## (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 6 May 2005 (06.05.2005)

PCT

(10) International Publication Number WO 2005/039483 A3

(51) International Patent Classification<sup>7</sup>: A61K 35/78

(21) International Application Number:

PCT/US2004/016043

(22) International Filing Date: 21 May 2004 (21.05.2004)

(25) Filing Language: English

English (26) Publication Language:

(30) Priority Data:

60/472,460 US 22 May 2003 (22.05.2003) 10/464,834 18 June 2003 (18.06.2003) US 10/464,410 18 June 2003 (18.06.2003) US 10/689,856 20 October 2003 (20.10.2003) US 10/774,048 4 February 2004 (04.02.2004) US

- (71) Applicant (for all designated States except US): METAPROTEOMICS, LLC [US/US]; 100 Avenida La Pata, San Clemente, CA 92673 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BABUSH, John, G. [US/US]; 508 White Church Road, Brooktondale, NY 14817 (US). TRIPP, Matthew, L. [US/US]; 4202 71st Avenue Court NW, Gig Harbor, WA 98335 (US). HOWELL, Terrence [US/US]; 36 Lake Shore Road, Lansing, NY 14882 (US). BLAND, Jeffrey, S. [US/US]; 957 11th Lane, Fox Island, WA 98333 (US). DARLAND, Gary [US/US]; 1718 Clorindi Circle NW, Gig Harbor, WA 98335 (US). LERMAN, Robert [US/US]; 6918 Cascade Avenue, Gig Harbor, WA 98335 (US). LUKACZER, Daniel, O. [US/US]; 5820 98th Avenue NW, Gig Harbor, WA 98335 (US).

- (74) Agents: CADENA, Deborah, L. et al.; McDermott, Will & Emery, 4370 La Jolla Village Drive, Suite 700, San Diego, CA 92122 (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, 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
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of
- (88) Date of publication of the international search report: 29 September 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: ANTI-INFLAMMATORY PHARMACEUTICAL COMPOSITIONS FOR REDUCING INFLAMMATION AND THE TREATMENT OR PREVENTION OF GASTRIC TOXICITY

(57) Abstract: The invention provides hops (Humulus lupulus) extracts or derivatives thereof for use in treating a patient prophylactically and/or therapeutically for ulcerogenic-type disorders of the stomach and/or intestines. The ulcerogenic disorders can be of the type chemically induced, environmentally-induced, infection-induced, and/or stress-induced. The invention also provides a pharmaceutical composition comprising an active amount of hops extracts or derivatives thereof, in combination with an analgesic compound and/or an anti-inflammatory compound. The invention further provides for use of hops extracts or derivatives thereof, significantly reducing and/or therapeutically treating ulcerogenic-type disorders of the stomach and/or intestines.



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/16043

A. CLASSIFICATION OF SUBJECT MATTER				
IPC(7) : A61K 35/78				
US CL: 424/725				
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)  U.S.: 424/725				
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) WEST, STN				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	ategory * Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.
x	US 5,968,539 A (BEERSE et al.) 19 October 1999(			1-36
Further documents are listed in the continuation of Box C.			See patent family annex.	tional filing data or originity data
Special categories of cited documents:      Special categories of cited documents:			and not in conflict with the application bu	t cited to understand the
"A" document particular	defining the general state of the art which is not considered to be of relevance	•	principle or theory underlying the invention	
"E" earlier application or patent 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)		"X"	considered novel or cannot be considered to involve an inventive step when the document is taken alone	
		"Y"		
"O" document	referring to an oral disclosure, use, exhibition or other means		to a person skilled in the art	
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report		
15 June 2005 (15.06.2005)			<u>r jul (uu)                                   </u>	
Name and mailing address of the ISA/US  Mail Stop PCT, Attn: ISA/US  Commissioner for Patents  P.O. Box 1450  Alexandria, Virginia 22313-1450		Authorized officer  Michael V. Meller  Telephone No. (571) 272-1600		
Facsimile No. (703) 305-3230				

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