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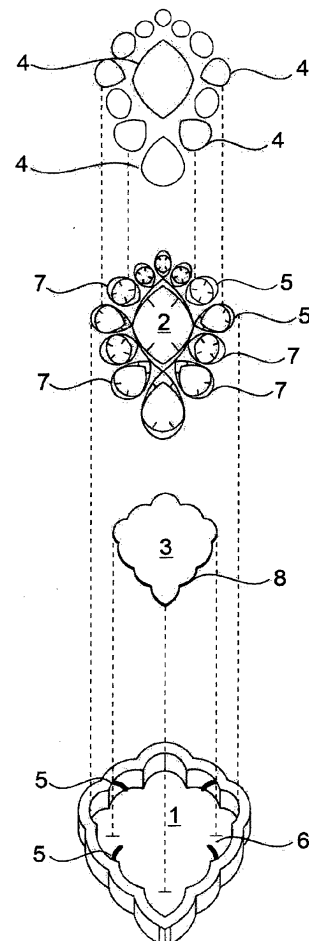
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(54) **METHOD OF PLACING AND FITTING A CLASS REFLECTOR (MIRROR AND/OR STRASS) INSIDE A PIECE OF JEWELRY WHEN BEING MANUFACTURED**

(57) A technical method of jewelry making with Rose Cut diamonds is provided using and fitting - placing a glass reflector, mirror and/or strass, inside the piece of jewelry. The use of a glass reflector inside the piece of jewelry ensures excellent shine for the specific-cut diamonds and, furthermore, it ensures the structural and aesthetic perfection of the piece of jewelry in all cases of washing, appraisal, repair or even enhancement.

FIGURE 1



Description

[0001] The invention refers to jewelry making using gemstones and in particular Rose Cut diamonds, the base of which is flat, which means without a cone. When making the piece of jewelry, the artisan and/or the diamond "nailer" creates at first a dent on the jewelry metal exactly in the dimensions of the diamond perimeter) where the diamond shall be secured. Prior to permanently placing the diamond in the dent of the piece of jewelry to be made, the artisan adjusts a thin sheet of aluminum or solder or chasmach at the bottom of the dent, and then secures ("nails") the diamond on the piece of jewelry to be made. This technique is used so that the Rose Cut Diamond due to its flat base (a single cut at its base) acquires glow, shine, clarity as it does not shine, glow and is not clear, it is not "alive" on its own and when placed on a piece of jewelry.

[0002] The application of the specific technique by the special artisan is extremely time-consuming and runs the risk of a high percentage of failure for the perfect and proper making of the piece of jewelry both in technical and aesthetic terms. The reason is that the securing of the diamond must be fully airtight on the piece of jewelry and, in particular on the created dent so that the reflection material under the diamond is protected and is not tainted or spoilt by the air and the water resulting in the diamond losing its shine, glow and clarity provided by the reflection material (aluminum sheet, solder, chahmach). In this technique, in order to secure airtightly the Rose Cut diamond on the piece of jewelry, and in particular exactly in the created dent, the special artisan uses either the metal mass "over" the diamond "zone" or in some cases, the artisan uses a glue in order to get a sealing result. The special artisan is required to repeat this strenuous time-consuming and precarious for the final result procedure for each diamond separately.

[0003] There is no guarantee in this technique that the diamond will be airtightly secured during the jewelry life. Furthermore, if for any reason, a diamond is to be removed from the piece of jewelry, there is the risk of the piece of jewelry being destroyed. There is a big risk of spoiling or destroying the final aesthetic picture of the piece of jewelry in any attempt to remove the diamond and then to secure it again. In addition in this technique, also due to the fact that the diamond zone is covered by the jewelry-dent metal mass, the diamond is very difficult up to impossible to be appraised because the appraiser cannot know accurately and with certainty the size, the dimensions, the depth and the other characteristics of the gemstone; furthermore, removing the gemstone from the piece of jewelry is discouraged.

[0004] This technique is especially applied for jewelry making in which Rose Cut diamonds are used. It has been almost abandoned for all the above reasons and, as a result, this type of diamonds is misjudged and not used by designers and jewelry makers.

[0005] The purpose of this invention is making jewelry

using Rose Cut diamonds and at the same time using a glass reflector (mirror) and/or strass abolishing all the above-mentioned problems and disadvantages; also re-defining the true and essential value and "place" of the Rose Cut diamonds in the global jewelry making industry. Further advantages from the application of the specific method in jewelry making: the cleaning and washing of the piece of jewelry using water and common detergent up to 80 °C as frequently as one wishes, since all the materials used in the making can tolerate these cleaning and washing conditions and are not destroyed. Even if a material is worn, for example, if the mirror is destroyed or worn or even if there is some kind of material failure, it can be easily replaced without affecting the structure of the piece of jewelry and its aesthetic perfection. This method is absolutely harmless if the piece of jewelry is gold-plated, platinum-plated or silver-plated. With this method and its technical application, the jewelry maker and designer by using a colored mirror and/or strass can achieve a change in the final visual result in the color of the gemstone and only for aesthetic reasons, as the real diamond characteristics are not modified and in addition, very easily, safely and quickly the gemstone can be removed from the piece of jewelry to be properly and correctly appraised. The piece of jewelry when made using this technique will be shiny, sparkling and clear during its life; furthermore, the diamonds on the piece of jewelry will be exceptionally shiny and sparkling and also clear due to the use of the mirror or strass.

