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(12) # EUROPEAN PATENT APPLICATION

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(54) **Connection device for a wrist-watch strap.**

(57) Connection device for a wristwatch strap (11) consisting of a leaf (12) bent in the shape of the letter U and designed to engage with a bar (15) integral with the watch case (16).

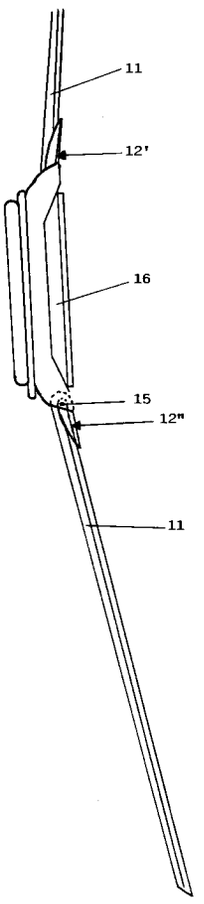

Fig. 3

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Field of the invention

The present invention relates to a new connection device for a wristwatch strap. It consists of a leaf bent in the form of the letter U and designed to engaged with a bar integral with the watch case.

Prior art

Normally, watch wriststraps are divided in two parts one of which ends with a hole in which is inserted a spring-loaded telescope type tube which engages its two ends in two seats especially provided on the watch case.

This system displays as drawbacks that it requires a certain manual skill of the operator for changing the wristwatch strap and that the spring-loaded tube has poor reliability as its ends can disengage easily from the seats.

There have also been proposed wristwatch strap consisting of a single piece. It is passed between the spring-loaded tubes and the watch case. This type of wristwatch strap has however the drawback of being rather troublesome for the user because it is between the wrist and the watch case.

Other more sophisticated systems have been recently proposed. For example. British patent application GB-A-2 245 642 illustrates a new wristwatch strap connection system to the watch case. It comprises a bar to be inserted in the hole located at each end of the wriststrap and an end of which is screwed to the watch body while the other end engages with a hook which rotates around a pin integral with the watch body.

The system is complicated and not safe enough because the hook easily disengages from the second end of the bar and thus allows the escaping of the watch from the wriststrap.

Even United States patents US-3 889 323 and US-4 414 719 have proposed two other systems for connection of the wriststrap to the watch case but these also are rather complicated and cumbersome.

Summary of the invention

The wriststrap connection which is the object of the present invention is a simple solution to the above problem.

Anybody, even not specialised, is able to change a wriststrap on which is mounted a connection of this type.

It consists essentially of a leaf of elastic material, e.g. spring steel or plastic permanently deformed in the shape of the letter U.

A prong of the U element connects with one end of the wriststrap while the other prong remains free and forms a hook which can be for example engaged with a spring-loaded telescoping tube or with any bar integral with the watch case.

The object of the present invention is therefore a wriststrap connection device consisting of a leaf bent in the shape of the letter U and designed to engage with a bar integral with the watch case.

List of the figures

FIG. 1 shows a plan of the device acording to the present invention affixed to the end of a wriststrap,

FIG. 2 shows a side view of the device of FIG. 1 and

FIG. 3 shows the device which is the object of the present invention mounted on a wristwatch.

Detailed description of the invention

FIGS. 1 and 2 show the leaf 12 bent in the shape of the letter U which constitutes the device which is the object of the present invention. A prong 13 of the leaf 12 is covered by the wriststrap 11 and is connected thereto by the usual methods, e.g. by gluing.

The other prong 14 is bent on the first 13 and forms therewith a U. The leaf 12 is made of elastic material, e.g. spring steel or plastic, which allows deformation of the prong 14 to allow passage between the two prongs 13 and 14 of the bar integral with the watch case. It is obtained in this manner the hooking of the leaf 12 bent in the shape of the letter U and then of one end of the wriststrap 11 to the wristwatch. It is clear that for each wriststrap 11 there are two leaves 12, one for each end.

Each leaf 12, for aesthetic and safety reasons, is preferably covered entirely with the material with which is made the wriststrap, i.e. normally leather or plastic.

In FIG. 3 is shown the wriststrap 11 connected to the watch case 16 by the leaves 12' and 12''. In FIG. 3 is also shown the bar 15 on which is hooked the leaf 12'' bent into the shape of the letter U. For ease of representation the equivalent bar for the leaf 12' is not shown.

Choice of the material from which the leaves are made is very important. Indeed, they must deform with a certain facility so as to allow passage of the bars between the prongs but at the same time it must be provided that, once the operation of hooking with the bar is completed, the external prong, due to the elastic effect of the material, closes on the internal one, preventing involuntary disengagement of the bar from the leaf bent in the shape of the letter U. It was therefore sought to use spring steel with high elasticity limit or plastic material having however suitable elasticity and resil-

ience.

As concerns the bar it is possible to think of using one forming an integral part of the watch case or which would be a spring-loaded telescopic tube such as those normally used for wristwatches.

Claims

1. Connecting device for a wriststrap (11) for a watch (16) consisting of a leaf (12) bent in the shape of the letter U and designed to engage with a bar (15) integral with the case of said watch (16).

2. Device according to claim 1 in which a prong (13) of said leaf (12) bent in the shape of the letter U is fixed to one end of said wriststrap (11).

3. Device according to claims 1 and 2 characterised in that said leaf (12) bent in the shape of the letter U is made of an elastic material.

