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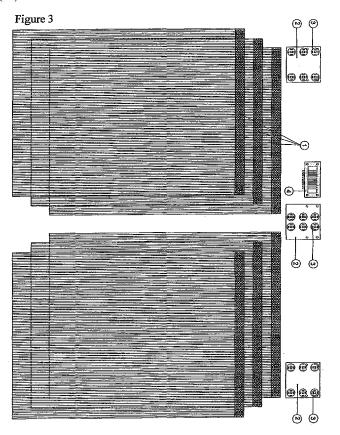
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#### (54) Title: HAIR WEFT WITH BUTTONS



(57) Abstract: Hair weft with buttons, which is consisted of hair pieces (1) connected with three similar cut sections of specific fabric (pads) (2), on these pads button bases are placed (3) on the front side and clips (4) on the reverse side, helping the construction to become one with the head or wig. The similar cut sections of specific fabric (pads) are placed at the ends and the center of the manufacturing, while the bases of buttons on the pads are for the edge pads at the edges, while for the central one in the middle almost to touch each other. The advantage of this weft is that it can be adjusted to the half of its original size in width by removing hair pieces, while is adjusted in color by adding different color hair piece or pieces. The Hair Weft with buttons can be used individually or in making wigs.

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 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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## Hair weft with buttons

The invention is related to hair weft with clips. The construction consists of equally hair pieces, which can be from one up to as much as someone wishes.

Equally hair pieces are connected with similar cut sections of special fabric (pads).

Depending on the part of the head that need coverage, the fabric sections are placed in such a way that two of them are located at the edges of the construction and the third right in the middle.

On the fabric sections (pads), metal or plastic button bases are placed as follows, on the edge pads, button bases are placed at the edges, in order to keep the construction stable, while on the central one in the middle almost to touch each other, so the construction can be divided in the half of its original size to its width

The bases of buttons are placed in rows and are as many as the hair pieces are.

At the reverse side (to the head) of fabric sections are placed the clips helping the construction to become one with the head or wig. Finally, buckles for the button bases, which are on the pads, are placed on the hair pieces, at appropriate distances.

One end of the first hair piece snaps on the button bases, which are located on the left pad and the other end on the first vertical column of central pad button bases.

The second hair piece snaps, respectively, from the second vertical column of central pad button bases up to the right pad.

Depending on the desired length and volume, more hair pieces are placed as previously, while the construction is adjusted to the half of the original width.

Depending on the desired color, different colored pieces are placed in some areas.

Hair weft with buttons is used in treatment purposes, offering to patients suffering from alopecia (absence or thinning of hair by falling), the opportunity to cover the problem, and in aesthetics as well, offering richer, longer and more beautiful hair.

Hair weft with buttons is also used in wig manufacturing. In a wig, which is consisted of rubber pads with button bases, where the hair pieces buckle.

Hair wefts with clips are widely known in the market, however, the existing products have main disadvantages.

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They are available only in standard size (length and volume) and cannot be, directly, adjusted by the user depending on the needs and mood.

The same situation there is also with the color, there is not the opportunity of immediate color change (lighter, darker etc). Additionally, in a case of damage even small, long standing reconstruction or replacement is needed.

The new hair weft with buttons can be adjusted immediately to the hair length and volume, just by adding or removing hair pieces. Similarly, color changes are allowed (lighter or darker). Finally, the construction offers flexibility in repairing damaged parts, since the process is simple replacement of the damaged part and not total replacement or reconstruction.

The construction of hair weft with buttons can be easily perceptible by the attached plans.

Figure 1 shows three fabric sections (pads) (2), where button bases have been placed (3).

At the reverse side (A) of each pad there is a clip (4), as presented on figure 2, so that the construction can be placed at the head or wig.

Figure 1, also, presents a clip (4) two hair pieces (1), where buckles for the pads button bases are placed (5) at appropriate distances and snaps as follows. The first one, on the left, snaps on the left pad button bases and on the first column button bases of the central pad. Similarly, the second one snaps on the second column button bases of the central pad and on the right pad button bases.

Figure 3 presents an example of six hair pieces, three on the one side and three on the other side.

By this way a single construction is created as presented on figure 4 (back side) and on figure 5 (front side).

Finally, figure 6 presents how the construction can be adjusted to the width in the half of its original size, by removing hair piece or pieces from one side.

