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(11)

**EP 1 245 168 A2**

(12)

**EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**02.10.2002 Bulletin 2002/40**

(51) Int Cl.7: **A44C 27/00**

(21) Application number: **02004836.9**

(22) Date of filing: **02.03.2002**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

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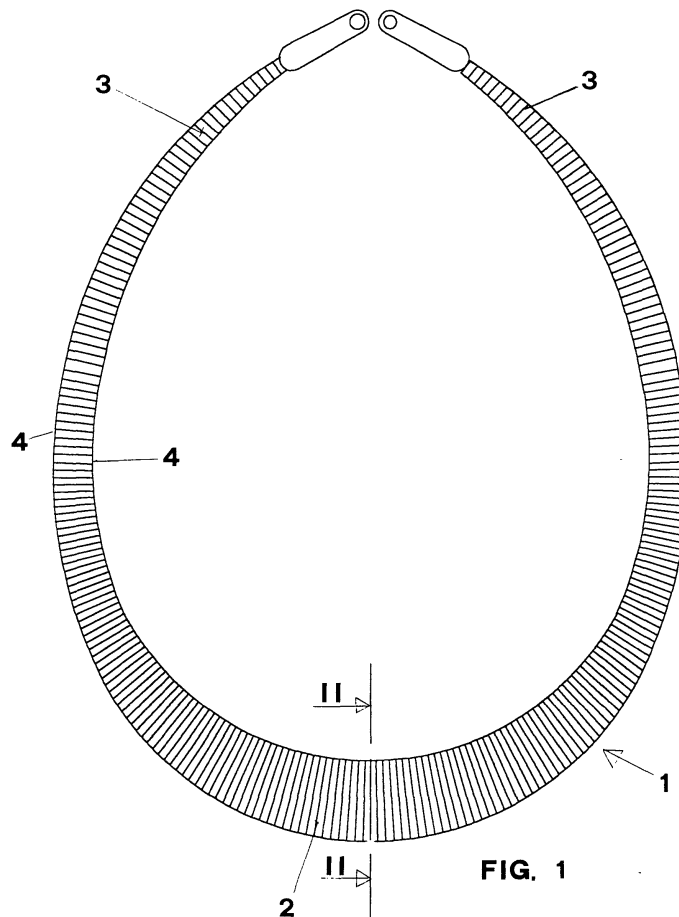
(30) Priority: **26.03.2001 IT VI010072**

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(54) **An ornamental manufactured product of the type called "wound graduated or dégradé"**

(57) An ornamental manufactured product of the type called "wound graduated or degrade" comprises a thread of precious material spirally wound on a woven strip of precious or non-precious material. The manu-

factured product is constituted by portions which have different width, that is with the two borders which are not completely rectilinear but are formed by tracts which have a converging and/or diverging course with respect to the longitudinal axis of the manufactured product.



**FIG. 1**

**EP 1 245 168 A2**

## Description

### Field Of The Invention

**[0001]** The present invention relates to an ornamental manufactured product of the type called "wound graduated or dégradé" and to a process for the production of this manufactured product which is capable of producing necklaces, bracelets and similar articles of jewelry.

### Background Of The Prior Art

**[0002]** In the production of necklaces, bracelets and other typical ornamental articles of the jewelry and para-jewelry industry the so called "wound necklaces" are well known. They are obtained by means of a thread of precious material which is wound in a spiral and a strip worked as a woven material, always of precious material that is inserted in the interior of the spiral with the function of conferring to the manufactured produce sufficient rigidity and consistency.

**[0003]** At the present state of the art, both the semi-finished as well as the finished product defined with the generic term "wound necklace" have a flexible lamina of constant width, that is with the two borders parallel.

### Summary Of The Present Invention

**[0004]** An object of the present invention is to provide a necklace of the type "wound" which is graduated or dégradé, that it is constituted by portions which have different width, that is the two borders are not completely rectilinear but are formed by tracts having a course which is converging and/or diverging with respect to the longitudinal axis of the manufactured product.

**[0005]** By way of example, an ornamental manufactured product which has the characteristics "graduated or dégradé", described in this invention, is represented by a necklace in which the central tract has a width which is greater with respect to the two lateral closure tracts.

**[0006]** A further object of this invention is to provide a process to achieve necklaces wound of the type "graduated or dégradé".

**[0007]** Still another object of the invention is to provide a process to obtain manufactured products, specifically, necklaces "wound dégradé" in which the width of the lamina degrades with regularity and in a uniform manner as a rule from the center towards the two extremities.

**[0008]** Still another object of the invention is to provide an ornamental product such as a chain, or bracelet or similar products which offers such characteristics as to achieve novel aesthetic results with respect to similar known products, such as the products obtained with chains having interknotted small rings and chains of the "Omega" type.

**[0009]** The process of the invention capable of providing wound dégradé necklaces is characterized by the fact that the spiral winding of the thread of precious ma-

terial is carried out on a support base constituted by a metallic lamina preferably of aluminum, which is brought close to a woven strip of precious material.

**[0010]** A further characteristic of novelty of the process consists of the fact that the metallic lamina has a shaped profile, exactly like the degrade profile which the wound necklace must have.

**[0011]** In actual operation, the thread of precious metal is wound in a spiral around the lamina thus generating a spirialized product with approached spirals with a course which is increasing/decreasing defined by the profile of the lamina.

