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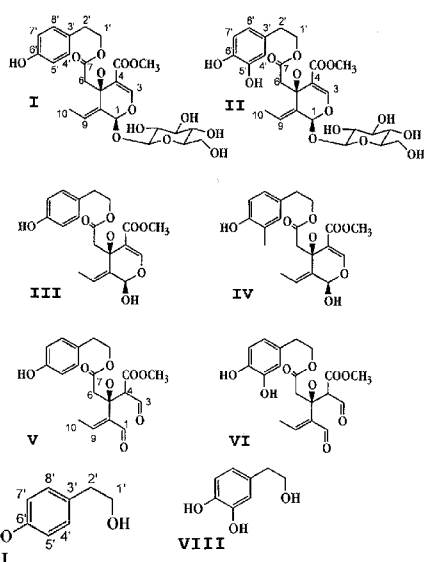


FIG. 1 Antioxidant structures of phenolic compounds found in olive oil: ligstroside (I); oleuropein glucoside (II); aglycone of ligstroside (III); aglycone of oleuropein glucoside (IV); dialdehydic form of ligstroside aglycone lacking a carboxymethyl group (V); dialdehydic form of oleuropein glucoside aglycone (VI); tyrosol (VII); hydroxytyrosol (VIII)

(57) Abstract: Methods are disclosed to create healthier palm oil and new food additives derived from products of the processing of *Elaeis* fruit that were hitherto fore discarded as waste. The pressing product of *Elaeis* fruit and the effluent created is treated with acidified antioxidants from olive vegetation containing hydroxytyrosol and a mixture of other polyphenols. The treated POME, palm oil and palm juice are stabilized against oxidation and their inherently nutritive components may now be harvested instead of being thrown away.

**A. CLASSIFICATION OF SUBJECT MATTER***A61K 36/88(2006.01)i, A61K 36/889(2006.01)i, A61P 39/06(2006.01)i, A61P 39/00(2006.01)i*

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 36/88; A61Q 99/00; A61K 31/355; A61K 8/97; A61P 3/00; A61K 36/25; A61K 36/899

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) &amp; Keywords: Elaeis fruit, antioxidants, effluent, palm oil mill effluent(POME), pressing, palm oil

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BAKAR, N. H. B. A., `Study on Mechanical Pretreatment Process of Palm Oil Mill Effluent(POME)` University College of Engineering & Technology Malaysia. November 2006, pp.1-27	1
A	See Pages 15, 18, 26	2-22
X	US 2009-0252817 A1 (HAYES, KENNETH C. et al.) 08 October 2009	18
A	See paragraphs [0007], [0115] and claim 1	1-17, 19-22
X	US 2007-0269400 A1 (GOLZ-BERNER, KARIN et al.) 22 November 2007	18
A	See paragraphs [0006], [0014] and claim 1	1-17, 19-22
A	US 2008-0188551 A1 (ROESLER, ROBERT et al.) 07 August 2008 See claims 4, 6	1-22

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

\* Special categories of cited documents:

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"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

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2012/024890**

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