à laquelle le brevet a été
accordé et délivré

1994/12/13

Date on which the patent
was granted and issued

Date du dépôt de la demande

1989/04/27

Filing date of the application

597956

1333471

DEC 13 1994

ABSTRACT OF THE DISCLOSURE

Effect of dietary whey protein (lactalbumin) on the immune response to sheep red blood cells, host resistance to bacterial infections, development of tumors and the process of aging.

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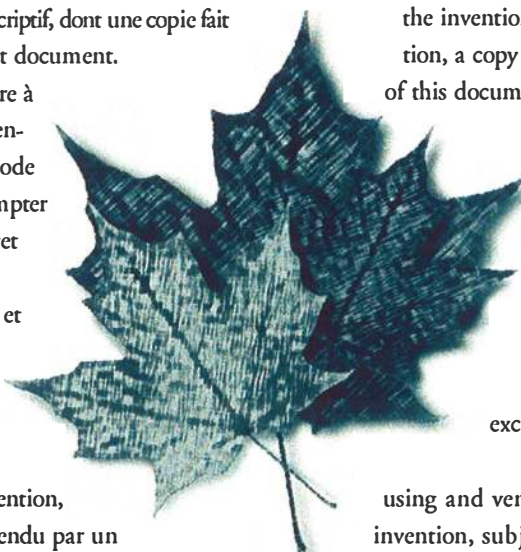
Brevet canadien / Canadian Patent

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Le présent brevet confère à son titulaire et à ses représentants légaux, pour une période expirant dix-sept ans à compter de la date à laquelle le brevet est accordé et délivré au Canada, le droit, la faculté et le privilège exclusif de fabriquer, construire, exploiter et vendre à d'autres, pour qu'ils l'exploitent, l'objet de l'invention, sauf jugement en l'espèce rendu par un tribunal compétent, et sous réserve du paiement des taxes périodiques.

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B R E V E T C A N A D I E N

1338682

C A N A D I A N P A T E N T

Date à laquelle le brevet a été
accordé et délivré

1996/10/29

Date on which the patent
was granted and issued

Commissaire aux brevets / Commissioner of Patents



29 OCT. 1996

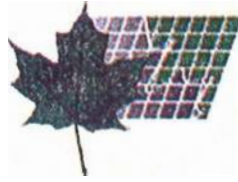
1338682

614239

ABSTRACT

The present invention is concerned with a whey protein composition comprising a suitable concentration of whey protein concentrate wherein the whey protein concentrate contains proteins which are present in an essentially undenatured state and wherein the biological activity of the whey protein concentrate is dependent on the overall amino acid and small peptides pattern resulting from the contribution of all its protein components and a method of producing said whey protein composition. The invention also relates to several applications of said composition.

[Back to document details](#)



Brevet canadien / Canadian Patent

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B R E V E T C A N A D I E N **2,090,186** C A N A D I A N P A T E N T

Date à laquelle le brevet a été accordé et délivré

1999/03/16

Date on which the patent was granted and issued

Date du dépôt de la demande

1993/02/23

Filing date of the application

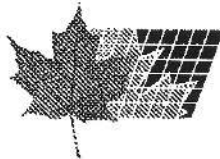
Date à laquelle la demande est devenue accessible au public pour consultation

1993/10/11

Date on which the application was made available for public inspection

Commissaire aux brevets / Commissioner of Patents





(11) (21) (C) **2,090,186**
(22) 1993/02/23
(43) 1993/10/11
(45) 1999/03/16

(72) Bounous, Gustavo, CA

(72) Gold, Phil, CA

(73) Immunotec Research Corporation Ltd., CA

(51) Int. Cl.⁶ A61K 39/395, A23L 1/305, A61K 35/20

(30) 1992/04/10 (866,756) US

(54) **METHODE DE TRAITEMENT DE SUJETS SEROPOSITIFS
POUR LE VIH A L'AIDE DE PROTEINES DU LACTOSERUM**

(54) **METHOD OF TREATMENT OF HIV-SEROPOSITIVE
INDIVIDUALS WITH DIETARY WHEY PROTEINS**

(57) Un concentré protéinique non caséique est administré à des individus VIH séropositifs pour augmenter le nombre de cellules sanguines mononucléaires, le taux de glutathione (GSH), le poids corporel et la sensation de bien-être. De plus, la concentration des lymphocytes T-4 et le rapport lymphocytes T-4/lymphocytes T-suppresseurs se trouvent légèrement augmentés.

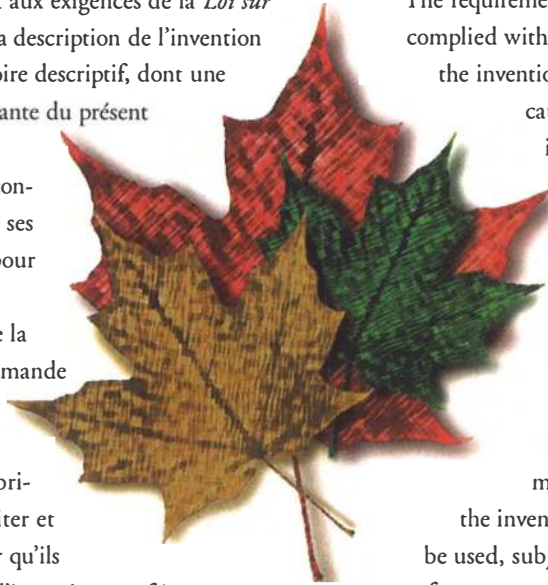
(57) Udenatured whey protein concentrate is administered to HIV-seropositive individuals to elevate their blood mononuclear cells, glutathione (GSH) level, body weight and sense of well being. In addition T-helper cells concentration and their T-helper cells; T-suppressor cells ratio are slightly elevated.



Brevet canadien / Canadian Patent

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B R E V E T C A N A D I E N

2,142,277

C A N A D I A N P A T E N T

Date à laquelle le brevet a été
accordé et délivré

2000/01/18

Date on which the patent
was granted and issued

Date du dépôt de la demande

1993/08/05

Filing date of the application

Date à laquelle la demande est
devenue accessible au public
pour consultation

1994/03/03

Date on which the application
was made available for
public inspection

Commissaire aux brevets / Commissioner of Patents

O P I C

OFFICE DE LA PROPRIÉTÉ
INTELLECTUELLE DU CANADA



C I P O

CANADIAN INTELLECTUAL
PROPERTY OFFICE

(12) (19) (CA) **Brevet-Patent**

(11) (21) (C) **2,142,277**

(22) 1993/08/05

(43) 1994/03/03

(45) 2000/01/18

(72) Bounous, Gustavo, CA

(72) Gold, Phil, CA

(73) Immunotec Research Corporation Ltd., CA

(51) Int.Cl.⁶ A61K 35/20

(30) 1992/08/13 (07/929,347) US

(54) **COMPOSITIONS THERAPEUTIQUES ANTICANCEREUSES,
POUR LA PREVENTION OU LE TRAITEMENT DU CANCER**

(54) **ANTI-CANCER THERAPEUTIC COMPOSITIONS FOR
PROPHYLAXIS OR FOR TREATMENT OF CANCER**

(57) This invention relates to a method of treatment of patients having lesions resulting from cancer cells and to an application as an anti-cancer composition of undenatured whey protein concentrate.

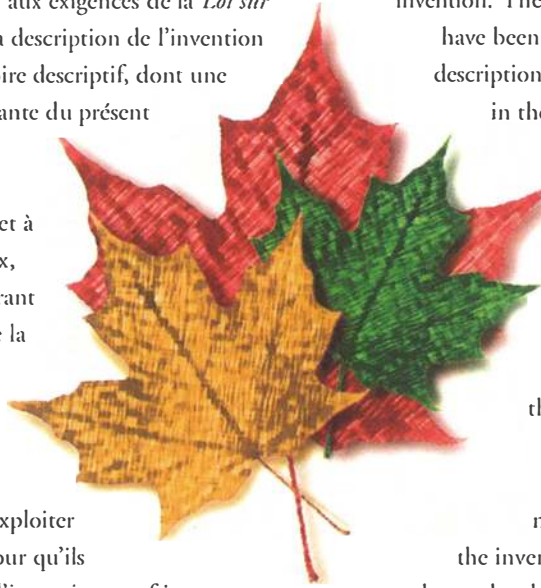




Brevet canadien / Canadian Patent

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B R E V E T C A N A D I E N **2,176,946** C A N A D I A N P A T E N T

Date à laquelle le brevet a été accordé et délivré

2006/02/07

Date on which the patent was granted and issued

Date du dépôt de la demande

1994/12/23

Filing date of the application

Date à laquelle la demande est devenue accessible au public pour consultation

1995/07/06

Date on which the application was made available for public inspection

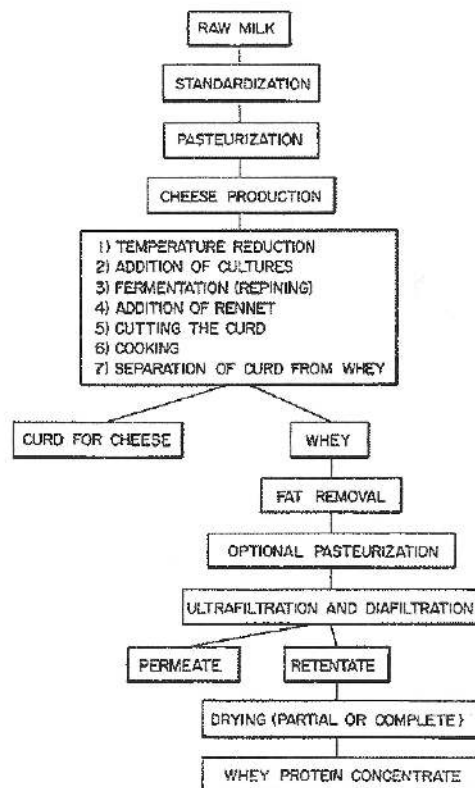
Commissaire aux brevets / Commissioner of Patents



(86) Date de dépôt PCT/PCT Filing Date: 1994/12/23
 (87) Date publication PCT/PCT Publication Date: 1995/07/06
 (45) Date de délivrance/Issue Date: 2006/02/07
 (85) Entrée phase nationale/National Entry: 1996/05/17
 (86) N° demande PCT/PCT Application No.: CA 1994/000726
 (87) N° publication PCT/PCT Publication No.: 1995/017830
 (30) Priorités/Priorities: 1993/12/30 (08/175,637) US;
 1994/09/30 (08/315,904) US

(51) Cl.Int./Int.Cl. *A23J 1/20* (2000.01),
A23L 1/305 (2000.01), *A23C 19/05* (2000.01),
A23C 9/142 (2000.01)
 (72) Inventeurs/Inventors:
 BOUNOUS, GUSTAVO, CA;
 LANGE, MICHEL, CA
 (73) Propriétaire/Owner:
 2458781 CANADA INC., CA
 (74) Agent: GOWLING LAFLEUR HENDERSON LLP

(54) Titre : PROCÉDE DE PRODUCTION D'UN CONCENTRE DE PROTEINES NON DENATUREES DE LACTOSERUM
 (54) Title: PROCESS FOR MAKING UNDENATURED WHEY PROTEIN CONCENTRATE



(57) Abrégé/Abstract:

A process for producing an undenatured whey protein concentrate as a by-product in making cheese to give a whey protein concentrate having a serum albumin content of about 9 % or more involving control of the temperature and other factors.



Etats-Unis / United States

**Brevets américains* /
American Patents* /
Patentes de los EE.UU.***

5,230,902

5,888,552

5,290,571

5,846,939

5,451,412

5,744,157

5,456,924

6,927,231

***Pour le texte intégral des brevets, tapez: /For the full text of the patents please go to :
<http://www.uspto.gov>**

The
United
States
of
America



The Commissioner of Patents
and Trademarks

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.

