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Abstract: **THE FUTURE HAS STARTED**

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Presentation: Nanotechnology's Insoles Footwear for Security and Defense

Motivation: To use of the nanotechnology and innovative processes to facilitate the task of the military and security personnel by providing more welfare, comfort, health and protection.

Scope of work: The scope of work focuses on keeping the feet dry, antimicrobial control preventing odor and skin diseases, and comfort to the impact of footsteps.

Approach: Through the process as technology termocolante (web), multipoint (pur), film, dust, and fire, make an insole footwear that meets the desired properties.

Results: Nanotec Red markets an insole footwear consisting of three layers, each one with specific functions.  
The upper layer is in contact with the foot, is permeable to moisture and gases, the intermediate layer is responsible for absorption of impact, is perforated to allow through the pressure of the foot insole, the passage the humidity down, reaching the third layer, consisting of a non-woven synthetic untreated, which has a high absorption capacity, this layer absorbs moisture very well that comes while using the footwear and remove all moisture gets absorbed, when the insole is removed from the footwear after use.  
This insole is also antimicrobial (via silver nanoparticles) for combating fungi, bacteria and mites.

Conclusions: The future has started, the nanotechnology-based products made today, you can touch, manipulate, use, sell and buy it.

Nanotec Red is an active part of this virtuous process that begins in the mind of a scientist or an entrepreneur and concludes using the product by a real flesh and blood user.

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