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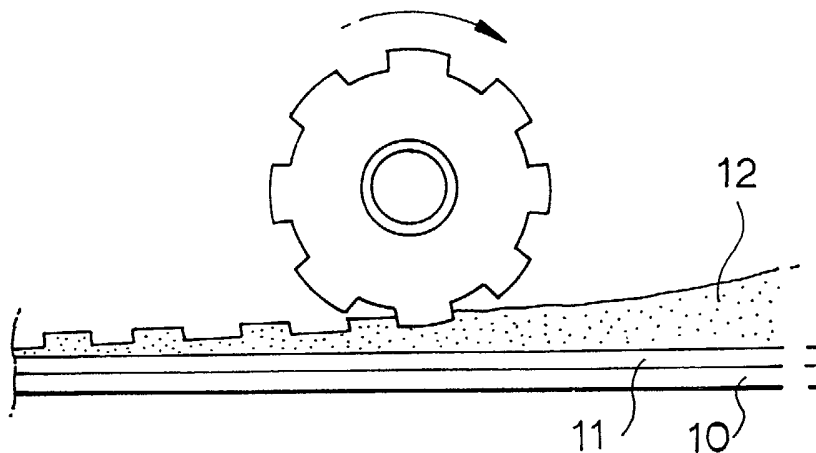
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ABRASIVE



(57) Abstract: Disclosed is an abrasive for use in polishing furniture, metals and plastics and in preparing cosmetic products, comprising a synthetic resin base (10), an adhesive layer (11) formed on the base (10) using an adhesive, and an abrasive layer (12) obtained by coating an adhesive and a mixture of pearl powder, stone powder and a perfume on a surface of the adhesive layer (11). The abrasive of the present invention exhibits colors, as well as figures and patterns on the surface of the abrasive layer, thus improving its aesthetic effects. Further, the abrasive optionally contains perfumes, thus enhancing olfactory effects.

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ABRASIVE

TECHNICAL FIELD

5 The present invention relates to an abrasive having an abrasive layer including stone powder and pearl powder, wherein the abrasive layer is bound to the abrasive by an adhesive. More particularly, the present invention relates to an abrasive having figures and patterns and emitting
10 fragrance, thus having various aesthetic effects which conventional abrasives including grindstones cannot provide.

PRIOR ART

15 It is well known that abrasive materials such as grindstones are used in preparing a variety of products. Such products are typically made of stone powder that cannot exhibit diverse colors, and are thus limited in their colors.

 Without distinction of their use, abrasive materials
20 for use in general polishing, which have simple colors and limited design, are generally utilized in cosmetic preparations.

 In spite of the fact that abrasives are used as cosmetic materials, they still do not offer diverse colors,
25 figures, patterns, fragrance and design, which are required

5 Because of having limits in their use and being applied
to both industrial and cosmetic products without particular
distinction, the conventional abrasives cannot support
specific features required in each of a variety of products.
Moreover, products prepared using such problematic abrasives
10 are dominant in the market. Therefore, there is a need for
development of abrasives capable of exhibiting diverse colors,
figures, design, etc., and thus improving qualities of
industrial and cosmetic products.

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metals and plastics, comprising a base, an adhesive layer formed on the base using an adhesive, and an abrasive layer obtained by coating an adhesive and an abrasive agent including pearl powder, stone powder and a perfume on a surface of the adhesive layer. Special figures and patterns are formed on the abrasive layer of the abrasive according to the present invention. In addition, according to applied products of the abrasive, a perfume may be added to the abrasive. The abrasive according to the present invention may be used in preparing industrial and cosmetic products. For example, special color, figure, pattern and perfume may be added to lumber using the abrasive of the present invention. Also, metals may be molded by an abrasive having a special figure, pattern, color and perfume according to the present invention.

To be used in cosmetic preparations for skin applications, the abrasive is prepared using a thermosetting silicon adhesive, which is not harmful to the body. When applied to the skin, cosmetic products including the resulting abrasive function to protect the skin from pollutants. In addition, the cosmetic products may be visually distinguished by their unique figures, patterns or perfumes exhibited by the abrasive contained therein.