Michael K. Turk

Acting Commissioner of Patents and Trademarks

Sandra L. Morton
Attest



US005230902A

United States Patent [19]
Gold et al.

[11] **Patent Number:** **5,230,902**
[45] **Date of Patent:** **Jul. 27, 1993**

[54] **UNDENATURED WHEY PROTEIN
CONCENTRATE TO IMPROVE ACTIVE
SYSTEMIC HUMORAL IMMUNE
RESPONSE**

1495940 12/1977 United Kingdom 424/95

[75] **Inventors:** Phil Gold, Westmount; Gustavo
Bounous, Montreal; Patricia A. L.
Kongshavn, St. Lambert, all of
Canada

[73] **Assignee:** Immunotec Research Corporation,
Montreal, Canada

[21] **Appl. No.:** 563,794

[22] **Filed:** Aug. 3, 1990

OTHER PUBLICATIONS

Horwitt, M. K. in *The Vitamins*, 2d ed., vol. V, Aca-
demic Press, New York, 1972, pp. 88-96.
Jansen, B. C. P. in *The Vitamins*, 2d ed., vol. V, Aca-
demic Press, New York, 1972, pp. 156-164.
Bounous et al. *J Nutr* 112(9):1747-1755 (1982).
Bounous et al. *J Nutr* 113:1415-1421 (1983).
Bounous et al. *J Nutr* 115(11):1409-1417 (1985).

Primary Examiner—Douglas W. Robinson
Assistant Examiner—Jean C. Witz
Attorney, Agent, or Firm—John P. White; Craig J.
Arnold

Related U.S. Application Data

[63] Continuation of Ser. No. 289,971, Dec. 23, 1988, aban-
doned, which is a continuation-in-part of Ser. No.
188,271, Apr. 27, 1988, abandoned.

[51] **Int. Cl.**⁵ A61K 35/20
[52] **U.S. Cl.** 424/535; 514/2;
530/365; 530/833
[58] **Field of Search** 514/2, 21, 251, 276,
514/885; 530/365, 833; 424/535; 426/72

[57] **ABSTRACT**

This invention provides a method of improving the
humoral immune response or increasing the concentra-
tion levels of glutathione in mammals, which comprises
administering orally to a mammal a therapeutically or a
prophylactically effective amount of undenatured whey
protein concentrate which has a biological activity
based on the overall amino acid and associated small
peptides pattern resulting from the contribution of all its
protein components. A method for improving the hu-
moral immune response in mammals also is disclosed
which comprises administering orally to a mammal the
combination of a vitamin supplement containing vita-
min B₂ in an amount in excess of minimum daily require-
ments and an effective amount of undenatured whey
protein concentrate. This invention further provides a
dietary supplement for a mammal which comprises an
effective amount of vitamin B₁ and B₂ and a therapeuti-
cally or prophylactically effective amount of whey
protein supplement.

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,710,387 12/1987 Uiterwaal et al. 726/72
4,753,926 6/1988 Lucas et al. 514/251
4,784,685 11/1988 Meister 71/106

FOREIGN PATENT DOCUMENTS

1136919 7/1982 Canada .
0022696 1/1981 European Pat. Off. .
239722 10/1987 European Pat. Off. .
2296428 9/1976 France 514/21
WO87/4050 7/1987 PCT Int'l Appl. .

16 Claims, 9 Drawing Sheets

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The Commissioner of Patents
and Trademarks

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Bruce Lehman

Commissioner of Patents and Trademarks

Jandra J. Morton
Attest



US005290571A

United States Patent [19]

[11] **Patent Number:** 5,290,571

Bounous et al.

[45] **Date of Patent:** * Mar. 1, 1994

[54] **BIOLOGICALLY ACTIVE WHEY PROTEIN CONCENTRATE**

[75] **Inventors:** Gustavo Bounous, Montreal; Phil Gold, Westmount; Patricia A. L. Kongshavn, St. Lambert, all of Canada

[73] **Assignee:** Immunotec Research Corporation, Ltd., Quebec, Canada

[*] **Notice:** The portion of the term of this patent subsequent to Jul. 27, 2010 has been disclaimed.

[21] **Appl. No.:** 417,246

[22] **Filed:** Oct. 4, 1989

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 289,971, Dec. 23, 1988, abandoned, and a continuation of Ser. No. 188,271, Apr. 28, 1988, abandoned.

[51] **Int. Cl.⁵** A61K 35/20

[52] **U.S. Cl.** 424/535; 514/2; 514/21; 514/251; 514/276; 514/885; 530/365; 530/833; 426/72

[58] **Field of Search** 514/2, 21, 251, 276, 514/885; 530/365, 833; 424/535; 426/72

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,043,990	8/1977	Melachouris	530/365
4,485,040	11/1984	Roger et al.	530/833
4,497,836	2/1985	Marquardt et al.	426/239
4,784,685	11/1988	Meister	504/110

FOREIGN PATENT DOCUMENTS

1136919	7/1982	Canada
0022696	1/1981	European Pat. Off.
239722	10/1987	European Pat. Off.
2296428	9/1976	France
87/00036	7/1987	PCT Int'l Appl.
1495940	12/1977	United Kingdom

OTHER PUBLICATIONS

Baricelli, G. C.: De seri facultatibus, et usu, opusculum

secundum, Scoriggium, Publ. Naples, Italy, pp. 105-147, 1603.

Cantani, A.: Latt e sicro di latte in-Materia medica e terapeutica-vol. 1-Vallardi F. Publ., Milano, Italy, p. 385, 1869.

Hoffman, K. F.: Zur geschichte der molkenkuren, insbesondere im 17, 18 und 19 Jahrhundert. Med. Monatschr 15: 411-416, 1961.

Barnes, L. A., et al.: Progress of premature infants fed a formula containing demineralized whey. Pediatrics, Jul. 1963, pp. 52-55.

Raiha, N. C. R., et al.: Milk protein quantity and quality in low birth weight infants I. Metabolic responses and effects on growth. Pediatrics 57:659-674, 1976.

Rassin D. K. et al.: Milk protein quantity and quality in low birth weight infants. J. Pediat. 90: 356-360, 1977.

Berger, H. M., et al.: Curd and whey proteins in the nutrition of low birth weight babies. Arch. Dis. in Child. 54: 98-104, 1979.

Mietens, C. et al.: Treatment of infantile E. coli gastroenteritis with specific bovine anti-E. coli milk immunoglobulins. Europ. J. Pediatr. 132: 239-252, 1979.

(List continued on next page.)

Primary Examiner—Douglas W. Robinson

Assistant Examiner—Jean C. Witz

Attorney, Agent, or Firm—John P. White

[57] **ABSTRACT**

The present invention is concerned with a whey protein composition comprising a suitable concentration of whey protein concentrate wherein the whey protein concentrate contains proteins which are present in an essentially undenatured state and wherein the biological activity of the whey protein concentrate is dependent on the overall amino acid and small peptides pattern resulting from the contribution of all its protein components and a method of producing said whey protein composition. The invention also relates to several applications of said composition.

13 Claims, 9 Drawing Sheets

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Bruce Lehman

Commissioner of Patents and Trademarks

Karna J. Cooper

Attest



US005451412A

United States Patent [19]

[11] Patent Number: **5,451,412**

Bounous et al.

[45] Date of Patent: * Sep. 19, 1995

[54] **BIOLOGICALLY ACTIVE UNDENATURED WHEY PROTEIN CONCENTRATE AS FOOD SUPPLEMENT**

[75] Inventors: **Gustavo Bounous, Montreal; Phil Gold, Westmount; Patricia A. L. Kongshavn, St. Lambert, all of Canada**

[73] Assignee: **Immunotech Research Corporation, Ltd., Montreal, Canada**

[*] Notice: **The portion of the term of this patent subsequent to Jul. 27, 2010 has been disclaimed.**

[21] Appl. No.: **84,304**

[22] Filed: **Jun. 29, 1993**

Related U.S. Application Data

[60] Division of Ser. No. 417,246, Oct. 4, 1989, Pat. No. 5,290,571, which is a continuation-in-part of Ser. No. 289,971, Dec. 23, 1988, abandoned, which is a continuation-in-part of Ser. No. 188,271, Apr. 29, 1988, abandoned.

[51] Int. Cl.⁶ **A61K 35/20**

[52] U.S. Cl. **424/535; 514/2; 514/21; 514/251; 514/276; 514/885; 530/365; 530/833; 426/72**

[58] Field of Search **514/2, 21, 251, 276, 514/885; 530/365, 833; 424/535; 426/72**

[56] References Cited

U.S. PATENT DOCUMENTS

3,922,375	11/1975	Dalan et al.	426/583
4,043,990	8/1977	Melachouris	260/112 R
4,112,123	9/1978	Roberts	426/72
4,485,040	11/1984	Roger et al.	260/122
4,497,836	2/1985	Marquardt et al.	426/239
5,084,285	1/1992	Shimatani et al.	426/271

OTHER PUBLICATIONS

Todorovic et al., *Mljekarstvo* 38(5): 115-123 (1988).

Jones et al., *Milchwissenschaft* 43(3): 233-235 (1988).

Primary Examiner—Marian C. Knode

Assistant Examiner—Jean C. Witz

Attorney, Agent, or Firm—John P. White; Matthew J. Golden

[57] ABSTRACT

The present invention is concerned with a whey protein composition comprising a suitable concentration of whey protein concentrate wherein the whey protein concentrate contains proteins which are present in an essentially undenatured state and wherein the biological activity of the whey protein concentrate is dependent on the overall amino acid and small peptides pattern resulting from the contribution of all its protein components and a method of producing said whey protein composition. The invention also relates to several applications of said composition.

2 Claims, 9 Drawing Sheets

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Bruce Lehman

Commissioner of Patents and Trademarks

Karnal J. Cooper

Attest



US005456924A

United States Patent [19][11] **Patent Number:** 5,456,924

Bounous et al.

[45] **Date of Patent:** * Oct. 10, 1995[54] **METHOD OF TREATMENT OF HIV-SEROPOSITIVE INDIVIDUALS WITH DIETARY WHEY PROTEINS**2033347 5/1992 Canada
0339656 11/1989 European Pat. Off.
0374390 6/1990 European Pat. Off.
8910139 11/1989 WIPO[75] **Inventors:** Gustavo Bounous, Montreal; Phil Gold, Westmount, both of Canada**OTHER PUBLICATIONS**[73] **Assignee:** Immunotec Research Corporation Ltd., Montreal, CanadaBounous, G., Kongshavn, P., Gold, P., *Clinical and Investigative Medicine*, vol. 11, No. 4, pp. 271-278 (Aug. 1988).
Bounous, G., Batist, G., Gold, P., *Clinical and Investigative Medicine*, vol. 12, No. 3, pp. 154-161 (1989).[*] **Notice:** The portion of the term of this patent subsequent to Jul. 27, 2010 has been disclaimed.Fidelus, R. K., Tsan, M. F., *Cellular Immunol.*, vol. 97, pp. 155-163 (1986).[21] **Appl. No.:** 866,756Gougerot-Pocidaló, M. A., et al., *Immunology*, vol. 64, pp. 281-288 (1988).[22] **Filed:** Apr. 10, 1992Nocle, R. J., Lawrence, D. A., *Biochem. J.*, vol. 198, pp. 571-579 (1981).**Related U.S. Application Data**Anderson, M. E., Meister, A., *Proc. Natl. Acad. Sci.-USA*, vol. 80, pp. 707-711, (1983).

[63] Continuation-in-part of Ser. No. 563,794, Aug. 3, 1990, Pat. No. 5,230,902, which is a continuation of Ser. No. 289,971, Dec. 23, 1988, abandoned, and a continuation-in-part of Ser. No. 417,246, Oct. 4, 1989, Pat. No. 5,290,511, which is a continuation-in-part of Ser. No. 289,971, Dec. 23, 1988, abandoned, which is a continuation-in-part of Ser. No. 188,271, Apr. 28, 1988, abandoned.