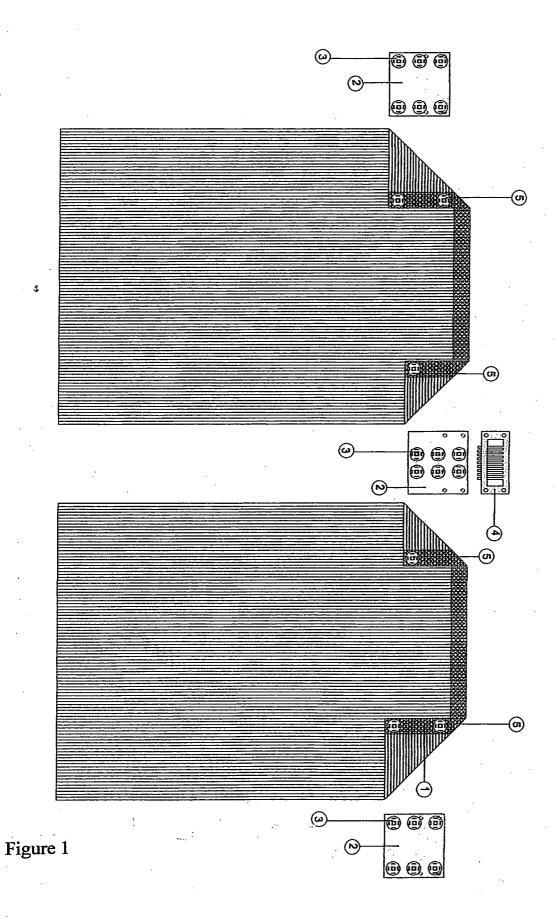
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## **CLAIMS**

- 1. Hair weft with buttons, which is consisted of hair pieces (1) and three cut sections of special fabric (pads) (2).
  - 2. Hair weft with buttons is characterized according to the claim 1 by the fact that on the three cut sections of special fabric (pads) button bases are placed (3) in the front side and clips (4) in the back side.
  - 3. Hair weft with buttons is characterized according to the claim 1 by the fact that in the back side of hair pieces, buckles for the button bases (5), that are on the pads, are placed.
- 4. Hair pieces are connected with three cut sections of special fabric (pads), on the pads button bases are placed in the front side and clips in the back side.
- 5. Hair weft with buttons is characterized according to the claim 3 by the fact that two cut sections of special fabric (pads), are located at the edges of the construction and the third right in the middle.
- 6. Hair weft with buttons is characterized according to the claim 3 by the fact that on the edge pads, button bases are placed at the edges, while on the central one in the middle almost to touch each other.
- 7. Hair weft with buttons is used as single construction.
  - 8. Hair weft with buttons is characterized according to the claim 6 by the fact that is used adjusted in the half of its original size by removing hair piece or pieces.
  - 9. Hair weft with buttons is characterized according to the claim 6 by the fact that is used adjusted to the color by adding hair piece or pieces.
- 10. Hair weft with buttons is characterized according to the claim 6 by the fact that can be used in wig manufacturing, which is consisted of rubber pads with button bases.



