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Applicants: NATREON INC



US010183047B2

(12) **United States Patent**
Kalidindi(10) **Patent No.: US 10,183,047 B2**(45) **Date of Patent: Jan. 22, 2019**(54) **CHROMIUM-CONTAINING COMPOSITIONS
IN COMBINATION WITH *PHYLLANTHUS*
EMBLICA AND SHILAJIT HAVING
SYNERGISTIC EFFECTS FOR IMPROVING
ENDOTHELIAL FUNCTION AND
CARDIOVASCULAR HEALTH**(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ
(US)(72) Inventor: **Sanyasi R. Kalidindi**, Monroe, NJ
(US)(73) Assignee: **Natreon, Inc.**, New Brunswick, NJ
(US)(*) 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.: **14/947,987**(22) Filed: **Nov. 20, 2015**(65) **Prior Publication Data**

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Related U.S. Application Data(63) Continuation-in-part of application No. 14/718,613,
filed on May 21, 2015, now abandoned.(60) Provisional application No. 62/001,438, filed on May
21, 2014.(51) **Int. Cl.****A61K 36/185** (2006.01)**A61K 33/24** (2006.01)**A61K 35/04** (2006.01)**A61K 36/47** (2006.01)**A61K 31/194** (2006.01)**A61K 31/366** (2006.01)(52) **U.S. Cl.**CPC **A61K 36/185** (2013.01); **A61K 31/194**
(2013.01); **A61K 31/366** (2013.01); **A61K**
33/24 (2013.01); **A61K 35/04** (2013.01); **A61K**
36/47 (2013.01)(58) **Field of Classification Search**CPC **A61K 31/194**; **A61K 31/366**; **A61K 35/04**;
A61K 36/185; **A61K 36/47**; **A61K 33/24**;
A61K 2300/00

See application file for complete search history.

(56) **References Cited****U.S. PATENT DOCUMENTS**6,124,268 A * 9/2000 Ghosal A61K 8/498
424/401
6,440,436 B1 8/2002 Ghosal
6,869,612 B2 3/2005 Ghosal
7,250,181 B2 7/2007 Ghosal
8,062,677 B2 11/2011 Komorowski
8,962,576 B2 2/2015 Ghosal et al.
2005/0085454 A1 * 4/2005 Ghosal A61K 31/28
514/1852005/0233942 A1 * 10/2005 Ghosal A61K 31/366
514/5.52005/0245434 A1 11/2005 Ghosal
2009/0155384 A1 * 6/2009 Komorowski ... A61K 47/48061
424/655

2013/0261068 A1 10/2013 Ghosal et al.

2013/0266676 A1 10/2013 Ghosal et al.

2014/0079729 A1 3/2014 Kalidindi

2014/0356466 A1 12/2014 Ghosal et al.

FOREIGN PATENT DOCUMENTS

WO 2009/010992 A2 1/2009

WO 2011/139246 A1 11/2011

OTHER PUBLICATIONSUsharani et al (2013). "Effects of Phyllanthus emblica extract on
endothelial dysfunctional and biomarkers of oxidative stress in
patients with type 2 diabetes mellitus: a randomized, double-blind,
controlled study." Diabetes, Metabolic Syndrom and Obesity: Tar-
gets and Therapy, 6: 275-284.*Saxena et al (2003). "Modulation of Oxidative and Antioxidative
Status of Diabetes by Asphaltum Panjabinum." Diabetes Care,
26(8): 2469-2470.*Hadi et al (2005). Vascular Health and Risk Management, 1(3):
183-198.*Akhtar, et al., "Effect of Amla fruit (*Emblca officinalis* Gaertn.) on
blood glucose and lipid profile of normal subjects and type 2
diabetic patients," Int. J. Food Sci. Nutr. (2011) 62(6): 609-616.
Abstract Only.Anila, et al., "Flavonoids from *Emblca Officinalis* and *Mangifera*
indica-effectiveness for dyslipidemia," J. Ethnopharmacol. (2002)
79:81-7.Bhattacharya, "Shilajit attenuates streptozotocin induced diabetes
mellitus and decrease in pancreatic islet superoxide dismutase
activity in rats," Phytother. Res. (1995) 9:41-4. Abstract Only.Biswas, et al., Int J Diab Dev Ctries, Jul-Sep. 2010, vol. 30, Issue
3, pp. 153-161.Chowienzyk, et al., "Photoplethysmographic assessment of pulse
wave reflection: blunted response to endothelium dependant beta
2-adrenergic vasodilation in type 2 diabetes mellitus," J. Am. Coll.
Cardiol. (Dec. 1999) 34(7):2007-14.Millasseau et al., "Determination of age related increases in large
artery stiffness by digital pulse contour analysis," Clinical Science
(2002) 103: 371-377.Miranda, et al., "A Rapid, Simple Spectrophotometric Method for
Simultaneous Detection of Nitrate and Nitrite," Nitric Oxide: Biol-
ogy and Chemistry (2001) vol. 5, No. 1, pp. 62-71. Abstract Only.Naidu, et al., "Comparison of two β_2 adrenoceptor agonists by
different routes of administration to assess human endothelial
function," Indian J. Pharmacol. (2007) 39:168-9.

(Continued)

Primary Examiner — Doan T Phan(74) *Attorney, Agent, or Firm* — Amin Talati Upadhye
LLP; George M. Carrera, Jr.(57) **ABSTRACT**Chromium-three cation containing compositions in syner-
gistic combination with *Phyllanthus emblica* extract and
Shilajit are useful for improvement of endothelial function
and cardiovascular health, including treatment of type 2
diabetes and metabolic syndrome.**16 Claims, 19 Drawing Sheets**



US 20140356466A1

(19) **United States**(12) **Patent Application Publication**
Gupta et al.(10) **Pub. No.: US 2014/0356466 A1**(43) **Pub. Date: Dec. 4, 2014**(54) **METHOD FOR TREATING PAIN AND
INFLAMMATION ASSOCIATED WITH
ARTHRITIS USING CHROMIUM-THREE
CATION IN COMBINATION WITH
PHYLLANTHUS EMBLICA AND SHILAJIT**(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ (US)(72) Inventors: **Ramesh C. Gupta**, Hopkinsville, KY
(US); **Aundrea Fleck**, Big Sandy, TN
(US); **Sanyasi R. Kalidindi**, Monroe, NJ
(US)(73) Assignee: **Natreon, Inc.**, New Brunswick, NJ (US)(21) Appl. No.: **14/293,754**(22) Filed: **Jun. 2, 2014****Related U.S. Application Data**(60) Provisional application No. 61/829,877, filed on May
31, 2013.**Publication Classification**(51) **Int. Cl.**
A61K 36/185 (2006.01)
(52) **U.S. Cl.**
CPC **A61K 36/185** (2013.01)
USPC **424/769**(57) **ABSTRACT**

Chromium-three cation in combination with *Phyllanthus emblica* extract and Shilajit is useful in treating symptoms associated with osteoarthritis including reduction of inflammation and pain in a mammal, particularly a human or an animal. The combination shows significant reduction in overall pain levels and other pain measures in a canine model, and in human studies. Thus the composition is an anti-arthritic formulation that decreases pain and inflammation.



US 20160213644A1

(19) **United States**

(12) **Patent Application Publication**
Sen

(10) **Pub. No.: US 2016/0213644 A1**

(43) **Pub. Date: Jul. 28, 2016**

(54) **REGULATION OF BODY WEIGHT GAIN BY
USING DIBENZO-ALPHA-PYRONES**

(71) Applicant: **NATREON, INC.**, New Brunswick, NJ
(US)

(72) Inventor: **Chandan K. Sen**, Columbus, OH (US)

(73) Assignee: **Natreon, Inc.**, New Brunswick, NJ (US)

(21) Appl. No.: **14/917,721**

(22) PCT Filed: **Sep. 9, 2014**

(86) PCT No.: **PCT/US14/54798**

§ 371 (c)(1),

(2) Date: **Mar. 9, 2016**

Related U.S. Application Data

(60) Provisional application No. 61/875,513, filed on Sep.
9, 2013.