Meister, A., in Stranbury, J. B., eds, *Metabolic Basis of Inherited Diseases 4th Edn.* McGraw Hill, pp. 328-335 (1978).[51] **Int. Cl.⁶** A61K 35/20Bounous, G., Gold, P., *Clinical and Investigative Medicine*, vol. 14, pp. 296-309 (1991).[52] **U.S. Cl.** 424/535; 514/2; 514/21; 426/72Hirai, Y., et al., *Evaluation of the Immunological Enhancement Activities of Immunocol* (Dec. 13, 1990) Osaka, Japan.[58] **Field of Search** 514/2, 21; 530/365, 530/833; 424/535; 426/72Buhl, R., et al., *Lancet*, pp. 1294-1297 (Dec. 2, 1989).[56] **References Cited**Anderson, M. E., *C.R.C. Handbook of Methods for Oxygen Radical Research*, pp. 317-329 (1985).**U.S. PATENT DOCUMENTS**4,880,626 11/1989 McMichael 424/88
4,983,387 1/1991 Goldstein et al. 424/88
5,030,449 7/1991 Berzofsky et al. 424/88
5,112,373 6/1992 Bibl et al. 424/85.8

Biological Abstracts, vol. 41, Abstract No. 84485, Voss et al. (Jun. 1991).

FOREIGN PATENT DOCUMENTS858533 12/1970 Canada 195/76
1263329 11/1989 Canada 195/128.3
2007258 7/1990 Canada 530/17.1
2011299 9/1990 Canada 167/140
2032653 12/1990 Canada
2022394 2/1991 Canada 530/7.06*Primary Examiner*—David M. Naff*Assistant Examiner*—Jean C. Witz*Attorney, Agent, or Firm*—John P. While[57] **ABSTRACT**

Undenatured whey protein concentrate is administered to HIV-seropositive individuals to elevate their blood mononuclear cells, glutathione (GSH) level, body weight and sense of well being. In addition T-helper cells concentration and their T-helper cells/T-suppressor cells ratio are slightly elevated.

8 Claims, No Drawings

The
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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.

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Acting Commissioner of Patents and Trademarks

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US00588852A

United States Patent [19]

[11] Patent Number: 5,888,552

Bounous et al.

[45] Date of Patent: Mar. 30, 1999

- [54] ANTI-CANCER THERAPEUTIC COMPOSITIONS CONTAINING WHEY PROTEIN CONCENTRATE
- [75] Inventors: Gustavo Bounous, Monical; Phil Gold, Westmount, both of Canada
- [73] Assignee: Immunotec Research Corporation Ltd., Quebec, Canada
- [21] Appl. No.: 381,975
- [22] PCT Filed: Aug. 5, 1993
- [86] PCT No.: PCT/CA93/00309
- § 371 Date: May 8, 1995
- § 102(c) Date: May 8, 1995
- [87] PCT Pub. No.: WO94/04168
- PCT Pub. Date: Mar. 3, 1994

Related U.S. Application Data

- [63] Continuation-in-part of Ser. No. 929,347, Aug. 13, 1992, abandoned, and Ser. No. 806,756, Apr. 10, 1992, Pat. No. 5,456,924, which is a continuation-in-part of Ser. No. 417,246, Oct. 4, 1989, Pat. No. 5,290,571, which is a continuation-in-part of Ser. No. 289,371, Dec. 23, 1988, abandoned, which is a continuation-in-part of Ser. No. 188,276, Apr. 29, 1988, abandoned, said Ser. No. 929,347, is a continuation-in-part of Ser. No. 417,246.
- [51] Int. Cl.⁶ A61K 35/20
- [52] U.S. Cl. 424/535; 514/2; 514/21; 514/251; 514/276; 514/885; 530/365; 530/833; 426/72
- [58] Field of Search 424/535; 514/2; 514/21, 251, 276, 885; 530/365, 833; 426/72

References Cited

U.S. PATENT DOCUMENTS

4,784,685 11/1988 Meister 504/110

FOREIGN PATENT DOCUMENTS

222560 5/1981 Argentina
1495940 12/1977 United Kingdom

OTHER PUBLICATIONS

Anderson, M.E., "Tissue glutathione", *C.R.C. Handbook of Methods for Oxygen Radical Research*, pp. 317-329 (1985) (Exhibit 1).
Lauterburg, B.H. et al., "Therapeutic doses of acetaminophen stimulate the turnover of cysteine and glutathione in man", *J. Hepatol.*, vol. 4, pp. 206-211 (1987) (Exhibit 2).
Lewis, A.D. et al., *Proc. Natl. Acad. Sci.*, vol. 85, pp. 8511-8515 (1988) (Exhibit 3).
Russo, A. et al., "Selective modulation of glutathione levels in human normal versus tumor cells and subsequent differential response to chemotherapy drugs", *Cancer Res.*, vol. 46, pp. 2865-2848 (1985) (Exhibit 4).
Walsira, P.J., "Dairy Chemistry and Physics", Wiley J. Nitlock, (ed.), p. 106 (1984) (Exhibit 5).

Williamson, J.M. et al., "Intracellular cysteine delivery system that protects against toxicity by promoting GSH synthesis", *Proc. Natl. Acad. Sci. U.S.A.*, vol. 79, pp. 6246-6249 (1982) (Exhibit 6).
Bounous, G., et al., "Dietary Whey Protein Inhibits the Development of Dimethylhydrazine Induced Malignancy." *Clin. Invest. Med.*, (1980) vol. 11, pp. 231-217.
Papenburg, R., et al., "Dietary Milk Proteins Inhibit The Development of Dimethylhydrazine-Induced Malignancy." *Tumor Biology*, (1990) vol. 11, pp. 129-136.
Barnichel, S., et al., (1992) AACR Abstract, "Different Effects of OTZ on Organ GSH Levels in Rats Bearing Tumors".
John, A.M., et al., "Amino Acid Requirements of the Growing Mouse." *J. Nutr.*, (1976) vol. 106, pp. 1361-1367.
Hoag, W.G., et al., "Nutrition" In: *Biology of the Laboratory Mouse*, E.L. Green, (ed.), (McGraw-Hill, New York: 1966) pp. 39-43.
Cunningham, A., et al., "Further Improvements in the Plaque Technique for Detecting Single Antibody Forming Cells." *J. Immunol.*, (1968) vol. 14, pp. 559-600.
Anderson, M.E., "Tissue Glutathione" In: *Handbook of Methods for Oxygen Radical Research* (C.R.C. Press, Boca Raton: 1988) pp. 317-329.
Glatt, H., et al., "Mutagenicity of Glutathione and Cysteine in the Ames Test." *Science*, (1983) vol. 220, pp. 961-962.
Taylor, Y.C., et al., "Elevation of Intracellular Glutathione Levels Following Depletion and its Relationship to Protection Against Radiation and Alkylating Agents." *Pharmacol. Ther.*, (1988) vol. 39, pp. 293-299.
White, C.W., et al., "Hypoxia Increases Glutathione Redox Cycle and Protects Rat Lungs Against Oxidants." *J. Appl. Physiol.*, (1988) vol. 65, pp. 2607-2616.
Anderson, M.E., et al., "Transport and Direct Utilization of Gamma-Glutamylcyst(e)ine for glutathione Synthesis." *Proc. Natl. Acad. Sci. U.S.A.*, (1983) vol. 80, pages 707-711.
Richie, J.P., et al., "Correction of a Glutathione Deficiency in the Aging Mosquito Increases its Longevity." *Proc. Soc. Exp. Biol. Med.*, (1987) vol. 184, pp. 113-117.
Fernandez-Checa, J.C., et al., "Effects of Chronic Ethanol Feeding on Rat Hepatocyte Glutathione." *J. Clin. Invest.*, (1989) vol. 83, pp. 1247-1252.
Meister, A., et al., "Glutathione." *Annu. Rev. Biochem.*, (1983) vol. 52, pp. 711-760.
Hamilton, T.C., et al., "Augmentation of Adriamycin, Melphalan and Cisplatin Cytotoxicity in Drug Resistant and Sensitive Human Ovarian Cancer Cell Lines by BSO Mediated GSH Depletion." *Biochem. Pharm.*, (1985) vol. 34, pp. 2583-2586.

(List continued on next page.)

Primary Examiner—Jean C. Witz
Attorney, Agent, or Firm—John P. White; Cooper & Dunham LLP

[57] ABSTRACT

This invention relates to a method of treatment of patients having lesions resulting from cancer cells and to an application as an anti-cancer composition of undenatured whey protein concentrate.

22 Claims, 3 Drawing Sheets

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Bruce Lehman

Commissioner of Patents and Trademarks

Karnal J. Cooper

Attest



US005846939A

United States Patent [19]

Miclo et al.

[11] Patent Number: 5,846,939

[45] Date of Patent: Dec. 8, 1998

[54] USE OF A DECAPEPTIDE WITH BENZODIAZEPINE-TYPE ACTIVITY FOR PREPARING MEDICINES AND FOOD SUPPLEMENTS

[75] Inventors: Laurent Miclo, Nancy; Emmanuel Perrin, Saulxures-Les-Nancy; Alain Driou, Laxou; Jean-Francois Boudier, Agny; Catherine Jung, Paris; Guy Linden, Heillecourt, all of France

[73] Assignee: Societe Cooperative Agricole Laitiere D'Artois Et Des Flandres, La Prosperite Ferrieré, Arras, France

[21] Appl. No.: 562,979

[22] Filed: Nov. 27, 1995

[30] Foreign Application Priority Data

Nov. 30, 1994 [FR] France 94 14362

[51] Int. Cl.⁶ A61K 38/08

[52] U.S. Cl. 514/15; 530/328

[58] Field of Search 514/15; 530/328; 435/213

[56] References Cited

U.S. PATENT DOCUMENTS

5,208,240 5/1993 Peet et al. 514/263

FOREIGN PATENT DOCUMENTS

06239888 2/1993 Japan .

OTHER PUBLICATIONS

Minawawa et al. 'Dibittering mechanism in bitter peptides of enzymatic hydrolysates from milk casein by aminopeptidase T', J. of Food Sci., 54(5), pp 1225-1229 Oct. 1989.

Shon et al. 'Antibodies raised against peptide fragments of bovine s1—casein cross-react with the native protein, but recognize sites distinct from the determinants on the protein', Eur. J. Immunol., 21, pp. 1475-1480 1991.

Yan et al., 'Purification and characterization of a novel metalloendopeptidase from *Streptococcus cremoris* H61', Eur. J. Biochem. 163, pp. 259-265 1987.

Niles et al., 'Pharmacological inhibition fo Forskolin-stimulated adenylate cyclase activity in rat brain melatonin, its analogs, and diazepam.' Biochem. Pharmac., 40(12), pp. 2701-2705 1990.

Loukas et al. 'Opioid activities and structures of -Casein-Derived Exorphins.' Biochemistry, 22, 4567-4573 1983.

Copy of European Search from French patent 94/14362, filed Nov. 30, 1994 with cited references.

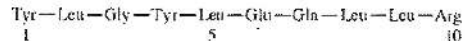
Primary Examiner—Cecilia J. Tsang

Assistant Examiner—Anish Gupta

Attorney, Agent, or Firm—Wolf, Greenfield & Sacks, P.C.

[57] ABSTRACT

The present invention relates to the use of the decapeptide having the amino acid sequence of SEQ ID NO.:1



in the preparation of medicines having benzodiazepine-type activity, particularly useful for the treatment of convulsions and anxiety. The invention also relates to pharmaceutical compositions, food supplements, and foodstuffs for special diets containing the said decapeptide.

4 Claims, 4 Drawing Sheets

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The Commissioner of
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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

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United States Patent

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Bence Lehman

Commissioner of Patents and Trademarks

Thomas E. Hauke Jr.



