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(54) **Device for sandpapering surfaces**

(57) There is described a block for sandpapering which allows easy work on surfaces having contours shaped in any manner.

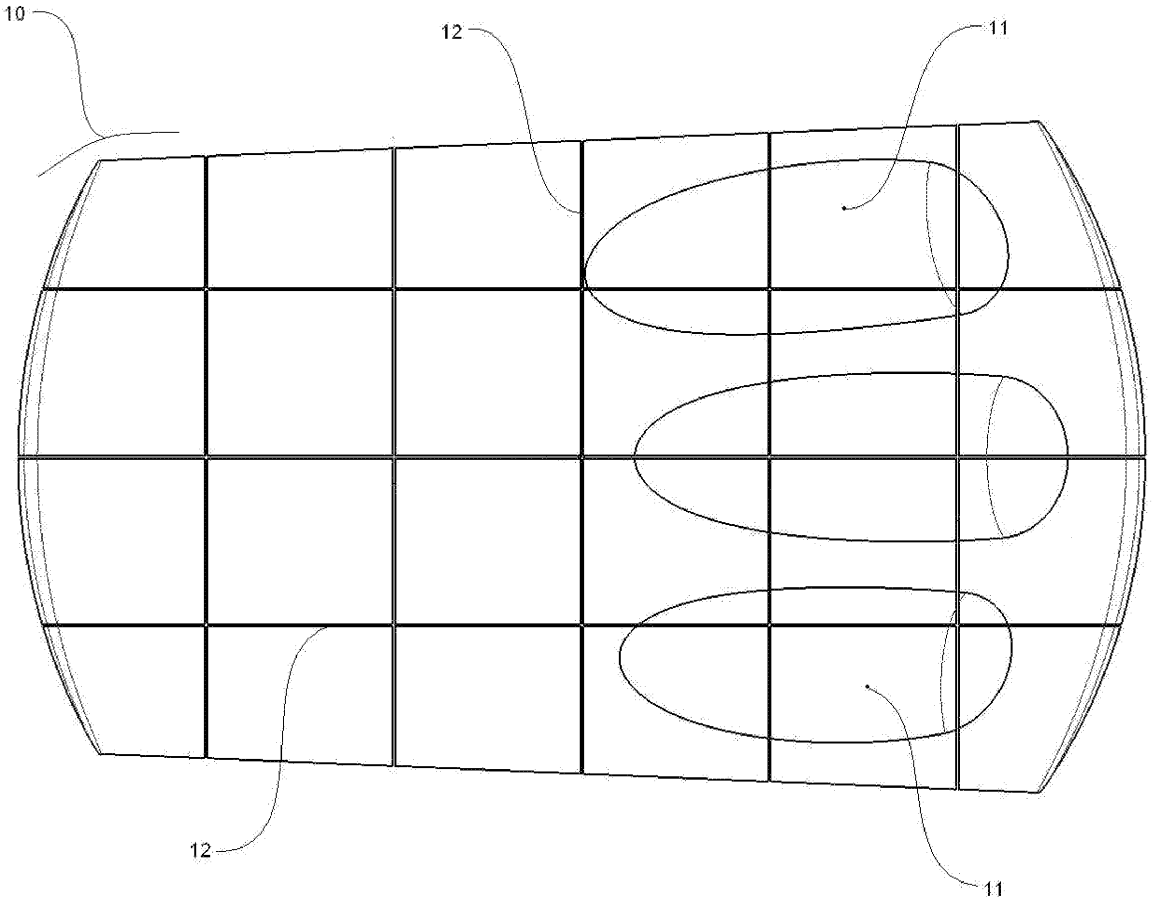

FIG. 1

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to the field of devices for sandpapering surfaces of any type.

STATE OF THE ART

[0002] As it is known, sheets are used to sandpaper surfaces, one of the surfaces of which comprises abrasive materials that perform the necessary smoothing action.

[0003] In order to be used, these sheets, of various shapes and sizes according to requirements, must be applied to appropriate support elements, called blocks, adapted to facilitate the sandpapering operation.

[0004] The blocks are made of rigid material so as to offer the operator a solid hold and at the same time provide a valid support for the abrasive sheets that are normally applied to the blocks using means such as Velcro®, which allow easily removable coupling thereof simply by tearing off, or smooth supports of various kinds through adhesive gripping.

[0005] Normally, the working surface of the block (i.e. the one to which the abrasive sheet is applied) is flat, although blocks in which said surface is concave or convex are also known, in order to be able to work on surfaces with rounded shapes, such as in the case of car body surfaces.

