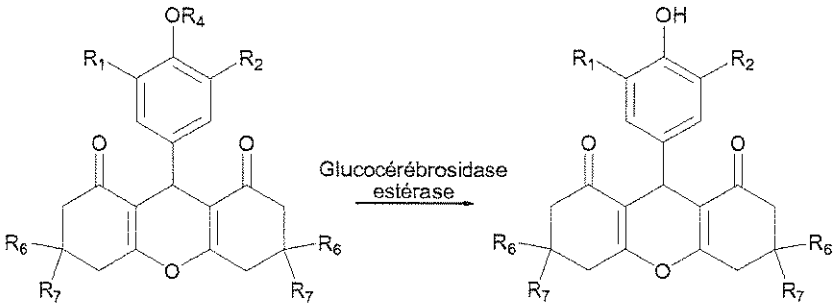
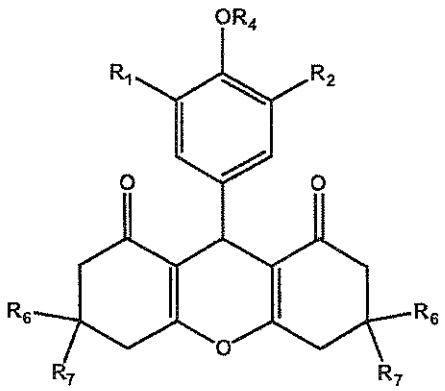


Glucocerebrosidase

esterase

Thus, one aspectthe objeet of the present invention relates tois a compound of the following generic formula (I):



In which:

- R_1 and R_2 represent simultaneously or independently: OH, an atom of hydrogen, a C_1-C_6 alkyl radical, a C_1-C_6 alkoxy radical, a halogen, or $OCOR_3$;
- R_3 represents: a C_1-C_{24} alkyl radical, a C_{12}-C_{24} alkenyl radical comprising at least one unsaturation, advantageously from 1 to 6 and preferably from 1 to 4;
- R_4 represents: COR_5, a glucide radical substituted or not by one or more acetyl radical(s),
- R_5 represents: a C_{10}-C_{24} alkyl radical, or a C_{12}-C_{24} alkenyl radical comprising at least one unsaturation, advantageously from 1 to 6 and preferably from 1 to 4;
- R_6 and R_7 represent:

- simultaneously a hydrogen atom or a methyl radical,

or

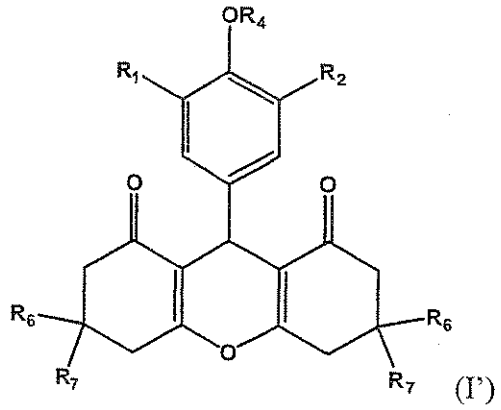
- when R_6 represents a hydrogen atom, R_7 represents a C_1-C_6 alkyl radical or a phenyl substituted or not by one or more C_1-C_3 alkoxy radical(s) or one or more halogen(s),

or

- R_6 and R_7 are bonded to each other and form a C_3-C_6 cycloalkyl,

and cosmetically and pharmaceutically acceptable salts.

