WATCH CUSHION

Technical Field

The present disclosure generally relates to a watch cushion.

Background

Watches and wristwatches in particular are typically put up on display in shops and sold in watch boxes to protect the watches. A watch box has a watch cushion inside that helps to reduce movement of the watch during transportation. Watch cushions are commonly made of plastics such as ethylene-vinyl acetate, but these plastics are often non-biodegradable and can cause pollution if they are not properly disposed.

Therefore, there is a need to provide an improved watch cushion that would address or alleviate at least one of the aforementioned problems and/or disadvantages.

Summary

According to a first aspect of the present disclosure, there is a watch cushion comprising a cushion body for supporting a wristwatch, the cushion body being made of a rubbery material that is substantially comprised of natural rubber and is absent of any synthetic rubber, wherein the natural rubber is made from pure natural latex.

According to a second aspect of the present disclosure, there is a method of making a watch cushion, the method comprising: preparing a moulding material substantially comprised of pure natural latex; and moulding a cushion body of the watch cushion using the moulding material, wherein the moulded cushion body is made of a rubbery material that is substantially comprised of natural rubber and is absent of any synthetic rubber, the natural rubber being made from the pure natural latex during said moulding.

A watch cushion according to the present disclosure is thus disclosed herein. Various features, aspects, and advantages of the present disclosure will become more

apparent from the following detailed description of the embodiments of the present disclosure, by way of non-limiting examples only, along with the accompanying drawings.

Brief Description of the Drawings

Figures 1A to 1C are illustrations of a watch cushion in accordance with embodiments of the present disclosure.

Figures 2A to 2C are illustrations of the watch cushion with a wristwatch.

Detailed Description

For purposes of brevity and clarity, descriptions of embodiments of the present disclosure are directed to a watch cushion, in accordance with the drawings. While aspects of the present disclosure will be described in conjunction with the embodiments provided herein, it will be understood that they are not intended to limit the present disclosure to these embodiments. On the contrary, the present disclosure is intended to cover alternatives, modifications and equivalents to the embodiments described herein, which are included within the scope of the present disclosure as defined by the appended claims. Furthermore, in the following detailed description, specific details are set forth in order to provide a thorough understanding of the present disclosure. However, it will be recognized by an individual having ordinary skill in the art, i.e. a skilled person, that the present disclosure may be practiced without specific details, and/or with multiple details arising from combinations of aspects of particular embodiments. In a number of instances, well-known systems, methods, procedures, and components have not been described in detail so as to not unnecessarily obscure aspects of the embodiments of the present disclosure.

In embodiments of the present disclosure, depiction of a given element or consideration or use of a particular element number in a particular figure or a reference thereto in corresponding descriptive material can encompass the same, an equivalent,

or an analogous element or element number identified in another figure or descriptive material associated therewith.

References to “an embodiment / example”, “another embodiment / example”, “some embodiments / examples”, “some other embodiments / examples”, and so on, indicate that the embodiment(s) / example(s) so described may include a particular feature, structure, characteristic, property, element, or limitation, but that not every embodiment / example necessarily includes that particular feature, structure, characteristic, property, element or limitation. Furthermore, repeated use of the phrase “in an embodiment / example” or “in another embodiment / example” does not necessarily refer to the same embodiment / example.

The terms “comprising”, “including”, “having”, and the like do not exclude the presence of other features / elements / steps than those listed in an embodiment. Recitation of certain features / elements / steps in mutually different embodiments does not indicate that a combination of these features / elements / steps cannot be used in an embodiment. As used herein, the terms “a” and “an” are defined as one or more than one. The use of “/” in a figure or associated text is understood to mean “and/or” unless otherwise indicated.

