

Description

This invention relates generally to the field of individual grooming, and more particularly to an improved method for selecting proper colors of individual articles of apparel, cosmetic make up or hair tint, the method being suitable for use by persons having only ordinary skills.

It has long been appreciated that garments, cosmetic make up or hair tint, of particular colors are more flattering to a wearer than similar items of other colors. Many persons, particularly women, possess the ability almost instinctively to make a selection, without appreciating the basis which enables them to make a subjective consideration and decision. Some persons are aware that the proper selection is directly related to the complexion of the wearer, but have not appreciated the actual relationship which exists. As a result, it is customary to try garments, cosmetic make up or hair tint on a trial basis, and observing the appearance in a mirror, or consulting with a salesperson.

The present invention is defined in the method of claim 1 and the color chart of claim 4.

I have found that the process of color selection can be materially simplified by the provision of standard categories, relatively few in number, of skin colors into which both Caucasian and American black persons may be classified, depending upon the underlying or subcutaneous skin color. Practically all such normal persons have an underlying tone of either blue or yellow-red in varying degrees of intensity, which results in the presence of a readily determined color temperature which may be measured by a draping technique done visually or by a color temperature measuring device or spectrophotometer. The output of a color temperature measuring device is a measure of the yellow to blue content of the light it receives. Where such temperature is to be measured to relatively large tolerances, it may be accomplished by using hand held color temperature meters. The result with a spectrophotometer will be a plottable curve covering the visual spectrum, which will show strength of varying degrees over the spectrum. This curve is matched with curves which are obtained by similar measurements of colors on fabrics or paper samples, which will exhibit similar blue and yellow red reflective properties. Practically all of the colors in the spectrum are available in each of the categories, for selection, provided that the particular color exhibits a curve which is similar to that obtained by measuring the skin pigmentation of the individual user.

The invention may be carried into practice in various ways and some embodiments will now be described by way of example with reference to the accompanying drawings, in which:-

Fig. 1 is a diagrammatic illustration of a color chart collecting together colors compatible with one category of skin color; and

Fig. 2 is a perspective view of an assemblage of fabric samples having colors compatible with one category of skin color.

In accordance with the invention, a first step consists in the establishment of a number of skin color categories. Each of the colors in each category exhibits a substantially similar plotted curve extending over the visible spectrum, obtained by spectroanalysis.

I have found that a compilation of four sets of basic color ranges in material fabric can be made that is most compatible with the four ranges of basic skin pigment undertones into which the great bulk of the population may be classified. These skin and fabric color categories are as follows.

Classification A includes almost all of the colors of the visible spectrum. They have the highest intensity (50 to 100%) per spectrum analysis of the shorter wave lengths of the skin color spectrum, that is to say, the "blue base" tones. Black is also in this classification.

Classification B also includes most all colors, with the exclusion of black. They have the next highest or one to fifty percent intensity per spectrum analysis of the shorter wave lengths of the skin color spectrum, or the "blue based" tones.

Classification C also includes most of the colors, and these have a one to fifty percent intensity of the yellow red tones, or the longer wave lengths of the skin color spectrum, per spectrum analysis.

Classification D, again, includes most of the colors, and they have the highest intensity of the yellow red tones, fifty to one hundred percent, or the longest wave lengths of the skin color spectrum, per spectrum analysis.

As both the skin color undertones of an individual person and the labeling of the color of a dyed piece of material can be classified into one of the above four categories, it is possible to match the skin of the user to the material and determine the most compatible colors in a given material a person may wear, or use on their person. Once the classification of the individual user is established, it is possible to provide that person with a simplified color chart 10, as shown for example in Fig. 1, and the selection of a garment or articles to be worn may be matched as closely as possible from the standpoint of color to a color 12 on the chart.

As a next step in the disclosed method, a series of color charts 10 are prepared in which suitable colors 12 for each category are assembled. This might be done by displaying the colors on a single surface, or preferably individual swatches of fabric 16 exhibiting the proper colors can be assembled in a convenient package 20, as shown

for example in Fig. 2.