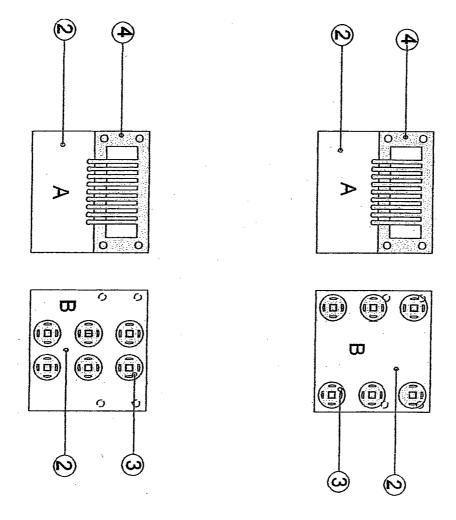


Figure 2

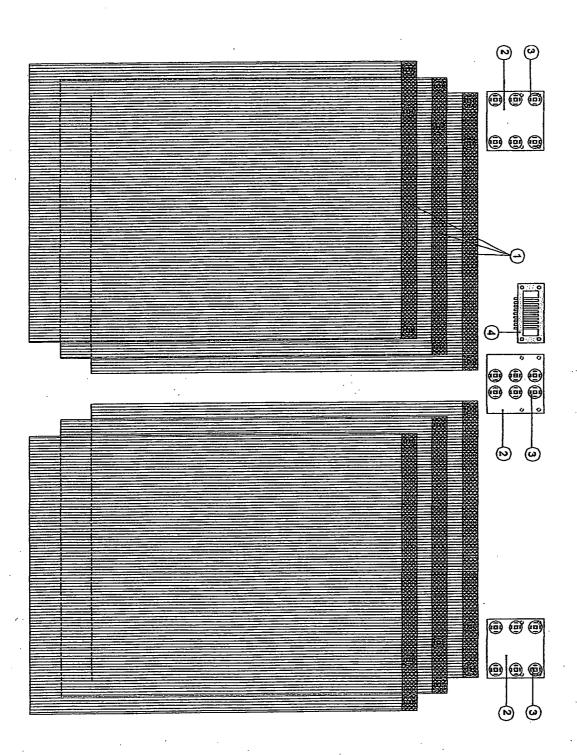


Figure 3

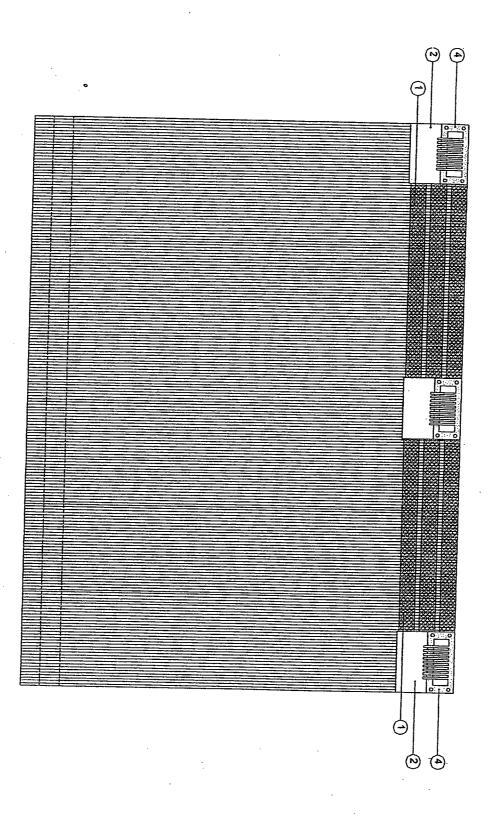


Figure 4

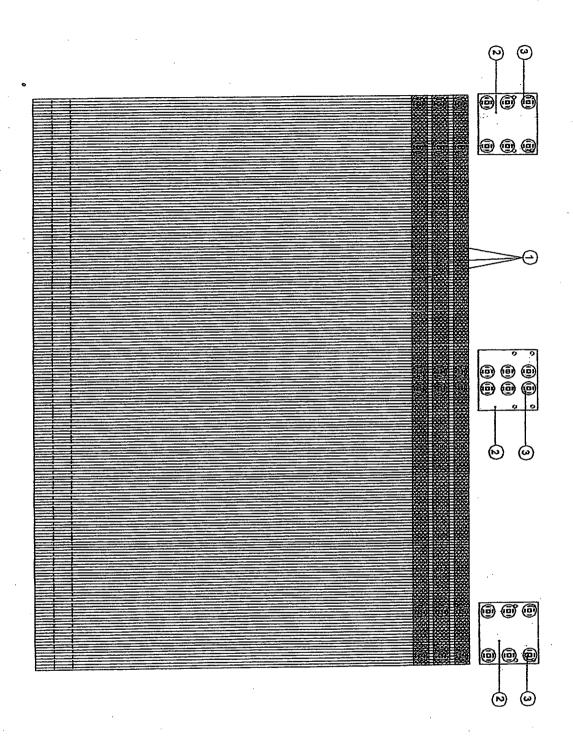


Figure 5

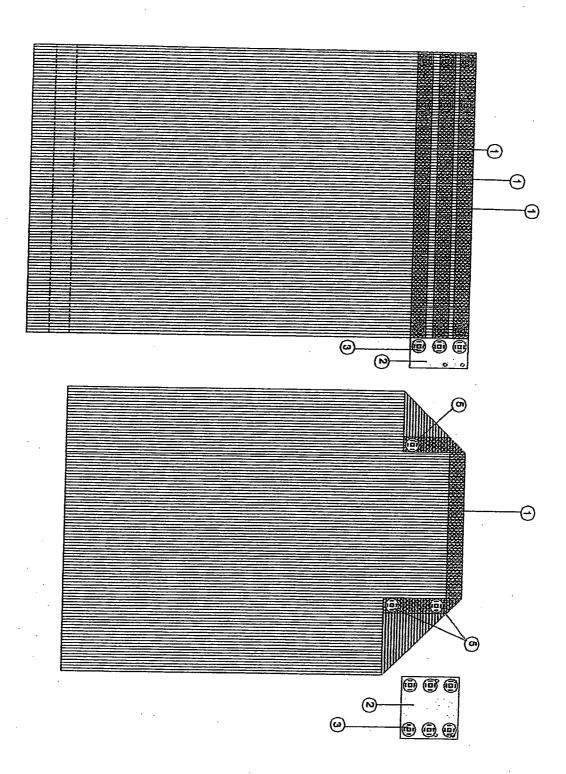


Figure 6

## **INTERNATIONAL SEARCH REPORT**

International application No
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A. CLASSIFICATION OF SUBJECT MATTER INV. A41G5/00 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)

A41G

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 practical, search terms used)

EPO-Internal, WPI Data

O-4*	014-11	H	Delevent to eleke Ne		
Dategory*	Citation of document, with indication, where appropriate, of	tne relevant passages	Relevant to claim No.		
X	W0 2007/013754 A1 (KWAK YOUNG 1 February 2007 (2007-02-01) paragraph [0025] - paragraph 5; figures 1-4	/	1-10		
(	US 2010/170523 A1 (DEPALMA MI 8 July 2010 (2010-07-08)	CHELE L [US])	1,7		
Ą	paragraph [0038] - paragraph figures 3,5	[0042];	2-6,8-10		
X	US 2008/047572 A1 (PARK HUI S 28 February 2008 (2008-02-28)		1,7		
A	paragraph [0016] - paragraph figures 2,3	[0027];	2-6,8-10		
X	FR 2 302 056 A1 (SALINAS JOSE 24 September 1976 (1976-09-24		7		
A	page 2, line 7 - line 23; fig	jures 1-3	1-6,8-10		
		-/			
X Furti	ner documents are listed in the continuation of Box C.	X See patent family annex.			
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Date of the actual completion of the international search		Date of mailing of the international sear	Date of mailing of the international search report		
11 January 2012		20/01/2012	20/01/2012		