Representative or exemplary embodiments of the present disclosure describe a watch cushion 100 as shown in Figures 1A to 1C. The watch cushion 100 may also be referred to as a watch pillow. The watch cushion 100 includes a cushion body 110 for supporting a wristwatch 200 as shown in Figures 2A to 2C. The wristwatch 200 includes a main part 210 which has components such as the watch face, bezel, and crown. It will be appreciated that different wristwatches 200 have different components in the main part 210. The wristwatch 200 further includes watch straps 220 attached to the main part 210, the watch straps 220 for wearing the wristwatch 200 on a person’s wrist. The watch straps 220 may also be referred to as watch bands, watch bracelets, or watch belts.

In one example as shown in Figures 2A to 2C, when the watch cushion 100 is supporting the wristwatch 200, the main part 210 of the wristwatch 200 rests on a top

portion 112 of the cushion body 110 and the watch straps 220 go around end portions 114 of the cushion body 110. The watch straps 220 may be joined together at the bottom portion 116 of the cushion body 110. The wristwatch 200 together with the watch cushion 100 may be displayed in a watch shop. The watch cushion 100 supports the wristwatch 200 such that the main part 210 is oriented towards people walking past the watch shop, making the wristwatch 200 more attractive to people. The wristwatch 200 and the watch cushion 100 may be stored together in a watch box that is given to a customer after the customer purchases the wristwatch 200.

The cushion body 110 is made of a rubbery material. The rubbery material has resilient and/or elastomeric properties to withstand forces sustained by the wristwatch 200, especially during transportation, thereby protecting the wristwatch 200 from damage. The rubbery material is substantially comprised of natural rubber and is absent of any synthetic rubber, wherein the natural rubber is made from pure natural latex, i.e. 100% natural latex. Preferably, the natural rubber forms at least 90% by weight of the cushion body 110. More preferably, the natural rubber forms about 90% to 96% by weight of the cushion body 110. The pure natural latex may be organic, i.e. the pure natural latex has been grown organically without use of any chemical pesticides.

Natural rubber is made from natural latex which is harvested from plants, whereas synthetic rubber is synthetically or artificially produced through chemical processes. Natural latex is commonly sourced from the rubber tree, specifically the Pará rubber tree or Hevea brasiliensis. Although rubber trees are native to South America, there are large rubber tree plantations in tropical regions, particularly Southeast Asia. Notably, Thailand and Indonesia are the two leading producers of natural rubber.

Unlike natural rubber which is made from natural latex harvested from rubber trees, synthetic rubber is made from petroleum compounds or petrochemicals in industrial plants. Some examples of synthetic rubber include styrene-butadiene rubber (SBR), poly acrylics, polyvinyl acetate (PVA), polyvinyl chloride (PVC), polychloroprene (also referred to as neoprene), and various types of polyurethane. SBR is one of the most common types of synthetic rubber that is used in the production of synthetic foam. Synthetic rubber is completely and artificially man-made and is essentially a plastic.

Like most plastics, synthetic rubber is non-renewable and non-biodegradable since it is sourced from petroleum compounds or fossil fuels which cause pollution and contribute to climate change.

The watch cushion 100 of the present disclosure is made substantially from natural rubber without any synthetic rubber. Natural rubber is made from pure natural latex that is sustainably sourced from rubber trees. Natural rubber is a renewable resource and is more eco-friendly and safer for the environment as compared to synthetic rubber. Moreover, the natural rubber from the watch cushion 100 can be recycled by pulverizing or shredding the watch cushion 100 and then reused in other products.

In various embodiments of the present disclosure, there is a method of making the watch cushion 100. The method includes preparing a moulding material substantially comprised of pure natural latex, and moulding the cushion body 110 of the watch cushion 100 using the moulding material. The moulded cushion body 110 is made of a rubbery material that is substantially comprised of natural rubber and is absent of any synthetic rubber, the natural rubber being made from the pure natural latex during said moulding.

Natural latex is a milky white liquid sap which is found beneath the bark of the rubber tree. The latex can be extracted by cutting into the bark so that the latex can flow out from the cut. When natural latex leaves the rubber tree, it gets exposed to air and starts to coagulate or solidify. The extracted latex is transferred into air-tight containers to preserve it in a liquid state for longer.

