

Nano One's New Patent on Nano Crystalline Cathode Materials for Battery Applications



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Nano One has recently filed a patent at the USPTO for a new technology of fabricating cathode materials used to enhance battery performance. In this technology discrete single crystals are produced instead of massive clusters, which prevents cracking and degradation due to repeated charging, thereby increasing the durability of cathode materials, which paves the way for the development of a new generation of battery materials.

Dr. Stephen Campbell, Chief Technology Officer at [Nano One Materials Corp.](#), is pleased to announce the issuance of US Patent No. 10,446,835 which augments the intellectual property estate of the Nano One™ proprietary process, cathode materials and improved batteries.

“This patent complements those recently issued across the globe and protects those physical attributes of Nano One’s proprietary cathode materials most closely associated with battery performance.” said Dr. Campbell. “The surface properties of single crystal cathode materials contribute to critical battery properties such as shorter charge time, longer battery life, and increased battery capacity. Nano One’s innovative control of these surface properties is important for our strategic partners.”

Nano One’s technology produces discrete single crystal particles rather than larger clusters and this resists cracking and degradation from repeated charging. This improves the durability of cathode materials and could enable electric vehicle manufacturers to significantly increase the lifespan and driving range of their batteries. Nano One is making these patented materials using innovative manufacturing technologies with fewer steps, simpler feedstocks and integrated coatings. These technologies are protected by patents in the US, [Canada](#), [Taiwan](#), [China](#), [Japan](#) and Korea.

“Nano One’s patent estate is multifaceted,” said Dr. Joseph Guy, Nano One Director and Patent Agent, “with patents covering the proprietary process, as well as the improved nano crystalline cathode materials made using the process. Of particular importance to our

strategic partners are patents focused on batteries having improved properties achieved through the use of these proprietary materials.”

Read the [original article](#) on Nano One Materials Corp.