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Anmelde-Nr:
Application No:
Demande n°:

10 763 405.

The examination is being carried out on the following application documents

Description. Pages

29 as published

Claims. Numbers

10 filed in electronic form on

10-06-2014

1 Citations

The following documents have been submitted by a third party

The numbering will be adhered to in the rest of the procedure.

D14: Formulation ID: JA7/418A

D15: Formulation ID: JA6/146A

D16: Formulation ID: AA20/226G

D17: Formulation ID: WA1/254F

D18: Formulation ID: AH3/711B

D19: Formulation ID: RS/840

D20: Formulation ID: RS/992

2 Amendments (Article 123(2) EPC)

2.1 Present claim 1 seems to be based on claims 1-5 and 39 as originally filed in combination with paragraph [0081] of the application as originally filed.

In paragraph [0081] it is indicated that the anthocyanin is dissolved in water, ethanol or glycerol at a pH between 2 and 7 at a specific temperature and is then formulated into a delivery base formulation. The pH of the delivery base formulation is not defined. Thus the teaching of the application as filed does not correspond to the combination of features defined by present claim 1, since it is not derivable that the final composition applied to hair has to have a pH between 2 and 7.

Thus, the requirements of Article 123(2) EPC are not met by present claim 1.

2.2 Present claim 1 moreover is limited by the teaching in paragraph [0042] as originally filed ("in the absence of..."). The embodiment described in paragraph [0042] is independently described from the embodiment in paragraph [0081] as originally filed. No basis for the concrete combination of these features can be found in the application as originally filed, contrary to the requirements of Article 123(2) EPC.

2.3 The same argument applies in principle to present claims 6 and 7. Claims 29-33 as filed related to a formulation which was not necessarily directly applied to hair. In fact the teaching of claims 29-33 as filed corresponds to the teaching in paragraph [0081] which relates to the formulation which is mixed with the delivery base formulation.

Thus, the requirements of Article 123(2) EPC are not met by present claims 6 and 7.

3 Novelty (Article 54 EPC)

3.1 The present application does not meet the requirements of Article 52(1) EPC, because the subject-matter of claims 1-10 is not new in the sense of Article 54 (1) and (2) EPC.

3.2 A third party observation has been filed. As evident from the documents cited in the third party observation (D14-D20) it is common practice to use anthocyanins for dyeing hair. The dyeing compositions described in the documents cited by the third party seem to contain water or alcohol. Arbitrarily using/replacing commonly used solvents such as water, ethanol or glycerol comes within the customary practice of the skilled person. Moreover, the compositions cited by the third party observation also seem to have a pH close to neutral due to the use of milk, rain water, etc. as the solvent.

Thus, the pH requirement defined in present claim 1 seems to be fulfilled (Guidelines Chapter G, VI, 6).

The compositions disclosed in the third party observation are used for hair dyeing. Since the same active hair colourants (the same fruits, thus the same anthocyanins) are used at the same conditions as proposed by present claim 1 it has to be concluded that the same type of semi-permanent hair dyeing is achieved.

Thus, the subject-matter of present claims 1-10 lacks novelty over the citations of the third party observation.

3.3 The following documents disclose hair colouring methods according to present claims 1-10.

3.3.1 **WO-A-2007/007936** (D4, claim 1, examples 1-3) discloses a composition for hair dyeing comprising a hot water mulberry extract. Thus, D4 uses the same fruits (mulberries) and the same extraction method as proposed by the present application and therefore the same ingredients (anthocyanin) have to be present. The compositions illustrated in the examples of D4 comprise solvents such as water and alcohol. Moreover, the compositions of examples 2 and 3 do not contain any alkaline pH adjuster. The composition of example 3 contains even citric acid. Thus it has to be concluded that the pH of these compositions is within the claimed range from 2-7 (Guidelines Chapter G, VI, 6).

The applicant argued that the teaching of D4 was not clear enough to describe a concrete hair colouring process using only the fruit extracts. However in all examples it is explicitly indicated that the mulberry extract is a "composition for hair dye of the present invention"). Therefore D4 explicitly teaches that the mulberry extracts are used for hair dyeing.

The present claims therefore lack novelty over D4.

