



FOR IMMEDIATE RELEASE

Apex Electric Motors to Utilize Microscale Technology for Enhanced Efficiency Thanks to Support of ONAMI and Oregon State University

Portland, Ore., January 20, 2009 -- Apex Drive Laboratories, Inc. (Apex) announces a \$250,000 Commercialization Grant from the Oregon Nanoscience and Microtechnologies Institute (ONAMI). The award will fund commercial development of microchannel devices used to cool the motor and controller in the Apex electric drive system. Use of this technology has the potential to triple the motor's performance and is anticipated to increase overall energy efficiency.

Liquid cooling of the Apex motor will be accomplished using microchannel technology to bring the cooling fluid in direct contact with components inside the motor. The motor's unique internal layout, for which the company was recently issued its third patent, allows the integration of this cooling technology in a compact high performance package. Known as "power density", this improvement could be realized in two ways: A motor that offers higher torque and power output in the same package size, or a smaller motor with the same performance rating as larger air-cooled motors.

Dr. Richard Peterson, Associate Director of the Microproducts Breakthrough Institute and Professor of Mechanical Engineering at Oregon State University, will be the Principal Investigator on the Apex development project. According to Dr. Peterson, "Applying microchannel cooling technology to electric drive motors opens up a whole new arena for high power density development. We are very excited about the potential of this new concept for producing high performance drive systems."

According to Michael Baker, Apex CEO, "With growing global concern about fuel economy and energy efficiency, Apex is proud to be on the forefront of positive change. We anticipate this performance breakthrough to have significant impact initially in the electric vehicle and alternative energy markets with intent to see it utilized in industrial applications as well." The company currently has customers with electric and hybrid electric vehicles and is being pursued by multiple wind, wave and tidal generator companies.

[Apex Drive Laboratories, Inc.](#) offers patented technology suitable for a multitude of transportation, alternative energy and industrial motor-generator applications. Focused on providing cost-effective, fully integrated electric power solutions, the company strives to provide environmentally sound design with zero compromise to performance.

[ONAMI](#) is dedicated to the growth of nanoscience and microtechnology research and commercialization to foster the creation of new products, companies and jobs in the Pacific Northwest. It unites regional universities OSU, OHSU, PSU and U of O, with Pacific Northwest National Labs, the State of Oregon, and private industry in Oregon's world-renowned "Silicon Forest".

[The Microproducts Breakthrough Institute](#) (MBI) is one of ONAMI's signature facilities. A research and educational collaboration between [Oregon State University](#) and Pacific Northwest National Laboratory, MBI seeks to advance microscale systems and create new microfabrication techniques for energy, environmental, medical, and defense applications.

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This news release contains forward-looking statements that may involve potential risks, uncertainties and assumptions. Should these risks or uncertainties materialize or assumptions prove incorrect, Apex Drive Laboratories and the associated organizations assume no obligation, and do not intend to update these forward-looking statements.