Publication Classification

(51) **Int. Cl.**
A61K 31/37 (2006.01)

(52) **U.S. Cl.**
CPC **A61K 31/37** (2013.01)

(57) **ABSTRACT**

A method of using dibenzo-alpha-pyrones (DBPs) is provided wherein a subject is administered one or more of the aforementioned resulting in decreased body weight gain. In an embodiment, a 3-OH-DBP, 3,8-(OH)₂-DBP, or a combination thereof is administered to an individual to control body weight gain.



US010500240B2

**(12) United States Patent
Kalidindi****(10) Patent No.: US 10,500,240 B2
(45) Date of Patent: Dec. 10, 2019****(54) USE OF TERMINALIA CHEBULA EXTRACT
FOR TREATMENT OF OSTEOARTHRITIS****(71) Applicant: Natreon, Inc.,** New Brunswick, NJ
(US)**(72) Inventor: Sanyasi R. Kalidindi,** Monroe, NJ
(US)**(73) Assignee: Natreon, Inc.,** New Brunswick, NJ
(US)**(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 578 days.**(21) Appl. No.: 14/578,793****(22) Filed: Dec. 22, 2014****(65) Prior Publication Data**

US 2015/0174184 A1 Jun. 25, 2015

Related U.S. Application Data**(60)** Provisional application No. 61/919,065, filed on Dec. 20, 2013.**(51) Int. Cl.**
A61K 36/185 (2006.01)
A61K 31/7048 (2006.01)**(52) U.S. Cl.**
CPC **A61K 36/185** (2013.01); **A61K 31/7048**
(2013.01)**(58) Field of Classification Search**
None
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**6,517,861 B2 2/2003 Singh et al.
7,338,674 B2 3/2008 Palpu et al.
7,618,663 B2 11/2009 Palpu et al.
2013/0266676 A1 10/2013 Ghosal et al.**FOREIGN PATENT DOCUMENTS**JP 405331041 A 12/1993
WO WO-02085394 A1 * 10/2002 A61K 36/00
WO WO-2011033524 A2 * 3/2011 A61K 36/60
WO 2011089615 7/2011**OTHER PUBLICATIONS**Ilaaj Barae Deru. From Qaraabaadeen Najm-al-Hhani (20th century AD), Munshi Nawal Kishore Lucknow, (second edition) 1928 AD, p. 321. Author: Mohammad Najuml Ghani Khan. Retrieved from TKDL. [Retrieved from the Internet on: Apr. 30, 2017].*
McConnell et al. Arthritis Care & Research 45:453-461, 2001. pp. 453-461.*
Ranjini et al. The Bioscan. 10(2): 549-551. (Year: 2015).*
Dhanani et al. Journal of Chromatographic Science. 53:625-632 (Year: 2015).*

A. Bag, et al., "Anti-inflammatory, anti-lipid peroxidative, antioxidant and membrane stabilizing activities of hydroalcoholic extract of Terminalia chebula fruits," Pharm. Biol. Dec. 2013; 26(9):1331-1335 (Abstract Only).

A.M. Bendele, "Animal models of osteoarthritis," J. Musculoskelet. Neuronal Interact. (2001) 1(4):363-376 (Abstract Only).

K.D. Brandt, "Animal models of osteoarthritis," Biorheology (2002) 39:221-235 (Abstract Only).

S.J. Kim, et al., "Effect of 1,2,3,4,6-penta-O-galloyl-beta-D-glucose on elastase and hyaluronidase activities and its type II collagen expression," Acta Pol. Pharm. (2010) 67(2):145-150 (Abstract Only).

C.B. Little and M.M. Smith, "Animal models of osteoarthritis," Current Rheumatology Reviews (2008) 4:1-8.

V. Nair, et al., "Anti-arthritis and disease modifying activity of Terminalia chebula Retz. In experimental models," J. Pharm. Pharmacol. (2010) 62(12):1801-1806 (Abstract Only).

J.B. Seo, et al., "Anti-Arthritic and Analgesic Effect of NDI10218, a Standardized Extract of Terminalia chebula, on Arthritis and Pain Model," Biomol. Ther. (Seoul) (2012) 20(1):104-112.

W.B. Van Den Berg, "Lessons from animal models of osteoarthritis," Current Opinion in Rheumatology (2001) 13 (Abstract Only). (5):452-456.

Arzani, Mohammad Akbar; "Qaraabaadeen Qaadri", (17th century AD), 1968 AD, p. 255-256, Ahmadi Publication, Delhi.

Basavaraja; "Basavarajiyam", Edn. 1st Reprint, 2005 (Time of Origin 15th Century), p. 85, Chaukhambha Sanskrit Pratisthan, Delhi.

Bin Zakariyya Al Razi, Abu Bakr Mohammad; "Kitaab al-Haawi-fil-Tibb", vol. XI (9th century AD), (First Edition) 1962 AD, p. 151, Daycrah al Ma'aarif Usmania, Hyderabad.

Cakrapanidattah; "Cakradattah", Ed. 4th 2002, p. 160, Chaukhambha Sanskrit Samsthan (Varanasi).

Madhavah; "Vrmdamadhava", Edn. 1922 (Time of Origin 9th century), p. 316, Yagyeshwara Gopal Dixit, Bookseller, Pune.

(Continued)

Primary Examiner — Amy L Clark**(74) Attorney, Agent, or Firm — Amin Talati Wasserman LLP; George M. Carrera, Jr.; Brent A. Batzer****(57) ABSTRACT**

The present invention provides an optimized and/or enriched hydrolyzable tannoid blend derived from *Terminalia chebula*. In an embodiment the present invention further relates to the use of an extract of *Terminalia chebula* for treatment of osteoarthritis. In another embodiment, a *T. chebula* extract composition contains about 8-25% by weight chebulagic acid, about 15-30% by weight chebulinic acid and about 10-40% by weight other low molecular weight hydrolyzable tannoids. This embodiment provides a *T. chebula* enriched tannoid blend composition (TC/enriched tannoid blend). In another embodiment, a method of treating osteoarthritis in an individual is provided, comprising administering to the individual in need thereof a therapeutically effective amount of the *T. chebula* extract composition. In yet another embodiment, a method of reducing pain and inflammation in an individual afflicted with osteoarthritis is provided, comprising orally administering to the individual in need thereof a therapeutically effective amount of the *T. chebula* extract composition.

13 Claims, No Drawings



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(19) **United States**

(12) **Patent Application Publication**
Kalidindi

(10) **Pub. No.: US 2016/0015740 A1**

(43) **Pub. Date: Jan. 21, 2016**

(54) **CHROMIUM-CONTAINING COMPOSITIONS
FOR IMPROVING ENDOTHELIAL
FUNCTION AND CARDIOVASCULAR
HEALTH**

Publication Classification

(51) **Int. Cl.**

A61K 33/24 (2006.01)

A61K 35/04 (2006.01)

A61K 36/185 (2006.01)

(52) **U.S. Cl.**

CPC *A61K 33/24* (2013.01); *A61K 36/185*
(2013.01); *A61K 35/04* (2013.01)

(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ (US)

(72) Inventor: **Sanyasi R. Kalidindi**, Monroe, NJ (US)

(73) Assignee: **Natreon, Inc.**, New Brunswick, NJ (US)

(21) Appl. No.: **14/718,613**

(57)

ABSTRACT

(22) Filed: **May 21, 2015**

Related U.S. Application Data

(60) Provisional application No. 62/001,438, filed on May 21, 2014.

Chromium-three cation containing compositions in combination with *Phyllanthus emblica* extract and Shilajit are useful for improvement of endothelial function and cardiovascular health, including treatment of type 2 diabetes and metabolic syndrome.



US 20150050369A1

(19) **United States**

(12) **Patent Application Publication**
Kalidindi

(10) **Pub. No.: US 2015/0050369 A1**

(43) **Pub. Date: Feb. 19, 2015**

(54) **TERMINALIA CHEBULA AND TERMINALIA
BELLERICA EXTRACTS FOR INHIBITION
OF XANTHINE OXIDASE**

Publication Classification

(51) **Int. Cl.**

A61K 36/185 (2006.01)

(52) **U.S. Cl.**

CPC **A61K 36/185** (2013.01)

USPC **424/769**

(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ (US)

(72) Inventor: **Sanyasi R. Kalidindi**, Monroe, NJ (US)

(73) Assignee: **NATREON, INC.**, New Brunswick, NJ
(US)

(21) Appl. No.: **14/459,046**

(57) **ABSTRACT**

(22) Filed: **Aug. 13, 2014**

Related U.S. Application Data

(60) Provisional application No. 61/865,233, filed on Aug.
13, 2013.