[0006] Nonetheless, although facilitating work, these blocks do not perfectly meet needs and, moreover, oblige the operator to make continuous changes to be able to work in the various points of the surface to be smoothed with the tool having the surface with the most suitable shape for the job.

[0007] It is therefore apparent that it would be extremely useful to be able to have blocks capable of easily adapting to the various contours, allowing perfect smoothing of any type of contour without having to use different blocks.

BRIEF DESCRIPTION OF THE FIGURES

[0008]

Fig.1 shows a plan view of a preferred embodiment of the block according to the present invention.

Fig. 2 shows an elevation of a preferred embodiment of the block according to the present invention.

Fig. 3 shows a first perspective view of a preferred embodiment of the block according to the present invention.

Fig. 4 shows a second perspective view of a preferred embodiment of the block according to the present invention.

SUMMARY OF THE INVENTION

[0009] There is described a block comprising a main body provided with a plurality of longitudinal and/or transverse cuts, such as to allow mutual partial detachment of the adjacent segments formed by said cuts, while allowing them to remain connected to the base of said main body.

DETAILED DESCRIPTION OF THE INVENTION

[0010] The present invention allows the aforesaid problems to be solved through a block comprising a main body 10, in turn comprising:

- an upper surface, which forms the handgrip for the user,
- a flat lower surface provided with appropriate reversible adhesive means,
- two optional flat side surfaces 13 optionally also provided with appropriate reversible adhesive means analogous to those above,

said adhesive means being adapted to reversibly engage - preferably by means of a Velcro® type coupling or by means of smooth supports of various kinds through adhesive gripping - with specific sheets or disks of abrasive material provided on the "inactive" surface" with appropriate reversible adhesive means of complementary type with respect to the analogous means present on the lower and side surfaces of said main body 10.

[0011] Said main body 10 further comprises a series of cuts 12, longitudinal and/or transverse, having a depth such as to allow mutual partial detachment of the adjacent segments formed by said cuts, while allowing them to remain connected to the base of said main body 10 or, at least, to said reversible adhesive means present on the lower surface and on the optional side surfaces thereof.

[0012] Said longitudinal and/or transverse cuts, optionally mutually orthogonal, allow the upper part of said main body 10 - the part in contact with the user - to be separated into segments of smaller dimensions adapted to be partially distanced from one another during use so as to deform said main body 10 and the lower surface thereof, in such a manner as to allow improved adhesion to the surfaces to be smoothed in the case in which they are not flat.

[0013] Preferably, the body 10 is made of mechanically resistant, flexible and elastic material.

[0014] If preferred, the upper surface can be ergonomically shaped and be provided with appropriate shaping 11 such as to facilitate holding and gripping thereof by the user.

[0015] If desired, the block according to the invention can be marketed in the form of a kit comprising shapes of different form and size and optionally one or more sheets or disks of abrasive material (optionally with dif-

ferent grit sizes to one another).

[0016] As can easily be understood, the block according to the invention allows immediate adaptation of the smoothing means to surfaces having any contour. In fact, as shown in the accompanying Figs. 3 and 4, the cuts made in the main body allow the segments to spread apart, thereby allowing the continuous surface of the block to take the desired curve (so as to adapt to that of the surface to be smoothed) through simple pressure exerted by the operator.

Claims

1. A block for sandpapering surfaces comprising a main body (10) in turn comprising:

   - an upper surface, which forms the handgrip for the user,
   - a flat lower surface provided with appropriate reversible adhesive means,

   characterized in that said main body (10) also comprises a series of longitudinal and/or transverse cuts (12) having a depth such as to allow mutual partial detachment of the adjacent segments formed by said cuts, while allowing them to remain connected to the base of said main body (10).

2. A block according to claim 1, **characterized in that** said main body (10) comprises two flat side surfaces (13) optionally also provided with said appropriate reversible adhesive means.

3. A block according to claims 1 - 2, **characterized in that** said cuts are longitudinal and transverse and arranged in a substantially mutually orthogonal manner.

4. A block according to claims 1 - 3, **characterized in that** said adhesive means are adapted to reversibly engage with specific sheets or disks of abrasive material provided on the "inactive" surface" with appropriate reversible adhesive means of complementary type with respect to the analogous means present on the lower and side surfaces (13) of said main body (10).