The above and other objects, features and other advantages of the present invention will be more clearly understood from the following detailed description taken in
5 conjunction with the accompanying drawings, in which:

Fig. 1 is a schematic view showing an adhesive layer formed on a base according to the present invention;

Fig. 2 is a schematic view showing an abrasive layer coated on the adhesive layer of Fig. 1;

10 Fig. 3 is a schematic view showing a process of producing three dimensional figures and patterns on the abrasive layer of Fig. 2 to produce an abrasive according to the present invention; and

Fig. 4 is a schematic view showing the structure of an
15 abrasive according to an embodiment of the present invention.

BEST MODES FOR CARRYING OUT THE INVENTION

The present invention will be explained in more detail
20 with reference to the following example in conjunction with the accompanying drawings, as follows.

Fig. 1 shows an adhesive layer formed on a base according to the present invention, while Fig. 2 shows an abrasive layer coated on the adhesive layer of Fig. 1.

25 To prepare an abrasive of the present invention, an

adhesive layer 11 is formed on a base 10 by coating an adhesive on the base 10, and an abrasive layer 12 is formed on the adhesive layer 11 of the base 10.

The abrasive layer 12 includes stone powder, pearl powder, a perfume, and a thermosetting silicon adhesive.

In addition, hologram figures are engraved on a surface of the abrasive layer 12, with the result that the surface of the abrasive layer 12 becomes uneven.

Desired designs and perfumes may be obtained by forming the abrasive layer 12 using an abrasive agent including pearl powder, a coloring agent and a perfume.

With reference to Fig. 3 showing a process of producing three dimensional figures and patterns on the abrasive, special figures and patterns are partially or entirely imprinted on the abrasive layer 12, thereby producing an abrasive having desirable visual and olfactory effects.

Fig. 4 shows an abrasive for cosmetic or industrial applications, in which a buffering pad 40 is fixed between an adhesive layer 12 and a resin 30 supplying physical strength by an adhesive contained in the adhesive layer 12.

Taken together, the abrasive according to the present invention is prepared in a form of having special figures and patterns, and optionally perfumes, thereby exhibiting diverse designs and providing a unique aroma.

The present invention has been described in an illustrative manner, and it is to be understood that the terminology used is intended to be in the nature of description rather than of limitation. Many modifications
5 and variations of the present invention are possible in light of the above teachings. Therefore, it is to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

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INDUSTRIAL APPLICABILITY

As described hereinbefore, the abrasive according to the present invention is not harmful to the body, and provides diverse colors, perfumes, figures and patterns to
15 industrial and cosmetic products to which the abrasive is applied, resulting in improvement of olfactory and visual effects.

CLAIMS

1. An abrasive comprising a base, an adhesive layer formed on the base using an adhesive, and an abrasive layer
5 obtained by coating a thermosetting silicon adhesive and a mixture of pearl powder, stone powder and a perfume on a surface of the adhesive layer.

2. The abrasive as set forth in claim 1, wherein
10 hologram figures are formed on a surface of the abrasive layer and the resulting surface of the abrasive layer is uneven.

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FIG. 1

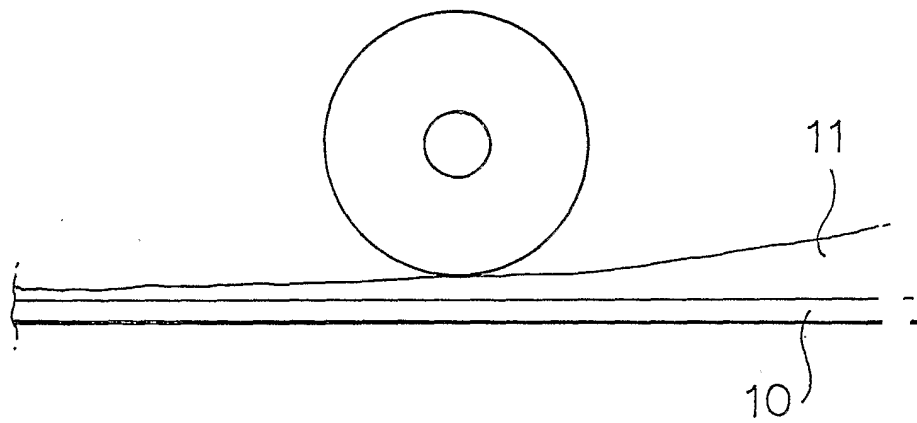
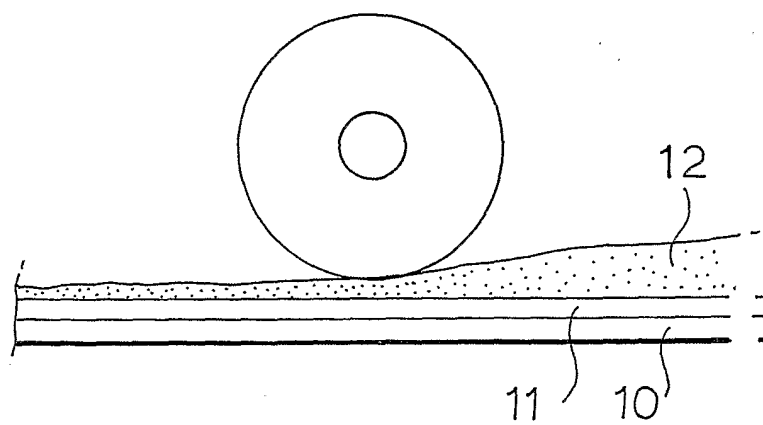