Individual testing of a subject is conducted using a draping technique of material around the shoulders, near the face, the materials being of the full color spectrum, but being either blue based or red yellow based and observed visually as to compatibility to the skin pigment of the subject, or by use of a spectrophotometer, or by means of a specialized color temperature meter calibrated to indicate broadly in which of the four categories A through D of the skin of the subject is properly classified. Once this reading has been made, the subject is supplied with the appropriate color chart, and selection of a garment, cosmetic make up or hair tint can be guided by comparing the apparent color thereof with colors 12 on the chart 10. While in most cases, the user will want to try the garment, make up or hair tint, as a practical matter, the chart is useful in facilitating an initial rejection of an item based upon improper color alone.

It will be understood by those skilled in the art that it is possible to provide a greater number of categories with correspondingly greater precision relative to the availability of colors. I have found, however, for practical purposes, the four category system is entirely adequate, and greater precision can be used in such case, with regard to the selection of colors to be included in the color chart relating to a particular category, thus facilitating the testing of an individual user which may be conducted by those who are relatively unskilled in the physical sciences.

Claims

1. A method of assigning to nonskin matter a skin color compatibility classification characterised by: providing a plurality of color classification categories based exclusively upon the measurable skin color content in the bluer and yellow regions of the spectrum; identifying the compatibility of at least one color of the nonskin matter with one of the classification categories; and assigning one of the color classifications to the nonskin matter based on the identified compatibility.
2. A method as claimed in claim 1, characterised by providing a plurality of colors assigned to the same color classification in a color chart.
3. A method as claimed in claim 1, characterised by collecting together in an assemblage a plurality of samples of nonskin matter having the same color classification.
4. A color chart characterized by representations of colors of nonskin products such as gar-

ments, cosmetics, hair tint or the like, and the representations of colors being assembled together and being of colors of a single classification compatible with a skin color classification category based exclusively upon measurable skin color content in bluer and yellower spectral regions.

Patentansprüche

1. Verfahren zur Zuordnung einer Hautfarbenverträglichkeitsklassifikation an eine Nichthaut-Materie, dadurch gekennzeichnet, daß eine Mehrzahl von Farbklassifizierungskategorien geschaffen werden, die ausschließlich auf dem meßbaren Farbgehalt der Haut in den blauerer und gelberer Bereichen des Spektrums basieren; die Verträglichkeit mindestens einer Farbe der Nichthaut-Materie mit einer der Klassifizierungskategorien festgestellt wird; und der Nichthaut-Materie auf Grundlage der erkannten Verträglichkeit eine der Farbklassen zugeordnet wird.
2. Verfahren nach Anspruch 1, dadurch gekennzeichnet, daß eine Mehrzahl von Farben bereitgestellt wird, die einer Farbtabelle der gleichen Farbkategorie zugeordnet sind.
3. Verfahren nach Anspruch 1, dadurch gekennzeichnet, daß eine Mehrzahl von Proben von Nichthaut-Materie mit der gleichen Farbklassifikation in einer Kollektion zusammengestellt werden.
4. Farbtabelle, gekennzeichnet durch die Darstellung von Farben von Nichthaut-Produkten wie Kleidung, Kosmetika, Haartönungen oder dergleichen und die Darstellung einer Farbzusammenstellung, die aus Farben einer einzigen Klasse besteht, welche mit einer Hautfarbenklassifizierungskategorie, die ausschließlich auf dem meßbaren Farbgehalt der Haut in den blauerer und gelberer Bereichen basiert, verträglich sind.

Revendications

1. Procédé pour attribuer à des matières étrangères à la peau une classification de compatibilité avec la couleur de la peau, caractérisé en ce qu'on prévoit une pluralité de catégories de classification des couleurs sur la base exclusivement du contenu chromatique de la peau mesurable dans les régions du bleu et du jaune du spectre; on identifie la compatibilité d'au moins une couleur des matières étrangères à la peau avec une des catégories de



for example in Fig. 2.