US005744157A

United States Patent [19]

[11] Patent Number: 5,744,157

Dröge

[45] Date of Patent: Apr. 28, 1998

[54] PREPARATION FOR MAINTAINING AND/OR INCREASING MUSCULAR POWER AND BODY CELL MASS

[51] Int. Cl.⁶ A61K 9/127; A61K 47/42
[52] U.S. Cl. 424/450; 424/439
[58] Field of Search 424/439, 450

[75] Inventor: Wulf Dröge, Heidelberg, Germany

[56] References Cited

[73] Assignee: The German Cancer Research Institute, Heidelberg, Germany

U.S. PATENT DOCUMENTS

[21] Appl. No.: 367,332

5,292,773 3/1994 Hirsch et al. 514/554

[22] PCT Filed: Aug. 31, 1993

Primary Examiner—Carlos Azpuru
Attorney, Agent, or Firm—Pennie & Edmonds LLP

[86] PCT No.: PCT/EP93/02354

§ 371 Date: Sep. 1, 1995

§ 102(c) Date: Sep. 1, 1995

[87] PCT Pub. No.: WO94/05270

PCT Pub. Date: Mar. 17, 1994

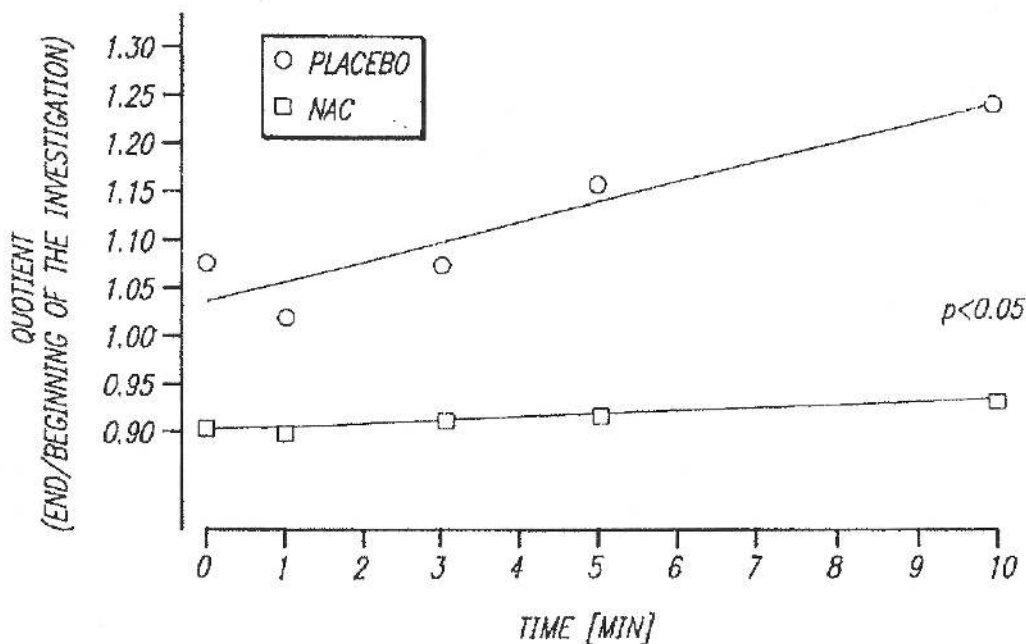
[30] Foreign Application Priority Data

[57] ABSTRACT

The present invention relates to a preparation for maintaining and/or increasing muscular power and body cell mass, which contains a thiol compound, particularly cysteine, a derivative and/or analogue thereof as well as conventional excipients.

Sep. 1, 1992 [DE] Germany 42 29 166.6 .

15 Claims, 1 Drawing Sheet



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**The Director of the United States
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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

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Jon W. I. Dudas

Director of the United States Patent and Trademark Office



US006927231B2

(12) **United States Patent**
Dröge

(10) **Patent No.:** **US 6,927,231 B2**
(45) **Date of Patent:** **Aug. 9, 2005**

(54) **USE OF CREATINE FOR THE AMELIORATION OF OXIDATIVE STRESS**

(75) **Inventor:** **Wulf Dröge, Heidelberg (DE)**

(73) **Assignee:** **2458781 Canada Inc. (CA)**

(*) **Notice:** **Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.**

(21) **Appl. No.:** **10/473,483**

(22) **PCT Filed:** **Mar. 28, 2002**

(86) **PCT No.:** **PCT/CA02/00435**

§ 371 (c)(1),

(2), (4) **Date:** **Mar. 4, 2004**

(87) **PCT Pub. No.:** **WO02/085346**

PCT Pub. Date: **Oct. 31, 2002**

(65) **Prior Publication Data**

US 2004/0147610 A1 Jul. 29, 2004

(30) **Foreign Application Priority Data**

Apr. 3, 2001 (DE) 101 16 589

(51) **Int. Cl.⁷** **A61K 31/415**

(52) **U.S. Cl.** **514/386**

(58) **Field of Search** **514/386, 562, 514/565**

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,219,846 A 6/1993 Bra et al.

FOREIGN PATENT DOCUMENTS

WO WO 94/16712 8/1994
WO WO 98/43617 10/1998
WO WO 99/51097 10/1999

OTHER PUBLICATIONS

The therapeutic potential of oral creatine supplementation in muscle disease, WYSS, et al., *Medical Hypotheses*, Eden Press (no date available).

Primary Examiner—Raymond J. Henley, III
(74) *Attorney, Agent, or Firm*—Schweitzer Comman Gross & Bondell LLP

(57) **ABSTRACT**

The present invention relates to a method of ameliorating oxidative stress and stress-related degenerative processes associated with aging or various disease conditions such as cancer, neurodegenerative diseases or the dysregulation of redox-regulated physiological processes, as indicated by the prooxidative shift in the plasma thi1/disulfide redox state and its consequences in conditions of elevated oxidative stress, characterized by administering creatine.

8 Claims, 3 Drawing Sheets

International

**Brevets internationaux* /
International Patents* /
Patentes internacionales***

***Pour le texte intégral des brevets, tapez: /For the full text of the patents please go to :
<http://www.wipo.int/pctdb/en/>**

International

**Undenatured Whey Protein
Concentrate to Improve Active
Systemic Humoral Immune Response**

Denmark

Germany

Italy

Japan

United Kingdom



Kongeriget Danmark

Patent nr. PR 172782.

Patentdirektoratet har meddelt patent på den opfindelse, som er angivet i vedlagte patentskrift. På patentskriftets forside findes oplysning om patenthaver, om dagen for bekendtgørelse af patentets meddelelse og om dagen, fra hvilken patenttiden løber.

Patentet er meddelt i medfør af patentloven, jf. lovbekendtgørelse nr. 587 af 2. juli 1993.

12. juli 1999

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Patentdirektoratet



Mogens Kring
Direktør



19 BUNDESREPUBLIK
DEUTSCHLAND



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PATENTAMT

12 Übersetzung der
europäischen Patentschrift

51 Int. Cl.⁶:
A 61 K 35/20
A 23 J 1/20

87 EP 0 339 656 B1

10 DE 689 19 114 T 2

- 21 Deutsches Aktenzeichen: 689 19 114.6
- 86 Europäisches Aktenzeichen: 89 107 697.8
- 86 Europäischer Anmeldetag: 28. 4. 89
- 87 Erstveröffentlichung durch das EPA: 2. 11. 89
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der Patenterteilung beim EPA: 2. 11. 94
- 47 Veröffentlichungstag im Patentblatt: 24. 5. 95

30 Unionspriorität: 32 33 31
29.04.88 US 188271 23.12.88 US 289971

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Dr.rer.nat., Pat.- u. Rechtsanw.; Graf, M., Dr.jur.,
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84 Benannte Vertragsstaaten:
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54 Udenaturiertes Proteinkonzentrat aus Molke.

DE 689 19 114 T 2

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avente per titolo: "CONCENTRATO IN PROTEINA NON DENATURATA DEL SIERO DI LATTE"

depositato il 28 APRILE 1989 - Dom. N°89107697.8
classificazione: A 61 K 37/00 - A 23 L 1/305

Milano, 16 GENNAIO 1995



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特許第2510724号

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特許証

発明の名称

ホエイたん白濃縮物による動物の宿主抵抗性の改良方法

特許権者

カナダ国ケベック州、モントリオール シャーブルック ストリート、ウエスト、

1010 スイート 1602

国籍 カナダ国

イミューノテック、リサーチ、コーポレーション、リミテッド

発明者

フィル ゴールド

グスタボ ポウノウス

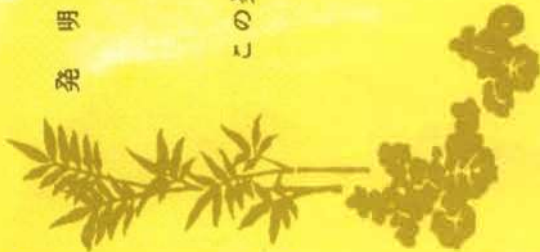
バトリシア エル、コングシャブン

この発明は、特許するものと確定し、特許原簿に登録されたことを証する。

平成 8 年 4 月 1 6 日

特許庁長官

清川 祐





特許第2510724号

平成01年特許願第112798号

特許証

発明の名称

ホエイたん白濃縮物による動物の宿主抵抗性の改良方法

特許権者

カナダ国ケベック州、モントリオール シャーブルック ストリート、ウエスト、

1010 スイート 1602

国籍 カナダ国

イミューノテック、リサーチ、コーポレーション、リミテッド

発明者

フィル ゴールド

グスタボ ボウノウス

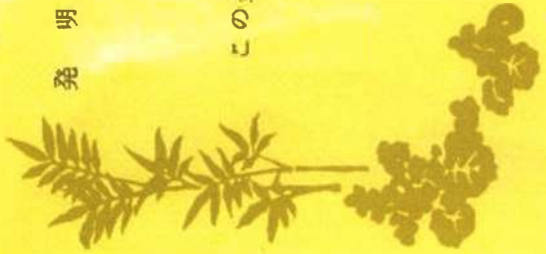
パトリシア エル・コングシャブン

この発明は、特許するものと確定し、特許原簿に登録されたことを証する。

平成 8年 4月 16日

特許庁長官

清川 祐



EIP 1



**Europäisches
Patentamt**

**European
Patent Office**

**Office européen
des brevets**

Urkunde Certificate Certificat

Es wird hiermit bescheinigt, daß für die in der beigefügten Patentschrift beschriebene Erfindung ein europäisches Patent für die in der Patentschrift bezeichneten Vertragsstaaten erteilt worden ist.

It is hereby certified that a European patent has been granted in respect of the invention described in the annexed patent specification for the Contracting States designated in the specification.

Il est certifié qu'un brevet européen a été délivré pour l'invention décrite dans le fascicule de brevet ci-joint, pour les Etats contractants désignés dans le fascicule de brevet.

Europäisches Patent Nr.

European Patent No.