3.3.2 **WO2010/006957** (D12, state according to Article 54(3) EPC, examples) discloses hair dyeing compositions comprising plant fruit extracts such as elderberry extract or grape extract. The same fruits as suggested by present claim 1 (grapes) are extracted by the same method as suggested by the present application (extraction with water). Thus, the same ingredients (anthocyanin) have to be present. The compositions are used at pH 6 and contain glycerin, water and ethanol.

4 **Inventive Step** (Article 56 EPC)

4.1 The present application is directed to hair dyeing compositions comprising polyphenols derived from a botanical source. This kind of hair coloring composition is known from the art as evidenced from the cited prior art such as D2, D4, D5 or D7. These documents therefore deal in principle with the same general problem as the present application. Therefore any of these documents could be regarded as the closest prior art, once the applicant could identify a novel combination of features.

4.2 **Present claim 1 cannot be distinguished from the teaching of D4 (examples 2 and 3) or D14-D20.**

The present application does not demonstrate any unexpected effect achieved due to the use of a specific botanical source for manufacturing the extract, a specific extraction process or due to the use of any further conventional hair treatment step such as a further conditioning step, etc. Moreover, documents D4 and D14-D20 identify fruit extracts as potential coloring agents.

Thus, starting from any of documents D4 or D14-D20 the objective technical problem can possibly only be regarded as to provide a mere alternative.

Arbitrarily modifying a known composition, a known manufacturing method or a known hair coloring method comes within the customary practice of the skilled person. Therefore the skilled person makes use of alternative botanical sources, extraction solvents, extraction additives, hair coloring composition additives, etc. within the experimental routine in order to provide a mere alternative.

Even when considering possible combinations of the dependent claims the subject-matter of present claims 1-10 therefore lacks an inventive step, contrary to Article 56 EPC.

4.3 **US-B-6 241 785** (D5, examples 3-5) discloses hair dyeing composition comprising as polyphenol apiginidin and trihydroxyflavylium.

The subject-matter of present claim 1 differs from the explicit teaching of D5 in that the colouring actives contain a hydroxy group or glycosyl group at the position of R3 as indicated in formula III of present claim 1.

The present application does not demonstrate any unexpected effect achieved due to the use of an alternative anthocyanin compound.

The applicant argued that anthocyanins provide a hair colouring free of hazards. The application does not demonstrate that anthocyanins provide less hazards than the similar compounds proposed by D5. Moreover, the fact that the anthocyanins are derived from plants might be a good marketing argument, however not all actives derivable from plants and fruits are necessarily free of hazards since a lot of poisonous fruits and plants exist.

Also the fact that certain colour tone can be achieved by anthocyanins is not a specific unexpected effect, since the structurally very similar compounds proposed by D5 are known to provide a colouring effect as well as the corresponding fruit extracts as evidenced by D14-D20. A certain variation of the colouring tone by changing the substituents on a known basic structure is expected by the skilled person working in the field of hair colourings.

Present claim 1 is neither restricted to compounds nor to certain conditions which would limit the method to a method achieving only one specific hair colour. Thus any effects claiming a specific colour shade do not seem to be of relevance for the scope of present claim 1. If the applicant sees his invention in providing blue compounds for providing a brown hair coloring (as argued in the last submission) then the scope of protection has been limited accordingly (e.g. according to paragraph [0087] a pH <4 seems to be essential) and the applicant has to demonstrate that all possible fruit extracts listed in present claim 1 containing all possible anthocynins achieve this specific effect.

In absence of an unexpected effect rendered credible over the whole scope of protection, the objective technical problem can possibly only be regarded as to provide a mere alternative when starting from document D5 as the closest prior art.

Arbitrarily modifying a known active comes within the customary practice of the skilled person, in particular since the general class of compounds is a known hair colouring active.

The subject-matter of present claims 1-10 therefore lacks an inventive step, contrary to Article 56 EPC.

- 5 It is not at present apparent which part of the application could serve as a basis for a new, allowable claim.
Should the applicant nevertheless regard some particular matter as patentable an independent claim including such matter should be filed. The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof.
- 6 When filing amended claims the applicant should at the same time bring the description into conformity with the amended claims. Care should be taken during revision, especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed (Article 123(2) EPC).
The applicant should clearly **identify the amendments** carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to **indicate accurately the passages** of the application as filed **on which these amendments are based**.
The amendments are preferred to be carried out in handwritten form on a copy of the relevant parts of the application as filed accompanied by an additional clean copy of corresponding pages.