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(54) **WELDER'S GARMENT ASSEMBLY**

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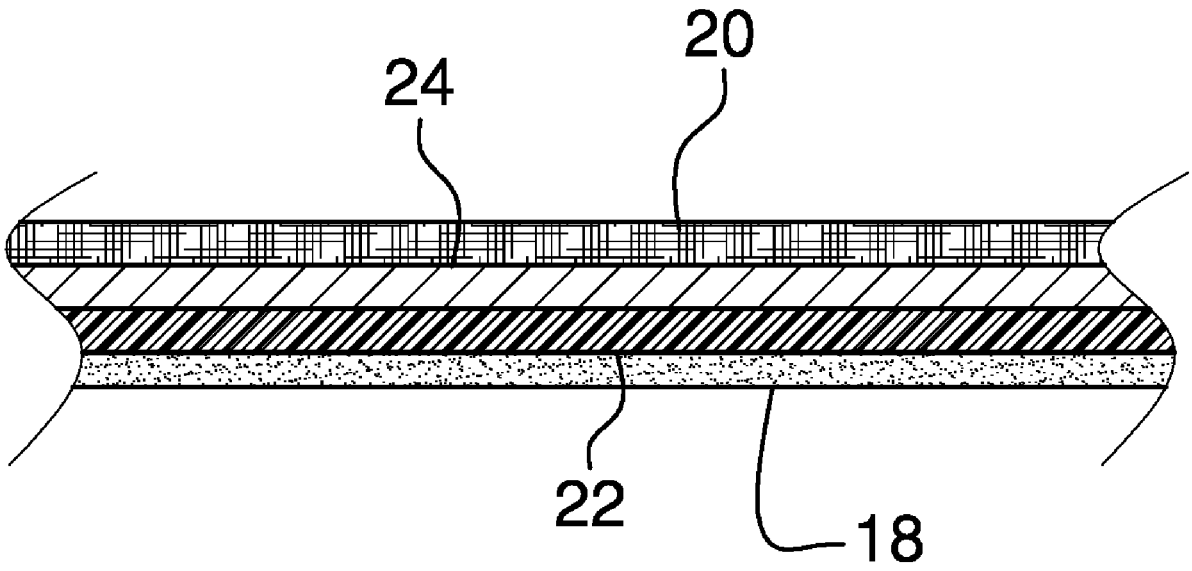
CPC ***A41D 19/0006*** (2013.01); ***A41D 31/065*** (2019.02); ***A41D 31/265*** (2019.02)

(57) **ABSTRACT**

A welder's garment assembly for protecting a welder from heat and electricity includes a garment that can be worn by a user. The garment is comprised of a pair of insulating layers that are sandwiched between a pair of covering layers. Each of the insulating layers is comprised of an energy absorbing material to protect the user during welding. A respective one of the covering layers is comprised of a resilient material to protect the insulating layers from abrasion. Furthermore, a respective one of the covering layers is comprised of a deformable material for enhancing comfort for wearing the garment.



