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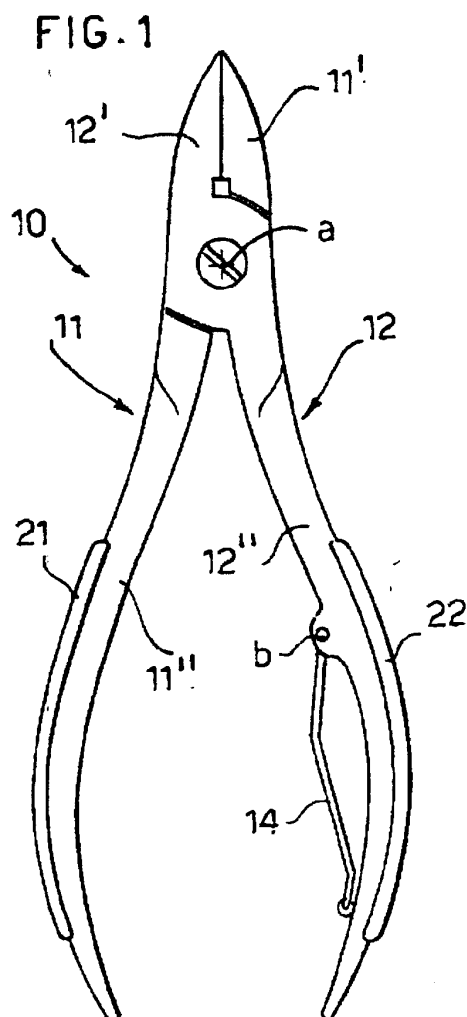
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(54) **Cutting device with two cutting blades having plastic applications on the handles**

(57) A two-blade cutting device, particularly with two pivoted blades (11,12), such as a pair of scissors or clip-pers, or the like, comprises facings or inserts (21,22) applied on the outer part, or back, of the handles to im-prove grip and make them more pleasant to the touch.



## Description

**[0001]** The invention refers to a cutting device, in particular of the two-blade type, more in particular still of the type in which two blade elements are pivoted together in an intermediate position about an axis so that they are free to swing about said axis between a divaricated or open position and a closed position.

**[0002]** This type of device includes scissors or shears of any kind used in any field, from nail scissors to gardening shears, to scissors and shears for industrial purposes.

**[0003]** Hereinafter, reference will be made to devices of the aforesaid type used for nail care, it being understood that this does not in any way limit the scope of the invention.

**[0004]** The devices with blade elements that are generally used for nail care, such as scissors, clippers and the like, are generally made of metal. A drawback with these devices is that they are cold to the touch for the person handling them and, in addition, they can easily slip out of his/her hand during use. A solution that has been sought to overcome this problem has been to make the handle parts with knurled portions. However, even though this increases friction with the user's hand, it does not improve the feel.

**[0005]** Recently, cutting devices have been made with the handles coated with a layer of plastic material. These implements provide a better feel as compared to the bare metal, but the plastic coating also covers the inner side of the handles, where the end of a spring-action divaricating lever engages, and this raises problems for the sliding of this end and hence worsens the functionality of the device.

**[0006]** The aim of the invention is to make cutting devices with pivoted blades, the devices being provided with anti-slip characteristics and being pleasant to the touch, without, however, adversely affecting the functionality of the divaricating springs thereof. A further aim is to obtain cutting devices that offer a pleasant appearance and may be made in a variety of shapes and colours. Another aim is to obtain cutting devices at a contained cost.

**[0007]** The aims referred to above have been achieved by means of a device with pivoted blades as specified in Claim 1.

**[0008]** Further new and useful characteristics are presented in the subsequent claims.

**[0009]** In other words, the new device comprises, on the outer face, or back, of the handle parts of the blade elements, applied facings or inserts made of plastic material. These facings or inserts are preferably applied in seats previously made in the back of the handles and/or are fixed to the respective handles by gluing, and/or by means of stake-type parts of the inserts, which are engaged and riveted inside holes in the handle, and/or by various means of fixing devices, such as stakes, rivets, dovetailing, etc. The plastic material may be rigid or

soft.

