(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 April 2003 (10.04.2003)

PCT

(10) International Publication Number
WO 03/028662 A2

(51) International Patent Classification[7]: A61K

(21) International Application Number: PCT/US02/31771

(22) International Filing Date: 3 October 2002 (03.10.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/326,928 3 October 2001 (03.10.2001) US
60/369,889 3 April 2002 (03.04.2002) US

(71) Applicant *(for all designated States except US)*: **HERBALSCIENCE, LLC** [US/US]; P.O. Box 7219, Naples, FL 34101 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GOW, Robert, T.** [US/US]; P.O. Box 7219, Naples, FL 34119 (US). **PIERCE, John, A.** [US/US]; P.O. Box 111, Moreno Valley, CA 92557 (US). **PIERCE, Brian** [US/US]; P.O. Box 111, Moreno Valley, CA 92557 (US). **BIRDSALL, William** [US/US]; 800 Laurel Oak Drive, Naples, FL 34101 (US).

(74) Agent: **FELLER, Mitchell, S.**; Clifford Chance US LLP, 200 Park Avenue, New York, NY 10166 (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, US, 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:**
— *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.*

WO 03/028662 A2

(54) Title: A METHOD OF PRODUCING A PROCESSED KAVA PRODUCT HAVING AN ALTERED KAVALACTONE DISTRIBUTION AND PROCESSED KAVA PRODUCTS PRODUCED USING THE SAME

(57) Abstract: A method of producing a processed kava product involves using an extraction solvent, such as liquid $CO_2$, to preferentially extract different kavalactones from the source material at different rates. By controlling the extraction parameters and stopping the extraction before all of the kavalactones have been extracted or allowing the extracted kavalactones to be preferentially precipitated in one or more collection environments, a processed kava product can be produced that has a kavalactone distribution profile that can differ substantially from that of the source material. As a result, roots from a less desirable kava cultivar can be used to produce a processed kava product which bas a kavalactone distribution profile that is similar to that of a highly desired cultivar. The kava paste can be further processed to produce a dry flowable powder suitable for use in, e.g., a tableting formula. A rapid dissolve tablet formulation for use in the delivery of kavalactones is also disclosed.