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(54) Title: PROCESS FOR DYEING KERATIN FIBRES USING A DIRECT DYE BEARING A DISULFIDE/THIOL/PROTECTED THIOL FUNCTION AND WATER VAPOUR

(57) Abstract: The invention relates to a process for dyeing and/or lightening keratin fibres such as the hair, using i) at least one cationic direct dye bearing a disulfide, thiol or protected thiol function especially of formula (I)as defined in the description and ii) water vapour. The invention also relates to the use i) of at least one cationic direct dye bearing a disulfide, thiol or protected thiol function combined with ii) water vapour, for dyeing and lightening keratin fibres, and to the use of water vapour for grafting onto keratin fibres dyes bearing a disulfide, thiol or protected thiol function. The process used and the use of thiol, protected thiol or disulfide dyes combined with water vapour makes it possible especially to obtain a long-lasting coloration on keratin fibres without the use of a reducing agent and without odour.

## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER A61K8/46 INV. A61K8/19 A61Q5/10 A61K8/49 A45D19/16 ADD. According to International Patent Classification (IPC) or to 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, WPI Data, BEILSTEIN Data, CHEM ABS Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category' WO 2008/019977 A2 (CIBA SC HOLDING AG [CH]; ELIU VICTOR [DE]; FROEHLING BEATE 1-19,21,Χ 22 [DE]; KAUFF) 21 February 2008 (2008-02-21) Υ claim 8 1-23 JP 7 187961 A (KAO CORP) 1-23 25 July 1995 (1995-07-25) abstract DE 10 2007 037427 A1 (HENKEL AG & CO KGAA 1-23 Α [DE]) 12 February 2009 (2009-02-12) paragraph [0149] X See patent family annex. Further documents are listed in the continuation of Box C. Special categories of cited documents "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be special reason (as specified) considered to involve an inventive step when the document is combined with one or more other such documents, such combination "O" document referring to an oral disclosure, use, exhibition or other being obvious to a person skilled in the art "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 3 June 2013 21/06/2013 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016 Werner, Stefan

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Information on patent family members

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