Compositions containing extracts of *Terminalia chebula* and
Terminalia bellerica, or combinations thereof and methods
for treatment of uricemia, hyperuricemia, and gout in a
human subject are provided.



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(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2019/0388322 A1**
Sen et al. (43) **Pub. Date: Dec. 26, 2019**

(54) **IMPROVEMENT OF BLOOD
MICROPERFUSION TO SKIN BY SHILAJIT**

Publication Classification

(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ
(US)

(51) **Int. Cl.**
A61K 8/49 (2006.01)
A61K 8/92 (2006.01)
A61K 8/72 (2006.01)
A61Q 19/08 (2006.01)

(72) Inventors: **Chandan K. Sen**, Columbus, OH (US);
Sanyasi R. Kalidindi, Monroe, NJ
(US)

(52) **U.S. Cl.**
CPC *A61K 8/498* (2013.01); *A61Q 19/08*
(2013.01); *A61K 8/72* (2013.01); *A61K 8/92*
(2013.01)

(73) Assignee: **Natreon, Inc.**, New Brunswick, NJ
(US)

(57) **ABSTRACT**

(21) Appl. No.: **16/018,876**

Methods of using Shilajit or its individual components, or a combination of two or more of these components, to improve skin microperfusion, to upregulate ECM related genes in the skin, to increase endothelial cell migration and growth of blood vessels, and thus to improve skin health are presented herein.

(22) Filed: **Jun. 26, 2018**

Document is not available for EP2776462A1



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Industry Canada

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(12) **DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION**

(13) **A1**

(22) Date de dépôt/Filing Date: 2013/09/13

(41) Mise à la disp. pub./Open to Public Insp.: 2014/03/14

(30) Priorité/Priority: 2012/09/14 (US61/701,399)

(51) Cl.Int./Int.Cl. *A61K 35/02* (2006.01),
A61P 3/06 (2006.01), *A61P 3/10* (2006.01)

(71) Demandeur/Applicant:
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(72) Inventeur/Inventor:
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(74) Agent: BORDEN LADNER GERVAIS LLP

(54) Titre : METHODE EN VUE D'AMELIORER LA FONCTION ENDOTHELIALE ET DE DIMINUER LA MORBIDITE
CARDIOVASCULAIRE A L'AIDE DU SHILAJIT

(54) Title: METHOD FOR IMPROVING ENDOTHELIAL FUNCTION AND DECREASING CARDIOVASCULAR
MORBIDITY USING SHILAJIT





US 20190255017A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2019/0255017 A1**
Kalidindi et al. (43) **Pub. Date: Aug. 22, 2019**(54) **SYNERGISTIC COMBINATIONS OF
UROLITHINS A AND B FOR IMPROVING
COGNITIVE CAPACITY OR COGNITIVE
FUNCTION**(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ (US)(72) Inventors: **Sanyasi R. Kalidindi**, Monroe, NJ
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Varanasi (IN)(73) Assignee: **Natreon, Inc.**, New Brunswick, NJ
(US)(21) Appl. No.: **16/159,343**(22) Filed: **Oct. 12, 2018**(30) **Foreign Application Priority Data**

Feb. 19, 2018 (IN) 20184100673

Publication Classification(51) **Int. Cl.****A61K 31/366** (2006.01)**A61P 25/28** (2006.01)(52) **U.S. Cl.**CPC **A61K 31/366** (2013.01); **A61P 25/28**
(2018.01)

(57)

ABSTRACT

A synergistic combination of Urolithin A (3,8-dihydroxy-dibenzo-alpha-pyrone) and Urolithin B (3-hydroxy-dibenzo-alpha-pyrone) is provided in a particular effective ratio, optionally in a nutraceutical or pharmaceutical composition. The composition is for use in treating cognitive deficits, including increasing cognitive function or cognitive capacity (nootropic activity). The composition is for use in treating or preventing a dementia-related disorder in a human subject, such as anxiety or Alzheimer's disease, and for inhibition of acetylcholinesterase (AChE).



(22) Date de dépôt/Filing Date: 2013/03/28

(41) Mise à la disp. pub./Open to Public Insp.: 2013/09/30

(30) Priorités/Priorities: 2012/03/30 (US61/618,289);
2013/03/26 (US13/850,911)

(51) Cl.Int./Int.Cl. *A61K 36/185* (2006.01),
A61K 31/7048 (2006.01), *A61P 3/10* (2006.01),
A61P 9/00 (2006.01)

(71) Demandeur/Applicant:
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(72) Inventeurs/Inventors:
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VEERARAGAVAN, MURUGANANDAM, IN;
KALIDINDI, SANYASI R., US

(74) Agent: BORDEN LADNER GERVAIS LLP

(54) Titre : COMPOSITIONS ET PROCEDES PERMETTANT D'AMELIORER LA FONCTION ENDOTHELIALE ET LA
SANTÉ CARDIOVASCULAIRE

(54) Title: COMPOSITIONS AND METHOD FOR IMPROVING ENDOTHELIAL FUNCTION AND CARDIOVASCULAR
HEALTH

(57) Abrégé/Abstract:

Compositions of natural antioxidants, especially those derived from *Phyllanthus emblica* and *Withania somnifera*, and combinations thereof, are provided. The compositions may be used for improvement of endothelial function and cardiovascular health, including treatment of diabetes.



US 20060159784A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2006/0159784 A1**
Ghosal (43) **Pub. Date: Jul. 20, 2006**(54) **POLYHERBAL COMPOSITIONS AND
METHODS FOR TREATING VIRAL
INFECTIONS**(76) Inventor: **Shibnath Ghosal**, Calcutta (IN)

Correspondence Address:

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**100 THANET CIRCLE, SUITE 306
PRINCETON, NJ 08540 (US)**(21) Appl. No.: **11/038,557**(22) Filed: **Jan. 19, 2005****Publication Classification**(51) **Int. Cl.****A61K 36/185** (2006.01)**A61K 36/10** (2006.01)(52) **U.S. Cl.** **424/762; 424/769**(57) **ABSTRACT**

The present invention relates to pharmaceutical or veterinary or nutritional compositions of polyherbal extracts useful as anti-viral or immune-supporting agents. Particularly, the present invention of polyherbal composition comprises of extracts of *Withania somnifera*, *Mangifera indica* and purified Shilajit. This cost effective immune-supporting agent is ideal for use during the maintenance phase of the treatment, following an initial viral load reduction phase in which it is used as an adjuvant to conventional anti-viral drug therapy. The anti-viral and immune-supporting composition of this invention can perhaps be the sole basis of treatment where affordability is an issue. Additionally, this composition is used for the treatment, prevention or management of immune-supporting system in primates in need, especially humans.



US 20160095881A1

(19) **United States**(12) **Patent Application Publication**
Sen(10) **Pub. No.: US 2016/0095881 A1**(43) **Pub. Date: Apr. 7, 2016**(54) **PROMOTING MUSCLE BUILDING AND
REPAIR AND TREATING DISORDERS
RELATED TO COLLAGEN AND PERTINENT
PROTEINS BY USING SHILAJIT**(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ (US)(72) Inventor: **Chandan K. Sen**, Columbus, OH (US)(21) Appl. No.: **14/873,069**(22) Filed: **Oct. 1, 2015****Related U.S. Application Data**

(60) Provisional application No. 62/059,072, filed on Oct. 2, 2014.

Publication Classification(51) **Int. Cl.***A61K 35/02* (2006.01)*A61K 31/538* (2006.01)*A61K 31/352* (2006.01)(52) **U.S. Cl.**CPC *A61K 35/02* (2013.01); *A61K 31/352*
(2013.01); *A61K 31/538* (2013.01)

(57)

ABSTRACT

A method of using Shilajit or its individual components, or a combination of two or more of these components, to induce the body of a mammal, including that of a human, to synthesize new collagen and the related extracellular matrix proteins, thus promoting the health of all of the tissues and organs containing collagen and the related extracellular matrix proteins, including skin, connective tissue, muscle, cartilage, bone, and teeth and improve muscle building and regeneration, and/or treat collagen-related disorders is presented.



