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(54) Title: A METHOD OF LIGHTENING SKIN

(57) Abstract: The invention relates to a method and a product for lightening of skin and also for blemish removal on the skin. The invention provides for a method of lightening skin comprising the sequential steps, in any order, of; a) applying an alcohol having carbon chain length of 2 to 4, to the skin; and b) applying a skin lightening agent to said skin. The invention also provides for a kit for skin lightening comprising an alcohol having carbon chain length of 2 to 4 and a separately packaged skin lightening agent, along with instructions for their use. It is particularly preferred that the alcohol is impregnated in porous water-insoluble substrate.



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**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. A61K8/34 A61K8/67 A61Q19/02

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
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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 practical, search terms used)  
 EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96/37179 A1 (UNILEVER PLC [GB]; UNILEVER NV [NL]) 28 November 1996 (1996-11-28) page 3, line 29 - page 4, line 10 claim 13; example 6	1-13
X	FR 2 906 463 A1 (OREAL [FR]) 4 April 2008 (2008-04-04) page 18, line 34 - page 19, line 12; claims 20, 22	1-13
X	EP 0 729 746 A1 (UNILEVER PLC [GB]; UNILEVER NV [NL]) 4 September 1996 (1996-09-04) page 2, line 14 - page 2, line 15; examples 1-5	12-13
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"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"P" document published prior to the international filing date but later than the priority date claimed	

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/025938 A1 (HANSENNE ISABELLE [US] ET AL) 1 February 2007 (2007-02-01) paragraph [0144] - paragraph [0148]; claim 22 -----	12-13
X	US 5 935 584 A (GUERRERO ANGEL AUGUSTO [US] ET AL) 10 August 1999 (1999-08-10) column 1, line 15 - column 1, line 16; examples 1-5 -----	12-13
X	US 2002/193321 A1 (VISHNUPAD MOHAN [US] ET AL) 19 December 2002 (2002-12-19) examples 5-10, 12 -----	12-13
A	WO 2005/004830 A1 (PROCTER & GAMBLE [US]; NONAKA GEN [JP]; TANAKA HIDEKAZU [JP]) 20 January 2005 (2005-01-20) the whole document -----	1-13

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2009/057715

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9637179	A1	28-11-1996	AR 001705 A1 26-11-1997
			AU 5145896 A 11-12-1996
			BR 9608796 A 17-02-1999
			CA 2221559 A1 28-11-1996
			CN 1191478 A 26-08-1998
			DE 69629027 D1 14-08-2003
			DE 69629027 T2 27-05-2004
			EP 0828473 A1 18-03-1998
			ES 2202431 T3 01-04-2004
			IN 188273 A1 31-08-2002
			JP 11505811 T 25-05-1999
			ZA 9603596 A 07-11-1997
			ZA 9604198 A 24-11-1997
FR 2906463	A1	04-04-2008	NONE
EP 0729746	A1	04-09-1996	NONE
US 2007025938	A1	01-02-2007	NONE
US 5935584	A	10-08-1999	NONE
US 2002193321	A1	19-12-2002	US 2006189552 A1 24-08-2006
			US 2006173076 A1 03-08-2006
			US 2006172955 A1 03-08-2006
WO 2005004830	A1	20-01-2005	AT 381313 T 15-01-2008
			AU 2003243573 A1 28-01-2005
			BR 0318354 A 25-07-2006
			CA 2525991 A1 20-01-2005
			CN 1787803 A 14-06-2006
			DE 60318256 T2 04-12-2008
			EP 1641428 A1 05-04-2006
			ES 2297279 T3 01-05-2008
			HK 1089100 A1 08-08-2008
			JP 2006527166 T 30-11-2006
			MX PA05013390 A 09-03-2006
			US 2005019283 A1 27-01-2005