In another aspect, there is provided a compound of generic formula (I'):



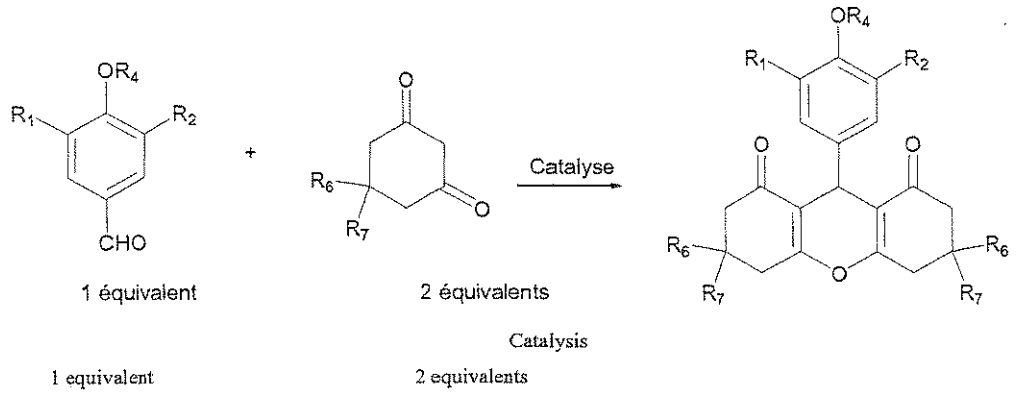
(I')

in which the radicals R_1, R_2, R_3, R_4, R_5, R_6 and R_7 have identical significations to those given as defined herein, but in which R_4 may in addition represent a hydrogen atom or an acetylated radical, and pharmaceutically acceptable salts, for use as medicine.

In another aspect, there is provided the use of a compound of generic formula (I') as defined herein in the manufacture of a medicament for the treatment and/or the prevention of the inflammation of the skin.

In another aspect, there is provided a pharmaceutical or cosmetic composition, characterised in that it comprises as active ingredient at least one compound of generic formula (I') as defined herein in association with a pharmaceutically or cosmetically acceptable excipient.

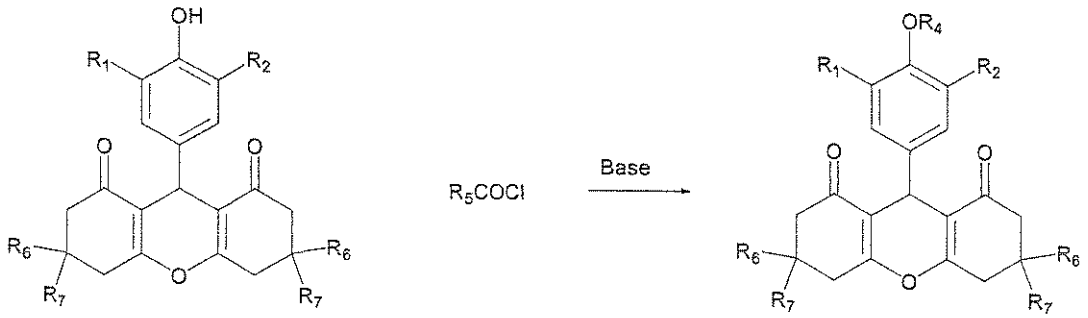
In another aspect, there is provided a method for synthesising compounds of generic formula (I) as defined herein, characterised in that two molecules of 1,3-diketone are made to react with an aldehyde in the presence of an acid or basic catalysis:



Aldehyde 1,3-diketone (I)

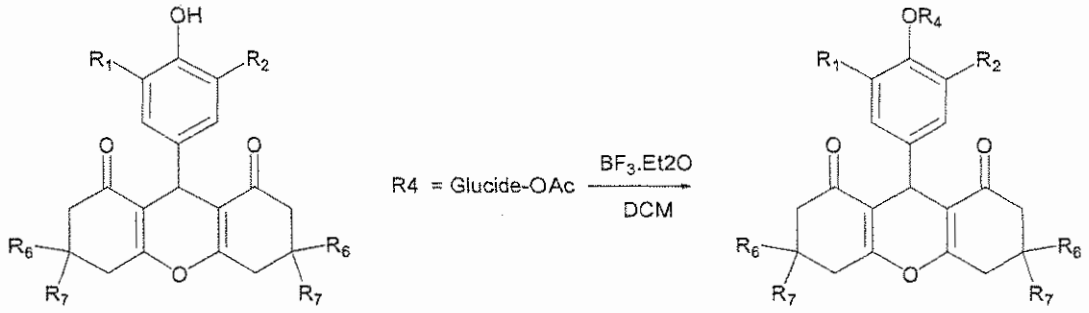
with R_1, R_2, R_3, R_4, R_5, R_6 and R_7 having the same significations as defined herein.

