

ANTEO RECEIVES POSITIVE ASSESSMENT OF BATTERY IP

18 October 2017

Highlights:

- Anteo energy patents due to enter National Phase of Examination
- US based battery consulting company , Polaris Battery Labs LLC, confirms the Company's Nano-coating Technology has potential value in the growing lithium-ion battery market
- Anteo IP shown to improve anode performance and could positively address impediments to global battery advancements

Anteo Diagnostics Ltd (ASX: ADO) ("**Anteo**" or "**Company**") engaged the US based battery consulting company Polaris Battery Labs LLC ("**Polaris**") to undertake an external third party review of its surface Nano-coating Technology for use in the lithium-ion battery market.

The Company is required to make a decision to progress its Intellectual Property ("**IP**") Patents in relation to its Nano-coating Technology in the battery industry to the National Phase of Examination or let its applications lapse. Prior to making this decision the Company retained Polaris to provide opinions on:

- (i) Is the Anteo approach novel?
- (ii) If the data generated to date is repeatable and scalable, would our Nano-coating technology be of value to the battery industry?
- (iii) What are the potential opportunities in the battery market for Anteo Nano-coating Technology?
- (iv) What are the actions required to commercialize the Anteo Nano-coating Technology given there is limited existing data and significant additional experimentation required to fully understand the potential value of the Nano-coating Technology to the battery industry?

The global lithium ion battery market is large and growing rapidly. Estimates place the 2015 market size at about 15 billion Euros per annum and it is expected to increase to 35 billion Euros per annum by 2025 (Source Avicenne 2013).

Based on the review conducted by Polaris and the expanding market of lithium-ion batteries the Company has decided to progress its IP Patents to the National Phase of Examination.

In most current lithium-ion batteries, graphite is used as an anode material. However, silicon as an anode is able to store ten times more energy than that of graphite. One of the key challenges for silicon anode batteries is the expansion and contraction of the silicon anode while charging and discharging which results in cell degradation and reduced performance of the battery over time.

The Company has previously completed proof of concept test work which demonstrates that its Nano-coating Technology acts as a stabilizer to silicon anodes within a battery cell which reduces the degradation of the battery over time.

After review of the Anteo intellectual property and proof of concept data, Polaris stated in regard to the novelty of the Anteo technology: "Polaris is not aware of any products on the market today, or under development, that act as a stabilizer for silicon anodes. The closest known technologies that we are aware of are traditional binders used in higher ratios than normal, foil adhesion promoters i.e. copper foil pre-coated with carbon nanotubes (see OCSIAL web site), or mechanical methods to enclose or contain the silicon (Metal-organic frameworks (MOFs), nanowires, graphene, or 3-dimensional substrates to embed the silicon material inside)".

The summary of the Polaris report stated "It is clear that the Anteo surface coating nanotechnology has a positive impact on silicon anode performance and that this could be a very important solution to developers struggling to solve the cell cycling issues that are preventing the widespread use of silicon in cells today"

ADO Executive Chairman, Dr John Hurrell, stated "The review of our battery technology IP and data by Polaris is part of the overall strategy review we are undertaking. It was important to have an independent expert opinion before we committed ourselves to additional investment in our Nano-coating battery technology. We are continuing discussions with Polaris and other companies in the lithium-ion battery market as we determine the best way forward. The Polaris report gives us the confidence to vigorously protect and expand our IP and to ramp-up our research efforts in this field."

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ABOUT POLARIS BATTERY LABS LLC

Polaris Battery Labs is a US based sample making and test lab for lithium ion batteries. Their goal: to accelerate commercialization of new technologies by offering lab facilities, advisory services, and more to developers and start-up companies.

Polaris assists companies in moving through four phases of bringing battery products to market:

- I. Proof-of-concept
- II. Prototyping
- III. Toll coating
- IV. Mass production

The Polaris business model is to assist companies to identify original equipment manufacturers wishing to incorporate new technologies into their consumer, vehicle, and industrial battery products through its existing network of battery industry relationships.

ABOUT ANTEO GROUP – Anteo Diagnostics Limited (ADO:ASX) & Subsidiaries

Anteo Group is a global nanochemistry technology and medical supply group, developing, commercialising, manufacturing and distributing products for the life sciences, clinical diagnostics and bioseparations markets, and creating new applications in the energy and medical devices sectors.

Through Anteo Technology, the Anteo Group owns a patented nanochemistry surface engineering technology which unites the strength and stability of covalent binding with the gentleness of passive binding through multi-point chelation. Through the use of its reagents binders, coatings or primers, Anteo provides materials and services for high-value commercial applications. Markets include protein binding and antibody coupling (e.g. point of care devices), primers for in-vivo medical devices and medical drug delivery, and coatings with commercial applications across a broad range of industry sectors, including life sciences, in vitro diagnostics, medical devices and energy.

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