**[0010]** The scissors or clippers thus obtained are pleasant to handle, are not cold or hot to the touch when they are picked up, do not slip easily out of the user's hand, enable an optimal operation of the divaricating spring where present, may be easily made in various shapes and colours, and may be made at a contained cost.

**[0011]** Exemplary unrestrictive embodiments of the invention will be described hereinafter with reference to the attached figures in which:

Fig. 1 is a front elevation of a pair of clippers with divaricating spring according to the invention, shown in a resting condition with the spring at rest; Fig. 2 is a view from the left of the same pair of nail clippers;

Fig. 3 is an exploded view of a handle part of a blade element of the clippers and corresponding insert represented as detached;

Fig. 4 is a view similar to that of Fig. 3 and shows a variant of the fit between insert and handle;

Fig. 5 shows another variant of fit between insert and handle;

Fig. 6 is a view, similar to that of Fig. 2, of a variant;

Fig. 7 is a front view of a further embodiment;

Fig. 8 is an enlarged cross section taken according to the plane 8-8;

Fig. 9 shows another embodiment in front view with a part removed; and

Fig. 10 is an enlarged cross section taken according to the plane 10-10.

**[0012]** With reference to the figures, a cutting device according to the invention is designated, as a whole, by the reference number 10 and comprises two blade elements, designated by 11 and 12, which respectively are pivoted together so that they can rotate one with respect to the other about the axis *a* which is at right angle to the plane of the sheet of Fig. 1.

**[0013]** The blade element 11 comprises a blade part 11' and a handle part 11"; the element 12 comprises a blade part 12' and a handle part 12". On the handle part 12" there is a divaricating spring 14 pivoted about an axis *b* which is basically parallel to the axis *a*. The divaricating spring 14 may turn about the axis *b* between a resting position, illustrated in Fig. 1, in which it does not engage the lever or opposed blade element 11, and a working position (not illustrated), in which it engages the element 11, constraining it, in the absence of external forces, in a divaricated position with respect to the element 12.

**[0014]** According to the invention, the external faces, or backs, of the handle parts 11" and 12" each carry an insert, 21 and 22, respectively, or a number of inserts, if so desired, made of soft and elastic plastic material.

**[0015]** Preferably, the inserts are applied in recesses or cavities made in the back of the handle parts. One

such cavity is indicated by the reference number 13 in Figs. 3-5 for the handle part 11". The inserts are made in the form of strips or with an elongated oval shape, or even, as indicated by 21c in Fig. 6, with a lenticular shape, and are applied to the surface of the handle portion by gluing, for example as is shown in Fig. 3.

**[0016]** According to one preferred alternative embodiment, the insert, is implemented as in 21a, with protruding stakes 25, 25, which are received in corresponding holes 15 in the handle and riveted on the inner face of the handle.

**[0017]** According to another embodiment, in Fig. 5, the insert 21b is provided with through holes 26, 26, for engaging fixing means, for example of a screw type, as indicated by 27, 27, suitable for engaging in threaded holes 17 in the handle part.

**[0018]** It is understood that other forms of fit between the plastic insert and the handle could be devised, without, however, departing from the scope of the present invention.

**[0019]** Figure 6 illustrates an example of embodiment of a cutting device 110 on which a number of lenticular inserts, designated by 21c, are provided on the handle part 112".

**[0020]** The shape of the insert or inserts may be of any sort.

**[0021]** Figures 7 and 8 show a variant, designated by 210, of the cutting device. The device 210, which is a pair of nail clippers, comprises blade elements 211, 212 with blade parts 211', 212' and handle parts 211", 212". The handle parts 211", 212" comprise respective inserts 221, 222 made of plastic, which is preferably relatively rigid. The inserts are coupled to the metal portion of each respective handle by means of a dovetail fit, as appears more clearly in Fig. 8.

