



(11) **EP 1 491 204 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:  
**Corrected version no 1 (W1 B1)**  
**Corrections, see**  
**Bibliography INID code(s) 54**

(51) Int Cl.:  
**A61K 36/484** <sup>(2006.01)</sup> **A61K 47/14** <sup>(2006.01)</sup>  
**A23L 1/30** <sup>(2006.01)</sup> **A61P 1/06** <sup>(2006.01)</sup>  
**A61P 11/10** <sup>(2006.01)</sup> **A61P 25/04** <sup>(2006.01)</sup>

(48) Corrigendum issued on:  
**10.02.2010 Bulletin 2010/06**

(86) International application number:  
**PCT/JP2003/004312**

(45) Date of publication and mention  
of the grant of the patent:  
**17.06.2009 Bulletin 2009/25**

(87) International publication number:  
**WO 2003/084556 (16.10.2003 Gazette 2003/42)**

(21) Application number: **03745912.0**

(22) Date of filing: **04.04.2003**

(54) **PROCESS FOR PRODUCING OIL AND FAT COMPOSITIONS CONTAINING HYDROPHOBIC COMPONENTS OF GLYCYRRHIZA**

VERFAHREN ZUR HERSTELLUNG VON ÖL- UND FETTZUSAMMENSETZUNGEN MIT  
HYDROPHOBEN KOMPONENTEN VON GLYCYRRHIZA

PROCEDE DE FABRICATION DE COMPOSITIONS OLÉIQUES ET LIPIDIQUES CONTENANT DES  
COMPOSANTS HYDROPHOBES DE GLYCYRRHIZA

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR  
HU IE IT LI LU MC NL PT RO SE SI SK TR**

(30) Priority: **04.04.2002 JP 2002102629**

(43) Date of publication of application:  
**29.12.2004 Bulletin 2004/53**

(73) Proprietor: **KANEKA CORPORATION**  
**Osaka-shi, Osaka 530-8288 (JP)**

(72) Inventors:  
• **IKEHARA, Toshinori**  
**Takasago-shi, Hyogo 676-0011 (JP)**  
• **KITAHARA, Mikio**  
**Kobe-shi, Hyogo 654-0067 (JP)**

(74) Representative: **Vossius & Partner**  
**Siebertstraße 4**  
**81675 München (DE)**

(56) References cited:  
**WO-A-02/47699 JP-A- 2 134 324**  
**JP-A- 4 164 021 JP-A- 2000 191 498**  
**JP-A- 2000 239 176**

- **NIU ET AL.: "Isolation and purification of glycyrrhizic acid with solvent extraction" SEPARATION AND PURIFICATION TECHNOLOGY, vol. 44, no. 3, 2004, pages 189-196, XP004977421**
- **KAORU AIDA ET AL.: 'Isoliquiritigenin: A new aldose reductase inhibitor from glycyrrhizae radix' PLANTA MED. vol. 56, no. 3, 1990, pages 254 - 258, XP002970030**
- **YASUO TANAKA ET AL.: 'Antibacterial compounds of licorice against upper airway respiratory tract pathogens' J. NUTR. SCI. VITAMINOL. vol. 47, no. 3, 2001, pages 270 - 273, XP002970031**
- **GORDON MICHAEL H. ET AL.: 'Antioxidant activity of flavonoids isolated from licorice' J. AGRIC. FOOD CHEM. vol. 43, no. 7, 1995, pages 1784 - 1788, XP002970032**
- **TATSUHIKO TSUTSUMI ET AL.: 'Introduction to new functions of natural plant extracts and their application to cosmetics' FRAGRANCE JOURNAL vol. 29, no. 1, 2001, pages 93 - 96, XP002970033**

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

**EP 1 491 204 B8**

- TSUTOMU HATANO ET AL.: 'Phenolic constituents of licorice. II. Structures of licopyranocoumarin, licoaryl coumarin and glisoflavone and inhibitory effects of licorice phenolics on xanthine oxidase' CHEM. PHARM. BULL. vol. 37, no. 11, 1989, pages 3005 - 3009, XP002970034
- HIROO SAIZUKA ET AL.: 'Sankanon ni yoru yusei shokuhin to yushi no sanku boshi koka' JAPAN FOOD SCIENCE vol. 25, no. 6, 1986, pages 43 - 48, XP002970035

- TATSUHIKO TSUTSUMI ET AL.: 'Application to cosmetics of oil-soluble licorice extract' FRAGRANCE JOURNAL vol. 17, no. 6, 1989, pages 122 - 125, XP002970036

Remarks:

The file contains technical information submitted after the application was filed and not included in this specification