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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
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- Declarations under Rule 4.17:**
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR RAPID AND PRECISE APPLICATION OF COSMETICS

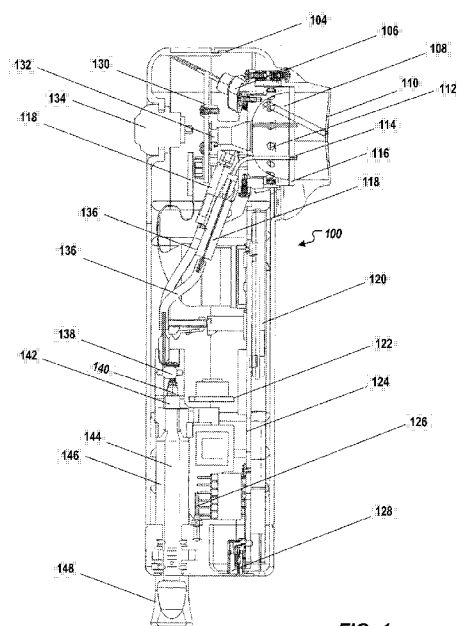


FIG. 1

(57) Abstract: A method for selectively applying a reflectance modifying agent (RMA) to an area of skin, the method comprising receiving an image of the area of skin, identifying, using the image, a nominated point within the area of skin, determining an actual reflectance of the nominated point, applying an edge protection technique based on the image to generate one or more outputs, determining a desired reflectance of the nominated point based on the one or more outputs, calculating an amount of RMA to be applied based on the output, and determining whether to apply the RMA to the area of skin based on the amount of RMA.



- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))* — *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

Published:

- *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:

18 October 2012

A. CLASSIFICATION OF SUBJECT MATTER***A61B 5/00(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)

A61B 5/00; H04N 5/225; A61K 7/32; G06K 9/00; G06K 9/40; G06F 3/12; A61K 7/00

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) & Keywords: image, reflectance, nominated point, cosmetic

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0192999 A1 (EDGAR ALBERT D. et al.) 14 August 2008 See abstract, paragraphs [0100]-[0110], claims 6-12, and figure 7.	1-4,21-26,38-40
A	US 2007-0110305 A1 ((PETER CORCORAN et al.) 17 May 2007 See abstract, paragraphs [0199]-[0201], and claims 1,3.	1-4,21-26,38-40
A	US 2010-0214421 A1 (QU DI et al.) 26 August 2010 See abstract, paragraphs [0035]-[0037],[0063], claim 1, and figures 1,3.	1-4,21-26,38-40
A	US 05985252 A (HALL; LYNNE et al.) 16 November 1999 See abstract and claim 1.	1-4,21-26,38-40



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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

"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

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

22 AUGUST 2012 (22.08.2012)

Date of mailing of the international search report

24 AUGUST 2012 (24.08.2012)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORTInternational application No.
PCT/US2012/022296**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:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 5-20,27-37,41-54
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:
See extra sheet
3. ☒ Claims Nos.: 8-10,12,14-20,28,29,31-37,43-46,48-54
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:

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 fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ 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.:

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/022296

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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US 2007-0110305 A1	17.05.2007	JP 04-865038 B2	18.11.2011
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The term "one or more of the foregoing claims" used in claims 5,8-10,12,15-20,27-29,32-37,41-46,49-54 are vague and unclear to meaningful search possible, because the definition of the word "more" is not clear. Thus, these claims do not meet the requirement of PCT Article 6. And claims 6,7,10,13,14,30,31,47, and 48 are not clear because they refer to said claims that do not comply with PCT Article 6.

The subject-matter of claims 11,13,30, and 47 are unclear because they refer to claims 10,12,29, and 46, respectively which do not comply with PCT Rule 6.4(a).