4. Device according to claim 3 characterised in that said elastic material is spring steel.

5. Device according to claim 3 characterised in that said elastic material is a plastic material.

6. Device according to claim 1 characterised in that said bar (15) is a spring-loaded telescope tube.

7. Device according to claim 1 characterised in that said leaf (12) is covered with the same material with which is made the wriststrap (11).

8. Watchwrist band characterised in that it uses a device as claimed in claims 1 to 7 above.

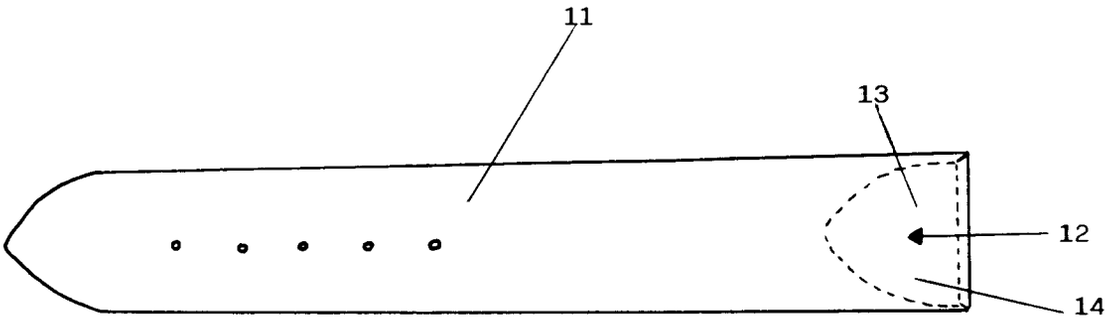

Fig. 1

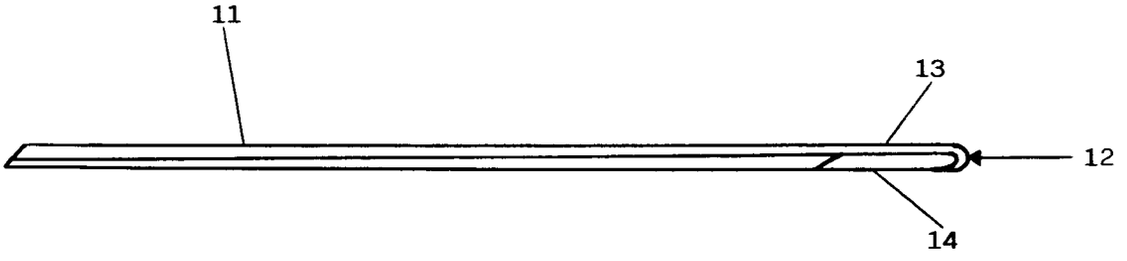

Fig. 2

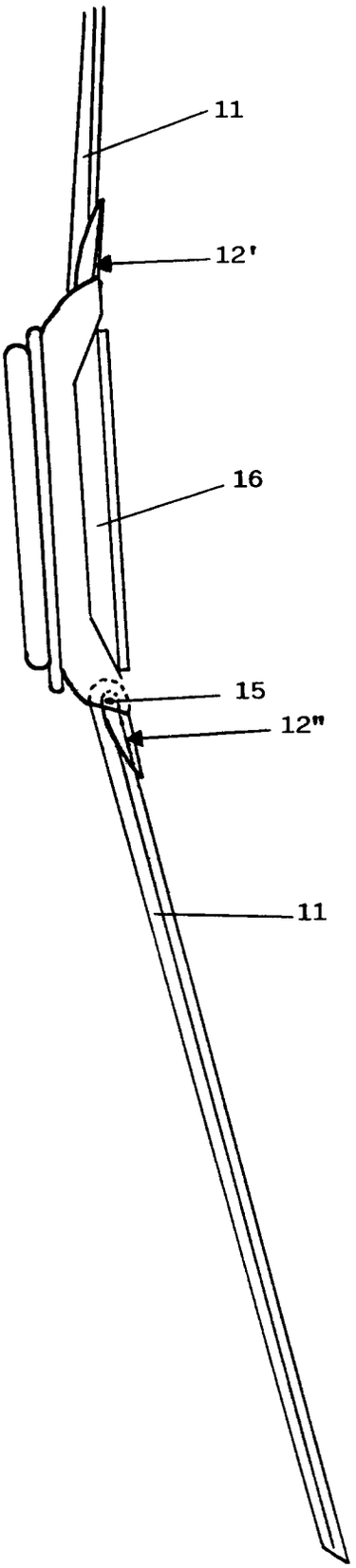

Fig. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 93 11 6769

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.5)
X	NL-A-8 302 634 (NOWACK 'CLUB-UHRARMBANDER') * the whole document * ---	1-5,7,8	A44C5/16
X	US-A-2 937 797 (A. TIKTIN) * column 2, line 17 - line 68; figures 1-5 * ---	1-4,7,8	
X	FR-A-2 320 070 (DIRSCHERL) * page 5, line 24 - line 13; figures 1-5 * ---	1-4,7,8	
X	FR-A-583 229 (A. MERCK) * the whole document * ---	1-4,7,8	
A	FR-A-1 101 206 (L. M. BEAUD) * the whole document * -----	6	

TECHNICAL FIELDS SEARCHED (Int.Cl.5)

A44C
G04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	18 March 1994	Garnier, F

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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