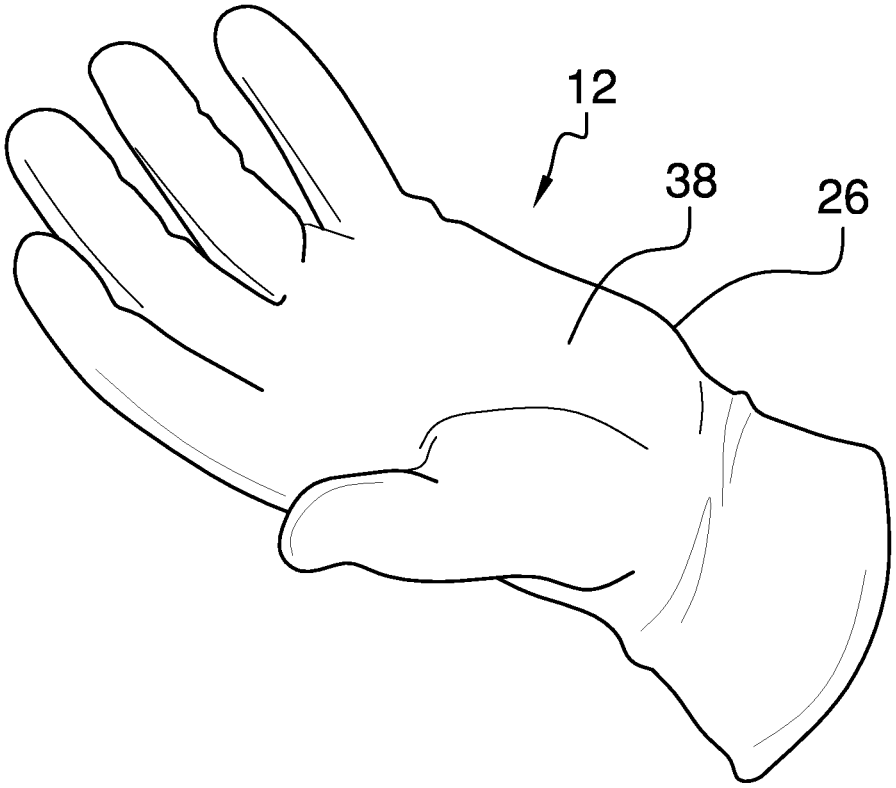


FIG. 1

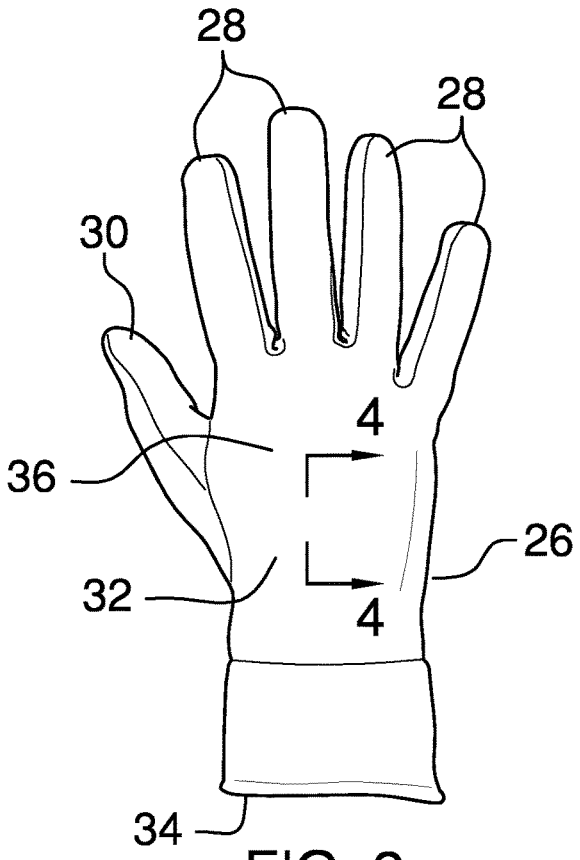


FIG. 2

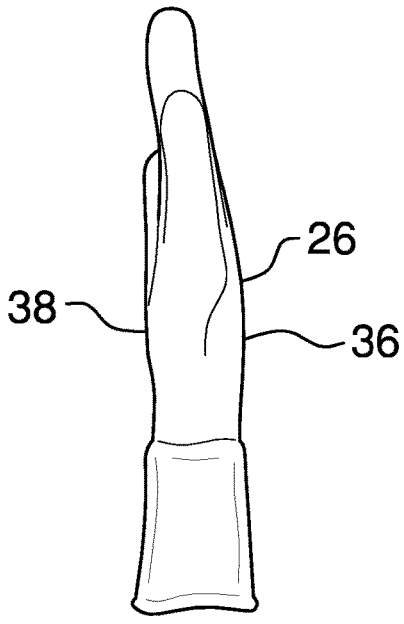


FIG. 3

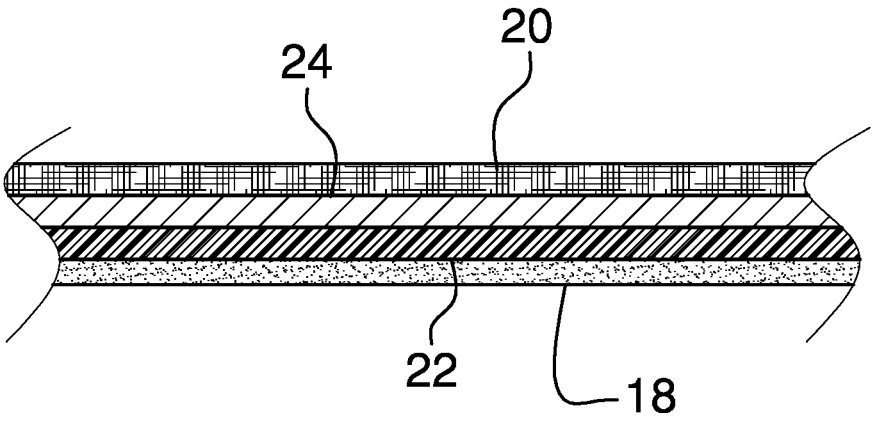


FIG. 4

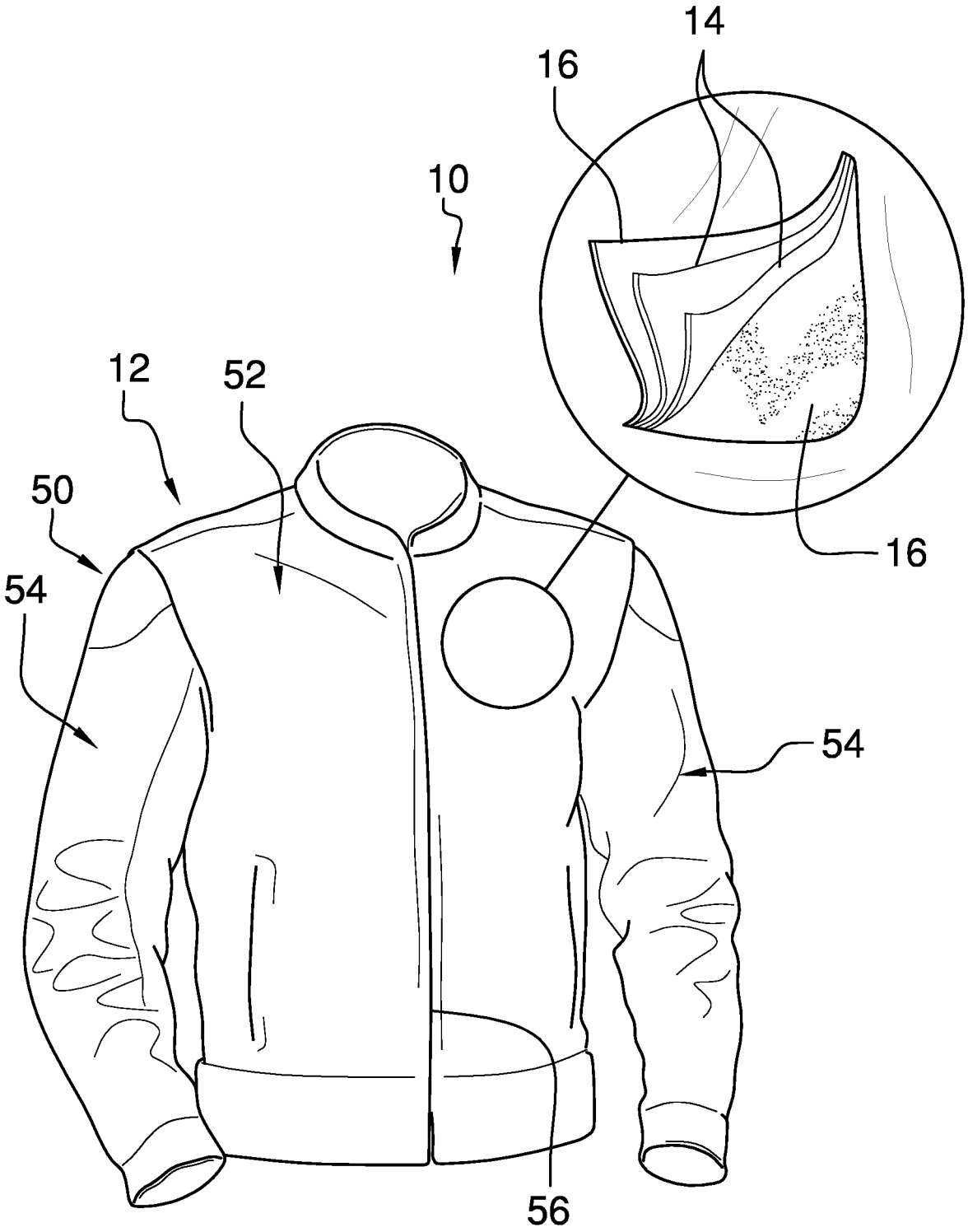


FIG. 5

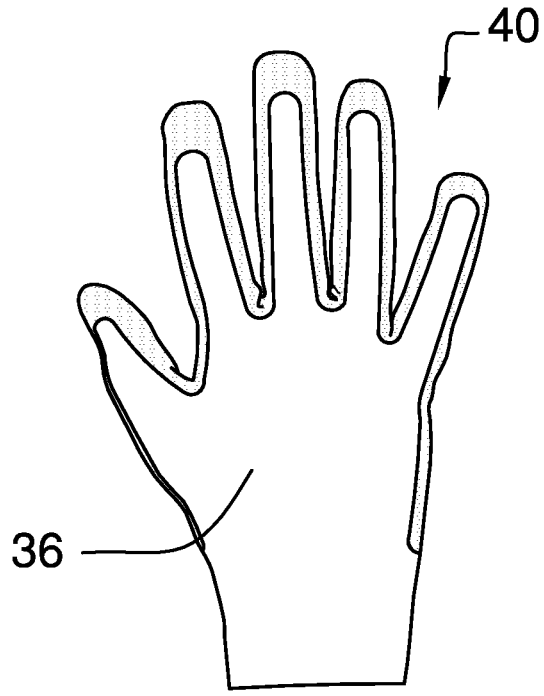


FIG. 6

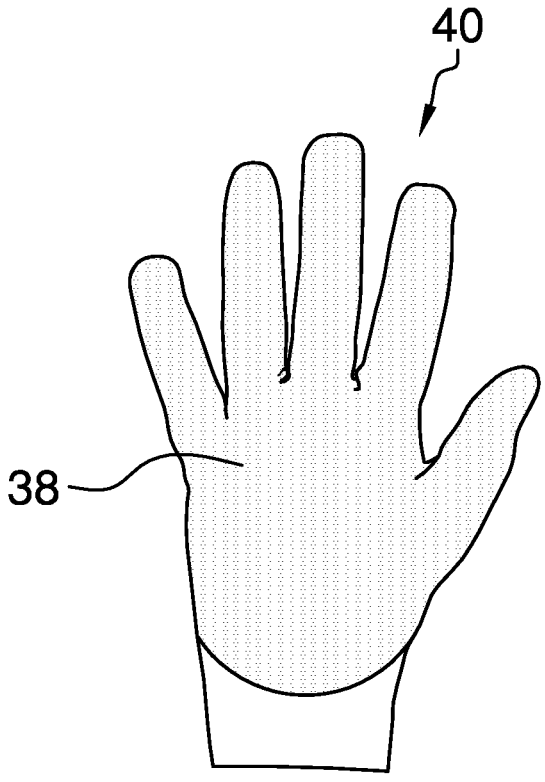


FIG. 7

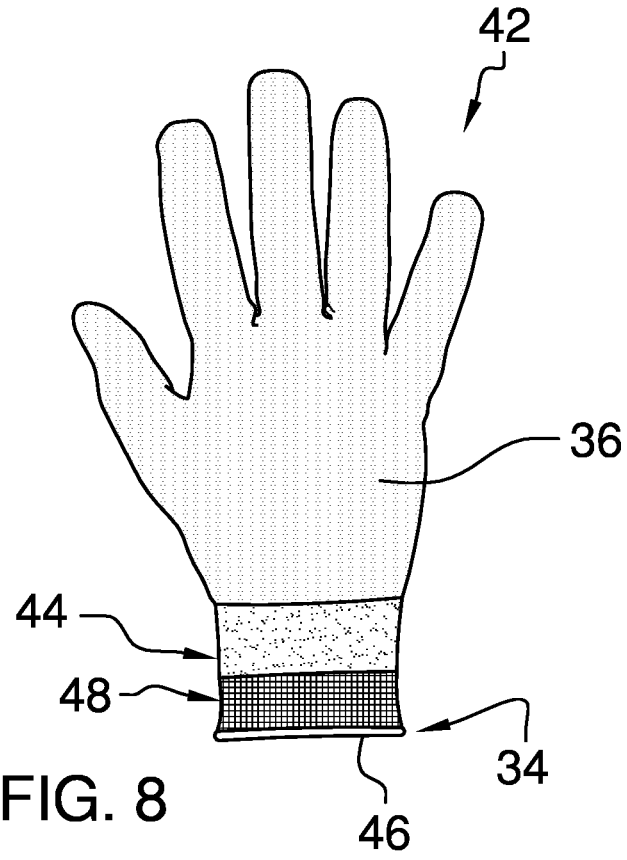


FIG. 8

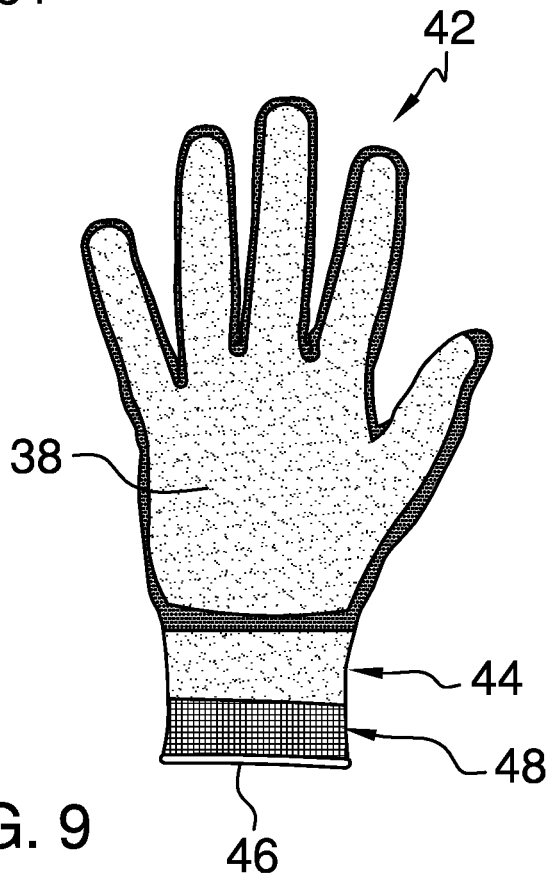


FIG. 9

WELDER'S GARMENT ASSEMBLY

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT

[0003] Not Applicable

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC OR AS A TEXT FILE VIA THE OFFICE ELECTRONIC FILING SYSTEM

[0004] Not Applicable

STATEMENT REGARDING PRIOR DISCLOSURES BY THE INVENTOR OR JOINT INVENTOR

[0005] Not Applicable

BACKGROUND OF THE INVENTION

(1) Field of the Invention

[0006] The disclosure relates to garment devices and more particularly pertains to a new garment device for protecting a welder from heat and from electricity. The device includes a garment that has a pair of insulating layers that are sandwiched between a pair of covering layers. Each of the insulating layers is respectively thermally insulating and electrically insulating. The covering layers include a resilient outer layer and soft inner layer.

(2) Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 1.98

[0007] The prior art relates to garment devices including a variety of gloves that have multiple layers of thermal insulation. In several instances the gloves include a covering layer of resilient material such as leather. The prior art discloses a variety of gloves that have multiple layers of electrically insulating material for protecting a user from electrical shock. In several instances the gloves include a covering of resilient material such as leather. The prior art discloses a protective glove that has a plurality of silicone pads integrated into the glove.

