

Title (en)

IMPROVED CITRAL DERIVATIVES

Title (de)

VERBESSERTE ZITRALDERIVATE

Title (fr)

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Application
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- US 34858002 P 20020115
- US 37791402 P 20020503
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- US 0222120 W 20020712
- US 0222441 W 20020712

Abstract (en)

[origin: GB2383327A] Improved citral derivatives, that have a longer useful shelf life than citral fragrances and flavorings, are disclosed. In one embodiment, the derivatives are prepared by replacing one or more double bonds in citral with a cyclopropyl group, which can be unsubstituted, or substituted with one or two lower alkyl, preferably methyl groups. The alkyl groups can optionally be substituted, for example, with electron donating groups, electron with drawing groups, groups which increase the hydrophilicity or hydrophobicity, and the like. In the derivatives the aldehyde group may be replaced with a nitrile, methyl ether or acetal group. The acetal groups can provide the compounds with a long lasting flavor or fragrance, where the acetals slowly hydrolyze to provide the aldehyde group in citral. Examples of suitable articles of manufacture include candles, air fresheners, perfumes, disinfectant compositions, hypochlorite (bleach) compositions, beverages such as beer and soda, denture cleanser tablets and flavored orally-delivered products such as lozenges, candies, and the like. The derivatives preferably have the structure: <EMI ID=1.1 HE=22 WI=61 LX=576 LY=1907 TI=CF> <PC>wherein Z is O, S, CR 2 or a double or a single bond provided at least one Z is O, S or CR 2 ; and X is a nitrile, methyl ether, or acetal group.

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IPC 8 full level

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CPC (source: EP)

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C-Set (source: EP)

C07C 45/69 + C07C 47/225

Citation (search report)

See references of WO 03053901A1

Citation (examination)

- DATABASE CROSSFIRE
- SCHELLER M.E. ET AL: "Photochemical reactions. Photochemistry of acylsilanes: photolysis and thermolysis of cyclopropyl silyl ketones", HELVETICA CHIMICA ACTA, vol. 73, no. 4, 20 June 1990 (1990-06-20), pages 922 - 931, XP001540007, DOI: doi:10.1002/hlca.19900730420

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