[0006] The solution of these problems and of the disadvantages is achieved according to the invention through the properties mentioned in claim 1. The research and 30-year practical experience in jewelry design and making resulted in the specific jewelry making method using gemstones, Rose Cut diamonds (4). As shown in Figure 1, the piece of jewelry comprises three key parts: the bottom part (frame) (1), the upper part, a combination of welded bezels (2) and a third part the mirror (3). Using the specific configuration of this technical method, a gap is created between the two parts of the piece of jewelry, the bottom (1) and upper part (2), inside which, in particular on the base (6) inside the frame (1), the glass reflector (3), mirror (3) or strass (3) is placed and permanently fitted. Then, at the upper key part, a combination of bezels (2) of the under construction piece of jewelry, the diamonds are secured and fitted with 3 or 4 teeth (5) for each diamond (4).

Furthermore, when all the diamonds (4) are fitted at the upper part (2), the last one is fitted on the frame (1) using the same technique of securing a diamond (4) on the bezel, i.e. with "teeth" (5).

Claims

1. Method of placing and fitting a glass reflector (mirror and/or strass) (3) inside pieces of jewelry when being manufactured, using Rose Cut diamonds (4), de-

signed in such a way so that a glass reflector (3), a mirror (3) or strass (3) can be fitted inside the piece of jewelry. In order to apply this technique, the piece of jewelry comprises three key parts: the bottom (1) and the upper part (2), i.e. the frame (1) and the top part (2), which is a combination of joined and welded bezels (7), respectively, and a third part being the glass reflector (3), mirror (3) or strass (3). A glass reflector (3), i.e. mirror (3) and/or strass (3), with thickness (8) ranging from 1.5mm to 6mm, is permanently fitted inside the frame (1) on the base (6), covering the entire available SURFACE. The upper part of the piece of jewelry (2) is designed in such a way so as to form a single metal piece (2) comprising joined and welded bezels (7). Each bezel (7) used for the creation of the upper part (2) of the piece of jewelry is designed and made exactly at the dimensions of the diamond (4) that has been provided to be placed and fitted on the piece of jewelry when it is designed. Each diamond (4) is secured on its "own" bezel (7) with three or four teeth (5), depending on the jewelry design and the each-time technical requirements. When all the diamonds are fitted (4) on their bezels (7), then the upper part (2) of the piece of jewelry is ready to be placed and set on the frame (1) by the artisan. The placement and "setting" of the upper part (2) of the piece of jewelry on the frame (1) is performed by the artisan using four or more teeth (5) (depending on the jewelry design and the technical and making requirements), which are found in the frame (1) and create a single piece with its metal mass (common body).

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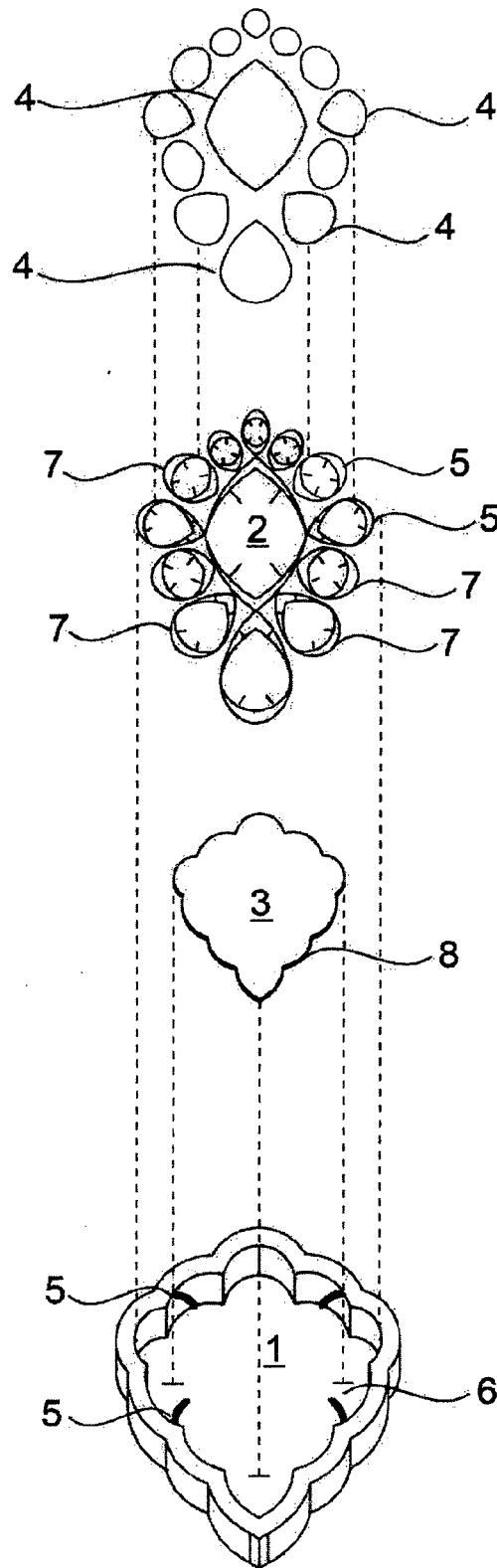
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FIGURE 1





EUROPEAN SEARCH REPORT

Application Number

EP 22 38 6058

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	CN 107 232 703 A (SHENZHEN Y & M INC) 10 October 2017 (2017-10-10) * description; figure 1 *	1	INV. A44C17/02 A44C17/04
A	WO 2018/208865 A1 (PRYMMO GROUP [US]) 15 November 2018 (2018-11-15) * figures 1a-1d, 4a-4d * * page 5, line 26 * * page 6, lines 7-13 * * page 8, lines 23-28 * * page 13, line 2 *	1	
A	US 2007/157665 A1 (LAI DANNY [US]) 12 July 2007 (2007-07-12) * paragraph [0031]; figure 2 *	1	

TECHNICAL FIELDS
SEARCHED (IPC)

A44C

The present search report has been drawn up for all claims

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Place of search

The Hague

Date of completion of the search

19 December 2022

Examiner

Gallego, Adoración

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 22 38 6058

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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