Chemicals such as ammonia may be added to the natural latex to prevent or slow the coagulation. However, excessive ammonia may damage the material properties of the resultant rubbery material. If the watch cushion 100 is made in a manufacturing facility that is reasonably close to rubber tree plantations or in the same country (e.g. Thailand) or geographical region where there are rubber tree plantations, the transportation time for the fresh natural latex from the rubber trees to the manufacturing facility is shorter. As such, there is less time for the natural latex to coagulate and it may not be necessary to add ammonia to the natural latex to maintain it in the liquid state until it

arrives at the manufacturing facility. Preferably, ammonia forms up to about 0.25% by weight of the moulding material and most of the moulding material is still the pure natural latex, such that the rubbery material contains low levels of ammonia.

The moulding process may include vulcanizing the moulding material. For example, the moulding material may be vulcanized in a suitable machine such as an autoclave. Various vulcanizing agents may be added to the moulding material for vulcanizing the moulding material. The following lists some non-limiting examples of vulcanizing agents.

Castor oil
Ceramics such as calcium oxide or titanium dioxide
Ceramic matrix composites
Charcoal
Clay such as bentonite
Dipropylene glycol (DPG)
Dispersing agent
Hydroperse AOL
Sodium Silicofluoride (SSF)
Oleic acid
Potassium hydroxide
Soap
Sulphur
Tamol
Zinc diethyldithiocarbamate (ZDEC).
ZMBT rubber accelerator

It will be appreciated that various conditions of the moulding process and the composition of the moulding material may be adjusted for making different watch cushions 100 with different material properties of the rubbery material, such as different elasticity, hardness, and weight. As mentioned above, natural rubber (made from 100% pure natural latex) should form at least 90%, or about 90% to 96%, by weight of the cushion body 110.

In the foregoing detailed description, embodiments of the present disclosure in relation to the watch cushion 100 are described with reference to the provided figures. The description of the various embodiments herein is not intended to call out or be limited only to specific or particular representations of the present disclosure, but merely to illustrate non-limiting examples of the present disclosure. The present disclosure serves to address at least one of the mentioned problems and issues associated with the prior art. Although only some embodiments of the present disclosure are disclosed herein, it will be apparent to a person having ordinary skill in the art in view of this disclosure that a variety of changes and/or modifications can be made to the disclosed embodiments without departing from the scope of the present disclosure. Therefore, the scope of the disclosure as well as the scope of the following claims is not limited to embodiments described herein.

Claims

1. A watch cushion comprising a cushion body for supporting a wristwatch, the cushion body being made of a rubbery material that is substantially comprised of natural rubber and is absent of any synthetic rubber, wherein the natural rubber is made from pure natural latex.

2. The watch cushion according to claim 1, wherein the natural rubber forms at least 90% by weight of the cushion body.

3. The watch cushion according to claim 2, wherein the natural rubber forms about 90% to 96% by weight of the cushion body.

4. The watch cushion according to any one of claims 1 to 3, wherein the pure natural latex is organic.

5. A method of making a watch cushion, the method comprising:

preparing a moulding material substantially comprised of pure natural latex; and

moulding a cushion body of the watch cushion using the moulding material,

wherein the moulded cushion body is made of a rubbery material that is substantially comprised of natural rubber and is absent of any synthetic rubber, the natural rubber being made from the pure natural latex during said moulding.

6. The method according to claim 5, wherein the natural rubber forms at least 90% by weight of the cushion body.

7. The method according to claim 6, wherein the natural rubber forms about 90% to 96% by weight of the cushion body.

8. The method according to any one of claims 5 to 7, wherein the pure natural latex is organic.

9. The method according to any one of claims 5 to 8, wherein ammonia forms up to about 0.25% by weight of the moulding material.

10. The method according to any one of claims 5 to 9, wherein said moulding comprises vulcanizing the moulding material.

11. The method according to claim 10, wherein the moulding material comprises vulcanizing agents for vulcanizing the moulding material.