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(54) **Title:** COMPOSITION AND ASSOCIATION OF SUNSCREENS FOR PHOTOSTABILIZING BUTYL METHOXYDIBENZOYL METHANE (BMDBM)

(57) **Abstract:** The present invention concerns a composition containing a photostabilized combination of Butyl Methoxydibenzoyl-methane (BMDBM), Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine (BEMT), and Methylene Bis- Benzotriazolyl Tetramethylbutylphenol (MBBT) wherein: (i) - the BEMT/BMDBM mass ratio is greater than or equal to 1 and preferably greater than or equal to 1.5; (ii) - the content of BMDBM is comprised between 1% and 5% by weight with regard to the total weight of the composition; (iii) - the quantity of MBBT is comprised between 3% and 7% by weight with regard to the total weight of the composition, said combination containing no octocrylene, PABA or ethylhexyl methoxycinnamate, and a pharmaceutically or cosmetically acceptable excipient.

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A. CLASSIFICATION OF SUBJECT MATTER	INV. A61K8/35	A61K8/49	A61Q17/04	A61K31/53	A61K31/4192
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B. FIELDS SEARCHED

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

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EPO-Internal, CHEM ABS Data, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 308 153 A2 (BEIERSDORF AG [DE]) 7 May 2003 (2003-05-07) pages 16-19; examples 2.5,4.3,6.3 claims 1,3,7 -----	1-10
A	WO 02/43656 A2 (AVON PROD INC [US]; KALAFSKY ROBERT E [US]; PECHKO ANDREW H [US]) 6 June 2002 (2002-06-06) page 10; example 2 -----	1-10
A	EP 1 764 081 A1 (JOHNSON & JOHNSON CONSUMER FR [FR]) 21 March 2007 (2007-03-21) page 13; example 1 -----	1-10
A	DE 101 35 258 A1 (BEIERSDORF AG [DE]) 6 February 2003 (2003-02-06) pages 17-18; examples 1.5,4.4,5.3 ----- -/-	1-10

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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.
A	WO 03/039507 A1 (BEIERSDORF AG [DE]; SCHULZ JENS [DE]; GOEPPEL ANJA [DE]) 15 May 2003 (2003-05-15) pages 36-37; examples 2.2,4.5 -----	1-10
X	EP 1 291 010 A2 (BASF AG [DE]) 12 March 2003 (2003-03-12) pages 43-44; example 3 -----	1,6
X	EP 1 093 797 A1 (OREAL [FR]) 25 April 2001 (2001-04-25) pages 12-13, paragraphs 0001,0022,0030-0031,0040; claims 14,21 -----	1-10
A	GB 2 439 618 A (RECKITT & COLMANN PROD LTD [GB]) 2 January 2008 (2008-01-02) claims 1-3 -----	1-6

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2013/051777

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 1308153	A2	07-05-2003	DE EP	10154111 A1 1308153 A2		22-05-2003 07-05-2003

WO 0243656	A2	06-06-2002	AU WO	1980402 A 0243656 A2		11-06-2002 06-06-2002

EP 1764081	A1	21-03-2007	BR EP EP US WO	PI0615350 A2 1764081 A1 1928401 A1 2009220442 A1 2007025599 A1		17-05-2011 21-03-2007 11-06-2008 03-09-2009 08-03-2007

DE 10135258	A1	06-02-2003	NONE			

WO 03039507	A1	15-05-2003	DE EP JP US WO	10155963 A1 1446094 A1 2005511585 A 2005008587 A1 03039507 A1		22-05-2003 18-08-2004 28-04-2005 13-01-2005 15-05-2003

EP 1291010	A2	12-03-2003	CN DE EP JP US	1406578 A 10143962 A1 1291010 A2 2003095850 A 2003161849 A1		02-04-2003 27-03-2003 12-03-2003 03-04-2003 28-08-2003

EP 1093797	A1	25-04-2001	AT AU AU BR CA DE DE DK EP ES FR JP JP KR PT US	213403 T 740339 B2 6664200 A 0006736 A 2324047 A1 60000075 D1 60000075 T2 1093797 T3 1093797 A1 2173072 T3 2799966 A1 3607864 B2 2001192351 A 20010070163 A 1093797 E 6419908 B1		15-03-2002 01-11-2001 26-04-2001 22-05-2001 22-04-2001 28-03-2002 28-11-2002 02-04-2002 25-04-2001 16-10-2002 27-04-2001 05-01-2005 17-07-2001 25-07-2001 28-06-2002 16-07-2002

GB 2439618	A	02-01-2008	EP GB WO	2040667 A1 2439618 A 2007144670 A1		01-04-2009 02-01-2008 21-12-2007