**[0012]** After the winding, the manufactured product so obtained comprising the thread wound on a center piece constituted by the metallic lamina and the woven strip with a precious metal, is immersed in an acidic bath, which causes complete elimination due to corrosion, of the metallic lamina.

**[0013]** Subsequently, the novel manufactured product constituted by the thread wound in a spiral on the woven strip, is subjected to a thickening action of the spirals in order to reacquire the space which has become empty due to the elimination of the metallic lamina thus obtaining the semiworked of the wound degrade necklace.

**[0014]** Still subsequently, the semiworked dégradé is subjected to further operations such as beating, polishing, glazing and others which transform the product in a finished product as necklaces, bracelets, and similar jewelry articles having specific aesthetic qualities.

**[0015]** This invention is extended from necklaces to bracelets and all other jewelry articles which may be obtained with the process of this invention.

**[0016]** The characteristics of this invention will be better understood by reference to the drawings of which:

**Fig 1** shows an elevational view of a necklace of the type called "wound graduated or degrade";

**Fig 2** shows a transversal cross/sectional view of the necklace of Fig 1;

**Fig 3** shows a view of the base for supporting the winding operation, the base being constituted by the metallic lamina and the woven strip being approached one to the other;

**Fig 4** is a schematic view of the process of this invention for the preparation of the necklace of Fig 1.

**[0017]** As shown in Fig 1, a necklace of this type called "wound and degrade" of the invention is characterized by the fact that lamina (1) has a variable width with a decreasing value from the central portion (2) towards the two extremities (3).

**[0018]** In addition, the profile (4), both internal and external, of the lamina decreases in a linear and uniform manner.

**[0019]** As shown in Fig 2, the necklace, as in any manufactured product of the type "wound", is constituted by

the thread (5) which is wound on a woven strip (6), both made of a precious material.

**[0020]** As shown in Fig 3, the process for the preparation of the necklaces of the wound type degrade requires at first the base (7) for winding thread (5), the base being constituted by metallic lamina (8) coupled with woven strip (6).

**[0021]** Subsequently as shown in Fig 4, the winding of the thread is carried out by mounting the base (7) between the two mandrels(9) which put the base (7) in rotation, so that the thread (5), wound on spool (10) is allowed to wind in a spiral on the base. The speed of rotation of the base (7) as shown by arrow (x) and the speed of transfer of spool (10) shown by arrow (y) transmitted by motors, respectively shown by numerals (11) and (12) are synchronized between themselves by means of an electronics program which regulates the parameters in a manner to keep always optimal the traction force of tract (5') of the thread to be wound in a manner to keep it always stretched.

**[0022]** The invention is intended to cover also manufactured products for ornamental use of the type wound dégradé which have portions with different width and inclinations of their profiles with respect to the longitudinal axis of the manufactured product, which are still within the scope of the claims.

## Claims

1. An ornamental manufactured product of the type called "wound graduated or dégradé" which comprises a thread of precious material spirally wound on a woven strip being of a precious or non-precious material, said manufactured product being **characterized by** the fact that it is constituted by portions which have different width, that is with two borders which are not completely rectilinear but are formed by tracts bearing a course which is converging and/or diverging with respect to the longitudinal axis of the manufactured product.
2. The product according to claim 1 which is a necklace of the type which is "wound graduated or dégradé", said necklace being constituted by a thread (5) which is wound on a woven strip (6), said thread and said strip being made of a precious material, **characterized by** the fact that the necklace has a lamina (1), said lamina has a variable width with a value which decreases from the center portion (2) towards the two extremities (3), said lamina has a profile (4), said profile in the interior and exterior decreasing in a linear and uniform manner.
3. a process for the preparation of a manufactured product according to claim 1, **characterized by** the fact that it comprises a base (7); said base is constituted by a metallic lamina (8), which is coupled to said strip (6), and said thread (5) is spiralling wound on said strip.
4. The process according to claim 3 **characterized by** the fact that said lamina (8) is made of a metal and has a shaped profile like the degrade profile of the manufactured product or the wound necklace.
5. The process according to claim 3 **characterized by** the fact that the spiralized product with approached spirals with an increasing/decreasing course defined by the profile of said lamina, comprises a thread (5) which is wound on a center piece or said base (7) said base is constituted by said metallic lamina (8) and by said woven strip (6) which is made of a precious material, is immersed in acidic bath, whereby said metallic lamina is eliminated due to corrosion.
6. The process according to claim 5 **characterized by** the fact that the manufactured product constituted by the thread (5) spirally wound on woven strip (6) is subjected to a thickening action of the spirals in order to reacquire the space which became empty due to the elimination of said metallic lamina whereby a semi-finished product of the type "wound dégradé" is obtained, said semi-finished product being subsequently subjected to further operation such as beating, polishing, glazing and other operations which transform said semi-finished product into a finished product with specific aesthetic qualities.
7. The process according to claim 3 **characterized by** the fact that the winding of thread (5) is carried out by mounting the base (7) between two mandrels (9) whereby said base is put in rotation and said thread wound on spool (10) is spirally wound on said base, the speed of rotation of the base and the speed of transfer of the spool (10) is transmitted from motors (11, 12) which are synchronized by a program of electronic means, said electronic means regulating the working parameters whereby the traction force of tract (5') of the thread being wound is always optimally maintained, and the thread is always kept stretched.
8. An ornamental manufactured product according to claims 1 made according to one or more of claims 3 to 7 **characterized by** the fact that it has portions of constant width and portion of width which is increasing and/or decreasing.

