



US 20130174318A1

(19) **United States**

(12) **Patent Application Publication**
Catena

(10) **Pub. No.: US 2013/0174318 A1**

(43) **Pub. Date: Jul. 11, 2013**

(54) **PUNCTURE RESISTANT ANIMAL HANDLING GLOVE**

(52) **U.S. Cl.**
CPC *A41D 19/01505* (2013.01)
USPC *2/161.8*

(71) Applicant: **Laura Catena**, Pittsburgh, PA (US)

(72) Inventor: **Laura Catena**, Pittsburgh, PA (US)

(21) Appl. No.: **13/734,043**

(22) Filed: **Jan. 4, 2013**

(57) **ABSTRACT**

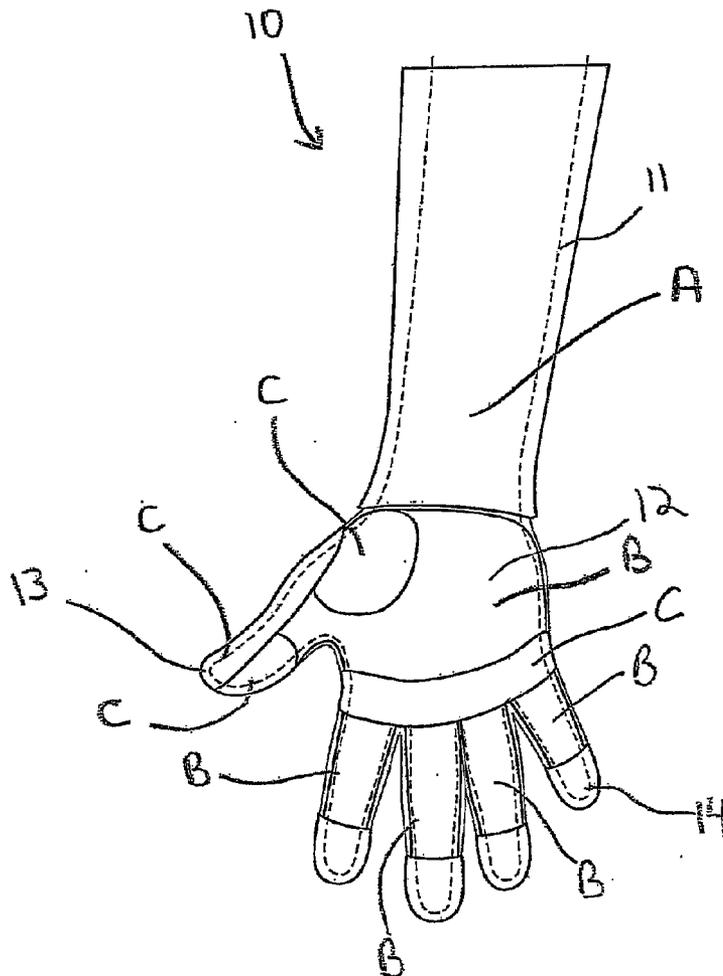
A puncture resistant animal handling glove includes a gauntlet and a dorsal hand portion made of a puncture resistant material; a palm portion and a thumb portion made of a flexible gripping material; and a plurality of finger portions made of the puncture resistant material and the flexible gripping material. The gauntlet, dorsal hand portion, palm portion, thumb portion, and the plurality of finger portions are secured together to form a unitary construction. Selected areas of the palm portion, the thumb portion and the plurality of finger portions made of the flexible gripping material are further made of a reinforcement material disposed on an inside of the flexible gripping material. The puncture resistant material provides a high degree of protection against animal bites and scratches and the flexible gripping material provides flexibility and dexterity while gripping an animal.