FIG. 2



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FIG. 3

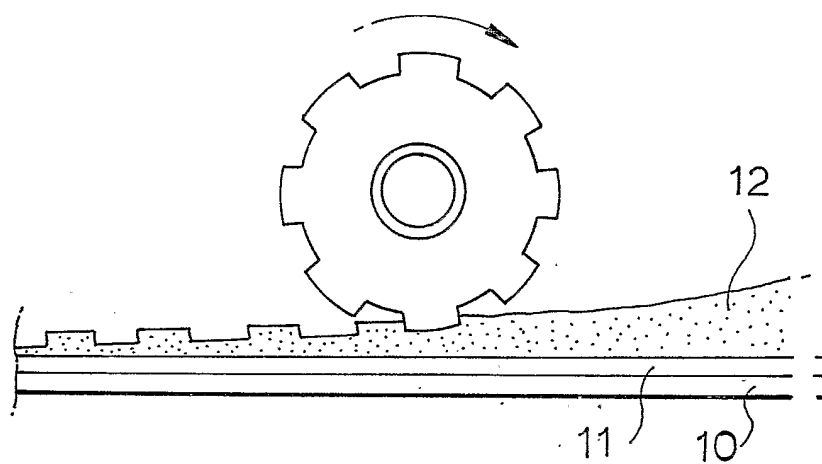
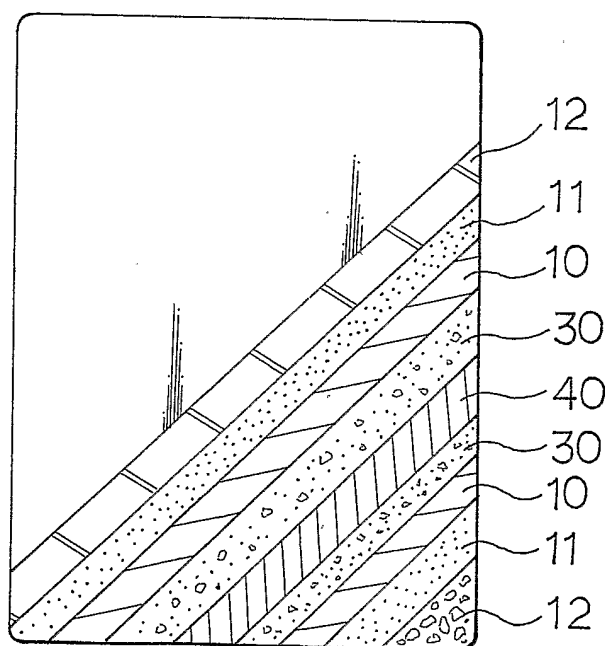


FIG. 4



INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC7 B24D 3/00

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)

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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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6056794 A (3M Innovative Properties Company) May. 2, 2000 see the whole document	1
A	US 5733176 A (Micron Technology, Inc.) Mar. 11, 2001 see the whole document	1
A	US 6286498 B1 (Chien-Min Sung) Sep. 11, 2001 see the whole document	1

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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