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## **INTERNATIONAL SEARCH REPORT**

International application No
PCT/GR2011/000041

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US 5 722 434 A (WALKER JANICE M [US]) 3 March 1998 (1998-03-03) the whole document  US 3 760 818 A (SCHWEIFER J) 25 September 1973 (1973-09-25) claims 1-4; figures 1-4  1-6,8-10	C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	T	
3 March 1998 (1998-03-03) the whole document  US 3 760 818 A (SCHWEIFER J) 25 September 1973 (1973-09-25) claims 1-4; figures 1-4  1-6,8-10	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
the whole document 1-6,8-10  US 3 760 818 A (SCHWEIFER J) 7  25 September 1973 (1973-09-25) claims 1-4; figures 1-4 1-6,8-10	Х	3 March 1998 (1998-03-03)		
25 September 1973 (1973-09-25) claims 1-4; figures 1-4 	A	the whole document	1-6,8-10	
claims 1-4; figures 1-4 1-6,8-10	(	25 September 1973 (1973-09-25)		
GB 16288 A A.D. 1915 (CALMON ERNEST [GB]; NEATE WILLIAM [GB]) 6 January 1916 (1916-01-06) the whole document  1-6,8-10	4	claims 1-4; figures 1-4	1-6,8-10	
the whole document 1-6,8-10	X	GB 16288 A A.D. 1915 (CALMON ERNEST [GB]; NEATE WILLIAM [GB]) 6 January 1916 (1916-01-06)	7	
	A	the whole document	1-6,8-10	

## **INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No
PCT/GR2011/000041

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007013754	A1 01-02-2007	KR 200400582 Y1 WO 2007013754 A1	08-11-2005 01-02-2007
US 2010170523	A1 08-07-2010	NONE	
US 2008047572	A1 28-02-2008	NONE	
FR 2302056	A1 24-09-1976	NONE	
US 5722434	A 03-03-1998	NONE	
US 3760818	A 25-09-1973	NONE	
GB 191516288	A 06-01-1916	NONE	