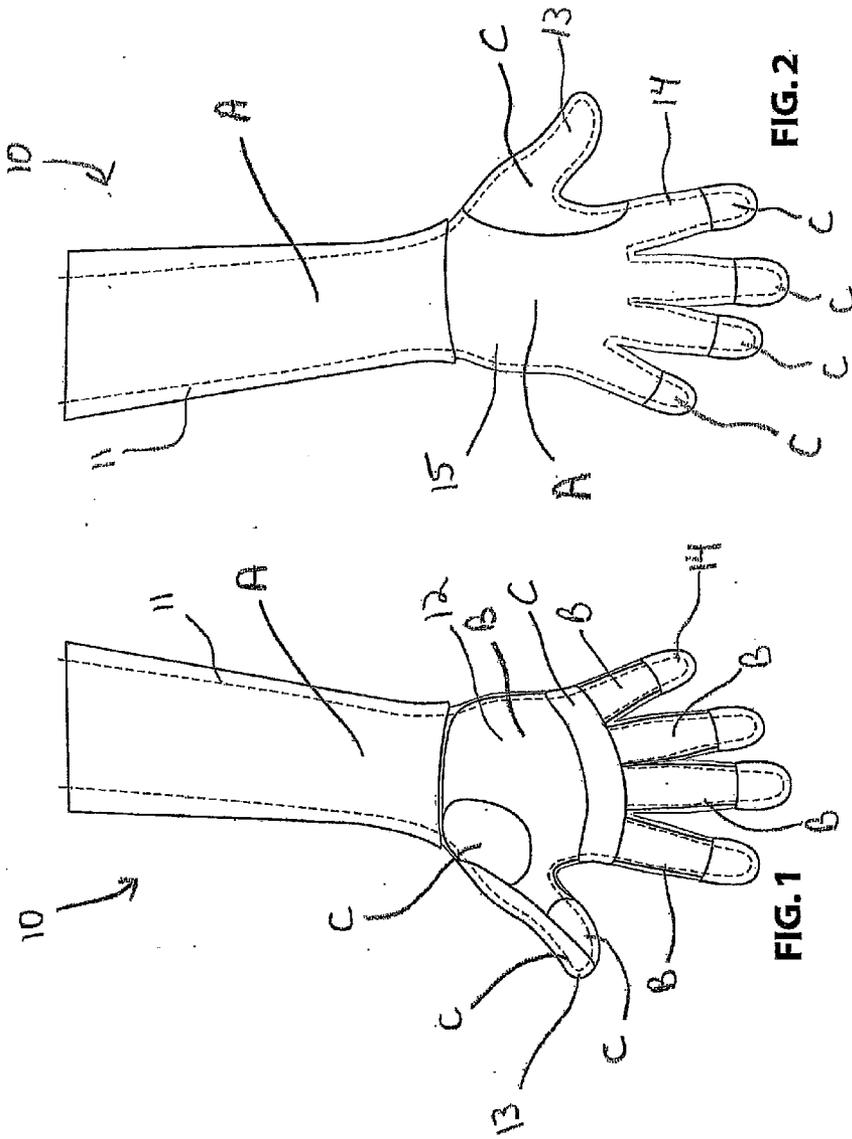
Related U.S. Application Data

(60) Provisional application No. 61/583,907, filed on Jan. 6, 2012.

Publication Classification

(51) **Int. Cl.**
A41D 19/015 (2006.01)