Individual testing of a subject is conducted using a draping technique of material around the shoulders, near the face, the materials being of the full color spectrum, but being either blue based or red yellow based and observed visually as to compatibility to the skin pigment of the subject, or by use of a spectrophotometer, or by means of a specialized color temperature meter calibrated to indicate broadly in which of the four categories A through D of the skin of the subject is properly classified. Once this reading has been made, the subject is supplied with the appropriate color chart, and selection of a garment, cosmetic make up or hair tint can be guided by comparing the apparent color thereof with colors 12 on the chart 10. While in most cases, the user will want to try the garment, make up or hair tint, as a practical matter, the chart is useful in facilitating an initial rejection of an item based upon improper color alone.

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Claims

1. A method of assigning to nonskin matter a skin color compatibility classification characterised by: providing a plurality of color classification categories based exclusively upon the measurable skin color content in the bluer and yellower regions of the spectrum; identifying the compatibility of at least one color of the nonskin matter with one of the classification categories; and assigning one of the color classifications to the nonskin matter based on the identified compatibility.
2. A method as claimed in claim 1, characterised by providing a plurality of colors assigned to the same color classification in a color chart.
3. A method as claimed in claim 1, characterised by collecting together in an assemblage a plurality of samples of nonskin matter having the same color classification.
4. A color chart characterized by representations of colors of nonskin products such as gar-

ments, cosmetics, hair tint or the like, and the representations of colors being assembled together and being of colors of a single classification compatible with a skin color classification category based exclusively upon measurable skin color content in bluer and yellower spectral regions.

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1. Verfahren zur Zuordnung einer Hautfarbenverträglichkeitsklassifikation an eine Nichthaut-Materie, dadurch gekennzeichnet, daß eine Mehrzahl von Farbklassifizierungskategorien geschaffen werden, die ausschließlich auf dem meßbaren Farbgehalt der Haut in den blauerer und gelberer Bereichen des Spektrums basieren; die Verträglichkeit mindestens einer Farbe der Nichthaut-Materie mit einer der Klassifizierungskategorien festgestellt wird; und der Nichthaut-Materie auf Grundlage der erkannten Verträglichkeit eine der Farbklassen zugeordnet wird.
2. Verfahren nach Anspruch 1, dadurch gekennzeichnet, daß eine Mehrzahl von Farben bereitgestellt wird, die einer Farbtabelle der gleichen Farbkategorie zugeordnet sind.
3. Verfahren nach Anspruch 1, dadurch gekennzeichnet, daß eine Mehrzahl von Proben von Nichthaut-Materie mit der gleichen Farbklassifikation in einer Kollektion zusammengestellt werden.
4. Farbtabelle, gekennzeichnet durch die Darstellung von Farben von Nichthaut-Produkten wie Kleidung, Kosmetika, Haartönungen oder dergleichen und die Darstellung einer Farbzusammenstellung, die aus Farben einer einzigen Klasse besteht, welche mit einer Hautfarbenklassifizierungskategorie, die ausschließlich auf dem meßbaren Farbgehalt der Haut in den blauerer und gelberer Bereichen basiert, verträglich sind.

Revendications

1. Procédé pour attribuer à des matières étrangères à la peau une classification de compatibilité avec la couleur de la peau, caractérisé en ce qu'on prévoit une pluralité de catégories de classification des couleurs sur la base exclusivement du contenu chromatique de la peau mesurable dans les régions du bleu et du jaune du spectre; on identifie la compatibilité d'au moins une couleur des matières étrangères à la peau avec une des catégories de



classification; et on attribue une des classifications de couleurs à la matière étrangère à la peau sur la base de la compatibilité identifiée.

2. Procédé suivant la revendication 1, caractérisé en ce qu'on prévoit une pluralité de couleurs attribuée à la même classification de couleurs dans une table de couleurs. 5
3. Procédé suivant la revendication 1, caractérisé en ce qu'on réunit en un ensemble une pluralité d'échantillons de matières étrangères à la peau présentant la même classification de couleurs. 10
4. Table de couleurs caractérisée par des représentations de couleurs de produits étrangers à la peau comme des vêtements, des produits de beauté, des teintures capillaires ou des produits analogues, les représentations de couleurs étant rassemblées et concernant les couleurs d'une seule classification compatible avec une catégorie de classification de couleur de la peau sur la base exclusive du contenu chromatique de la peau mesurable dans les régions du bleu et du jaune du spectre. 15
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