Brevet européen n°

0339656

Patentinhaber

Proprietor of the Patent

Titulaire du brevet

IMMUNOTEC RESEARCH CORPORATION LTD.
1010 Sherbrooke St. West, Suite 1602
Montreal, Quebec H3A 2R7/CA

München, den
Munich,
Fait à Munich, le

02.11.94

Paul Braendli

Präsident des Europäischen Patentamts
President of the European Patent Office
Président de l'Office européen des brevets

International

Method of Treatment of HIV-Seropositive Individuals with Dietary Whey Proteins

Australia

Austria

Chile

China

Czech Republic

Denmark

Germany

Israel

Japan

Mexico

Norway

South Korea

Spain

Sweden

Taiwan

United Kingdom



Commonwealth
of Australia

Letters patent

Patents Act 1990

No.
687731

STANDARD PATENT

I, Bruce Ian Murray, Commissioner of Patents, grant a Standard Patent with the following particulars:

Name and Address of Patentee:

Immunotec Research Corporation Ltd., 292 Adrien Patenaude, Vaudreuil-Dorion, Quebec J7V 5V5 Canada

Names of Actual Inventors: Phil Gold and Gustavo Bounous

Title of Invention: Method of treatment of HIV-seropositive individuals with dietary whey protein

Application Number: 38812/93

Term of Letters Patent: Twenty years commencing on 22 March 1993

Priority Details:

Number
866756

Date
10 April 1992

Filed with
UNITED STATES OF AMERICA

Dated this 27 day of August 1998




B.I. MURRAY
COMMISSIONER OF PATENTS

Übersetzung der europäischen
PATENTSCHRIFT

(12)

(97)

Veröffentlichungsnummer: EP 0 634 934 B1

(96) Anmeldenummer: 93907682

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(45) Ausgabetag: 10. 3.2000

(51) Int.Cl.⁷: **A61K 35/20**
A61K 38/00, 39/395

(54) VERWENDUNG VON DIÄTETISCHEN MOLKEPROTEINEN ZUR BEHANDLUNG VON HIV SEROPOSITIVEN INDIVIDUEN

(30) Priorität:

10. 4.1992 US 866756

(97) Veröffentlichungstag der Anmeldung:

25. 1.1995, Patentblatt 95/04

(97) Bekanntmachung des Hinweises auf die Patenterteilung:

8.12.1999, Patentblatt 99/49

(84) Benannte Vertragsstaaten:

AT CH DE DK ES GB LI LU NL SE

(56) Entgegenhaltungen:

EP-A -0339656 EP-A -0374390
BIOLOGICAL ABSTRACTS, VOL. 41, PHILADELPHIA,
PA, US; ABSTRACT, NO. 84485, VOSS T. ET AL.
'MANAGEMENT OF HIV RELATED WEIGHT LOSS AND
DIARRHEA WITH AN ENTERAL FORMULA CONTAINING
WHEY PEPTIDES AND MEDIUM-CHAIN TRIGLYCERIDES.'
BIOLOGICAL ABSTRACTS, VOL. 41, PHILADELPHIA,
PA, US; ABSTRACT NO. 84488, GLAUSER M. ET AL.
'FAT TOLERANCE IN HIV-INFECTED SUBJECTS
INGESTING A SEMI-ELEMENTAL DIET CONTAINING
MEDIUM-CHAIN TRIGLYCERIDES MCT AND WHEY
PEPTIDES.'

(73) Patentinhaber:

IMMUNOTEC RESEARCH CORPORATION LTD.
292 ADRIEN PATENAUDE
VAUDREUIL- DORION, QUEBEC J7V 5V5 (CA).

(72) Erfinder:

GOLD, PHIL
3225 THE BOULEVARD
WESTMOUNT, QUEBEC H3Y 1S4 (CA).

BOUNOUS, GUSTAVO
4858 CORE DES NEIGES
APT. 1504C, MONTREAL, QUEBEC H3V 1G8 (CA).

Anmerkung:

Innerhalb von neun Monaten nach der Bekanntmachung des Hinweises auf die Erteilung des europäischen Patents im Europäischen Patentblatt kann jeder beim Europäischen Patentamt gegen das erteilte europäische Patent Einspruch einlegen. Der Einspruch ist schriftlich einzureichen und zu begründen. Er gilt erst als eingelegt, wenn die Einspruchsgebühr entrichtet worden ist (Art. 99(1) Europäisches Patentübereinkommen).

Die Übersetzung ist gemäß § 5 PatVEG vom Patentinhaber eingereicht worden. Sie wurde vom Österreichischen Patentamt nicht geprüft!

AT E 187 335 T1

REPÚBLICA DE CHILE



MINISTERIO DE ECONOMÍA, FOMENTO Y RECONSTRUCCIÓN

DEPARTAMENTO DE PROPIEDAD INDUSTRIAL

PATENTE DE INVENCION

857-33

857-33

857-33

857-33

En conformidad a la Ley 19.039, sobre Propiedad Industrial, concédese a:

IMMUNOTEC RESEARCH CORPORATION, LTD.

Domicilio : 1010 SHERBROOKE ST. WEST, SUITE 1602, MONTREAL, QUEBEC, CANADA, H3A 2R7

País : CANADA

Inventores

GUSTAVO BOUNOUS; PHIL GOLD

POR : USO DE CONCENTRADO DE PROTEÍNAS DE SUERO DE LECHE NO DESNATURADAS PARA LA PREPARACION DE UN MEDICAMENTO DESTINADO AL TRATAMIENTO DE INDIVIDUOS VIH-SEROPOSITIVOS.

CIP (7) A61K 35/20 38/00, 39/395

La vigencia de este privilegio en **CHILE**, rige desde **el 05 de Noviembre de 2003 hasta el 05 de Noviembre de 2018.**

ROGELIO CAMPUSANO SAEZ
Conservador de Patentes de Invención y Diseños Industriales



ELEAZAR BRAVO MANRIQUEZ
Jefe del Departamento de Propiedad Industrial

Santiago, 01 de Abril de 2004

发明专利证书

发明名称: 治疗 HIV 血清阳性个体的药品

发明人: 古斯塔夫·邦纳斯; 菲尔·戈尔德

专利号: ZL 93 1 04081.7 国际专利分类号: A61K 35/20

专利申请日: 1993 年 4 月 9 日

专利权人: 免疫技术研究公司

授权公告日: 2001 年 9 月 5 日



证书号 第 72033 号

本发明经过本局依照中华人民共和国专利法进行审查, 决定授予专利权, 颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

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专利号 



局长 王崇川

ČESKÁ REPUBLIKA

ÚŘAD PRŮMYSLOVÉHO VLASTNICTVÍ

PATENTOVÁ LISTINA



A handwritten signature in black ink, appearing to read "J a k l".

Ing. Ladislav J a k l, CSc.
předseda
Úřadu průmyslového vlastnictví



Kongeriget Danmark

Patent nr. DK/EP 0634934

Det europæiske patent på den opfindelse, som er angivet i vedlagte oversættelse af europæisk patentskrift, har fået virkning for Danmark. På patentskriftets forside findes oplysning om patenthaver, om dagen for Den Europæiske Patentmyndigheds bekendtgørelse af patentets meddelelse, om dagen for bekendtgørelse af dansk oversættelse af patentskriftet og om den europæiske indleveringsdag, som er dagen, fra hvilken patenttiden løber.

Patentets virkning for Danmark er meddelt i medfør af patentloven, jf. lovbekendtgørelse nr. 587 af 2. juli 1993.

13. juni 2000



**Patent- og
Varemærkestyrelsen**
Erhvervsministeriet

Mogens Kring
Direktør



19 BUNDESREPUBLIK
DEUTSCHLAND



DEUTSCHES
PATENT- UND
MARKENAMT

12 Übersetzung der
europäischen Patentschrift

97 EP 0 634 934 B 1

10 DE 693 27 236 T 2

51 Int. Cl.⁷:
A 61 K 35/20
A 61 K 38/00
A 61 K 39/395

- 21 Deutsches Aktenzeichen: 693 27 236.8
- 86 PCT-Aktenzeichen: PCT/CA93/00107
- 96 Europäisches Aktenzeichen: 93 907 682.4
- 87 PCT-Veröffentlichungs-Nr.: WO 93/20831
- 86 PCT-Anmeldetag: 22. 3. 1993
- 87 Veröffentlichungstag der PCT-Anmeldung: 28. 10. 1993
- 97 Erstveröffentlichung durch das EPA: 25. 1. 1995
- 97 Veröffentlichungstag der Patenterteilung beim EPA: 8. 12. 1999
- 47 Veröffentlichungstag im Patentblatt: 30. 3. 2000

30 Unionspriorität:
866756 10. 04. 1992 US

73 Patentinhaber:
Immunotec Research Corp. Ltd., Vaudreuil-Dorion,
Quebec, CA

74 Vertreter:
Mitscherlich & Partner, Patent- und Rechtsanwälte,
80331 München

84 Benannte Vertragsstaaten:
AT, CH, DE, DK, ES, GB, LI, LU, NL, SE

72 Erfinder:
GOLD, Phil, Westmount, Quebec H3Y 1S4, CA;
BOUNOUS, Gustavo, Apt. 1504C, Montreal,
Quebec H3V 1G8, CA

54 VERWENDUNG VON DIÄTETISCHEN MOLKEPROTEINEN ZUR BEHANDLUNG VON HIV SEROPOSITIVEN INDIVIDUEN

DE 693 27 236 T 2

Anmerkung: Innerhalb von neun Monaten nach der Bekanntmachung des Hinweises auf die Erteilung des europäischen Patents kann jedermann beim Europäischen Patentamt gegen das erteilte europäische Patent Einspruch einlegen. Der Einspruch ist schriftlich einzureichen und zu begründen. Er gilt erst als eingelegt, wenn die Einspruchsgebühr entrichtet worden ist (Art. 99 (1) Europäisches Patentübereinkommen).

Die Übersetzung ist gemäß Artikel II § 3 Abs. 1 IntPatÜG 1991 vom Patentinhaber eingereicht worden. Sie wurde vom Deutschen Patent- und Markenamt inhaltlich nicht geprüft.

DE 693 27 236 T 2

8929a

STATE OF ISRAEL



מדינת ישראל

חוק הפטנטים, התשכ"ז - 1967
Patents Law, 5727 - 1967

תעודת פטנט
CERTIFICATE OF PATENT

זאת לתעודה כי הפרטים דלהלן נרשמו בפנקס הפטנטים: -

This is to certify that the following particulars have been recorded in the Register of Patents: -

8.IV.1993 תאריך הבקשה: 105339 מס' הפטנט: Patent No.

Date of Application

Patent No.

Immunotec Research Corporation Ltd., Montreal, P.Q., Canada

בעלי הפטנט
Patentee

תכשירי רוקחות המכילים תרכיז של פרוטאין של מי חלב שלא עבר דנטורציה
PHARMACEUTICAL COMPOSITIONS CONTAINING UNDENATURED WHEY PROTEIN CONCENTRATE

שם האמצאה
Title of Invention

מספר או סימן זיהוי Number or Identification Mark	תאריך Date	מדינת האיגוד Convention Country
866756	10.IV.1992	US

דין קדימה
Priority Right

18.X.1998 תאריך מתן הפטנט 15.VII.1998 תאריך פרסום קיבול הבקשה
Date of Grant of Patent Publication Date
of Application Acceptance

תעודה זו, כשהיא מוטבעת בחותם הלשכה, הינה אישור כי דבר מתן הפטנט* נרשם בפנקס הפטנטים.

This Certificate, when impressed with the seal of the Office, certifies that the grant of the Patent* has been recorded in the Register of Patents.

* תנאי הפטנט מפורטים מעבר ליהף

* The Conditions of the Patent are set out overleaf.

משה ש. גולדברג

רשם הפטנטים
REGISTRAR OF PATENTS





特許証

特許第2738592号

平成05年特許願第517869号

発明の名称

食餌用ホエータンパク質を用いたHIV-血清陽性患者の治療法

特許権者

カナダ国ケベック州、モントリオール、スイート、1602、シャールブルック、セント
、ウエスト、1010

国籍 カナダ

イミユノテク、リサーチ、コーポレーション、リミテッド

発明者

ゴールド、フィル

パウナス、グスターボ

この発明は、特許するものと確定し、特許原簿に登録されたことを証する。

平成10年 1月16日

特許庁長官

荒井 寿光





TITULAR(ES): IMMUNOTEC RESEARCH CORPORATION LTD.