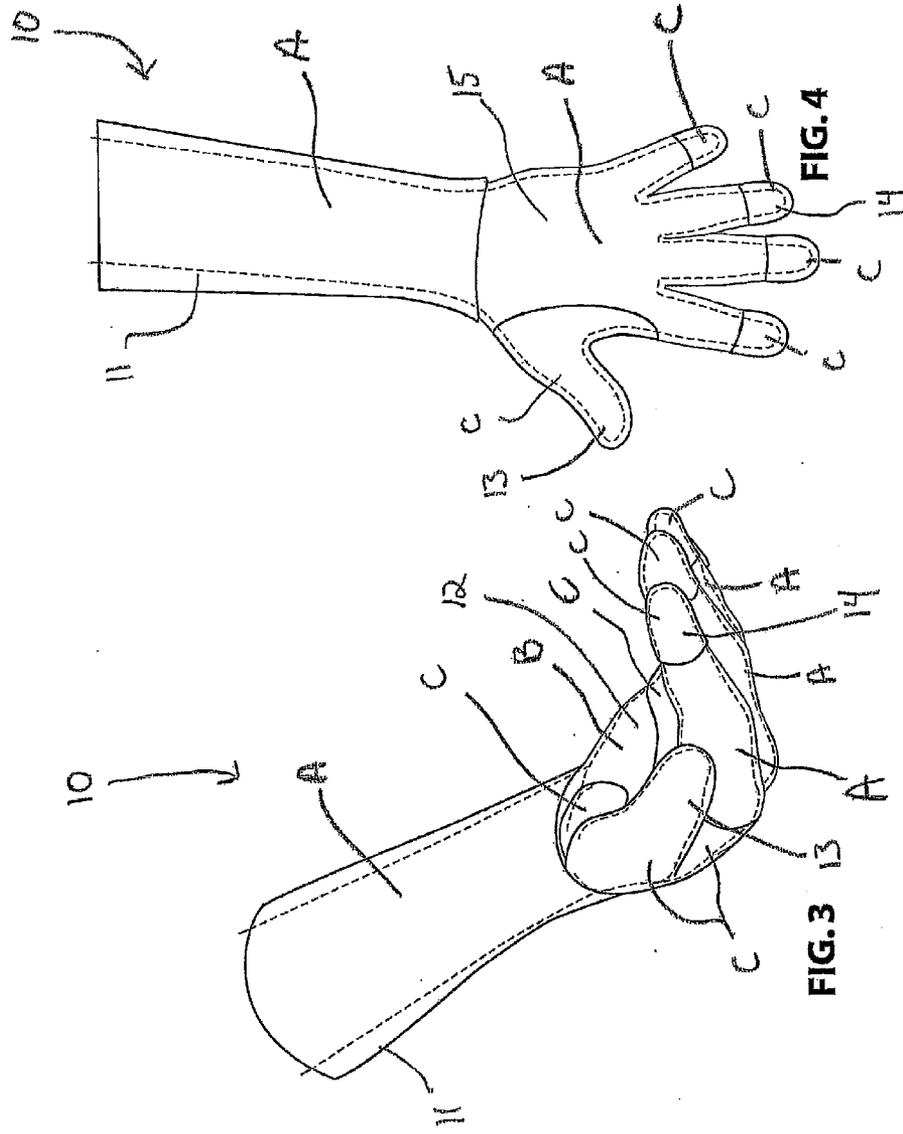


FIG. 4

FIG. 3

PUNCTURE RESISTANT ANIMAL HANDLING GLOVE

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a protective glove for handling animals in a variety of settings and, more particularly, to a puncture resistant glove that incorporates flexible gripping material on the inside of the hand to facilitate control of the animal

[0003] 2. Description of Related Art

[0004] Animal bites and scratches are a daily risk for veterinarians and their staff as well as anyone otherwise involved in animal handling. Animal bites and scratches transmit disease and carry increased risk of infection. Bites and scratches to fingers, thumbs, hands, and the lower arms account for approximately 70% of injuries among veterinary workers.

[0005] Typical prior art gloves for handling animals are heavily padded and incorporate inflexible Kevlar or similar fabric throughout the glove. As a result, the gloves are heavy and bulky and highly inflexible, which makes it easy for a struggling animal to get free of a handler wearing such a glove, because the wearer is unable to grip the animal. As such, many workers are reluctant to wear the gloves that are available because they are ineffective, thus increasing the risk of injury.

SUMMARY OF THE INVENTION

[0006] Accordingly, there is a general need in the art for a protective glove for veterinary workers to wear while handling animals that offers protection to the wearer while facilitating restraint of the animal by having sufficient flexibility and dexterity. Such a glove can be used not only by veterinary workers and veterinarians, but by anyone that handles or works with animals on a regular basis, such as kennel workers, breeders, pet store employees, animal shelter workers, animal trainers, groomers, and pet owners. The glove is useful to veterinarians and clinic workers in handling a fractious or ill tempered animal, for inspecting an animal's mouth or teeth, for administering vaccination and medication to the animal, or any other situation where maintaining control of the animal's head is necessary to caring for the animal.

[0007] According to a preferred, non-limiting, embodiment, the present invention provides for a puncture resistant animal handling glove that is flexible in certain locations in order to restrain an animal properly, but also provides protection against animal bites and scratches. The glove includes a "grip" surface and material on the palm of the hand. The outside surface of the glove is made from a material that is puncture and cut resistant, as is used in typical protective gloves of this type. The glove may or may not be washable but the material on the palm of the glove is wipeable such that the glove may be cleaned. The glove extends not only to protect the hand but also the lower arm and may come in generic sizes.