5. A block according to claims 1 - 4, **characterized in that** said cuts (12) allow the adjacent segments formed thereby to adhere only to said reversible adhesive means present on the lower surface and/or on the optional side surfaces (13) of said main body (10).

6. A block according to claims 1 - 5 **characterized in that** the upper surface of said main body (10) is ergonomically shaped and is provided with appropriate shaping (11) such as to facilitate holding and gripping thereof by the user.

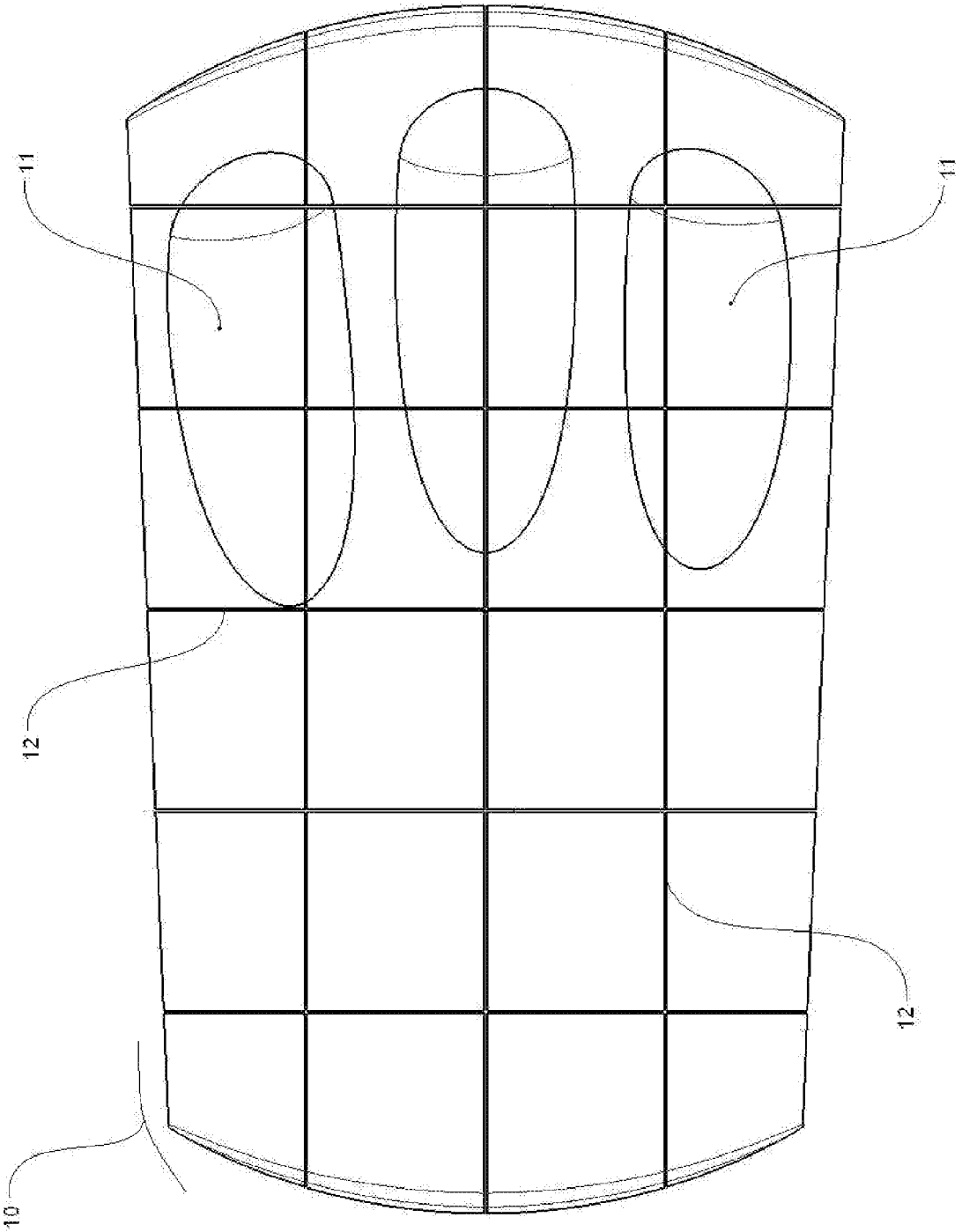

FIG. 1

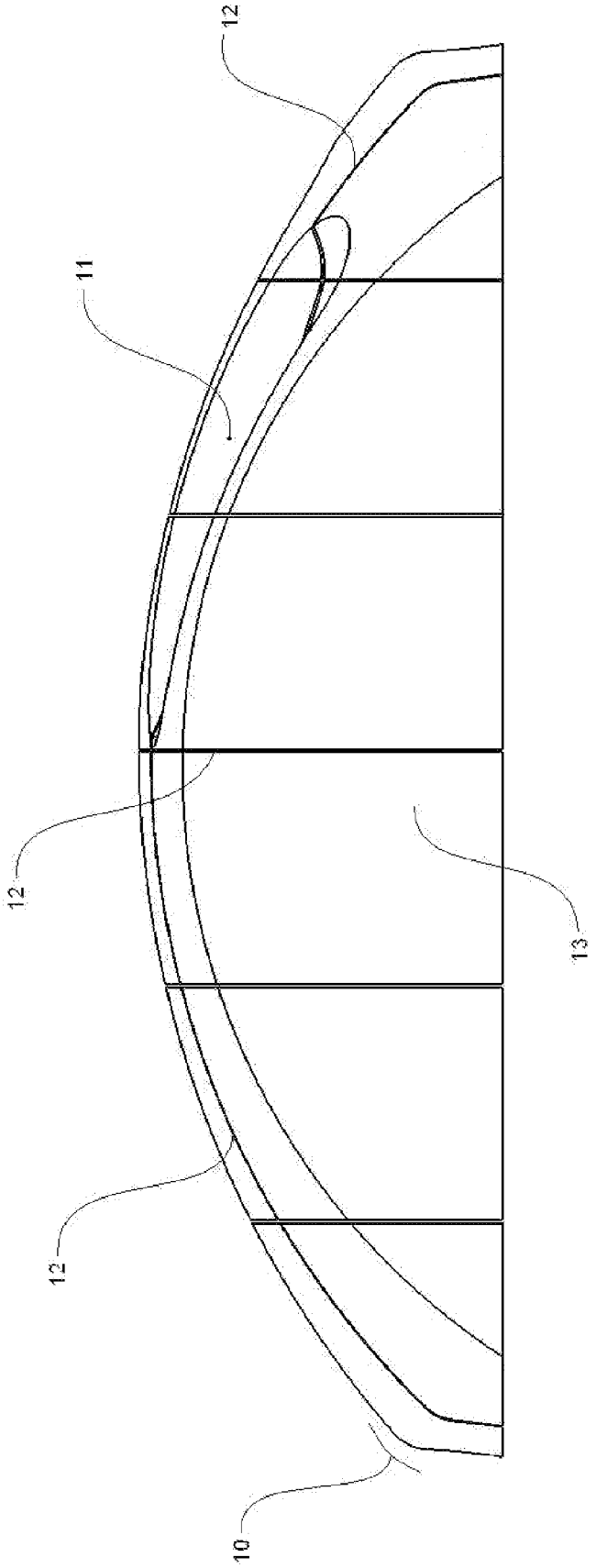

FIG. 2

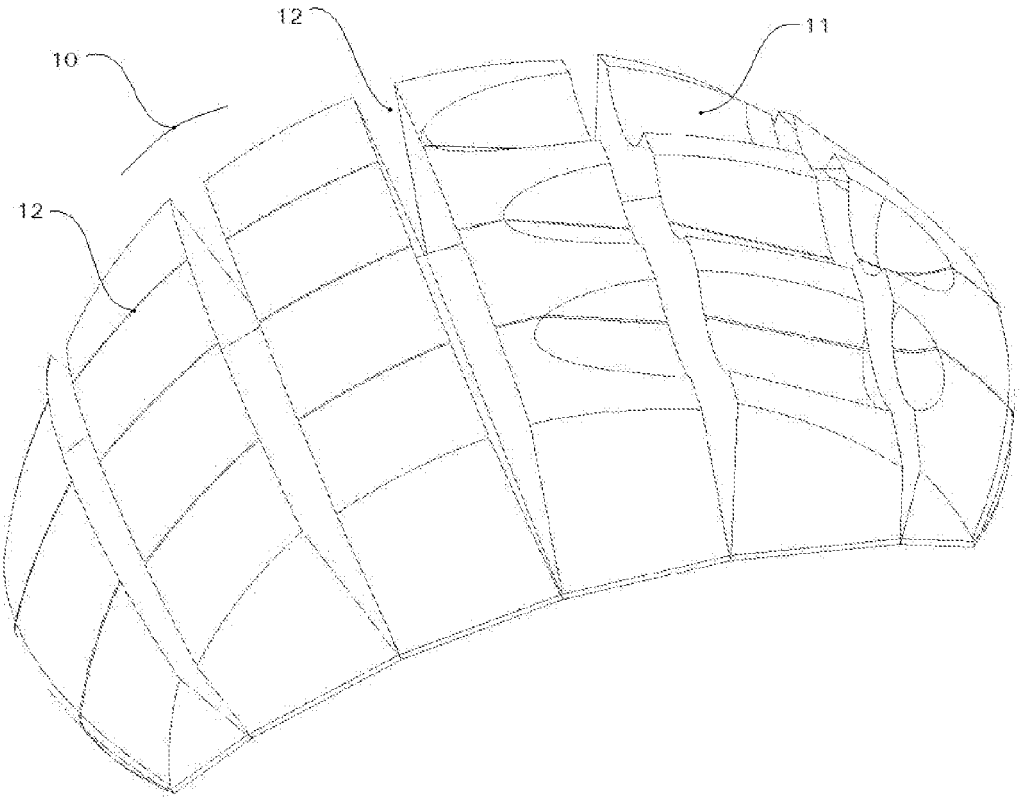

FIG. 3

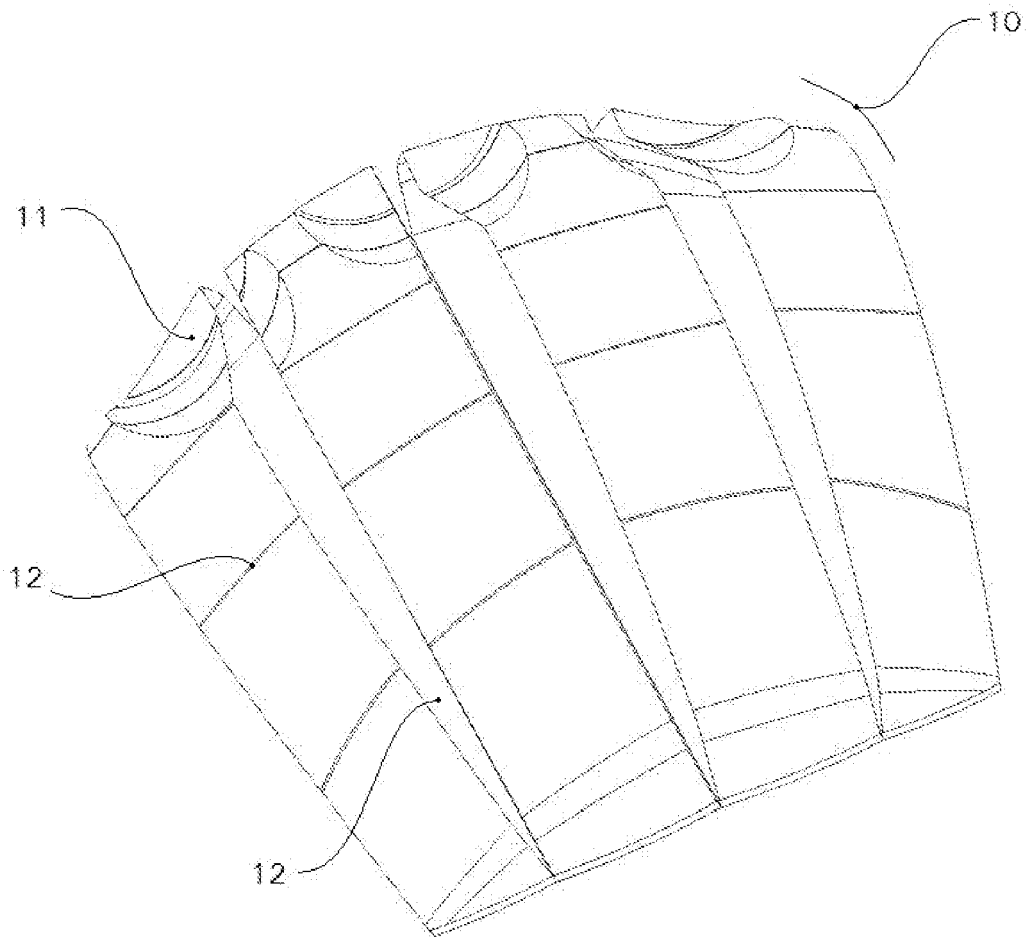

FIG. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 09 17 3881

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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TECHNICAL FIELDS SEARCHED (IPC)

B24D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	13 January 2010	Koller, Stefan

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 09 17 3881

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82