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(54) **METHOD OF IDENTIFYING A SKIN-LIGHTENING AGENT**

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(56) References cited:

WO-A1-2012/011904 WO-A2-2012/116081

US-A1- 2011 150 798 US-A1- 2011 160 080

US-A1- 2011 269 852

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- LAMB ET AL: "The connectivity map: using gene-expression signatures to connect small molecules, genes and disease", SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, WASHINGTON, DC; US, vol. 313, 29 September 2006 (2006-09-29), XP008103904, ISSN: 0036-8075, DOI: 10.1126/SCIENCE.1132939 -& "Supporting Online Material for The Connectivity Map: Using Gene-Expression Signatures to Connect Small Molecules, Genes, and Disease", , 29 September 2006 (2006-09-29), pages 1-7, XP008103904, Retrieved from the Internet: URL: <http://www.sciencemag.org/content/suppl/2006/09/29/313.5795.1929.DC1/Lamb.SOM.pdf> [retrieved on 2013-05-27] -& "Table S1", , 29 September 2006 (2006-09-29), pages 1-9, XP008103904, Retrieved from the Internet: URL: <http://www.sciencemag.org/content/313/5795/1929/suppl/DC1> [retrieved on 2013-05-27]
- Y. ISHIMATSU-TSUJI ET AL: "Identification of novel hair-growth inducers by means of connectivity mapping", THE FASEB JOURNAL, vol. 24, no. 5, 1 May 2010 (2010-05-01), pages 1489-1496, XP055031487, ISSN: 0892-6638, DOI: 10.1096/fj.09-145292
- "Topical N-acetyl glucosamine and niacinamide affect pigmentation-relevant gene expression in in vitro genomics experimentation", JOURNAL OF THE AMERICAN ACADEMY OF DERMATOLOGY, C.V. MOSBY, ST. LOUIS, MO, US, vol. 56, no. 2, 1 February 2007 (2007-02-01), page AB169, XP005937344, ISSN: 0190-9622
- BISSETT DONALD L ET AL: "Genomic expression changes induced by topical N-acetyl glucosamine in skin equivalent cultures in vitro.", JOURNAL OF COSMETIC DERMATOLOGY DEC 2007, vol. 6, no. 4, December 2007 (2007-12), pages 232-238, XP009169916, ISSN: 1473-2165