DOMICILIO(S): 292 ADRIEN PATENAUDE VAUDREUIL - DORION, QUEBEC, J7V
5V5 CANADA

DENOMINACION: METODO PARA EL TRATAMIENTO DE INDIVIDUOS SEROPOSITIVOS
DE VIH CON PROTEINAS DIETETICAS DE SUERO DE LECHE

CLASIF.INT : A61K35/20, A61K37/02, A61K39/395

INVENTOR(ES): PHIL GOLD, GUSTAVO BOUNOUS

SOLICITUD

NUMERO: 9302057 FECHA DE PRESENTACION: 7 DE ABRIL DE 1993 HORA: 13:43

PRIORIDAD

PAIS: US FECHA: 10 DE ABRIL DE 1992 NUMERO: 866,756

ESTA PATENTE CONCEDE A SU TITULAR EL DERECHO EXCLUSIVO DE EXPLOTACION DEL
INVENTO RECLAMADO EN EL CAPITULO REIVINDICATORIO Y TIENE UNA VIGENCIA DE VEINTE
AÑOS IMPRRORROGABLES CONTADOS A PARTIR DE LA FECHA DE PRESENTACION DE LA SOLICITUD.

FECHA DE EXPEDICION

12 DE NOVIEMBRE DE 1999

EL DIRECTOR GENERAL

LIC. JORGE AMIGO CASTAÑEDA





KONGERIKET NORGE
The Kingdom of Norway

Patent nr.: 317795
Patent No.

I henhold til patentloven av 15 desember 1967 er Deres patent meddelt med opplysninger som angitt i vedheftet patentskrift.

This is to certify that the Norwegian Patent Office, in accordance with the Patents Act No. 9 of 15 December 1967, has granted a patent for the enclosed invention

Jørgen Smith
direktør

Registreringsbrev

Certificate of Registration



PATENTSTYRET[®]
Styret for det industrielle rettsvern



특 허 증

특 허 제 0297959 호

출원 번호 제 1994-0703473 호
출원 일 1994년 10월 04일
등록 일 2001년 05월 28일

발명의명칭 유장단백질로HIV-혈청양성개체의치료방법

특허 권자 이뮤노테크리서치코오퍼레이션리미티드

캐나다, 퀘벡에이치3에이2알7, 몬트리올, 슈이트1602, 웨르브르크
에스티.웨스트1010

발명자 등록 사항란에 기재

위의 발명은 특허법에 의하여 특허등록원부에
등록되었음을 증명합니다.

2001년 05월 28일

특 허 증





TRADUCCIÓN DE UNA PATENTE EUROPEA QUE DESIGNA A ESPAÑA

Nº DE SOLICITUD PATENTE EUROPEA		Nº DE PUBLICACION PATENTE EUROPEA CONCEDIDA	
93907.682.4.-		EP 0. 634. 934- B-1.-	
TITULAR/ES	APELLIDOS O DENOMINACIÓN JURÍDICA		NOMBRE
IMMUNOTEC RESEARCH CORPORATION LTD.-			
DATOS DEL TITULAR/ES			
DOMICILIO VAUDREUIL-DORION, QUEBEC H3V 1G8 (CA).-			
LOCALIDAD	PAIS RESIDENCIA CANADA.-		TELEFONO
PAIS RESIDENCIA	NACIONALIDAD CANADIENSES.-		CÓDIGO NACIÓN (CA).-
REPRESENTANTE: D. JUAN LUIS LOPEZ MARCHENA.-			
Principe de Vergara nº 122.-			
Apartado Postal 1085.-			
28080.- MADRID.- (España).-			
TITULO DE LA INVENCION (EN ESPAÑA)			
" UTILIZACION DE UN REGIMEN ALIMENTARIO A BASE DE PROTEINAS DE SUERO PARA EL TRATAMIENTO DE INDIVIDUOS SEROPOSITIVOS AL VIH ".			
DE CONFORMIDAD CON LO DISPUESTO EN EL CAPÍTULO V DEL R.D. 2424/1986, DE 10 DE OCTUBRE SE PRESENTA LA TRADUCCIÓN DEL FASCÍCULO DE LA PATENTE EUROPEA ARRIBA MENCIONADA PARA QUE DICHA PATENTE SURTA EFECTOS EN ESPAÑA.			
RELACIÓN DE DOCUMENTOS QUE SE ACOMPAÑAN			
<input checked="" type="checkbox"/> PRIMERA PÁGINA FASCÍCULO PATENTE EUROPEA PUBLICADO POR LA OEP			
<input checked="" type="checkbox"/> TRADUCCIÓN DEL FASCÍCULO			
<input type="checkbox"/> DIBUJOS (EN SU CASO)			
<input type="checkbox"/> AUTORIZACIÓN AL REPRESENTANTE			
<input checked="" type="checkbox"/> JUSTIFICANTE DEL PAGO DE LAS TASAS			
			FIRMA DEL TITULAR/ES O REPRESENTANTE/S
			MADRID, 7 de Marzo 2000.-

SVERIGE

(19) SE



Översättning av europeisk patentskrift (T 3)

(87) Europeiskt publi nr: 0634934 2000:12

(86) Europeiskt ansökningsnr: 93907682.4

(51) Internationell klass⁷

PATENTVERKET A61K 35/20 A61K 38/00 A61K 39/395

(86) Ingivningsdag för ansökan
om europeiskt patent:
1993-03-22

(45) Meddelandecdatum för
det europeiska patentet
1999-12-08

(60) Stamansökans nummer

(24) Löddag

(30) Prioritetsuppgifter
1992-04-10 US 866756

(54) Benämning
Användning av dietiska vassleproteiner för behandling av HIV-seropositiva individer

(73) Patenthavare

IMMUNOTEC RESEARCH CORPORATION LTD. ,Vaudreuil-Dorion, Quebec J7V 5V5 CA

(72) Uppfinnare

P . GOLD , Westmount, Quebec H3Y 1S4 CA
G . BOUNOUS , Apt. 1504C, Montreal, Quebec H3V 1G8 CA

(84) Designerade stater

AT CH DE DK ES GB LI LU NL SE



中華民國專利證書

發明第 一五四三 號

發明名稱：利用未變性乳清蛋白濃縮物增加癌症患者免疫力之藥學組成物

專利權人：免疫技術研究股份有限公司

發明人：菲爾·哥德、加斯泰佛·包納斯

專利權期間：自中華民國八十九年一月二十一日
至一〇二年八月十六日止

上開發明業經專利權人依專利法之規定取得專利權

經濟部智慧財產局

局

局長 陳明邦

中華民國

八十九年

月

七

日



注意：專利權人未依法繳納年費者，其專利權自原繳費期限屆滿之次日起消滅。



Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

0183

Urkunde Certificate Certificat

Es wird hiermit bescheinigt, daß für die in der beigefügten Patentschrift beschriebene Erfindung ein europäisches Patent für die in der Patentschrift bezeichneten Vertragsstaaten erteilt worden ist.

It is hereby certified that a European patent has been granted in respect of the invention described in the annexed patent specification for the Contracting States designated in the specification.

Il est certifié qu'un brevet européen a été délivré pour l'invention décrite dans le fascicule de brevet ci-joint, pour les Etats contractants désignés dans le fascicule de brevet.

Europäisches Patent Nr. **0634934** European Patent No. Brevet européen n°

Patentinhaber **IMMUNOTEC RESEARCH CORPORATION LTD.**
Proprietor of the Patent **292 Adrien Patenaude**
Titulaire du brevet **Vaudreuil-Dorion, Quebec J7V 5V5/CA**

München, den
Munich,
Fait à Munich, le

08.12.99

Ingo Kober

Präsident des Europäischen Patentamts
President of the European Patent Office
Président de l'Office européen des brevets

International

Anti-Cancer Therapeutic Compositions for Prophylaxis or for Treatment of Cancer

Australia

Czech Republic

Israel

New Zealand

South Korea

Taiwan

United Kingdom



Commonwealth
of Australia

Letters patent

Patents Act 1990

No.
687356

STANDARD PATENT

I, Bruce Ian Murray, Commissioner of Patents, grant a Standard Patent with the following particulars:

Name and Address of Patentee:

Immunotec Research Corporation Ltd., 292 Adrien Patenaude, Vaudreuil-Dorion, Quebec J7V 5V5 Canada

Names of Actual Inventors: Phil Gold and Gustavo Bounous

Title of Invention: Anti-cancer therapeutic compositions containing whey protein concentrate

Application Number: 46937/93

Term of Letters Patent: Twenty years commencing on 5 August 1993

Priority Details:

<i>Number</i>	<i>Date</i>	<i>Filed with</i>
929347	13 August 1992	UNITED STATES OF AMERICA

Dated this 20 day of August 1998




B.I. MURRAY
COMMISSIONER OF PATENTS

ČESKÁ REPUBLIKA

ÚŘAD PRŮMYSLOVÉHO VLASTNICTVÍ

PATENTOVÁ LISTINA



A handwritten signature in black ink, appearing to read 'Čada'.

Karel Čada
předseda
Úřadu průmyslového vlastnictví

097437

State of Israel,
Patent Office

מדינת ישראל,
לשכת הפטנטים

חוק הפטנטים, התשכ"ז - 1967
Patents Law, 5727 - 1967

תעודת פטנט

CERTIFICATE OF PATENT

זאת לתעודה כי הפרטים דלהלן נרשמו בפנקס הפטנטים:-
This is to certify that the following particulars have been recorded in the Register of Patents:-

Patent No.	106576	מס' הפטנט:
Date of application:	03/08/1993	תאריך הבקשה:

Patentee(s): IMMUNOTEC RESEARCH CORPORATION LTD. 1010 SHERBROOKE ST. WEST, S UITE 1602, MONTREAL, QUEBEC, Canada	בעל(י) הפטנט:
---	---------------

Title of invention ANTI-CANCER THERAPEUTIC COMPOSITIONS FOR PROPHYLAXIS OR FOR TREATMENT OF CANCER	שם האמצאה תכשירים תרופתיים נגד סרטן למניעה של סרטן או לטיפול בו
---	---

Priority Right US 929347	13/08/1992	דין קדימה	ארה"ב
Date of publication of acceptance:	13/08/2000	תאריך פרסום קיבול הבקשה:	
Date of Grant:	14/11/2000	תאריך מתן פטנט:	

תעודה זו, כשהיא מוטבעת בחותם הלשכה, הינה אישור כי דבר מתן הפטנט נרשם בפנקס הפטנטים.

This Certificate, when impressed with the seal of the Office, certifies that the grant of the patent has been recorded in the Register of Patents.

משה ש. גולדברג
 רשם הפטנטים
 Registrar of Patents





LETTERS PATENT

ELIZABETH THE SECOND, by the Grace of God Queen of New Zealand and Her Other Realms and Territories, Head of the Commonwealth, Defender of the Faith; To all to whom these presents shall come, Greeting:

WHEREAS pursuant to the Patents Act 1953 an application has been made for a patent of an invention for
ANTI-CANCER THERAPEUTIC COMPOSITIONS CONTAINING WHEY PROTEIN CONCENTRATE

(more particularly described in the complete specification relating to the application)

AND WHEREAS

IMMUNOTEC RESEARCH CORPORATION LTD., a Canadian company of 2075 rue Universite, Bureau 1100, Montreal, Quebec, H3A 2L1, Canada

(hereinafter together with his or their successors and assigns or any of them called "the patentee") is entitled to be registered as the proprietor of the patent hereinafter granted:

NOW, THEREFORE, We by these letters patent give and grant to the patentee our special licence, full power, sole privilege, and authority, that the patentee by himself, his agents, or licensees and no others, may subject to the provisions of any statute or regulation for the time being in force make, use, exercise and vend the said invention within New Zealand and its dependencies during a term of twenty years from the date hereunder written and that the patentee shall have and enjoy the whole profit and advantage from time to time accruing by reason of the said invention during the said term:

AND WE strictly command all our subjects whomsoever within New Zealand and its dependencies that they do not at any time during said term either directly or indirectly make use of or put into practice the said invention, nor in any way imitate the said invention without the consent, licence, or agreement of the patentee in writing under his hand, on pain of incurring such penalties as are prescribed by law and of being answerable to the patentee according to law for his damages thereby occasioned:

PROVIDED ALWAYS:

- (1) That these letters patent shall determine and become void if the patentee does not from time to time pay the renewal fees prescribed by law in respect of the patent:
- (2) That these letters patent are revocable on any of the grounds prescribed by the Patents Act 1953 as grounds for revoking letters patent:
- (3) That nothing in these letters patent shall prevent the granting of licences in the manner in which and for the considerations on which they may by law be granted:
- (4) That these letters patent shall be construed in the most beneficial sense for the advantage of the patentee.