BRIEF SUMMARY OF THE INVENTION

[0008] An embodiment of the disclosure meets the needs presented above by generally comprising a garment that can be worn by a user. The garment is comprised of a pair of insulating layers that are sandwiched between a pair of covering layers. Each of the insulating layers is comprised of an energy absorbing material to protect the user during welding. A respective one of the covering layers is comprised of a resilient material to protect the insulating layers from abrasion. Furthermore, a respective one of the covering layers is comprised of a deformable material for enhancing comfort for wearing the garment.

[0009] There has thus been outlined, rather broadly, the more important features of the disclosure in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the disclosure that will be described hereinafter and which will form the subject matter of the claims appended hereto.

[0010] The objects of the disclosure, along with the various features of novelty which characterize the disclosure, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWING(S)

[0011] The disclosure will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

[0012] FIG. **1** is a perspective view of a glove of a welder's garment assembly according to an embodiment of the disclosure.

[0013] FIG. **2** is a top view of a glove of an embodiment of the disclosure.

[0014] FIG. **3** is a left side view of a glove of an embodiment of the disclosure.

[0015] FIG. **4** is a cross sectional view taken along line **4-4** of FIG. **2** of an embodiment of the disclosure.

[0016] FIG. **5** is a front perspective view of a jacket of an embodiment of the disclosure.

[0017] FIG. **6** is a top view of an alternative embodiment of the disclosure.

[0018] FIG. **7** is a bottom view of an alternative embodiment of the disclosure.

[0019] FIG. **8** is a top perspective view of an alternative embodiment of the disclosure.

[0020] FIG. **9** is a bottom perspective view of an alternative embodiment of the disclosure.

DETAILED DESCRIPTION OF THE INVENTION

[0021] With reference now to the drawings, and in particular to FIGS. **1** through **9** thereof, a new garment device embodying the principles and concepts of an embodiment of the disclosure and generally designated by the reference numeral **10** will be described.

[0022] As best illustrated in FIGS. **1** through **9**, the welder's garment assembly **10** generally comprises a garment **12** that can be worn by a user. The garment **12** is comprised of a pair of insulating layers **14** that are sandwiched between a pair of covering layers **16**. Each of the insulating layers **14** is comprised of an energy absorbing material to protect the user during welding. Additionally, each of the covering layers **16** completely covers the pair of insulating layers **14** such that neither of the insulating layers **14** is visible.

[0023] A respective one of the covering layers **16** is comprised of a resilient material to protect the insulating layers **14** from abrasion. The resilient material may include, but not be limited to, leather, canvas or other type of material that is puncture resistant and abrasion resistant. A respective one of the covering layers **16** is comprised of a deformable

material for enhancing comfort for wearing the garment **12**. The deformable material may include, but not be limited to, cotton, rayon, wool or other type of soft material that is pleasing against the user's skin. The pair of covering layers **16** includes an inner layer **18** and an outer layer **20**. The outer layer **20** comprises the resilient material and the inner layer **18** comprises the deformable material.

[0024] The pair of insulating layers **14** includes a first insulating layer **22** and a second insulating layer **24**. The first insulating layer **22** is comprised of a thermally insulating material to protect the user from is burned during welding. The thermally insulating material may comprise silicon or other type of material with a high thermal mass. The second insulating layer **24** is comprised of an electrically insulating material to protect the user from electrical current during welding. The electrically insulating material may comprise rubber or other similar deformable material that is electrically insulating.

[0025] As is most clearly shown in FIGS. **1** through **4** and FIGS. **6** through nine, the garment **12** comprises a glove **26** that includes a plurality of fingers **28**, a thumb **30**, a palm **32** and a cuff **34**, and the glove **26** has a top side **36** and a bottom side **38**. In an alternative embodiment **40** as is most clearly shown in FIGS. **6** and **7**, the top side **36** comprises a resiliently stretchable material and the bottom side **38** comprises the thermally insulating material. The resiliently stretchable material may comprise nylon, spandex or other similar type of material.

