

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 July 2009 (09.07.2009)

PCT

(10) International Publication Number
WO 2009/085236 A3

(51) International Patent Classification:

A61K 8/64 (2006.01) A61Q 19/00 (2006.01)
A61Q 19/08 (2006.01)

(21) International Application Number:

PCT/US2008/013947

(22) International Filing Date:

19 December 2008 (19.12.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/016,245 21 December 2007 (21.12.2007) US
61/028,774 14 February 2008 (14.02.2008) US

(71) Applicant (for all designated States except US): **IM-MUNEREGEN BIOSCIENCES, INC.** [US/US]; 8767 E. Via De Ventura, Suite 190, Scottsdale, AZ 85258 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SIEGEL, Hal** [US/US]; 7111 E. McDonald Drive, Paradise Valley, AZ 85253-5406 (US). **WILHELM, Michael, K.** [US/US]; 10129 N. 119th Place, Scottsdale, AZ 85259 (US).

(74) Agents: **INSOGNA, Anthony M.** et al.; Jones Day, 222 East 41st. Street, New York, NY 10017-6702 (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, BR, BW, BY, BZ, CA, CH, 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, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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 (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:
12 November 2009

(54) Title: COMPOSITIONS AND METHODS OF USING SUBSTANCE P. ANALOGS

(57) Abstract: Provided herein are compositions and methods for use of Substance P analogs to enhance the appearance of human skin. The compositions can be administered as creams, ointments, liquids, lotions and the like.



WO 2009/085236 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/013947

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K8/64 A61Q19/08 A61Q19/00

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K A61Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/204471 A1 (LACHARRIERE OLIVIER D [FR] ET AL) 14 September 2006 (2006-09-14) the whole document	1-49
X	WO 2004/058155 A (WITTEN MARK L [US]) 15 July 2004 (2004-07-15) page 4, paragraph 19; claims	1-4, 6, 13, 15, 25, 26
X	WO 2005/107700 A (IMMUNEREGEN BIOSCIENCES INC [US]; WITTEN MARK L [US]) 17 November 2005 (2005-11-17) paragraphs [0022], [0025], [0027]; claims	1-4, 6, 11, 13, 15, 25, 26
	-/--	

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

9 September 2009

Date of mailing of the international search report

25/09/2009

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Donovan-Beermann, T

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/013947

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2005/107688 A (IMMUNEREGEN BIOSCIENCES INC [US]; WITTEN MARK L [US]) 17 November 2005 (2005-11-17) the whole document	1-4,6, 11,13, 15,25,26
X	EP 0 221 208 A (MEIJI SEIKA KAISHA [JP]) 13 May 1987 (1987-05-13) page 8, line 1 - line 27; claims; example 1	1-4,6,8, 9,11,13, 15,25,26
X	JP 60 202807 A (MEIJI SEIKA CO) 14 October 1985 (1985-10-14) abstract	1-4,6, 25,26
X	DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; 1988, LU, DEIZHANG: "Application of substance P in cosmetics" XP002544861 retrieved from STN Database accession no. 1988:62239 abstract & RIYONG HUAXUE GONGYE , (4), 189-91 CODEN: RHGOE8; ISSN: 1001-1803, 1987,	1,25-27
E	WO 2009/017662 A (IMMUNEREGEN BIOSCIENCES INC [US]; SIEGEL HAL [US]) 5 February 2009 (2009-02-05) the whole document	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/013947
--

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2006204471	A1	14-09-2006	CA 2389552 A1	29-11-2002
			EP 1262169 A2	04-12-2002
			FR 2825273 A1	06-12-2002
			JP 2002370966 A	24-12-2002
			JP 2005330295 A	02-12-2005
			JP 2008195734 A	28-08-2008
			US 2003003123 A1	02-01-2003
			<hr/>	
WO 2004058155	A	15-07-2004	AU 2003293582 A1	22-07-2004
<hr/>				
WO 2005107700	A	17-11-2005	AU 2005240026 A1	17-11-2005
			CA 2564796 A1	17-11-2005
			CN 1972704 A	30-05-2007
			EP 1740198 A2	10-01-2007
			JP 2007534682 T	29-11-2007
			US 2008193403 A1	14-08-2008
			US 2008167248 A1	10-07-2008
			WO 2005107688 A1	17-11-2005
			<hr/>	
WO 2005107688	A	17-11-2005	AU 2005240026 A1	17-11-2005
			CA 2564796 A1	17-11-2005
			CN 1972704 A	30-05-2007
			EP 1740198 A2	10-01-2007
			JP 2007534682 T	29-11-2007
			US 2008193403 A1	14-08-2008
			US 2008167248 A1	10-07-2008
			WO 2005107700 A2	17-11-2005
			<hr/>	
EP 0221208	A	13-05-1987	DE 3584250 D1	31-10-1991
			JP 61007209 A	13-01-1986
<hr/>				
JP 60202807	A	14-10-1985	NONE	
<hr/>				
WO 2009017662	A	05-02-2009	US 2009075903 A1	19-03-2009
<hr/>				