In another aspect, there is provided a method for synthesising compounds of generic formula (I) as defined herein, characterised in that a phenol is made to react with a R_5COCl activated carboxylic acid in the presence of a base:



with R_1, R_2, R_3, R_5, R_6 and R_7 having the same significations as defined herein and R_4 represents COR_5.

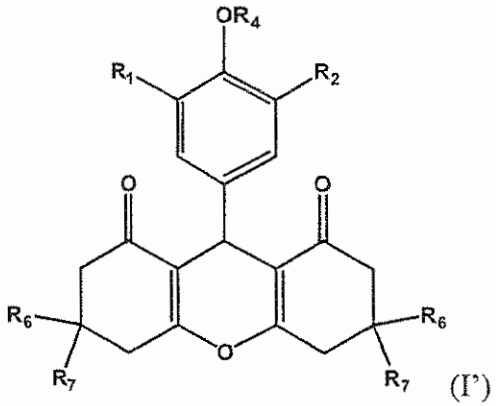
In another aspect, there is provided a method for synthesising compounds of generic formula (I) as defined herein, characterised in that a phenol is made to react with a glucide radical substituted by one or more acetyl radical(s) in the presence of a Lewis acid (BF_3, Et_2O):



(I)

with R_1, R_2, R_3, R_5, R_6 and R_7 having the same significations as defined herein, and R_4 represents a glucide radical substituted by one or more acetyl radical(s).

In another aspect, there is provided a cosmetic use of a compound of generic formula (I'):



(I')

in which the radicals R_1, R_2, R_3, R_4, R_5, R_6 and R_7 have identical significations to those given as defined herein, but in which R_4 may in addition represent a hydrogen atom or an acetylated radical, as a cosmetic active ingredient.

Definitions:

"Alkyl radical" is taken to mean, according to the present invention, a saturated linear or branched aliphatic hydrocarbon chain and comprising the specified number of carbon atoms. Methyl, ethyl and propyl may for example be cited. The alkyl radical may in particular represent the hydrocarbon chain of a C_1-C_{24} and in particular a C_{10}-C_{24} saturated fatty acid.

The saturated fatty acids may be capric acid (10 :0), undecylic acid (11 :0), lauric acid (12 :0), tridecylic acid (13 :0), myristic acid (14 :0), pentadecylic acid (15 :0), palmitic acid (16 :0), margaric acid (17 :0), stearic acid (18 :0), nonadecylic acid (19 :0), arachidic acid (20 :0), heneicosanoic acid (21 :0), behenic acid (22 :0), tricosanoic acid (23 :0), lignoceric acid (24 :0). In particular, the saturated fatty acids may be palmitic acid and stearic acid.

"Alkoxy radical" is taken to mean, according to the present invention, a linear or branched hydrocarbon chain comprising the number of carbon atoms indicated and an oxygen atom for example a methoxy radical, an ethoxy radical, a propoxy radical or a butoxy radical.

"Alkenyl radical" is taken to mean, according to the present invention, a linear or branched hydrocarbon chain comprising the number of carbon atoms indicated and comprising at least one unsaturation advantageously 1 to 6 and preferably 1 to 4. "Unsaturation" is taken to mean, according to the present invention, a C=C double bond.

The alkenyl radical may in particular represent a hydrocarbon chain stemming from a C_{12}-C_{24} unsaturated fatty acid comprising at least one unsaturation, advantageously 1 to 6 and preferably 1 to 4.

The unsaturated fatty acids may be lauroleic acid (C12 :1), myristoleic acid (C14 :1), palmitoleic acid (C16 :1), oleic acid (C18 :1), ricinoleic acid (C18 :1),