[0026] In alternative embodiment **42** as is most clearly shown in FIGS. **8** and **9**, the top side **36** comprises the thermally insulating material and the bottom side **38** comprises the electrically insulating material. Additionally, the cuff **34** has a first portion **44** extending from the palm **32** toward an end **46** of the cuff **34** and a second portion **48** extending between the first portion **44** and the end **46** of the cuff **34**. The first portion **44** comprises a resiliently stretchable material and the second portion **48** comprises a mesh material. The resiliently stretchable material may comprise nylon, spandex or other similar material. As is most clearly shown in FIG. **5**, the garment **12** comprises a jacket **50** which includes a body **52**, a pair of sleeves **54** and a closure **56** running along a full height of the body **52**.

[0027] In use, the garment **12** is worn when the user will be performing welding activities, or any other time that the user might be exposed to high temperatures or electrical current. In this way the user can safely work without the risk of getting burned or electrocuted. The outer layer **20** of the garment **12** protects the insulating layers **14** and the inner layer **18** enhances comfort for the user. In this way the garment **12** has the maximum possible service life while providing the maximum amount of comfort for the user.

[0028] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of an embodiment enabled by the disclosure, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by an embodiment of the disclosure.

[0029] Therefore, the foregoing is considered as illustrative only of the principles of the disclosure. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the disclosure to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the disclosure. In this patent document, the word "comprising" is used in its non-limiting sense to mean that items following the word are included, but items not specifically mentioned are not excluded. A reference to an element by the indefinite article "a" does not exclude the possibility that more than one of the element is present, unless the context clearly requires that there be only one of the elements.

I claim:

1. A welder's garment assembly having electrical insulating and thermal insulating properties, said assembly comprising:

a garment being configured for wearing on a user, said garment being comprised of a pair of insulating layers being sandwiched between a pair of covering layers, each of said insulating layers being comprised of an energy absorbing material wherein said insulating layers are configured to protect the user during welding, a respective one of said covering layers being comprised of a resilient material to protect said insulating layers from abrasion, a respective one of said covering layers being comprised of a deformable material for enhancing comfort for wearing said garment.

2. The assembly according to claim **1**, wherein said pair of covering layers includes an inner layer and an outer layer, said outer layer comprising said resilient material, said inner layer comprising said deformable material.

3. The assembly according to claim **1**, wherein said pair of insulating layers includes a first insulating layer and a second insulating layer, said first insulating layer being comprised of a thermally insulating material wherein said first insulating layer is configured to protect the user from being burned during welding, said second insulating layer being comprised of an electrically insulating material wherein said second insulating layer is configured to protect the user from electrical current during welding.

4. A welder's garment assembly having electrical insulating and thermal insulating properties, said assembly comprising:

a garment being configured for wearing on a user, said garment being comprised of a pair of insulating layers being sandwiched between a pair of covering layers, each of said insulating layers being comprised of an energy absorbing material wherein said insulating layers are configured to protect the user during welding, a respective one of said covering layers being comprised of a resilient material to protect said insulating layers from abrasion, a respective one of said covering layers being comprised of a deformable material for enhancing comfort for wearing said garment, said pair of covering layers including an inner layer and an outer layer, said outer layer comprising said resilient material, said inner layer comprising said deformable material, said pair of insulating layers including a first insulating layer and a second insulating layer, said first insulating layer being comprised of a thermally insulating material wherein said first insulating layer is configured to protect the user from being burned during welding, said second insulating layer being comprised of an electrically insulating material wherein said second insulating layer is configured to protect the user from electrical current during welding.

5. The assembly according to claim **4**, wherein said garment comprises a glove including a plurality of fingers, a thumb, a palm and a cuff, said glove having a top side and a bottom side.

6. The assembly according to claim **5**, wherein:

said top side comprises a resiliently stretchable material; and

said bottom side comprises said thermally insulating material.

7. The assembly according to claim **5**, wherein:

said top side comprises said thermally insulating material;

said bottom side comprises said electrically insulating material; and

said cuff has a first portion extending from said palm toward and end of said cuff and a second portion extending between said first portion and said end of said cuff, said first portion comprising a resiliently stretchable material, said second portion comprising a mesh material.

8. The assembly according to claim **4**, wherein said garment comprises a jacket including a body, a pair of sleeves and a closure running along a full height of said body.

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