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(54) Title: HAIR CARE COMPOSITIONS THAT CAN INCREASE THE APPEARANCE OF THICKER AND FULLER HAIR

(57) Abstract: Hair care compositions, methods, and articles of commerce that can increase the appearance of thicker and fuller hair. Such compositions can be applied to any areas where a thicker and fuller hair appearance is desired, such as the scalp or face. The present invention also relates to methods of marketing such compositions.

INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/019180

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C. DOCUM	ENTS CONSIDERED TO BE RELEVANT			· · · · · · · · · · · · · · · · · · ·
Category*	Citation of document, with indication, where appr	opriate, of the relevant p	assages	Relevant to claim No.
X	EP 1 683 509 A (SHISEIDO)	. 1-5
	26 July 2006 (2006-07-26 the whole document	5)		
		· -		
X	FR 2 751 541 A (FABRE PI COSMETIQUE [FR])	ERRE DERMO		1-3
	30 January 1998 (1998-01	1-30)	•	
	claims 1-12; example 7			
X	WO 02/087700 A (PROCTER	 & GAMBLE FUS	1)	1,2
	7 November 2002 (2002-11		• ′	
	example 3			
Υ	DE 10 2005 010142 A1 (KU			1-3
	KG DR [DE]) 3 November 2 paragraphs [0012] - [001		-03)	
	claims 1-4,19	[0], [0030],		
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[V] -				
<u> </u>	her documents are listed in the continuation of Box	С. Х	See patent family annex.	
	categories of cited documents:	0	er document published after the in r priority date and not in conflict wit	
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/019180

(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	PCT/US200	
ategory*	Citation of document, with indication, where appropriate, of the relevant passages	•	Relevant to claim No.
	WO 99/66887 A (GECOMWERT ANSTALT [LI]; MONTANARI DANIELA [IT]; GUGLIELMO MANUELA [IT]) 29 December 1999 (1999-12-29) page 1, line 7 - line 24 page 6, line 1 - line 12		1-3
	JP 2001 002532 A (OJI PAPER CO) 9 January 2001 (2001-01-09) abstract		1-3
	DATABASE MEDLINE [Online] US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; May 2001 (2001-05), DE LACHARRIÈRE O ET AL: "Hair diameter diversity: a clinical sign reflecting the follicle miniaturization." XP002468228 Database accession no. NLM11346342 abstract		1-3
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International application No. PCT/US2007/019180

INTERNATIONAL SEARCH REPORT

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers
only those claims for which fees were paid, specifically claims Nos.:
4. Y No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
see annex
Remark on Protest The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3

A hair composition comprising a xanthine compound, a vitamin B3 compound and a panthenol compound and its use for increasing hair shaft diameter to give the appearance of thicker and fuller hair.

2. claim: 4

A method for increasing hair shaft diameter to give the appearance of thicker and fuller hair comprising topically applying a hair care composition comprising a safe and effective amount of an AQP3 up-regulator to a region where thicker and fuller hair is desired.

3. claims: 5-6

A method for increasing hair shaft diameter to give the appearance of thicker and fuller hair comprising topically applying a hair care composition comprising a safe and effective amount of a hair growth inhibitor to a region where thicker and fuller hair is desired.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/019180

	itent document I in search report		Publication date		Patent family member(s)		Publication date
EP	1683509	Α	26-07-2006	CN WO KR US		A1 A	13-12-2006 19-05-2005 01-12-2006 27-12-2007
FR	2751541	Α	30-01-1998	NONE			
WO	02087700	Α	07-11-2002	US	2003069618	A1	10-04-2003
DE	102005010142	A1	03-11-2005	ΕP	1700617	A1	13-09-2006
WO	9966887	A	29-12-1999	AT AU CH DE DE DK EP ES PT US	689821 69914752 69914752 1089704 1089704	A A5 D1 T2 T3 A1 T3	15-02-2004 10-01-2000 15-12-1999 18-03-2004 15-07-2004 14-06-2004 11-04-2001 16-12-2004 31-05-2004 14-06-2001
JP	2001002532	Α	09-01-2001	 JP	3820800	B2 .	13-09-2006