

Graphene Conductive Glove And Method To Manufacture

PATENT NO. PI 2023001555

CURRENT ISSUES



Short life span

Non-conductive

USEFULNESS & APPLICATION

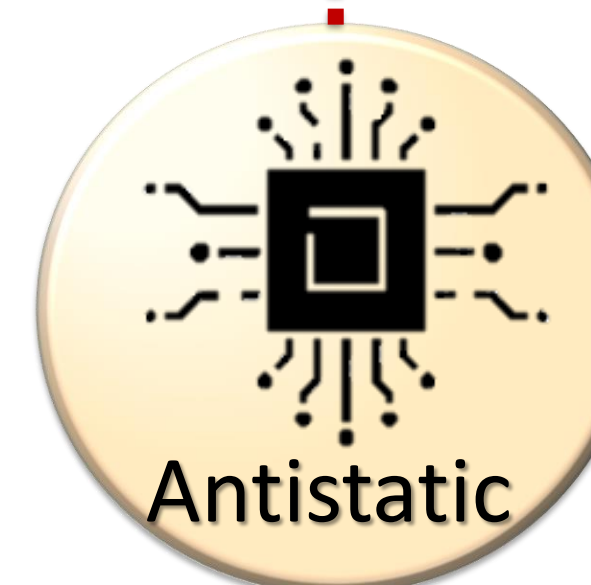
✓ High Tensile Strength (40 MPa)

✓ High Elongation (675%)

✓ Electrically Conductive

✓ Thermal Conductive

✓ Durable, Elastic, Free from Pinhole



INVENTIVENESS & NOVELTY

Reduction in latex consumption

Applicable in latex formulations

Improve physical and electronic properties

The formulated graphene additives act as reinforcing filler and conductive material to improve the overall properties of the rubber glove.

The invention is related to both solvent and water-based graphene additives that mix with coagulant and latex respectively.

The method of obtaining graphene additive comprises heat treatment and milling of graphene with salt.

The graphene additive dispersion is mixed well with the latex and coagulant respectively before the glove dipping process.

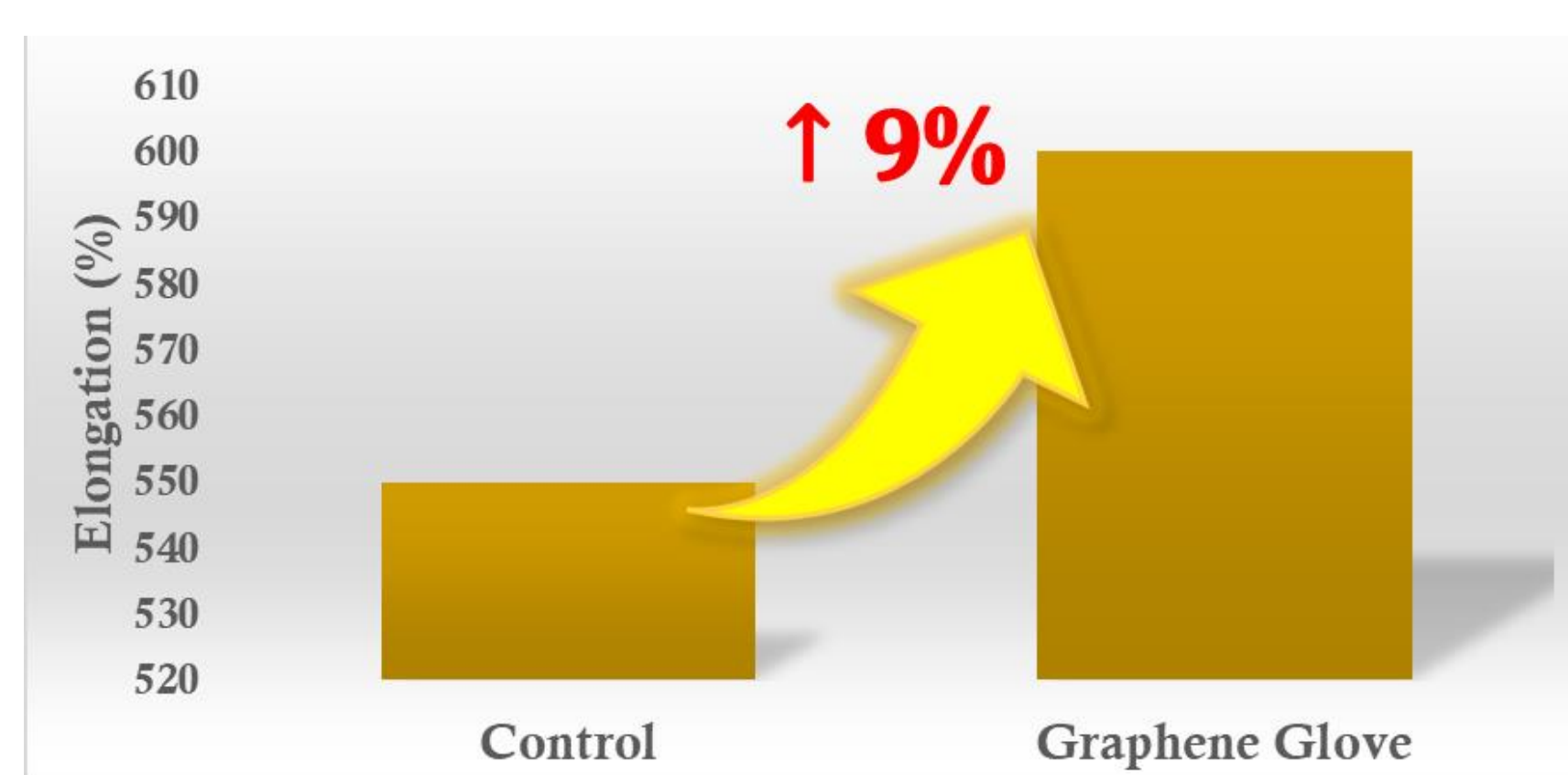
The introduction of graphene additive in latex and coagulant reduces latex consumption, improves tensile strength, and antistatic properties providing a lighter and thinner multifunctional glove

IMPACT OF THE PRODUCT

Tensile Strength



Elongation



Electrical Conductivity

From $10^7 \Omega$ (Static Dissipative) to $10^4 \Omega$ (Conductive)

OTHER GRAPHENE RUBBER APPLICATIONS



MARKET POTENTIAL

Rubber industry

Polymer industry

Electronic industry

Manufacturing industry

TRL 6

Demonstration in real environment



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