- (51) International Patent Classification:
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- (26) Publication Language: English
- (30) Priority Data:
61/992,054 12 May 2014 (12.05.2014) US
- (71) Applicant: NATREON, INC. [—/US]; 2-D Janine Place,
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Chicago, IL 60603 (US).
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KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
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SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
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kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

- (54) Title: PHYLLANTHUS EMBLICA COMPOSITIONS FOR REDUCTION OF BLOOD GLUCOSE LEVELS

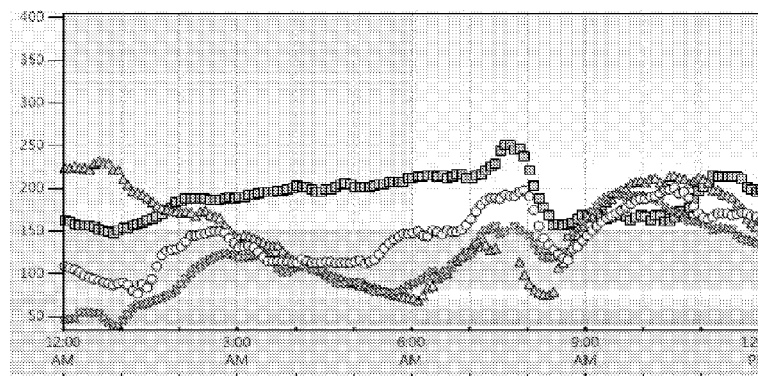


FIG. 2

- (57) Abstract: Methods for improvement of symptoms of Type 1 Diabetes using compositions derived from *Phyllanthus emblica*, or extracts thereof, are provided. In an embodiment, postprandial blood glucose levels may be reduced in a patient afflicted with Type 1 Diabetes. In one embodiment, the present invention describes the usefulness of *Phyllanthus emblica* and compositions or extracts thereof, in improving symptoms and/or metabolic outcomes in patients with Type 1 diabetes mellitus as well as in healthy subjects.



- (51) **International Patent Classification:**
A61K 36/185 (2006.01) *A61K 33/24* (2006.01)
- (21) **International Application Number:**
PCT/US2015/062006
- (22) **International Filing Date:**
20 November 2015 (20.11.2015)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
PCT/US2015/032024 21 May 2015 (21.05.2015) US
14/718,613 21 May 2015 (21.05.2015) US
- (71) **Applicant:** NATREON, INC. [US/US]; 2-D Janine Place,
New Brunswick, NJ 08901 (US).
- (72) **Inventor:** KALIDINDI, Sanyasi, R.; 1 Angelo Court,
Monroe, NJ 08831 (US).
- (74) **Agents:** CARRERA, George, M., Jr. et al.; Amin Talati
& Upadhye, LLC, 55 West Monroe Street, Suite 3400,
Chicago, IL 60603 (US).
- (81) **Designated States** (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,

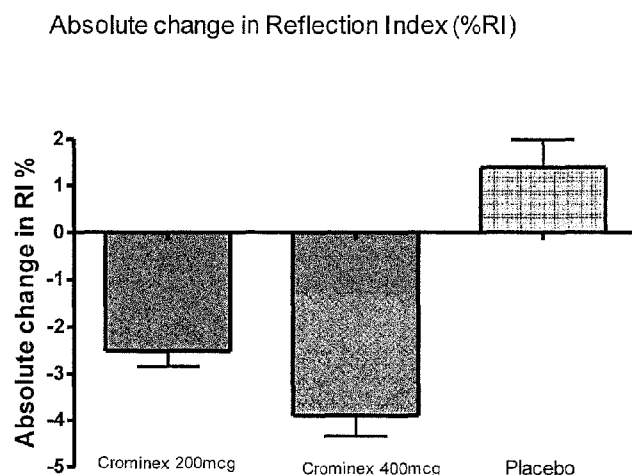
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC,
SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) **Designated States** (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- with information concerning one or more priority claims
considered void (Rule 26bis.2(d))

(54) **Title:** SYNERGISTIC COMPOSITIONS CONTAINING CHROMIUM WITH PHYLLANTHUS EMBLICA AND SHILAJIT
FOR IMPROVING ENDOTHELIAL FUNCTION AND CARDIOVASCULAR HEALTH



p<0.001 compared between the three treatments

FIG. 1

(57) **Abstract:** Chromium-three cation contain-
ing compositions in synergistic combination
with *Phyllanthus emblica* extract and Shilajit are
useful for improvement of endothelial function
and cardiovascular health, including treatment of
type 2 diabetes and metabolic syndrome.



US006235721B1

(12) **United States Patent**
Ghosal

(10) **Patent No.:** **US 6,235,721 B1**
(45) **Date of Patent:** ***May 22, 2001**

(54) **STABILIZATION OF VITAMIN C**

(75) Inventor: **Shibnath Ghosal**, Benares (IN)

(73) Assignee: **Natreon Inc.**, New Brunswick, NJ (US)

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

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/503,899**

(22) Filed: **Feb. 15, 2000**

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/251,917, filed on Feb. 17, 1999, now Pat. No. 6,124,268.

(51) **Int. Cl.**⁷ **A61K 31/70**; A61K 31/34

(52) **U.S. Cl.** **514/25**; 514/27; 514/474; 424/401; 424/439; 424/440; 424/195.1

(58) **Field of Search** 514/27, 25, 474; 424/401, 439, 440, 195.1

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,124,268 * 9/2000 Ghosal 514/27

* cited by examiner

Primary Examiner—Frederick Krass

(74) *Attorney, Agent, or Firm*—Walter Katz

(57) **ABSTRACT**

A natural antioxidant blend in the form of an amorphous powder was obtained by extraction from *Emblica officinalis* fruit. In this process, the finely pulped fruit was treated with a dilute aqueous salt solution at hot water temperature to provide an extract-containing solution, which was filtered and dried to provide the desired antioxidant blend powder. A synergistically stabilized composition of ascorbic acid or its derivatives with the antioxidant composition of *Emblica officinalis*, is also described. Cosmetic, pharmaceutical and nutritional use formulations thereof also are described.

11 Claims, No Drawings

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International Bureau



(43) International Publication Date
27 October 2005 (27.10.2005)

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(10) International Publication Number
WO 2005/099739 A1

(51) International Patent Classification⁷: **A61K 38/00**

(21) International Application Number:
PCT/US2005/008577

(22) International Filing Date: 14 March 2005 (14.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/824,271 14 April 2004 (14.04.2004) US
10/799,104 30 April 2004 (30.04.2004) US

(71) Applicant (for all designated States except US): **NA-TREON, INC.** [US/US]; 14A Jules Lane, New Brunswick, NJ 08901 (US).

(72) Inventor: **GHOSAL, Shibnath**; P-27 Nilachal Complex, Narendrapur, Calcutta 700103, West Bengal State (IN).

(74) Agent: **DUNN MCKAY, Diane**; Mathews, Collins, Shepherd & McKay, P.A., 100 Thanet Circle, Suite 306, Princeton, NJ 08540 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OXYGENATED DIBENZO-ALPHA-PYRONE CHROMOPROTEINS

(57) Abstract: A composition of oxygenated dibenzo-alpha-pyrone chromoproteins (DCP) and their isolation from shilajit, fossils of ammonites, corals and other invertebrates. More particularly, to the description of DCP-composition comprising oxygenated dibenzo-alpha-pyrone or its conjugates, phosphocreatine, proteins, fatty acyl esters of glycerol and other small ligands, e.g., carotenoids, sterols and aromatic acids, as core structural fragments, and their biological functions. Pharmaceutical, nutritional, skin care and personal care formulations are also described. These findings establish DCPs as the major bioactives of shilajit.





(51) International Patent Classification:

A61K 35/02 (2015.01) A61K 31/538 (2006.01)

A61K 31/352 (2006.01)

MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:

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(22) International Filing Date:

26 June 2018 (26.06.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant: NATREON, INC. [US/US]; 2-D Janine Place, New Brunswick, NJ 08901 (US).

