

## Patent Granted for Textile Nano-Membranes

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An Italian company, Directa Plus PLC, has been awarded a patent for a graphene-enhanced membrane. This membrane offers breathable, water-repellent textiles which provide interesting properties such as breathability, electrical and thermal conductivity, infrared absorption, and the inhibition of bacterial growth. The membrane is expected to be employed in smart textiles and electronics applications in general data transmission and heating in particular.

[Directa Plus PLC](#) has been awarded an Italian patent for a new textile membrane using its G+ graphene nanoplatelets.

The AIM-listed firm said the new membrane, to be marketed under the Grafytherm and Grafyshield brands, provided water protection as well as breathability, thermal and electrical conductivity, infrared absorption and the ability to inhibit the growth of bacteria.

The membrane will be initially targeted at the apparel market, with future uses expected to include smart textile and electronic applications such as electrical heating and data transmission.

The patent for the material is also in the process of being extended internationally.

Giulio Cesareo, Directa's chief executive, said the new membrane was building on the "recognised benefits" of the firm's G+ technology currently being delivered to the apparel markets, with the new patent allowing the firm to market the product to manufacturers in [Italy](#) and globally.

Read the [original article](#) on Proactive Investors.