

Translation of PCT/AT97/00184

Holder for a Gem

This invention relates to a holder for a gem, comprising a fixture positively clamping the gem, which consists of two clamps connected with each other at both ends and forming between each other a mounting lug for the gem.

In the usual holders for gems, the gems are held in the fixture by means of bent-up clamping hooks engaging over the gems, which fixture has a ring- or box-shaped design. The gems are thus covered by the holder on at least one side. In addition, these holders substantially restrict the possible use of gems to pieces of jewellery.

There is furthermore known a holder (US 5,022,238 A) which consists of two clamps forming a mounting lug for the gem. The mounting lug itself is formed of two stamped sheet-metal rings, which are connected with each other by a web and are bent towards each other by 180° in the vicinity of the web, so that these two rings are in contact with each other along their outer edges and between each other form a groove that is V-shaped in cross-section for accommodating the gem. Before the rings formed from a flat sheet by embossing, the gem is inserted in one of the two rings, so as to be clamped between the rings after the same have been bent towards each other. Clamping the gem is effected in a direction transverse to the ring plane, which either leads to a mounting of the gem that is not without any clearance or to the two sheet-metal rings at least partly gaping apart in the vicinity of their outer edges.

It is therefore the object underlying the invention to design a holder for gems as described above with simple means such that the gems can easily be inserted in the holders without any clearance, without the possible use of the gems being restricted by the holders. With their holders, the gems should rather find use as

elements of jewellery in all kinds of articles of daily use, decoration and jewellery, for instance in spectacles.

This object is solved by the invention in that the gem merely engaging in two oppositely located recesses of the integrally formed clamps is clamped in a mounting lug with an elastic bias of the clamps.

The two clamps forming a mounting lug for the gem produce an element of jewellery together with the inserted gem, which can be used in many ways in articles of decoration, daily use or jewellery. The gem is largely presented freely visible in this mounting lug, namely from both sides of the opening, because the gem is merely held in the clamp recesses disposed opposite each other in the vicinity of two peripheral portions. With the exception of these peripheral portions engaging in the clamp recesses the gem is exposed inside the mounting lug between the clamps. This is possible due to the elastic bias of the clamps, which ensures a clearance-free clamping of the gem between the clamps. For inserting the gem in such holder the mounting lug of the clamps need merely be spread open accordingly, so that the gem introduced in the widened mounting lug can be clamped in the clamp recesses when the spreading force is released and the mounting lug is constricted accordingly. To increase the clamping force, the two clamps can, in special cases, additionally be urged against each other subsequent to their connecting portion when the gem has been inserted. The bias of the clamps can advantageously be utilized in particular for a clearance-free clamping, when between the gem and the connection of the two clamps at their ends a spacing is provided.

For safely clamping the gem in the clamp recesses disposed opposite each other with a corresponding bias of the clamps, the clamps must be connected at both ends. This connection might be produced for instance by soldering or welding. Particularly favorable conditions are, however, obtained in this connection by an integral connection of the two clamps, which not only involves mechanical, but also optical advantages. The clamp recesses for accommodating oppositely located peripheral portions of the gem should accommodate the gem positively and without any clearance. To compensate manufacturing tolerances on the one hand, and on the other hand to ensure that a precise adaptation to the respective shape of the gem need not be required, the clamp recesses may have a cross-section

tapering towards the bottom of the recess. This cross-sectional shape tapering towards the bottom of the recess thus acts as tapered gap into which the gem is urged as a result of the bias of the clamps, so that the gem is always clamped without any clearance in the mounting lug between the two clamps connected with each other at their ends.

In the drawing, the subject-matter of the invention is represented by way of example, wherein:

Fig. 1 shows an inventive holder for a gem in a side view,

Fig. 2 shows this holder in a top view, and

Fig. 3 in a section along line III-III of Fig. 1.

In accordance with the illustrated embodiment, the holder for a gem 1 consists of two clamps 2 integrally connected with each other at their ends, which between each other form a mounting lug 3 for the gem 1. In the longitudinal central portion of the two clamps 2 the same are provided with clamp recesses 4 disposed opposite each other, in which the gem 1 is inserted. For this purpose, the mounting lug 3 is widened by resiliently spreading apart the two clamps 2, as this is indicated for instance in Fig. 1 by means of the schematically represented spreading forces 5. When the spreading forces 5 are reduced, the gem 1 introduced in the mounting lug 3 engages in the clamp recesses 4 with two peripheral portions located opposite each other. Because of the remaining bias of the clamps 2, a resilient clamping force acts on the gem 1, which is thus held without any clearance between the clamps 2, all the more so as the clamp recesses 4 have a cross-section tapering towards the bottom of the recess, as this can be taken from Fig. 3. The tapered gap formed by this tapering cross-section ensures a safe mounting of the gem 1, without having to provide any additional measures.

The holder with the gem 1 constitutes a separately usable element of jewellery, which can be used alone or in conjunction with identical elements of jewellery lined up one beside the other. This element of jewellery can, however, also be completed to form a web 6, which prolongs the clamps 2 at one or at both ends, as this is indicated in Fig. 1 in dash-dotted lines. The possible field of use is thus

extended, for instance to ear pieces of spectacles, along which at least one such element of jewellery may be provided.

Claims:

1. A holder for a gem (1), comprising a fixture positively clamping the gem (1), which fixture consists of two clamps (2) connected with each other at both ends and forming between each other a mounting lug (3) for the gem (1), characterized in that the gem (1) merely engaging in two oppositely located recesses (4) of the integrally formed clamps (2) is clamped in the mounting lug (3) with an elastic bias of the clamps.
2. The holder as claimed in claim 1, characterized in that between the gem (1) and the connection of the two clamps (2) at their ends a spacing is provided.



This Sheet Has Been Replaced



PART OF THIS SHEET HAS BEEN
REPLACED