Abstract:
The composition of nail gel where the fragrance is added to the basic UV or LED nail gels or gel nail polish - the fragrance which provides the any fragrance/ aroma of the gel materials during the application, but also after subsequent polymerization, during a few days.
UV and LED Nail Gels and Gel Nail Polishes

Technology Area

This technical solution concerns the composition of UV or LED Gel for the modeling of artificial nails, Gel for strengthening of natural nails, Coloured Gels and Gel Nail Polishes which contain a compound for providing a fragrance during the application of these materials and also after their subsequent polymerization which gives a therapeutic-aroma effect to these materials.

Present condition of Technology

Nowadays nail gels are made on the basis of Polyurethane metalaclrylate prepolymer of resins, Polyurethane acrylate prepolymer of resins, Di-HEMA Trimethylhexil of Bicarbonates, Trimethyleneglycol of Dimetacrylates, where the components like Benzophenon are contained. The known compositions are these where the coloured pigment is added to the basic gel for achieving the various colours and shades of these materials and where the glucocorticosteroid is added to the gel for treatment of bacterial infection or mold of nails or other ingredients providing e.g. smaller nail chipping.

The disadvantage of all existing compositions of nail gels and gel nail polishes is the fact that during the application these materials smell of chemical components contained in the gel and after the polymerization they have usually no fragrance.

Principle of Technical Solution

The above mentioned disadvantages are removed by the composition of nail gel according to the technical solution where the fragrance is added to the basic UV or LED nail gels or gel nail polish - the fragrance which provides the any fragrance/aroma of the gel materials during the application, but also after subsequent polymerization, during a few days.

Examples of Technical Solution conduct
Nail gel contains about 45% Polyurethane methacrylate prepolymer of resins, about 40-50% Polyurethane acrylate prepolymer of resins, 2% 1-hydroxycyclohexylphenylketone, 2% Benzophenone, 0.1% TiO2, 0.1% Carmine red and 2.8% fragrance Malus domestica -fragrance (green apple). This composition gives the fragrance of green apple to the gel material. In the form of gel when applied on the nails and after the polymerization of UV or LED radiance it still releases the fragrance of green apple for a few days. These materials can obtain any aroma/fragrance dependent on the character of the added component which lasts during the application, and also after the polymerization of these gel materials, thereby these materials obtain aroma-therapeutic effects.

**Industrial Efficiency**

The above mentioned composition of nail gels is usable for modeling gels designed for professional use, and also for coloured gels designed to create Nail Design and for the Gel Nail Polishes where all these materials are harden by UV or LED radiance.
Claims for Protection

1. UV and LED nail Gels, Coloured UV Gels and UV Gel Nail Polishes which are harden by UV or LED radiance characterized in that the fragrance is added to the known composition, i.e. any aroma/fragrance, within 0.01 % to 15 % of weight.
**INTERNATIONAL SEARCH REPORT**

**International application No.**

PCT/CZ2011/000094

**A. CLASSIFICATION OF SUBJECT MATTER**

INV. A61K8/29 A61K8/35 A61K8/36 A61K8/40 A61K8/92 A61Q3/02 A61Q13/00 A45D31/00

**ADD.**

According to International Patent Classification (IPC) or both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

A61K A61Q A45D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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**O** document referring to an oral disclosure, use, exhibition or other means  
**P** document published prior to the international filing date but later than the priority date claimed

**Date of the actual completion of the international search**

18 April 2012

**Date of mailing of the international search report**

08/05/2012

**Name and mailing address of the ISA**

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016

Tulberg, Erik
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