

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A non-compression garment ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range characterized in that it~~ wherein the garment comprises:

[[- A]] a composite material including a polymer matrix in which particles of an inorganic material capable of emitting far-infrared radiation are embedded[[.]]; and

[[- A]] a fabric for surrounding a body part of [[the]] a user and having at least a portion ~~or the whole of it~~ coated with said composite material.

2. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range according to [[the]] claim 1, characterised in that~~ wherein the composite material contains metal oxides and inorganic material and at least one of the following components Al_2O_3 , Fe_2O_3 , TiO_2 , Cr_2O_3 , SiO_2 , MgO , ZrO_2 , MnO_2 , or Co_2O_3 ,

3. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range according to claims 1 to 2~~ claim 1, wherein

the composition of the metal oxide and inorganic material has the following composition by weight[[]], the percentage being 100%

TiO ₂	30-40%
SiO ₂	10-20%
MnO ₂	10-20%
Al ₂ O ₃	10-20%
Fe ₂ O ₃	5 to 10%
MgO	3-7%
Co ₂ O ₃	3-7%
ZrO ₂	≤ 5%

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4. (Currently Amended) [[A]] The non-compression garment, and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range according to claims 1,2,3 claim 1, wherein the composite material contains a polymer matrix which may be based on a breathable hydrophilic polymer, such as polytetrafluoroethylene (PTFE), polyurethane, polyester (PE), acrylic, polyvinyl chloride (PVC), polystyrene-butadiene copolymer (SBS), or an artificial latex (polyisoprene), or any other thermoplastic or thermosetting polymers.

5. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range~~ according to ~~claims 1,2,3,4~~ claim 1, ~~characterized in that~~ wherein the polymer matrix is based on a water based polyurethane.

6. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range~~ according to ~~claims 1, 2, 3, 4, 5~~ characterised in that claim 1, wherein the fabric is selected from ~~any kind of~~ a fabric or a combination of fabric made from threads, fibers or [[any]] other suitable natural or synthetic material.

7. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range~~ according to ~~any preceding~~ claim 1, wherein the garment comprises a fabric and a composite material where the fabric is printed with the composite material to form a pattern and surround [[any]] a body part of the user, ~~such as arms, throat, torso, thigh or calf,~~ in order to increase the temperature of the skin, improve blood circulation in the microcapillaries under the skin, ~~and to the upper and lower limbs,~~ improve the muscle strength, reduce the lactic acid in the muscles and the free radicals[[and]], or to reduce the appearance of cellulite.

8. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range according to any preceding claim 1,~~ wherein the fabric is impregnated with the composite material by a dipping process.

9. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range according to any preceding claim 1,~~ wherein the fabric is impregnated with the composite material by a tumbling process.

10. (Currently Amended) [[A]] The non-compression garment, ~~and in particular a “next to skin” article based on a fabric coated with a composite material on the basis of metal oxides and an inorganic material emitting in the far infrared range according to any preceding claim 1,~~ wherein the composite material has a level of emissivity of at least 95% in the far infrared radiation between 4 and 14 microns.

11. (New) The non-compression garment according to claim 4, wherein the hydrophilic polymer is polytetrafluoroethylene (PTFE), polyurethane, polyester (PE), acrylic, polyvinyl chloride (PVC), polystyrene-butadiene copolymer (SBS), or an artificial latex (polyisoprene), or other thermoplastic or thermosetting polymer.