**[0022]** Figures 9 and 10 show a cutting device 310 according to the present invention in the form of a pair of scissors. The blade elements 311 and 312 of the device have their handle parts 311" and 312" coupled to respective plastic inserts 321 and 322, which are relatively rigid and each of which forms a ring to accommodate a finger or thumb. Each insert, as may be better seen in Fig. 10, is coupled to the corresponding handle preferably by means of a dovetail fit.

2. A cutting device according to Claim 1, wherein said handle parts are made of metal.

3. A cutting device according to Claim 1, characterized in that said plastic material is soft, elastic and anti-slip plastic.

4. A cutting device according to Claim 1, characterized in that said plastic material is relatively rigid.

5. A cutting device according to Claim 1, characterized in that said at least one insert (21) is applied by gluing on the corresponding handle part.

6. A cutting device according to Claim 1, characterized in that said at least one insert (21; 21a; 21b; 21c) is applied on said handle part in a recess (13) previously made therein.

7. A cutting device according to Claim 1, characterized in that said at least one insert (21a) has protruding stakes (25), and said handle part (112) has through holes (15) for receiving said stakes.

8. A cutting device according to Claim 1, characterized in that said at least one insert (21b) has through holes (26), and the corresponding handle (11") has threaded holes (17) for receiving screws (27) for fixing the insert.

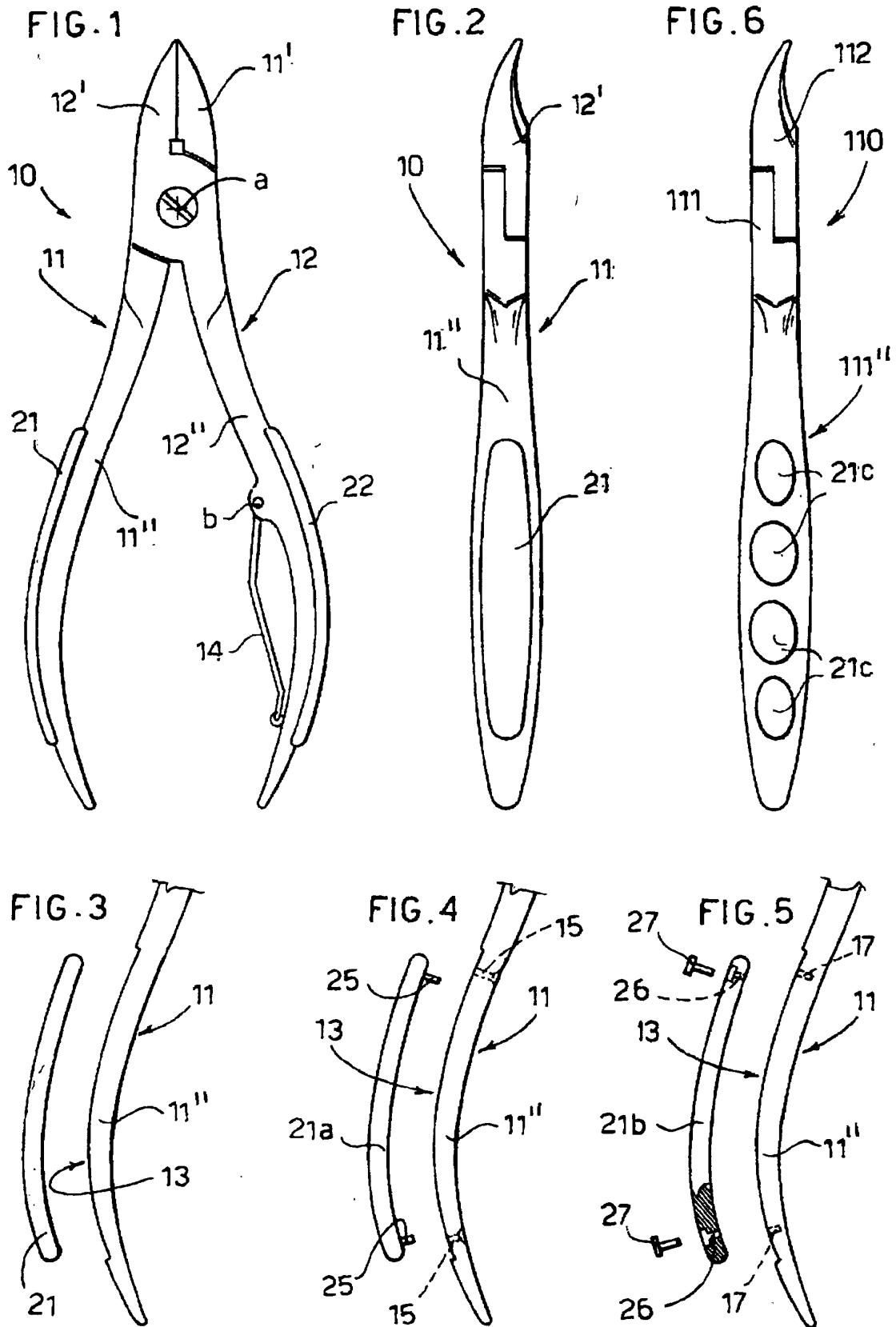
9. A cutting device according to Claim 1, comprising springs for divaricating the handles.

