Argonne battery technology patent confirmed by US Patent Office

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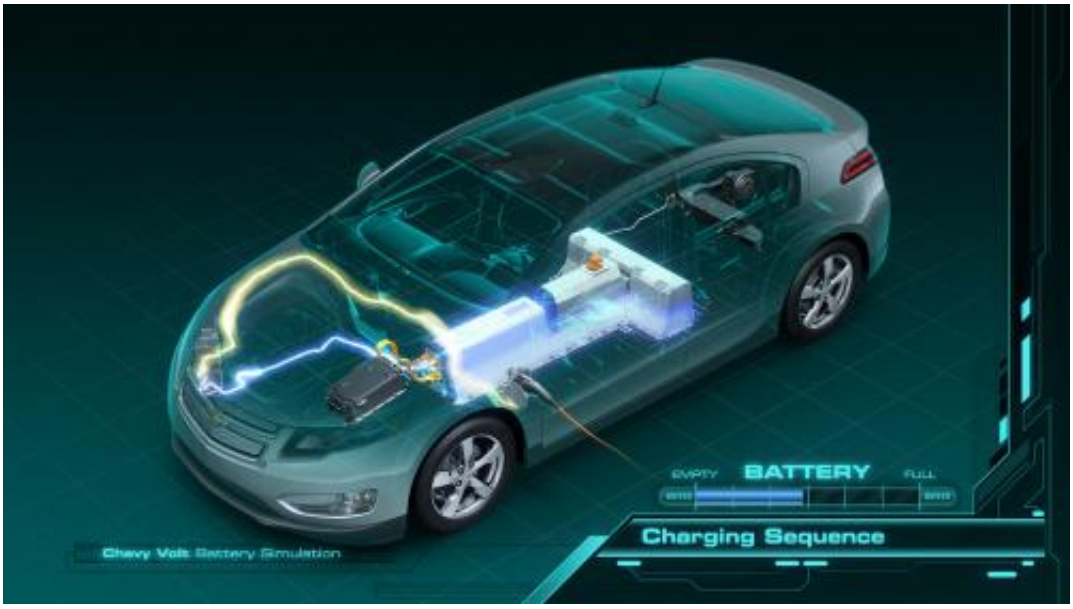

The 2011 Chevrolet Volt's 16 kWh battery can be recharged using a 120V or 240V outlet. The car's lithium-ion battery is based on technology developed at Argonne. Credit: General Motors.

The Argonne National Laboratory announced that the U.S. Patent and Trademark Office, after a careful reexamination of the relevant prior patents and publications, has confirmed the patentability of U.S. Patent 6,677,082, which claims a fundamental advanced battery cathode technology developed by Argonne.

"This patent forms the basis for a suite of cathode technologies that

Argonne has already licensed to several very prominent companies in the automotive and chemical industries," said Carl Shurboff, manager of industry partnership development for Argonne's Technology Development & Commercialization (TDC) office. "This reinforces our efforts to commercialize this technology and other battery innovations and improvements developed at Argonne."

The cathode material is designed to the molecular level, enabling batteries to hold more energy. It is environmentally safer than the cobalt oxide materials found in most lithium-ion batteries and is more economical to manufacture. The result is less expensive, longer-lasting batteries for consumer products and electric vehicles.

Mike Thackeray, one of the co-inventors of the advanced cathode technology, was extremely pleased with the Patent Office's finding. "It confirmed what we and the technology's licensees knew to be the case – that Argonne developed a unique cathode material," Thackeray said.

"This is a very important finding for Argonne," said Greg Morin, interim director of Argonne TDC. "Vehicle electrification, through the use of advanced batteries, is an emerging market that is growing in importance."

Argonne is the DOE's primary lab for battery research and has a portfolio of more than 160 battery technologies that are available for license. For more information about the advanced cathode material, view the fact sheet on the technology.

Argonne also operates the Joint Center for Energy Storage Research, which is developing battery and other energy storage technologies that go beyond lithium-ion.

Provided by Argonne National Laboratory