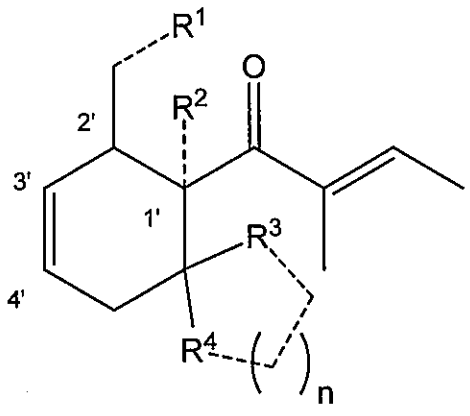
Claims

1. A compound of the formula (I)



(I)

in which, independently,

R_1 is selected from H and methyl;

R_2 is selected from H, and methyl;

R_3 is selected from H, methyl and ethyl;

R_4 is selected from H, methyl and ethyl;

or R_3 and R4 together form a ring in which n is 1 or 2.

2. A compound according to claim 1, wherein both R^1 and R^2 are hydrogen.

3. A compound according to claim 2, wherein R^4 is selected from methyl and ethyl, or wherein R^3 and R^4 together form a cyclopentyl ring (n = 1).

4. A compound according to claim 3 selected from the group consisting of

(2*E*,1'*R**,2'*S**)-2-methyl-1-(2',6',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one,

(2*E*,1'*R**,2'*R**)-2-methyl-1-(2',6',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one,

(2*E*,6'*R**,7'*S**)-2-methyl-1-(7'-methylspiro[4.5]dec-8'-en-6'-yl)but-2-en-1-one,

(2*E*,6'*R**,7'*R**)-2-methyl-1-(7'-methylspiro[4.5]dec-8'-en-6'-yl)but-2-en-1-one,

(2*E*)-1-(2',6'-dimethylcyclohex-3'-en-1'-yl)-2-methylbut-2-en-1-one,

(2*E*)-1-(6'-ethyl-2'-methylcyclohex-3'-en-1'-yl)-2-methylbut-2-en-1-one,

(2*E*)-2-methyl-1-(1',2',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one,

(2*E*,1'*R**,2'*S**)-2-methyl-1-(2'-methylcyclohex-3'-en-1'-yl)but-2-en-1-one , and

(2*E*,1'*R**,2'*R**)-2-methyl-1-(2'-methylcyclohex-3'-en-1'-yl)but-2-en-1-one.

5. A compound according to claim 4, consisting of (2*E*,1'*R**,2'*S**)-2-methyl-1-(2',6',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one.

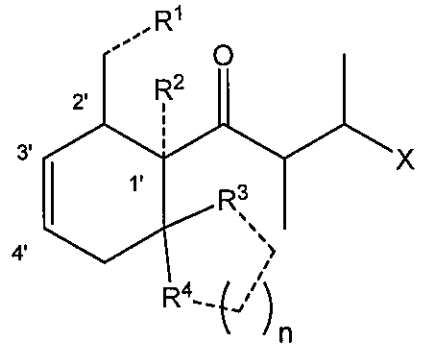
6. The use as fragrance ingredient of a compound according to claim 1.

7. A fragrance composition comprising a compound according to claim 1 and at least one other fragrance ingredient.

8. A perfumed product comprising a perfumed product base and at least one compound according to claim 1.

9. A perfumed product according to claim 8, selected from fine perfumery, fabric care, household products, beauty and personal care products and air care products.

10. A precursor capable of generating a compound according to Formula (I), having the Formula (II):



(II)

in which X is selected from SR^5, NHR^6 and NR^6R^7, R^5, R^6 and R^7 being selected from linear or branched C_1-C_{15} alkyl, a C_3–C_8 cycloalkyl or an aryl substituent, both optionally substituted with linear or branched C_1–C_7 alkyl groups or, in the case of NR^6R^7, R^6 and R^7, together with the nitrogen atom to which they are attached, form part of a polymeric entity;

11. A method of providing in a fragrance application a compound according to claim 1, comprising

(i) preparing a precursor according to claim 8;

(ii) adding the compound of Formula II to an application; and

(iii) subjecting the application to conditions that will result in the generation of a compound according to claim 1.

12. Use in a fragrance application of a compound according to claim 8 for the *in situ* generation of a compound according to claim 1.

13. A method of providing in a fragrance application a fruity-floral fragrance note with reduced skin sensitization, comprising the addition to a fragrance application base of a compound according to claim 1.

14. Method according to claim 13, wherein both R^1 and R^2 are hydrogen.

15. Method according to claim 14, wherein R^4 is selected from methyl and ethyl., or wherein R^3 and R^4 together form a cyclopentyl ring (n = 1).

16. Method according to claim 15, in which the compound is selected from the group consisting of:
(2*E*,1'*R**,2'*S**)-2-methyl-1-(2',6',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one,
(2*E*,1'*R**,2'*R**)-2-methyl-1-(2',6',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one,
(2*E*,6'*R**,7'*S**)-2-methyl-1-(7'-methylspiro[4.5]dec-8'-en-6'-yl)but-2-en-1-one,
(2*E*,6'*R**,7'*R**)-2-methyl-1-(7'-methylspiro[4.5]dec-8'-en-6'-yl)but-2-en-1-one,
(2*E*)-1-(2',6'-dimethylcyclohex-3'-en-1'-yl)-2-methylbut-2-en-1-one,
(2*E*)-1-(6'-ethyl-2'-methylcyclohex-3'-en-1'-yl)-2-methylbut-2-en-1-one,
(2*E*)-2-methyl-1-(1',2',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one,
(2*E*,1'*R**,2'*S**)-2-methyl-1-(2'-methylcyclohex-3'-en-1'-yl)but-2-en-1-one , and
(2*E*,1'*R**,2'*R**)-2-methyl-1-(2'-methylcyclohex-3'-en-1'-yl)but-2-en-1-one.

17. Method according to claim 16, in which the compound is (2*E*,1'*R**,2'*S**)-2-methyl-1-(2',6',6'-trimethylcyclohex-3'-en-1'-yl)but-2-en-1-one