IN WITNESS whereof We have caused these letters patent to be signed and sealed as of the 5th day of August 1993



Commissioner of Patents



특 허 증

특 허 제 0297610 호

출원 번호 제 1995-0700475 호
출원 일 1995년 02월 09일
등록 일 2001년 05월 24일

발명의명칭 유장단백질농축물을포함하는항암치료조성물

특허 권자 이뮤노테크리서치코오퍼레이션리미티드

캐나다, 퀘벡에이치3에이2알7, 몬트리올, 스위트1602, 웨르브르크
에스티, 웨스트1010

발명자 등록 사항란에 기재

위의 발명은 특허법에 의하여 특허등록원부에
등록되었음을 증명합니다.

2001년 05월 24일

특 허 청





中華民國專利證書

發明第 一五四三 號

發明名稱：利用未變性乳清蛋白濃縮物增加癌症患者免疫力之藥學組成物

專利權人：免疫技術研究股份有限公司

發明人：菲爾·哥德、加斯泰佛·包納斯

專利權期間：自中華民國八十九年一月二十一日
至一〇二年八月十六日止

上開發明業經專利權人依專利法之規定取得專利權

經濟部智慧財產局

局

局長 陳明邦

中華民國

八十九年 五月 七日



注意：專利權人未依法繳納年費者，其專利權自原繳費期限屆滿之次日起滅失。



Europäisches Patentamt
 European Patent Office
 Office européen des brevets



(11) **EP 0 655 925 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention
 of the grant of the patent:
28.04.2004 Bulletin 2004/18

(51) Int Cl.7: **A61K 35/20**
 // (A61K35/20, 31:51),
 (A61K35/20, 31:525),
 (A61K35/20, 33:04)

(21) Application number: **93917476.9**

(22) Date of filing: **05.08.1993**

(86) International application number:
PCT/CA1993/000309

(87) International publication number:
WO 1994/004168 (03.03.1994 Gazette 1994/06)

(54) **ANTI-CANCER THERAPEUTIC COMPOSITIONS CONTAINING WHEY PROTEIN CONCENTRATE**
 ANTIKREBS-THERAPEUTISCHE ZUSAMMENSETZUNGEN DIE MOLKE-PROTEINKONZENTRAT
 ENTHALTEN

COMPOSITIONS THERAPEUTIQUES ANTI-CANCEREUSES CONTENANT UN CONCENTRE DE
 PROTEINES DE PETIT-LAIT

(84) Designated Contracting States:
AT CH DE DK ES GB LI LU NL SE

• **BOUNOUS, Gustavo**
Montreal, Quebec H3G 1A7 (CA)

(30) Priority: **13.08.1992 US 929347**

(74) Representative: **Troesch Scheidegger Werner AG**
Patentanwälte
Postfach
8032 Zürich (CH)

(43) Date of publication of application:
07.06.1995 Bulletin 1995/23

(73) Proprietor: **IMMUNOTEC RESEARCH**
CORPORATION LTD.
Montreal, Quebec H3A 2R7 (CA)

(56) References cited:
EP-A- 0 374 390 EP-A- 0 375 852
DE-A- 3 628 010

(72) Inventors:
 • **GOLD, Phil**
Westmount, Quebec H3Y 154 (CA)

Remarks:
 The file contains technical information submitted
 after the application was filed and not included in this
 specification

EP 0 655 925 B1

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

International

Process for Making Undenatured Whey Protein Concentrate

Australia

New Zealand



Commonwealth
of Australia

Letters patent

Patents Act 1990

No.
692508

STANDARD PATENT

I, Janet Lucille Werner, Acting Commissioner of Patents, grant a Standard Patent with the following particulars:

Name and Address of Patentee:

Immunotec Research Corporation Ltd., 292 Adrien Patenaude, Vaudreuil-Dorion, Quebec J7V 5V5 Canada

Names of Actual Inventors: Michel Lange and Gustavo Bounous

Title of Invention: Process for making undenatured whey protein concentrate

Application Number: 14097/95

Term of Letters Patent: Twenty years commencing on 23 December 1994

Priority Details:

<i>Number</i>	<i>Date</i>	<i>Filed with</i>
175637	30 December 1993	UNITED STATES OF AMERICA
315904	30 September 1994	UNITED STATES OF AMERICA



Dated this 12 day of November 1998

Janet Werner
J.L. WERNER
ACTING COMMISSIONER OF PATENTS



No. 278018

LETTERS PATENT

ELIZABETH THE SECOND, by the Grace of God Queen of New Zealand and Her Other Realms and Territories, Head of the Commonwealth, Defender of the Faith; To all to whom these presents shall come, Greeting:

WHEREAS pursuant to the Patents Act 1953 an application has been made for a patent of an invention for
PROCESS FOR MAKING UNDENATURED WHEY PROTEIN CONCENTRATE

(more particularly described in the complete specification relating to the application)

AND WHEREAS

IMMUNOTEC RESEARCH CORPORATION LTD, 292 Adrien Patenaude, Vaudreuil-Dorion, Quebec J7V 5V5, Canada

(hereinafter together with his or their successors and assigns or any of them called "the patentee") is entitled to be registered as the proprietor of the patent hereinafter granted:

NOW, THEREFORE, We by these letters patent give and grant to the patentee our special licence, full power, sole privilege, and authority, that the patentee by himself, his agents, or licensees and no others, may subject to the provisions of any statute or regulation for the time being in force make, use, exercise and vend the said invention within New Zealand and its dependencies during a term of twenty years from the date hereunder written and that the patentee shall have and enjoy the whole profit and advantage from time to time accruing by reason of the said invention during the said term:

AND WE strictly command all our subjects whomsoever within New Zealand and its dependencies that they do not at any time during said term either directly or indirectly make use of or put into practice the said invention, nor in any way imitate the said invention without the consent, licence, or agreement of the patentee in writing under his hand, on pain of incurring such penalties as are prescribed by law and of being answerable to the patentee according to law for his damages thereby occasioned:

PROVIDED ALWAYS:

- (1) That these letters patent shall determine and become void if the patentee does not from time to time pay the renewal fees prescribed by law in respect of the patent:
- (2) That these letters patent are revocable on any of the grounds prescribed by the Patents Act 1953 as grounds for revoking letters patent:
- (3) That nothing in these letters patent shall prevent the granting of licences in the manner in which and for the considerations on which they may by law be granted:
- (4) That these letters patent shall be construed in the most beneficial sense for the advantage of the patentee.

IN WITNESS whereof We have caused these letters patent to be signed and sealed as of the 23rd day of December 1994



Neelke Harms

Commissioner of Patents
17th day of August 1998

International

Process for Producing an Undenatured Whey Protein Concentrate

**Singapore
South Africa**

THE REGISTRY OF PATENTS
SINGAPORE

CIP-7

THE PATENTS ACT
(CHAPTER 221)

CERTIFICATE OF GRANT OF PATENT

In accordance with section 35 of the Patents Act, it is hereby certified that a patent having the following P-No. 53316 [WO 96/35336] had been granted in respect of an invention having the following particulars:

Title : A PROCESS FOR PRODUCING AN
UNDENATURED WHEY PROTEIN
CONCENTRATE

Application No. : 9706092-5

Date of Filing : 08 May 1996

Priority Data : 09 May 1995 - PATENT APPLICATION NO.
08/437,852 (UNITED STATES OF AMERICA)

Name of Inventor(s) : BOUNOUS, GUSTAVO.

Name(s) and Address(es) of
Proprietor(s) of Patent : IMMUNOTEC RESEARCH CORPORATION
292 ADRIEN PATENAUDE
VAUDREUIL-DORION,
QUEBEC, J7V 5V5,
CANADA

Date of Grant : 27 April 1999

Dated this 27th day of April 1999.



Liew Woon Yin (Ms)
Registrar of Patents,
Singapore.



DEPARTEMENT VAN HANDEL EN NYWERHEID
DEPARTMENT OF TRADE AND INDUSTRY

REPUBLIEK VAN SUID-AFRIKA



REPUBLIC OF SOUTH AFRICA

PATENTBRIEF

(WET OP PATENTE, 1978)

LETTERS PATENT

(PATENTS ACT, 1978)

No. 96/9618

NADEMAAL
WHEREAS

IMMUNOTEC RESEARCH CORPORATION LTD.

(Hieronder "die Patenthouer" genoem)
(Hereinafter called "the Patentee")

aansoek by my gedoen het om die verlening van 'n patent ten opsigte van 'n uitvinding wat beskryf is en waarop aanspraak
has applied to me for the grant of a patent is respect of an invention described and claimed in the complete specification

gemaak word in die volledige spesifikasie wat by die Patentkantoor onder bovermelde nommer ingedien is en waarvan 'n
deposited at the Patent Office under the above-mentioned number, a copy of which is annexed, together with the relevant

skrif aangeheg is tesame met die betrokke Vorm P. 2;
Form P. 2;

SO IS DIT dat hierdie Patentbrief aan die Patenthouer 'n patent verleen wat die uitwerking het dat, behoudens die
NOW THEREFORE these letters Patent are to grant to the Patentee a patent, the effect of which shall be to grant to the

voorskrif van die Wet, aan die Patenthouer vir die duur van die patent in die Republiek die reg verleen word om ander
Patentee in the Republic, subject to the provisions of the Act, for the duration of the patent, the right to exclude other persons

persone uit te sluit van die vervaardiging, aanwending, uitoefening of van die handsetting van die uitvinding, sodat hy al die
from making, using, exercising or disposing of the invention, so that he shall have and enjoy the whole profit and advantage

wins en voordeel wat uit die uitvinding voortspruit, verkry en geniet.
profits and advantage accruing by reason of the invention.

WATER BETUIGING WAARVAN die seël van die Patentkantoor hierop te Pretoria aangebring is met ingang van die
IN TESTIMONY WHEREOF the seal of the Patent Office has been affixed at Pretoria with effect from the

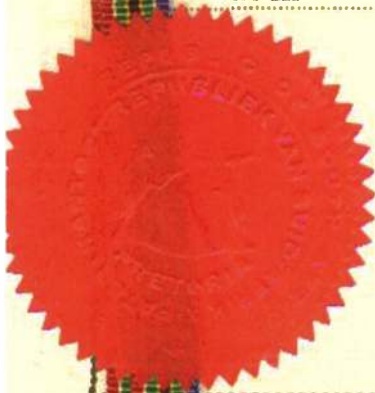
27th

dag van
day of

MAY

eenduisend negehoenderd
nineteen hundred and

NINETY EIGHT



[Signature]
Registrateur van Patente • Registrar of Patents

[Blaai om
See overleaf

International

**Whey Protein Composition, a Method
for Producing it and Application of the
Whey Protein Compositions**

Chile

Norway

REPUBLICA DE CHILE



Nº 38412

Int. Cl. A23C 9/142, 9/148,
21/00, 21/06, A23K
1/08.-

MINISTERIO DE ECONOMIA, FOMENTO Y RECONSTRUCCION

DEPARTAMENTO DE PROPIEDAD INDUSTRIAL

PATENTE DE INVENCION

Visto la resolución dictada, concédese Patente de Invención a:

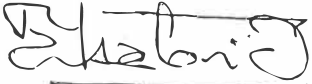
PROF. GUSTAVO BOUNOUS y PROF. PHIL GOLD
Domiciliados en 1745 Cedar Avenue, Montreal, Quebec, CANADA.
3225 The Boulevard Westmount, Quebec, CANADA.
Inventores de la patente.

