(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 12 August 2004 (12.08.2004)

(10) International Publication Number WO 2004/066967 A3

(51) International Patent Classification⁷: A61K 31/56, 31/58, 31/585, 9/14, A61L 15/16, A61F 13/00

(21) International Application Number:

PCT/US2004/000941

(22) International Filing Date: 15 January 2004 (15.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/348,570 21 January 2003 (21.01.2003) US

(71) Applicants (for all designated States except US): DIMERA INC. [US/US]; 2525 NW Lovejoy, Suite 311, Portland, OR 97210 (US). HERMSMEYER, R., Kent [US/US]; 2420 NE 61st Avenue, Portland, OR 97213 (US).

(74) Agent: EISENBERG, Howard; 2206 Applewood Court, Perkasie, PA 18944 (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, 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, 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, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations 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, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, 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, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 3 March 2005

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: METHOD AND KIT FOR REDUCING THE SYMPTOMS OF PERIPHERAL VASCULAR DISEASE

(57) Abstract: A method for reducing the symptoms of peripheral vascular disease wherein a chemical agent that reduces peripheral vascular hyperreactivity in response to a stimulus for contraction of peripheral vascular musculature is administered to a subject in need thereof. Kits for administering the chemical agent to reduce the symptoms of peripheral vascular disease.





INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/00941

A. CLAS IPC(7)	SIFICATION OF SUBJECT MATTER - A61K 31/56 31/58 31/585 9/14: A61L 15/16	5- A61F 13/00			
US CL					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIEL	DS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols) U.S.: 514/169, 170, 177, 178, 179, 180, 181, 182; 424/ 444, 447,449, 484					
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 practicable, search terms used) Please See Continuation Sheet					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.				
Y	Database CAPLUS, AN 1943:5455, WALKER, T.C., Use of testosterone propionate and estrogenic substance in treatment of essential hypertension, angina pectoris and peripheral vascular disease. Journal of Clinical Endocrinology. 1942, Vol. 2, pages 560-568. Abstract.				
Y	MYERS et al. Estrogen increase male rat aortic endothelial cell (RAEC) PGI2 release, Prostaglandins, leukotrienes and essential fatty acids. 1996, Vol. 54, No. 6, pages 403-409, see entire document.				
Y	US 5,612,051 A (YUE) 18 March 1997(18.03.1997), See the abstract, col. 7, line 14 to col. 8, lines 5, col. 9, line 64 to col. 10, line 20, col. 10, lines 59-64, and the claims.		1-39		
Y	EP 0 399 432 A2 (TAKEDA CHEMICAL INDUSTRIES) 28 November 1990, the		1-39		
Y	abstract, page 3, lines, 31-34. US 2002/0156090 A1 (DAY et al.) 24 October 2002(24.10.2002), the abstract, pages 2-3, and the claims.		1-39		
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 		"T" later document published after the inte date and not in conflict with the applic principle or theory underlying the inve	ation but cited to understand the		
of particular relevance "E" earlier application or patent published on or after the international filing date		document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step			
"L" document	which may throw doubts on priority claim(s) or which is cited to he publication date of another citation or other special reason (as	when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be			
specified)		considered to involve an inventive step combined with one or more other such being obvious to a person skilled in th	when the document is documents, such combination		
"P" document published prior to the international filing date but later than the					
priority date claimed					
		Date of mailing of the international search report 20 DEC 2004			
	004 (30.10.2004) iiling address of the ISA/US	Aithorized officer /			
Mail Stop PCT, Attn: ISA/US Commissioner for Patents		Shengjuh Wanga Jaw Rexcl. Gor			
P.O. Box 1450 Alexandria, Virginia 22313-1450		Telephone No. (571) 272-1600	, -		
Facsimile No. (703) 305-3230					

Form PCT/ISA/210 (second sheet) (January 2004)

	International application No.	
INTERNATIONAL SEARCH REPORT	PCT/US04/00941	
	•	
Continuation of D. EIEL DC CE ADCLIED Item 2		
Continuation of B. FIELDS SEARCHED Item 3: CAS ONLINE MEDI INE. BIOSIS search terms: peripheral vascular disease. It	Raynaud hormone androgen extrogen progesteron	
CAS ONLINE, MEDLINE, BIOSIS search terms: peripheral vascular disease, I testosterone, progestin, diabetes, gel, oral, cream, ointment, transdermal.	man progestoren,	
	*	