US009410152B2

(12) **United States Patent**
Saintigny et al.

(10) **Patent No.: US 9,410,152 B2**
(45) **Date of Patent: Aug. 9, 2016**

(54) **USE OF MICRORNA MOLECULES TO INFLUENCE SKIN PIGMENTATION**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 23 days.

(21) Appl. No.: **14/366,767**

(22) PCT Filed: **Dec. 18, 2012**

(86) PCT No.: **PCT/FR2012/052977**

§ 371 (c)(1),
(2) Date: **Jun. 19, 2014**

(87) PCT Pub. No.: **WO2013/093329**

PCT Pub. Date: **Jun. 27, 2013**

(65) **Prior Publication Data**

US 2015/0010485 A1 Jan. 8, 2015

(30) **Foreign Application Priority Data**

Dec. 19, 2011 (FR) 11 61950

(51) **Int. Cl.**

A61K 8/60	(2006.01)
A61Q 19/02	(2006.01)
C12N 15/113	(2010.01)
C12Q 1/66	(2006.01)
G01N 33/50	(2006.01)
C12N 15/11	(2006.01)
C12Q 1/68	(2006.01)

(52) **U.S. Cl.**

CPC ***C12N 15/113*** (2013.01); ***A61K 8/606*** (2013.01); ***A61Q 19/02*** (2013.01); ***C12N 15/111*** (2013.01); ***C12N 15/1137*** (2013.01); ***C12Q 1/66*** (2013.01); ***C12Q 1/6883*** (2013.01); ***G01N 33/5023*** (2013.01); ***G01N 33/5044*** (2013.01); *A61K 2800/74* (2013.01); *A61K 2800/86* (2013.01); *C12N 2310/141* (2013.01); *C12N 2320/30* (2013.01); *C12Q 2600/142* (2013.01); *C12Q 2600/148* (2013.01); *C12Q 2600/178* (2013.01); *G01N 2500/10* (2013.01)

(58) **Field of Classification Search**

CPC A61K 8/606

See application file for complete search history.

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(57) **ABSTRACT**

At least one microRNA selected from among hsa-miR-330, hsa-miR-7 and hsa-miR-137, the mature forms thereof, and the precursors thereof, for depigmenting the skin, and an in vitro method for identifying depigmenting compounds, which includes the steps of: a) placing at least one test compound in contact with a sample of melanocytes; b) measuring the expression or activity of at least one microRNA selected from among miR-330, miR-7 and miR-137, the mature forms thereof, and the precursors thereof, in the melanocytes; c) selecting the compounds for which at least 20% activation of the expression or of the activity of at least one of the microRNAs is measured in the melanocytes treated in a) by an element for comparing with the untreated melanocytes.

7 Claims, 6 Drawing Sheets