TITULO :


"Procedimiento por ultrafiltración no térmico, para obtener a partir del lactosuero, de una composición proteica biológicamente activa que contiene un concentrado de proteínas y/o péptidos en su conformación nativa, con grupos glutamyl-cisteína, útil para nutrición humana o animal, por aumentar el glutatión celular".

El plazo de concesión para explotar en el país el invento es de 15 años contados desde el 30 de Septiembre de 1992.-

Santiago de Chile, 16 de Febrero de 1993


IVAN VRSALOVIC OSTOJIC
Conservador de Patentes de Invención




JAIME PALMA OYEDO
Jefe del Depto. de Propiedad Industrial



KONGERIKET NORGE

PATENTBREV

Det bekreftes herved at Styret for det industrielle rettsvern i medhold av lov nr. 9 av 15. desember 1967 om patenter har meddelt patent som angitt i vedheftede patentskrift.

Jørgen Sjøfl
Direktør



International

Biologically Active Whey Protein Composition, a Method for Producing it and Use of the Composition

Argentina

Germany

Italy

Mexico

New Zealand

United Kingdom



255565

LA ADMINISTRACION NACIONAL DE PATENTES, CONFORME LO RESUELTO EN EL EXPEDIENTE RESPECTIVO Y A LO DISPUESTO POR LA LEY 24.481 (T.O. 1996), EXTIENDE EN NOMBRE DE LA NACION ARGENTINA EL PRESENTE TITULO A FAVOR DE IMMUNCTEC RESEARCH CORPORATION LTD.

QUE ACREDITA LA CONCESION DE PATENTE DE INVENCION SOBRE :
COMPOSICION PROTEICA BIOLOGICAMENTE ACTIVA DE LACTEO Y SU APLICACION
CUYA DOCUMENTACION ANEXA ES COPIA FIEL DE LA DEPOSITADA EN EL INSTITUTO NACIONAL DE LA PROPIEDAD INDUSTRIAL CONFORME A LO ESTABLECIDO EN EL ARTICULO 97 DEL REGLAMENTO DE LA LEY 24.481 (DECRETO 260/96 - ANEXO II), EL TERMINO POR EL QUE SE ACUERDA LA PATENTE EXPIRARA EL DIA 25 DE MARZO DE 2017

BUENOS AIRES, 25 DE MARZO DE 2002

LUIS M. NOGUERA
Comisario



19 BUNDESREPUBLIK
DEUTSCHLAND



DEUTSCHES
PATENTAMT

12 Übersetzung der
europäischen Patentschrift

87 EP 0 375 852 B1

10 DE 689 24 142 T 2

51 Int. Cl.⁶:
A 23 J 1/20
A 61 K 35/20
A 23 C 9/142

- 21 Deutsches Aktenzeichen: 689 24 142.9
- 86 Europäisches Aktenzeichen: 89 118 345.1
- 86 Europäischer Anmeldetag: 3. 10. 89
- 87 Erstveröffentlichung durch das EPA: 4. 7. 90
- 87 Veröffentlichungstag
der Patenterteilung beim EPA: 6. 9. 95
- 47 Veröffentlichungstag im Patentblatt: 1. 2. 96

DE 689 24 142 T 2

30 Unionspriorität: 32 33 31
23.12.88 US 289971

73 Patentinhaber:
Immunotec Research Corp. Ltd., Montreal, Quebec,
CA

74 Vertreter:
Patentanwälte Mitscherlich & Partner, 80331
München

84 Benannte Vertragsstaaten:
AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

72 Erfinder:
Bounos, Gustavo, Montreal, Quebec, CA; Gold, Phil,
Quebec H3Y 2S4, CA

54 Biologisch aktive Molkeproteinzusammensetzung, Verfahren zur Herstellung und Verwendung dieser
Zusammensetzung.

Anmerkung: Innerhalb von neun Monaten nach der Bekanntmachung des Hinweises auf die Erteilung des europäischen Patents kann jedermann beim Europäischen Patentamt gegen das erteilte europäische Patent Einspruch einlegen. Der Einspruch ist schriftlich einzureichen und zu begründen. Er gilt erst als eingelegt, wenn die Einspruchsgebühr entrichtet worden ist (Art. 99 (1) Europäisches Patentübereinkommen).

Die Übersetzung ist gemäß Artikel II § 3 Abs. 1 IntPatÜG 1991 vom Patentinhaber eingereicht worden. Sie wurde vom Deutschen Patentamt inhaltlich nicht geprüft.

DE 689 24 142 T 2



ALL'UFFICIO CENTRALE BREVETTI
Via Molise, 19
ROMA

OGGETTO: Traduzione del testo del brevetto europeo n. 0 375 852 (num. pubblicazione)
(art. 4 D.P.R. 8-1-1979, n. 32, come modificato dall'art. 2 L. 3/5/1985 n° 194)

La Ditta IMMUNOTEC RESEARCH CORPORATION LTD.
~~XXXXXXXX~~

di nazionalità canadese ~~XXXXXXXX~~ con sede in MONTREAL, Quebec (Canada)
Via //

a mezzo dei mandatarî Fabrizio de Benedetti,
Paquale Pizzoli, Mario Arrigucci, Silvano Adorno, Luciano Aimi,
della SOCIETA' ITALIANA BREVETTI S.p.A., Via Carducci, 8, 20123 Milano, presso
cui elegge domicilio in Italia agli effetti di legge.
DEPOSITA PRESSO CODESTO UFFICIO

ai fini previsti dal citato art. 4 l'allegata traduzione in lingua italiana del
testo nel quale l'Ufficio Europeo Brevetti concede ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~
il brevetto europeo rilasciato per l'Italia di cui è titolare, n. 0 375 852
avente per titolo: "COMPOSIZIONE DI PROTEINE DEL STERO DI LATTE BIOLOGICAMENTE
ATTIVE, METODO PER LA SUA PREPARAZIONE E USO DELLA COMPOSIZIONE"

depositato il 3 OTTOBRE 1989 - Dom. N°89118345.1
classificazione: A 23 J 1/20 - A 61 K 35/20 - A 23 C 9/142

Milano, 5 DICEMBRE 1995

Allegati:
2 copie del presente formulario
1 esemplare della traduzione
Disegni, tavole n. 7



FIRMA
Il Mandatario: 
Dr. Luciano AIMI
Is. Iscr. Albo 130

1 lettera d'incarico/~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

UFFICIO PROV. INDUSTRIA, COMMERCIO ED ARTIGIANATO DI MILANO

(spazio riservato all'ufficio) n° d'ordine

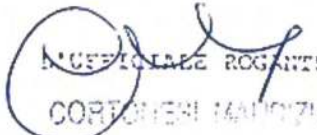
30699BE/95

La presente istanza con i documenti allegati è stata ricevuta da questo Ufficio
in data

5 DIC 1995

timbro
dell'U.P.I.C.A.




UFFICIO LEGGE ROGANTE
CORTESESI MANOZZI



TITULO DE PATENTE DE INVENCION NUMERO: 182279

TITULAR(ES): IMMUNOTEC RESEARCH CORPORATION LTD.

DOMICILIO(S): 1010 SHERBRUOSE STREET, WEST MONTREAL, CANADA

DENOMINACION: PROCEDIMIENTO PARA PRODUCIR UN CONCENTRADO DE PROTEINAS DE SUERO LACTEO, BIOLOGICAMENTE ACTIVO, EL CONCENTRADO MISMO Y SU UTILIZACION

CLASIF.INT :⁵ A23J1/20, A61K35/20

INVENTOR(ES): GUSTAVO BOUNOUS, PHIL GOLD

SOLICITUD

NUMERO: 18842 FECHA DE PRESENTACION: 21 DE DICIEMBRE DE 1989 HORA: 13:20

PRIORIDAD

PAIS: US FECHA: 23 DE DICIEMBRE DE 1988 NUMERO: 289,971

ESTA PATENTE CONCEDE A SU TITULAR EL DERECHO EXCLUSIVO DE EXPLOTACION DEL INVENTO RECLAMADO EN EL CAPITULO REIVINDICATORIO Y TIENE UNA VIGENCIA DE VEINTE AÑOS IMPRORROGABLES CONTADOS A PARTIR DE LA FECHA DE PRESENTACION DE LA SOLICITUD.

FECHA DE EXPEDICION
2 DE AGOSTO DE 1996

EL DIRECTOR GENERAL


LIC. JORGE AMIGO CASTAÑEDA



LETTERS PATENT

Number 243860

ELIZABETH THE SECOND, by the Grace of God Queen of New Zealand and Her Other Realms and Territories, Head of the Commonwealth, Defender of the Faith; To all to whom these presents shall come, Greeting:

WHEREAS pursuant to the Patents Act 1953 an application has been made for a patent of an invention for

USE OF A BIOLOGICALLY ACTIVE WHEY PROTEIN COMPOSITION

(more particularly described in the complete specification relating to the application)

AND WHEREAS

IMMUNOTEC RESEARCH CORPORATION LTD., 292 Adrien Patenaude, Vaudreuil-Dorion, Quebec, Canada J7V 5V5

(hereinafter together with his or their successors and assigns or any of them called "the patentee") is entitled to be registered as the proprietor of the patent hereinafter granted:

Address for service: **BALDWIN SHELSTON WATERS, Level 14, NCR House, 342 Lambton Quay, Wellington, New Zealand**

NOW, THEREFORE, We by these letters patent give and grant to the patentee our special licence, full power, sole privilege, and authority, that the patentee by himself, his agents, or licensees and no others, may subject to the provisions of any statute or regulation for the time being in force make, use, exercise and vend the said invention within New Zealand and its dependencies during a term of twenty years from 19 December 1989 and that the patentee shall have and enjoy the whole profit and advantage from time to time accruing by reason of the said invention during the said term;

AND WE strictly command all our subjects whomsoever within New Zealand and its dependencies that they do not at any time during said term either directly or indirectly make use of or put into practice the said invention, nor in any way imitate the said invention without the consent, licence, or agreement of the patentee in writing under his hand, on pain of incurring such penalties as are prescribed by law and of being answerable to the patentee according to law for his damages thereby occasioned:

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- (2) That these letters patent are revocable on any of the grounds prescribed by the Patents Act 1953 as grounds for revoking letters patent;
- (3) That nothing in these letters patent shall prevent the granting of licences in the manner in which and for the considerations on which they may by law be granted;
- (4) That these letters patent shall be construed in the most beneficial sense for the advantage of the patentee.

IN WITNESS whereof We have caused these letters patent to be signed and sealed on 8 February 2001 with effect from 19 December 1989.



Neville Harris
Commissioner of Patents, Trade Marks and Designs



Ⓢ

EUROPEAN PATENT SPECIFICATION

- Ⓢ Date of publication of patent specification: 06.09.95 Ⓢ Int. Cl.⁶ **A23J 1/20, A61K 35/20, A23C 9/142**
- Ⓢ Application number: 89118345.1
- Ⓢ Date of filing: 03.10.89

The file contains technical information submitted after the application was filed and not included in this specification

Ⓢ **Biologically active whey protein composition, a method for producing it and use of the composition.**

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- Ⓢ References cited:

EP-A- 0 239 722	WO-A-87/04050
WO-A-88/08673	FR-A- 2 296 428
GB-A- 1 136 309	GB-A- 1 495 940
US-A- 4 710 387	US-A- 4 753 926
US-A- 4 784 685	

M.K. Horwitt, The Vitamins, 2nd ed., vol.V, 1972, pages 88-96

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