(72) Inventors: SEN, Chandan, K.; 2808 River Park Drive, Columbus, OH 43220 (US). KALIDINDI, Sanyasi; 1 Angelo Court, Monroe, NJ (US).

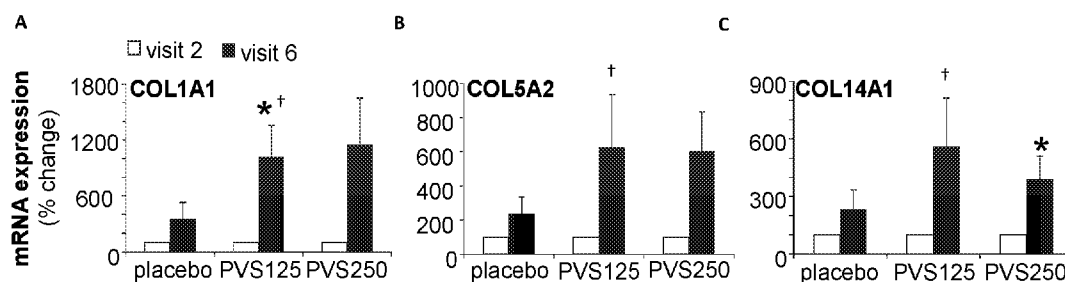
(74) Agent: CARRERA, George, M., Jr. et al.; 100 South Wacker Drive, Suite 2000, Chicago, IL 60606 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,

(54) Title: IMPROVEMENT OF BLOOD MICROPERFUSION TO SKIN BY SHILAJIT

FIG. 7



(57) Abstract: Methods of using Shilajit or its individual components, or a combination of two or more of these components, to improve skin microperfusion, to upregulate ECM related genes in the skin, to increase endothelial cell migration and growth of blood vessels, and thus to improve skin health are presented herein.





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(87) Date publication PCT/PCT Publication Date: 2007/02/01
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(86) N° demande PCT/PCT Application No.: US 2006/029431
(87) N° publication PCT/PCT Publication No.: 2007/014334
(30) Priorités/Priorities: 2005/07/27 (US60/702,947);
2006/07/26 (US11/493,185)

(51) Cl.Int./Int.Cl. *A61K 36/00* (2006.01)
(71) Demandeur/Applicant:
NATREON, INC., US
(72) Inventeur/Inventor:
GHOSAL, SHIBNATH, IN
(74) Agent: BORDEN LADNER GERVAIS LLP

(54) Titre : METHODE DE TRAITEMENT OU DE GESTION DU STRESS
(54) Title: METHOD OF TREATMENT OR MANAGEMENT OF STRESS

(57) **Abrégé/Abstract:**

The present invention provides a method of treatment or management of various adaptogenic conditions, such as, stress in mammals, more particularly, humans, comprising administering *Withania somnifera* plant extract. A high purity extract composition comprising withanolide glycosides, oligosaccharides, withanolide aglycones and a minimum level of polysaccharides, and a pharmaceutically, veterinary or nutritionally acceptable carrier(s) is disclosed. Preferably, the composition of the present invention can be devoid of any alkaloids or contains trace levels of alkaloids. The method of treatment or management of stress administering the composition comprising *Withania somnifera* of the present invention does not suffer from any one of the abovementioned side effects even after prolonged use. A method of preconditioning a mammalian patient to improve the patient's resistance and reaction to subsequently encountered stress is described.



(86) Date de dépôt PCT/PCT Filing Date: 2013/04/10
(87) Date publication PCT/PCT Publication Date: 2013/10/17
(85) Entrée phase nationale/National Entry: 2014/10/09
(86) N° demande PCT/PCT Application No.: US 2013/035964
(87) N° publication PCT/PCT Publication No.: 2013/155175
(30) Priorités/Priorities: 2012/04/10 (US61/622,323);
2013/04/09 (US13/859,633)

(51) Cl.Int./Int.Cl. *A61K 36/185* (2006.01),
A61K 31/7048 (2006.01), *A61K 8/97* (2006.01),
A61P 39/06 (2006.01)
(71) Demandeur/Applicant:
NATREON, INC., US
(72) Inventeurs/Inventors:
GHOSAL, SHIBNATH, IN;
VEERARAGAVAN, MURUGANANDAM, IN;
KALIDINDI, SANYASI R., US
(74) Agent: BORDEN LADNER GERVAIS LLP

(54) Titre : COMPOSITIONS A BASE DE TERMINALIA CHEBULA ET PROCEDE D'EXTRACTION ASSOCIE
(54) Title: TERMINALIA CHEBULA COMPOSITIONS AND METHOD OF EXTRACTING SAME

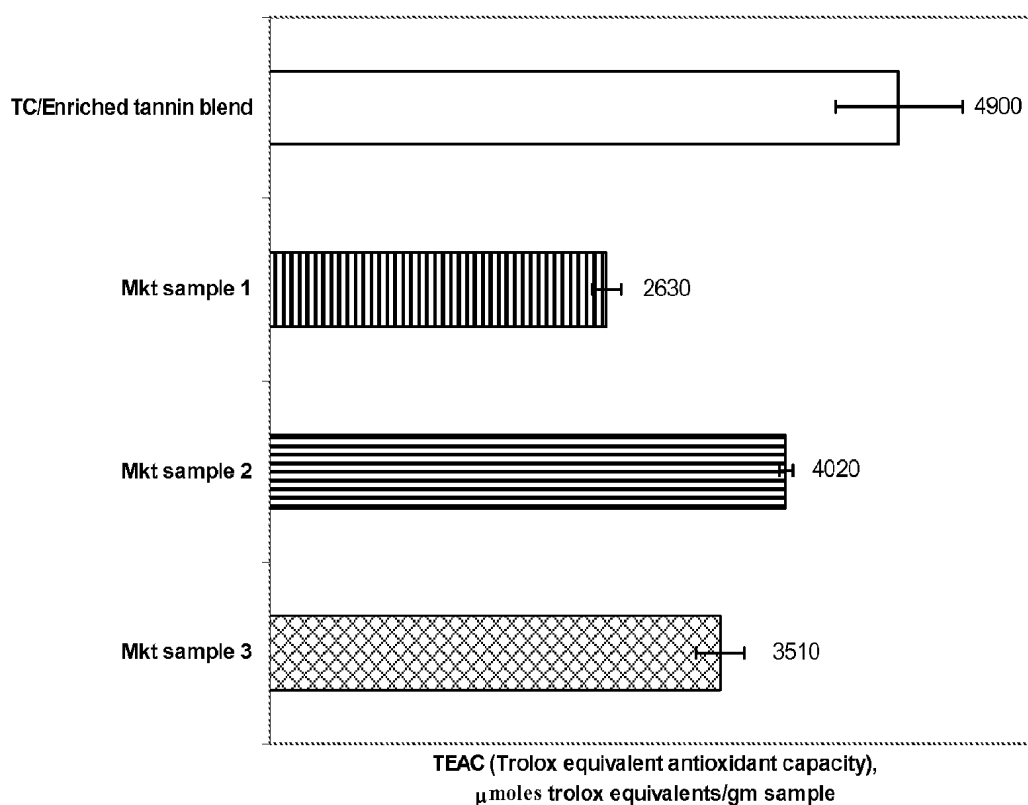


FIG. 1

(57) Abrégé/Abstract:

An enriched hydrolyzable tannoid blend derived from Terminalia chebula is provided. An optimized aqueous extraction method for Terminalia chebula is provided to maximize the levels of bioactive hydrolyzable tannoids including chebulagic acid, chebulinic acid



US 20050085454A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2005/0085454 A1**
Ghosal (43) **Pub. Date: Apr. 21, 2005**

(54) **PHENOLIC ANTIOXIDANT-CHROMIUM
COMPLEXES FOR TREATMENT OR
PREVENTION OF TYPE 2 DIABETES OR
GLUCOSE INTOLERANCE**

(21) Appl. No.: **10/686,801**

(22) Filed: **Oct. 16, 2003**

Publication Classification

(51) **Int. Cl.⁷** **A61K 31/555**; A61K 31/28

(52) **U.S. Cl.** **514/185**; 514/505

(57) **ABSTRACT**

A composition for the treatment, prevention or management of a condition in primates, especially humans comprising a phenolic antioxidant-chromium complex.