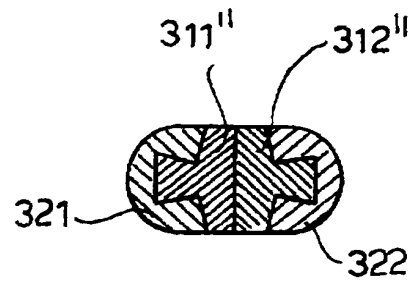
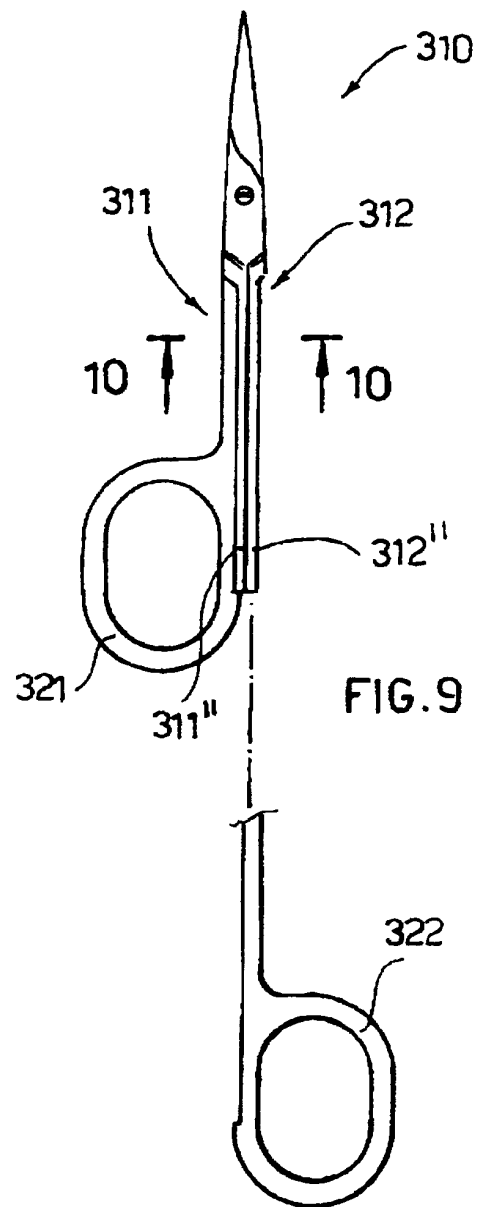
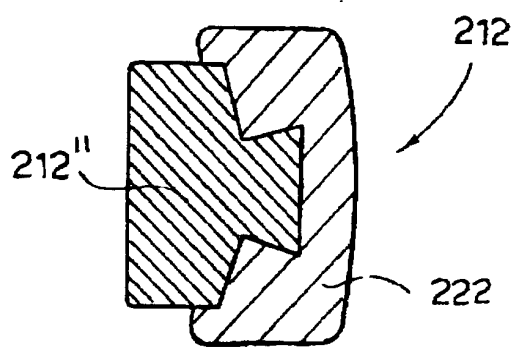
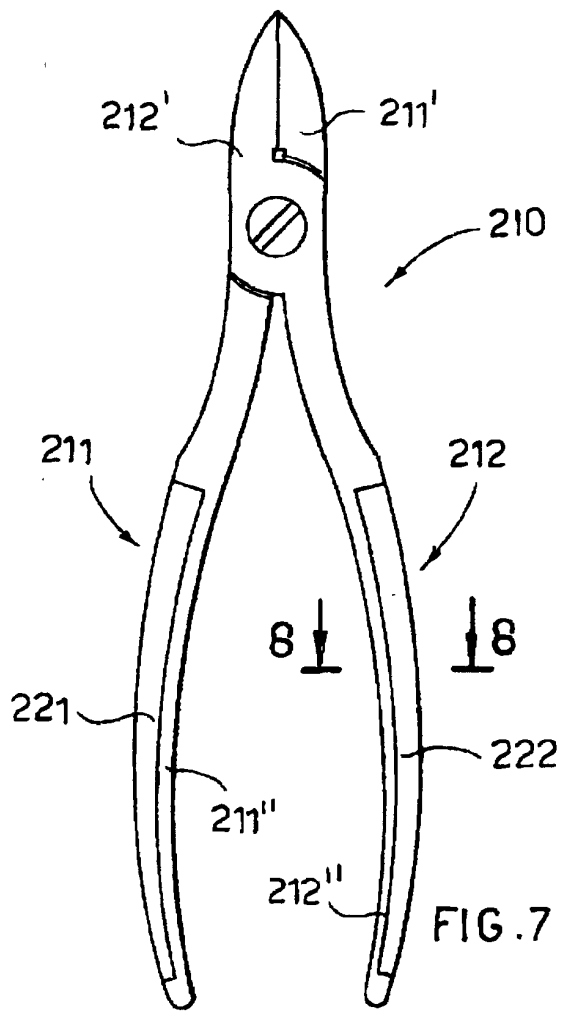
10. A cutting device according to Claim 4, characterized in that a plastic insert is coupled to the corresponding handle by means of a dovetail fit.

11. A cutting device according to Claim 10, characterized in that the insert comprises a ring-shaped part.

## Claims

1. A cutting device with blade elements (11, 12) pivoted together, which are free to move one with respect to the other between a closed position, with the blades brought up to one another, and an open position, with the blades divaricated, said blade elements (11, 12) each comprising a handle portion (11", 12"), characterized in that said handle parts comprise, at least on their surfaces facing outwards, at least one insert (21, 22; 21a; 21 b; 21c) made of plastic material.







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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 12 1451

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 39 24 825 A (HUGO FREUND GMBH & CO) 31 January 1991 (1991-01-31) * the whole document *	1,2,4-6,9	A45D29/02 B26B13/12
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A	US 5 502 897 A (RAUCH JOSEPH A) 2 April 1996 (1996-04-02) * column 4, line 1-16; figures 1-4,7 *	1-3	
			<b>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</b>  A45D B26B A01G B25G
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>1 February 2000</b>	Examiner <b>Herijgers, J</b>
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 12 1451

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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01-02-2000

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