CLAIMS

1. A graphene nanomaterial selected from graphene nanofibers,

wherein the graphene nanomaterial has a particle size distribution having a dn(90) of 0.60 μm or smaller in number of particle and a dv(90) of 80.00 μm or smaller in volume particle, as measured by laser diffraction particle analyzer.

2. The graphene nano material according to claim 1, wherein ~~its~~ the BET specific surface area of the graphene nanomaterial is comprised between 100 and 500 m^2/g.

3. The graphene nanomaterial ~~as defined in~~according to claim 2, wherein ~~its~~ the BET specific surface area of the graphene nanomaterial is between 300-350 m^2/g.

4. The graphene nanomaterial ~~as defined in~~according to claim 1, wherein ~~its~~ the pore volume of the graphene nanomaterial is between 0.35-0.40 cm^3/g.

5. The graphene nanomaterial ~~as defined in~~according to claim 1, wherein ~~its~~ the BET specific surface area of the graphene nanomaterial is between 300-350 m^2/g and ~~its~~ the pore volume of the graphene nanomaterial is between 0.35-0.40 cm^3/g.

6. The graphene nano material according to any one of claims 1 to 5, wherein the impurities in the graphene nano-material ~~are~~ is less than 0.01% by weight.

7. A method of preparing the graphene nanomaterial according to any one of claims 1 to 6, from raw graphene nanofibers, comprising the steps of:

a) purifying the raw graphene material using a strong acid to remove any metal or impurity present in the graphene raw material,

b) reducing the particle size of the purified graphene nanomaterial through an exfoliation process to a particle size distribution having a dn(90) of 0.60 μm or smaller in number of particle and a dv(90) of 80.00 μm or smaller in volume particle, as measured by laser diffraction particle analyzer,

c) optionally subjecting the obtained product to a depyrogenization process.

~~7~~8. ~~Use of a~~The graphene nanomaterial according to any one of claims 1 to 6, for use as a cosmetic.

~~8~~9. ~~Cosmetic use~~The graphene nanomaterial according to claim ~~7~~8, wherein the cosmetic is to treat the skin.

~~9~~10. ~~Cosmetic use~~The graphene nanomaterial according to claims ~~7~~ 8 or ~~8~~ 9, wherein the cosmetic is to reduce adipose tissue of the skin, preferably to reduce fat in the hypodermis.

~~10~~11. The graphene nanomaterial according to any one of claims 1 to 6, for use as a ~~C~~cosmetic treatment method for preventing or reducing the increase in the volume of adipose tissue and/or the formation of fatty lumps, ~~characterized in that~~wherein the graphene nanomaterial ~~according to any of claims 1-6, or a composition comprising it,~~ is applied to the skin.

~~11~~12. The graphene nanomaterial according to claim 11, wherein the ~~C~~cosmetic treatment ~~according to claim 10~~ is for the reduction of ~~cellulitis~~adipose tissue stored in the hypodermis and/or~~,~~ wrinkles ~~and/or varicose veins~~.

13. A composition comprising the graphene nanomaterial according to any one of claims 1 to 6, for use as a cosmetic treatment method for preventing or reducing the increase in the volume of adipose tissue and/or the formation of fatty lumps, wherein the composition is applied to the skin.

14. The composition according to claim 13, wherein the cosmetic treatment is for the reduction of adipose tissue stored in the hypodermis and/or wrinkles.

~~12~~15. The ~~G~~graphene nanomaterial according to any of claims 1-6~~, or a composition comprising it~~, for use as a ~~the~~ cosmetic ~~use~~ in preventing or reducing the increase in the volume of adipose tissue and/or the formation of fatty lumps, wherein ~~said~~ the graphene nanomaterial~~,~~ ~~or said composition,~~ is applied to the skin.

~~13~~16. The ~~G~~graphene nanomaterial according to claim 15~~, or a composition comprising it~~, wherein the ~~for~~ cosmetic ~~use according to claim 12, wherein the use~~ is for the reduction of ~~cellulitis~~adipose tissue stored in the hypodermis and/or~~,~~ wrinkles ~~and/or varicose veins~~.

17. A composition comprising the graphene nanomaterial according to any one of claims 1 to 6, for use as a cosmetic in preventing or reducing the increase in the volume of adipose tissue and/or the formation of fatty lumps, wherein the composition is applied to the skin.

18. The composition according to claim 17, wherein the cosmetic is for the reduction of adipose tissue stored in the hypodermis and/or wrinkles.

~~14~~19. A cosmetic composition comprising ~~a~~ the graphene nano-material ~~product as defined in~~according to any one of claims 1 to 6 and a cosmetically acceptable excipient.

~~15~~20. ~~A~~ The cosmetic composition according to claim ~~14~~19, wherein the composition is suitable for topical use.

~~16~~21. ~~A~~ The cosmetic composition according to claims ~~14~~ 19 or ~~15~~ 20, wherein the composition is in a form selected from a cream, a lotion, an ointment, a microemulsion, a fatty ointment, a gel, an emulsion-gel, a paste, a foam, a tincture, a patch, a bandage, a membrane ~~an~~ and transdermal therapeutic systems.

~~17~~22. ~~A~~ The cosmetic composition according to claim ~~16~~ 22, wherein the composition is in a form selected from a cream, a hydrogel or an emulsion-gel.

~~18. A method to prepare the product as defined in any of claims 1 to 6 from raw graphene nanofibers, comprising the steps of:~~

~~a) Purifying the raw graphene material, preferably using a strong acid, to remove any metal or impurity present in the graphene raw material,~~

~~b) Reducing the particle size of the purified graphene nano material, preferably through an exfoliation process, to a particle size distribution having a dn(90) of 0.60 µm or smaller in number of particle and a dv(90) of 80.00 µm or smaller in volume particle, as measured by laser diffraction particle analyzer,~~

~~c) Optionally subjecting the obtained product to a depyrogenization process.~~