(75) Inventor: **Shibnath Ghosal**, Calcutta (IN)

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(73) Assignee: **NATREON INC.**



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d'Industrie Canada

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Intellectual Property
Office

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Industry Canada

CA 2659892 A1 2008/02/07

(21) **2 659 892**

(12) **DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION**

(13) **A1**

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(87) Date publication PCT/PCT Publication Date: 2008/02/07
(85) Entrée phase nationale/National Entry: 2009/02/03
(86) N° demande PCT/PCT Application No.: US 2007/016969
(87) N° publication PCT/PCT Publication No.: 2008/016554
(30) Priorités/Priorities: 2006/08/04 (US60/835,520);
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(51) Cl.Int./Int.Cl. *A61K 38/00* (2006.01)
(71) Demandeur/Applicant:
NATREON, INC., US
(72) Inventeur/Inventor:
GHOSAL, SHIBNATH, IN
(74) Agent: BORDEN LADNER GERVAIS LLP

(54) Titre : ANTIOXYDANTS A CIBLAGE MITOCHONDRIAL
(54) Title: MITOCHONDRIA-TARGETED ANTIOXIDANTS

(57) Abrégé/Abstract:

The present invention relates to a pharmaceutical or veterinary or nutritional or personal care composition comprising coenzyme Q₁₀ (CoQ₁₀), reduced CoQ₁₀, or mixtures thereof and oxygenated dibenzo- α -pyrone or an amino acyl ester thereof. The composition of the present invention is able to support and/or provide therapy to individuals at risk and/or under treatment for dysfunctions of energy metabolism, and specifically, for mitochondrial diseases.



(19) World Intellectual Property Organization
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(10) International Publication Number
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(51) International Patent Classification⁷: **A61K 35/78**

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(22) International Filing Date:
20 September 2005 (20.09.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
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11/229,871 19 September 2005 (19.09.2005) US

(71) Applicant (for all designated States except US):
NATREON, INC. [US/US]; 14-A Jules Lane, New Brunswick, NJ 08901 (US).

(72) Inventor: **GHOSAL, Shibnath**; P-27 Nilachal Complex, Narendrapur, Calcutta-700103, West Bengal (IN).

(74) Agent: **DUNN, McKay, Diane**; Mathews, Shepherd, McKay & Bruneau, P. A., 100 Thanet Circle, Suite 306, Princeton, NJ 08540 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

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- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITIONS FOR ANTI-OBESITY, HEALTH-RESTORATIVE AND HEALTH-PROMOTIONAL BENEFITS

(57) Abstract: An obesity control agent with health-restorative and health-promotional benefits to humans comprising the extract of *Chlorophytum* species, more particularly, *Chlorophytum arundinaceum*, is disclosed. The bioactive principles responsible for anti-obesity property have been determined to be mainly due to spirosta-steroidal saponins, spirosta-steroidal alkaloids and galactoglucan oligosaccharides. Most effective as an obesity control agent is the spirosta-steroidal saponins. Pharmaceutical, nutritional and veterinary use of this inventive composition is also disclosed.



WO 2006/036638 A1



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(19) **United States**

(12) **Patent Application Publication**
Chaudhuri et al.

(10) **Pub. No.: US 2003/0198612 A1**

(43) **Pub. Date: Oct. 23, 2003**

(54) **SKIN-LIGHTENING**

(22) Filed: **Apr. 11, 2002**

(75) Inventors: **Ratan K. Chaudhuri**, Lincoln Park, NJ
(US); **Francois Marchio**, Scarsdale, NY
(US)

Publication Classification

(51) **Int. Cl.⁷** **A61K 7/135**; A61K 35/78

(52) **U.S. Cl.** **424/62**

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ARLINGTON, VA 22201 (US)

(57) **ABSTRACT**

(73) Assignees: **EM Industries**, Hawthorne, NY;
Natreon Inc., New Brunswick, NJ

(21) Appl. No.: **10/120,156**

A light colored standardized extract of *Emblica officinalis* consisting essentially of over 40% by weight of Emblicanin A. Emblicanin B, Pedunculagin and Punigluconin, and not more than about 1% by weight of flavonoids, and methods of producing same. Also disclosed are cosmetic or pharmaceutical compositions comprising the standardized extract and methods of using same to lighten or whiten skin.



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A61K 6/00, 7/00, 9/20, 31/34, 47/00, A01N 25/00, 25/08, 43/08	A1	(11) International Publication Number: WO 00/48551 (43) International Publication Date: 24 August 2000 (24.08.00)
(21) International Application Number: PCT/US00/04043 (22) International Filing Date: 16 February 2000 (16.02.00) (30) Priority Data: 09/251,917 17 February 1999 (17.02.99) US 09/503,899 15 February 2000 (15.02.00) US (71) Applicant: NATREON INC. [US/US]; 415 Cleveland Avenue, Highland Park, NJ 08904 (US). (72) Inventor: GHOSAL, Shibnath; 90A, Ravindrapuri, Varanasi 221005 (IN). (74) Agent: KATZ, Walter; 8 Umberland Place, Monroe Township, NJ 08831 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(54) Title: NATURAL ANTIOXIDANT COMPOSITIONS, METHOD FOR OBTAINING SAME AND COSMETIC, PHARMACEUTICAL AND NUTRITIONAL FORMULATIONS THEREOF		
(57) Abstract A natural antioxidant blend in the form of an amorphous powder was obtained by extraction from <i>Emblica officinalis</i> fruit. In this process, the finely pulped fruit was treated with a dilute aqueous salt solution at hot water temperature to provide an extract-containing solution, which was filtered and dried to provide the desired antioxidant blend powder. A synergistically stabilized composition of ascorbic acid or its derivatives with the antioxidant composition of <i>Emblica officinalis</i>, is also described. Cosmetic, pharmaceutical and nutritional use formulations thereof also are described.		

(12)

(21) **2 570 419**

(51) Int. Cl.:

A61K 31/366 (2006.01)

A61K 31/665 (2006.01)

(22) **08.06.2005**

(85) **15.12.2006**

(86) **PCT/US05/020024**

(87) **WO06/007310**

(30) **10/872,276 US 18.06.2004**

(72)

GHOSAL, SHIBNATH (IN).

(71)

**NATREON INC.,
14A Jules Lane, NEW BRUNSWICK, XX (US).**

(74)

BORDEN LADNER GERVAIS LLP

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- | | |
|------|---|
| (54) | COMPOSITIONS A BASE DE METABOLITES BIOACTIFS STABLES D'ACIDES DOCOSAHEXANOIQUE (DHA) ET EICOSAPENTANOIQUE (EPA) |
| (54) | COMPOSITIONS OF STABLE BIOACTIVE METABOLITES OF DOCOSAHEXAENOIC (DHA) AND EICOSAPENTAENOIC (EPA) ACIDS |



US 20130122119A1

(19) **United States**(12) **Patent Application Publication**
Ghosal et al.(10) **Pub. No.: US 2013/0122119 A1**(43) **Pub. Date: May 16, 2013**(54) **PHYLLANTHUS AMARUS COMPOSITIONS
AND METHOD OF EXTRACTING SAME****Publication Classification**(71) Applicant: **Natreon, Inc.**, New Brunswick, NJ (US)(51) **Int. Cl.****A61K 36/185** (2006.01)(72) Inventors: **Shibnath Ghosal**, Kolkata (IN);
Muruganandam Veeraragavan,
Kolkata (IN); **Sanyasi R. Kalidindi**, East
Brunswick, NJ (US)(52) **U.S. Cl.**CPC **A61K 36/185** (2013.01)USPC **424/725**; 264/5(73) Assignee: **NATREON, INC.**, New Brunswick, NJ
(US)

(57)

ABSTRACT(21) Appl. No.: **13/666,637**(22) Filed: **Nov. 1, 2012****Related U.S. Application Data**(60) Provisional application No. 61/554,235, filed on Nov.
1, 2011.