[0008] According to an embodiment of the present invention, a puncture resistant animal handling glove is provided. The glove comprises a gauntlet comprised of a puncture resistant material; a dorsal hand portion comprised of the puncture resistant material; a palm portion comprised of a flexible gripping material different from the puncture resistant material; a thumb portion comprised of the flexible gripping material; and a plurality of finger portions comprised of the puncture

resistant material and the flexible gripping material. The gauntlet, dorsal hand portion, palm portion, the thumb portion, and the plurality of finger portions are secured together to form a unitary construction. Areas of the palm portion, the thumb portion, and the plurality of finger portions comprised of the flexible gripping material are further comprised of a reinforcement material disposed on an inside of the flexible gripping material. The puncture resistant material provides a high degree of protection against animal bites and scratches and the flexible gripping material provides flexibility and dexterity while gripping an animal.

[0009] Further details and advantages of the invention will become clear upon reading the following detailed description in conjunction with the accompanying drawing figures, wherein like parts are designated with like reference numerals throughout.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a bottom view of a puncture resistant animal handling glove in accordance with an embodiment of the present invention;

[0011] FIG. 2 is a top view of the puncture resistant animal handling glove of FIG. 1;

[0012] FIG. 3 is a side perspective view of the puncture resistant handling glove of FIG. 1; and

[0013] FIG. 4 is a top view of a left-handed version of the puncture resistant animal handling glove of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0014] For purposes of the description hereinafter, the terms "end", "upper", "lower", "right", "left", "vertical", "horizontal", "top", "bottom", "lateral", "longitudinal" and derivatives thereof shall relate to the invention as it is oriented in the drawing figures. However, it is to be understood that the invention may assume various alternative variations and step sequences, except where expressly specified to the contrary. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification, are simply exemplary embodiments of the invention. Hence, specific dimensions and other physical characteristics related to the embodiments disclosed herein are not to be considered as limiting. Further, it is to be understood that the invention may assume various alternative variations and step sequences, except where expressly specified to the contrary.

[0015] With reference to FIGS. 1-4, a puncture resistant animal handling glove **10** is shown in accordance with an embodiment of the present invention. The glove **10** includes a gauntlet **11** extending from the wrist along the forearm to the area below the user's elbow, a palm portion **12** that covers the user's palm, a thumb portion **13** that covers the user's thumb, a plurality of finger portions **14** that cover the user's fingers, and a dorsal portion **15** that covers the dorsal part of the hand, i.e., the back of the hand.

[0016] The glove **10** is made up of several different portions of fabric or protective material that may be secured together by any method known to be suitable to those having ordinary skill in the art, such as stitching or gluing, to form a unitary construction. In particular, the areas A in FIGS. 1-4 are areas comprised of puncture resistant, preferably water resistant material or fabric, for example, a para-aramid (aromatic polyamide) synthetic fiber material, such as KEVLAR™

(commercially available from E.I. du Pont de Nemours & Co.), NOMEX™, TECHNORA™, SUPERFABRIC™ (commercially available from HDM, Inc. of Oakdale, Minn.), other armor materials incorporating armor plates interwoven with fabric or applied to the surface thereof, leather, high performance polyethylene (HPPE), fiber and steel blend, and combinations thereof, and/or any other materials known to be suitable to those having ordinary skill in the art. Such material should have high puncture and cut resistance, i.e., have a high ISEA/CE puncture rating, which will provide a high degree of resistance to bites and scratches from animals. For instance, according to one embodiment, the material for those areas noted "A" in the drawings is the same as the materials that are typically used in conventional protective gloves. Optionally, the puncture resistant material can have a water resistant exterior layer or coating. The areas of the glove 10 that include such heavy material include the gauntlet 11 and the entire dorsal portion 15 of the glove 10, including along the dorsal part of the fingers 14 up to the tips of the fingers 14. Because flexibility in these areas is not typically needed to grip an animal, maximum protection is provided.