An enriched hydrolyzable tannin blend derived from *Phyllanthus amarus* is provided. An optimized aqueous extraction method for *Phyllanthus amarus* is provided to maximize the levels of bioactive hydrolyzable tannins including corilagin, geraniin, nirurin and other low molecular weight hydrolyzable tannoids. The method produces a *Phyllanthus amarus* extract containing a hydrolyzable tannin blend as an amorphous dry powder. In an embodiment, the *Phyllanthus amarus* extract contains 7-13% by weight corilagin, 3.5-10% nirurin, 1-2% geraniin, and 9-20% low molecular weight hydrolyzable tannoids. In another embodiment, the *Phyllanthus amarus* extract contains 12-20% geraniin and 12-20% low molecular weight hydrolyzable tannoids. Potential uses of said enriched hydrolyzable tannin compositions for hepatoprotection in a human subject are described herein.

Document is not available for EP1465589A1



US 20140087009A1

(19) **United States**(12) **Patent Application Publication**
McNeary(10) **Pub. No.: US 2014/0087009 A1**(43) **Pub. Date: Mar. 27, 2014**(54) **COMPOSITION OF BETA-GLUCAN AND
ASHWAGANDHA****Publication Classification**(71) Applicant: **Nutrigenesis, LLC**, Brattleboro, VT
(US)(51) **Int. Cl.****A61K 36/81** (2006.01)**A61K 31/716** (2006.01)(72) Inventor: **Peter S. McNeary**, Brattleboro, VT (US)(52) **U.S. Cl.**CPC **A61K 36/81** (2013.01); **A61K 31/716**
(2013.01)(73) Assignee: **Nutrigenesis, LLC**, Brattleboro, VT
(US)USPC **424/725**(21) Appl. No.: **14/094,251**

(57)

ABSTRACT(22) Filed: **Dec. 2, 2013****Related U.S. Application Data**(62) Division of application No. 13/532,338, filed on Jun.
25, 2012, now Pat. No. 8,597,697.(60) Provisional application No. 61/501,029, filed on Jun.
24, 2011.

Compositions including combinations of β -glucan and *Withania somnifera* for increasing the immune activity of certain target cytokines and phagocytosis, and reducing cortisol or corticosterone. Methods of improving immunity activity under periods of stress including chronic stress with a combination of β -glucan and *Withania somnifera* are also described. Particular combinations of β -glucan and *Withania somnifera* synergistically increases the immune activity of the cytokines IL-12 and IL-6 over expected values.

(19) AUSTRALIAN PATENT OFFICE

(54) Title
TOPICAL ANHYDROUS DELIVERY SYSTEM FOR ANTIOXIDANTS

(51)⁶ International Patent Classification(s)
A61K 007/48 A61K 007/32
A61K 007/42

(21) Application No: **2003276180** (22) Application Date: **2003.10.24**

(87) WIPO No: **WO04/041234**

(30) Priority Data

(31) Number	(32) Date	(33) Country
60/424,316	2002.11.07	US
10/616,494	2003.07.10	US
		7

(43) Publication Date : **2004.06.07**

(43) Publication Journal Date : **2004.07.01**

(71) Applicant(s)
MERCK PATENT GmbH

(72) Inventor(s)
CHAUDHURI, Ratan; LINZ, Philip

(19) AUSTRALIAN PATENT OFFICE

(54) Title
**METHOD FOR PROTECTION OF SKIN AGAINST SUN-INDUCED DAMAGE BY ORAL
ADMINISTRATION OF AN EXTRACT OF EMBLICA OFFICINALIS (syn. PHYLLANTHUS EMBLICA)**

(51)⁶ International Patent Classification(s)
A61K 007/42 A61K 035/78

(21) Application No: **2003274079** (22) Application Date: **2003.10.24**

(87) WIPO No: **WO04/041231**

(30) Priority Data

(31) Number (32) Date (33) Country
60/424,712 2002.11.08 US
7

(43) Publication Date : **2004.06.07**

(43) Publication Journal Date : **2004.07.01**

(71) Applicant(s)
MERCK PATENT GMBH

(72) Inventor(s)
CHAUDHURI, Ratan

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 March 2005 (24.03.2005)

PCT

(10) International Publication Number
WO 2005/025532 A1

(51) International Patent Classification⁷: **A61K 7/48**,
35/78, A23L 1/29

(21) International Application Number:
PCT/EP2004/009109

(22) International Filing Date: 13 August 2004 (13.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/660,742 12 September 2003 (12.09.2003) US

(71) Applicants (for all designated States except US):
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(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHAUDHURI,**
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
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claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ENRICHED AQUEOUS COMPONENTS OF *EMBLICA OFFICINALIS*

(57) Abstract: In an extraction process comprising extracting a raw extract from *Embllica officinalis* the improvement comprising conducting the extraction under conditions of time, temperature and atmosphere, to inhibit the formation of black specks and/or oligomeric and/or polymeric tannins and/or oxidation products thereof.

WO 2005/025532 A1

(12)

(21) **2 508 478**

(51) Int. Cl. 7: **A61K 35/78**

(22) **07.11.2003**

(85) **02.06.2005**

(86) **PCT/US03/035406**

(87) **WO04/050015**

(30) **10/308,714 US 03.12.2002**

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(71)

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LTD.,
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(72)

GHOSAL, SHIBNATH (IN).

(74)

BCF LLP

(54) COMPOSITION A BASE D'ASHWANGANDHA, PROCEDE POUR OBTENIR LADITE COMPOSITION, ET FORMATIONS PHARMACEUTIQUES, NUTRITIONNELLES, ET D'HYGIENE PERSONNELLE

(54) WITHANIA SOMNIFERA COMPOSITION, METHOD FOR OBTAINING SAME AND PHARMACEUTICAL, NUTRITIONAL AND PERSONAL CARE FORMULATIONS THEREOF

(57)

This invention relates to a composition of the plant Withania Somnifera, and, more particularly to a high purity extract composition with advantageous levels of withanolide glycosides and oligosaccharides, a minimum of polysaccharides, and substantially low levels of free withaferin A and equivalents (withanolide aglycones), which composition provides enhanced cognition-enhancing effects for the user, and an extraction process for obtaining such composition, as well as pharmaceutical, nutritional and personal care use products thereof.



US 20100098785A1

(19) **United States**

(12) **Patent Application Publication**
McNeary

(10) **Pub. No.: US 2010/0098785 A1**

(43) **Pub. Date: Apr. 22, 2010**

(54) **COMPOSITION OF ASHWAGANDHA AND
INDIAN GOOSEBERRY**

(75) Inventor: **Peter McNeary**, Brattleboro, VT
(US)

Correspondence Address:
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199 MAIN STREET, P O BOX 190
BURLINGTON, VT 05402-0190 (US)

(73) Assignee: **NUTRAGENESIS, LLC**,
Brattleboro, VT (US)

(21) Appl. No.: **12/604,092**

(22) Filed: **Oct. 22, 2009**

Related U.S. Application Data

(60) Provisional application No. 61/107,573, filed on Oct.
22, 2008.

Publication Classification

(51) **Int. Cl.**
A61K 36/00 (2006.01)

(52) **U.S. Cl.** **424/725**

(57) **ABSTRACT**

A therapeutic composition comprising extracts of the plant species ashwagandha (*Withania somnifera*) and Indian gooseberry (*Phyllanthus emblica*). A composition of ashwagandha and Indian gooseberry may: (1) lower cortisol and increase DHEA, (2) prevents free radical-induced photoaging, (3) inhibit collagenase activity in vitro, (4) inhibit hyaluronidase activity in vitro, (5) display superior cascading antioxidant activity, (6) reduce C-reactive protein, (7) enhance mood.



US006290996B1

(12) **United States Patent**
Ghosal

(10) **Patent No.:** **US 6,290,996 B1**
(45) **Date of Patent:** **Sep. 18, 2001**

(54) **METHOD OF INHIBITING BLOOD
PLATELET AGGREGATION**

(75) Inventor: **Shibnath Ghosal**, Varanasi (IN)

(73) Assignees: **Natreon Inc.**, New Brunswick, NJ
(US); **Indian Herbs Research &
Supply Company LTD**, Saharanpur
(IN)

(*) 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.: **09/667,042**

(22) Filed: **Sep. 21, 2000**

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/503,899, filed on
Feb. 15, 2000, now Pat. No. 6,235,721, and a continuation-
in-part of application No. 09/251,917, filed on Feb. 17,
1999, now Pat. No. 6,124,268.

(51) **Int. Cl.**⁷ **A01N 65/00**

(52) **U.S. Cl.** **424/777**; 424/401; 424/439;
424/440; 424/769; 514/25; 514/27

(58) **Field of Search** 514/25, 27; 424/769,
424/777, 401, 439, 440

(56) **References Cited**
PUBLICATIONS

Chemical Abstract 103:27136, "Embllica officinalis reduces
serum, aortic and hepatic cholesterol in rabbits" (1985).*

* cited by examiner

Primary Examiner—Frederick Krass

(74) *Attorney, Agent, or Firm*—Walter Katz

(57) **ABSTRACT**

A method of inhibiting blood platelet aggregation in humans
which comprises administering an extract blend of the fruit
of the Embllica officinalis plant to control said aggregation,
suitably in a dose amount of about 50–500 mg/day.

8 Claims, No Drawings

(12)

(21) **2 407 465**

(51) Int. Cl.⁷: **A01N 65/00**

(22) **19.09.2001**

(85) **29.10.2002**

(86) **PCT/US01/29304**

(87) **WO02/023995**

(30) **09/667,043 US 21.09.2000**

U.P. , SAHARANPUR, XX (IN).

(71)

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(72)

GHOSAL, SHIBNATH (IN).

(74)

SMART & BIGGAR

(54) **METHODE DE BLOCAGE DE PROCESSUS A RADICAUX LIBRES DONNANT LIEU A UNE PATHOLOGIE
INDUITE SANS REACTIONS SECONDAIRES DE PRO-OXYDATION NUISIBLES**

(54) **METHOD OF BLOCKING FREE RADICAL PROCESSES WHICH RESULT IN MEDIATED PATHOLOGY
WITHOUT DELETERIOUS PRO-OXIDANT SIDE REACTIONS**

(57)

A method of blocking free radical processes in humans and animals which result in mediated pathology without deleterious pro-oxidant side reactions which comprises administering an extract of the fruit of the *Emblica officinalis* plant to effect such advantageous result, preferably in a use formulation at an active use level of 0.005 to 5 % by weight of the formulation.

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 January 2001 (18.01.2001)

PCT

(10) International Publication Number
WO 01/03715 A1

(51) International Patent Classification⁷: **A61K 35/78**

(21) International Application Number: PCT/US00/18851

(22) International Filing Date: 11 July 2000 (11.07.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/351,890 13 July 1999 (13.07.1999) US

(71) Applicants: **NATREON INC.** [US/US]; 415 Cleveland Avenue, Highland Park, NJ 08904 (US). **INDIAN HERBS RESEARCH & SUPPLY COMPANY LTD.** [IN/IN]; Shardanagar, Saharanpur 247 001, Uttar Pradesh (IN).

(72) Inventor: **GHOSAL, Shibnath**; 90A, Ravindrapuri, Varanasi 221 005 (IN).

(74) Agent: **KATZ, Walter**; 8 Umlerland Place, Monroe Township, NJ 08831 (US).

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: WITHANIA SOMNIFERA COMPOSITION

(57) Abstract: A high purity Withania Somnifera extract composition in the form of a high purity, stable, free-flowing, light yellow-to-brown herbaceous powder, for producing an enhanced cognition effect for the user and to augment the learning facility in the geriatric population when taken in a dosage of 200-800 mg/day. This extract contains, by weight, (a) at least 3% of withanolide glycosides and sitoindosides, preferably 3-8%, (b) at least 3% of oligosaccharides, preferably 3-8%, preferably a molecular weight of < 2000, and (c) less than 0.5% of free cytotoxic withaferin A (aglycone), wherein the ratio of (a):(c) is 75-95:25-5, and the ratio of (a):(b) is 40-60:60-40. An extraction process for obtaining such extract composition, and pharmaceutical and nutritional use products thereof, also are described.



WO 01/03715 A1



US006224906B1

(12) **United States Patent**
Ghosal

(10) **Patent No.:** **US 6,224,906 B1**
(45) **Date of Patent:** **May 1, 2001**

(54) **ST. JOHN'S WORT COMPOSITION**

(56) **References Cited**

(75) Inventor: **Shibnath Ghosal**, Varanasi (IN)

U.S. PATENT DOCUMENTS

(73) Assignees: **Natreon Inc.**, Highland Park, NJ (US);
Indian Herbs Research & Supply
Company Ltd. (IN)

5,820,867 * 10/1998 Bewicke 424/195.1
6,113,907 * 9/2000 Khwaja et al. 424/195.1

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

* cited by examiner

(21) Appl. No.: **09/387,588**

Primary Examiner—James M. Spear

(22) Filed: **Aug. 31, 1999**

(74) *Attorney, Agent, or Firm*—Walter Katz

(51) **Int. Cl.**⁷ **A61K 9/20**; A61K 9/14;
A61K 9/48

(57) **ABSTRACT**

(52) **U.S. Cl.** **424/464**; 424/195.1; 424/451;
424/455; 424/489; 514/937

A composition of St. John's Wort, in the form of a stable,
free-flowing, powder, having effective antidepressant
properties, characterized by having essentially no hypericin
therein.

(58) **Field of Search** 424/489, 195.1,
424/451, 464, 455

13 Claims, No Drawings

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 May 2003 (01.05.2003)

PCT

(10) International Publication Number
WO 03/035094 A1

(51) International Patent Classification⁷: **A61K 35/78**

(21) International Application Number: PCT/US02/25683

(22) International Filing Date: 13 August 2002 (13.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/957,797 21 September 2001 (21.09.2001) US

(71) Applicants: **NATREON INC.** [US/US]; 14-A Jules Lane, New Brunswick, NJ 08901 (US). **INDIAN HERBS RESEARCH & SUPPLY COMPANY LTD.** [IN/IN]; Shardanagar, Saharanpur 247001, Uttar Pradesh (IN).

(72) Inventor: **GHOSAL, Shibnath**; P-27 Nilachal Complex, Naendrapur, Calcutta 700 102 (IN).

(74) Agent: **KATZ, Walter**; 8 Umberland Place, Monroe Township, NJ 08831 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DELIVERY SYSTEM FOR PHARMACEUTICAL, NUTRITIONAL AND COSMETIC INGREDIENTS

(57) Abstract: A stable, water-soluble delivery system which is a purified Shilajit composition obtained by extraction of native Shilajit, preferably containing at least 40% by weight of a carrier which is purified fulvic acid, characterized by having a sponge-like structure punctured by voids of about 200-1000 Å in diameter, and a Mn molecular weight of about 700-2500; and an effective amount of an active pharmaceutical, nutritional or cosmetic ingredient added to said carrier and filling voids therein.



WO 03/035094 A1

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 November 2002 (28.11.2002)

PCT

(10) International Publication Number
WO 02/094984 A2

(51) International Patent Classification⁷: **C12N**

(21) International Application Number: PCT/US02/14259

(22) International Filing Date: 3 May 2002 (03.05.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/860,890 18 May 2001 (18.05.2001) US

(71) Applicants: **NATREON INC.** [US/US]; 14-A Jules Lane, New Brunswick, NJ 08901 (US). **INDIAN HERBS RESEARCH & SUPPLY COMPANY LTD.** [IN/IN]; Shardanagar, Saharanpur 247001 (IN).

(72) Inventor: **GHOSAL, Shibnath**; 90A, Ravindrapuri, Varanasi 221005 (IN).

(74) Agent: **KATZ, Walter**; 8 Umlerland Place, Monroe Township, NJ 08831 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR PREPARING PURIFIED SHILAJIT COMPOSITION FROM NATIVE SHILAJIT

(57) Abstract: A purified shilajit composition is provided herein from native shilajit. The composition has an abundance of bioactive components, particularly, at least 0.3 %, preferably 0.4-1 %, by weight, oxygenated dibenzo- α -pyrones and fulvic acids of low-to-medium molecular weight (Mn of 700-2000) with an E₄/E₆ ratio of 8-10 at λ 465-665 nm. Personal care, pharmaceutical and nutritional use formulations of the purified shilajit composition also are described.



WO 02/094984 A2