[0017] The areas B in FIGS. 1-3 are areas comprised of a flexible, preferably water resistant/waterproof and cleanable/wipable material suitable for establishing and maintaining a grip on the animal. Such a material should be flexible enough to allow for dexterity in the palm and fingers so that the hand may be moved to securely hold the animal. The material is also preferably waterproof and cleanable/wipable so that the glove 10 may be cleaned with or without machine washing. Suitable materials for the areas B include: neoprene, rubber, latex, nitrile, silicon, vinyl, polytetrafluoroethylene and copolymers, and mixtures and combinations thereof, and/or any other materials known to be suitable to those having ordinary skill in the art. The material in the areas B should be provided thick enough to protect the user from scratches and small or partial bites while still being flexible enough to allow for sufficient movement of the hand to grip the animal. Preferably, the material also has a certain tackiness or stickiness to provide a better grip on the animal. To that end, the material in the areas B may have additional surface beading and/or knurling and/or silicon coating to improve surface grip. The areas of the glove 10 that include the flexible gripping material include a majority of the palm portion 12 and the inside areas of the fingers 14 from the joints to the tips of the fingers 14. Once control of the animal is established, these areas are not prone to bites and scratches but need to be flexed to maintain grip on the animal.

[0018] The selected areas C in FIGS. 1-4 are areas comprised of the flexible gripping material provided in the areas B and which are additionally reinforced against bites and scratches. The additional reinforcement may be provided by a reinforcement material, such as additional layers of the flexible gripping material provided in the areas B, foam or fiber padding under the flexible gripping material, or thinner layers of the puncture resistant material provided in the areas A. The areas C are more prone to being bitten and scratched by an animal, but flexibility in these areas is useful in establishing and maintaining a grip on the animal. Accordingly, the configuration allows for increased flexibility and dexterity compared to the puncture resistant materials provided in the areas A while also providing additional protection against bites and scratches as compared to the flexible gripping material provided alone in the areas B. The areas C may also have additional surface beading and/or knurling and/or silicon

coating to improve surface grip. The areas of the glove 10 that include the reinforcement material and the flexible gripping material include the entire back of the thumb 13 and the joint area of the thumb 13 on the dorsal part 15 of the glove 10, the tip of the inside of the thumb 13, the thumb pad area of the palm 12, the area of the palm 12 just below the joints of the fingers 14, and the inside and the outside of the tips of the fingers 14.

[0019] According to one embodiment of the invention, the glove 10 is machine washable. However, it is sufficient if the glove 10 can be cleaned and wiped by hand to remove stains and maintain sanitary conditions.

[0020] As shown in FIG. 4, the left handed glove 10 is of the same construction as the right handed glove illustrated in FIGS. 1-3. According to one embodiment of the present invention, right handed and left handed gloves are provided as a pair and are worn by the user simultaneously.

[0021] While embodiments of a Puncture Resistant Animal Handling Glove were provided in the foregoing description, those skilled in the art may make modifications and alterations to these embodiments without departing from the scope and spirit of the invention. Accordingly, the foregoing description is intended to be illustrative rather than restrictive. The invention described hereinabove is defined by the appended claims and all changes to the invention that fall within the meaning and the range of equivalency of the claims are to be embraced within their scope. It is to be understood that the present invention contemplates that, to the extent possible, one or more features of any embodiment can be combined with one or more features of any other embodiment.

The invention claimed is:

1. A puncture resistant animal handling glove, comprising:
 - a gauntlet comprised of a puncture resistant material;
 - a dorsal hand portion comprised of the puncture resistant material;
 - a palm portion comprised of a flexible gripping material different from the puncture resistant material;
 - a thumb portion comprised of the flexible gripping material; and
 - a plurality of finger portions comprised of the puncture resistant material and the flexible gripping material, wherein the gauntlet, dorsal hand portion, palm portion, the thumb portion, and the plurality of finger portions are secured together to form a unitary construction, wherein selected areas of the palm portion, the thumb portion and the plurality of finger portions comprised of the flexible gripping material are further comprised of a reinforcement material disposed on an inside of the flexible gripping material, and wherein the puncture resistant material provides a high degree of protection against animal bites and scratches and the flexible gripping material provides flexibility and dexterity while gripping an animal.
2. The puncture resistant animal handling glove according to claim 1, wherein the puncture resistant material is selected from the group consisting of: para-aramid material, leather, HPPE, fiber and steel blend, and combinations thereof.
3. The puncture resistant animal handling glove according to claim 1, wherein the flexible gripping material is selected from the group consisting of: neoprene, rubber, latex, nitrile, silicon, vinyl, polytetrafluoroethylene and copolymers, and combinations thereof.