



Press Release

Advent Technologies acquires license from BASF to produce their high temperature membrane electrode assembly (MEA) and gas diffusion electrodes (GDEs)

Advent to offer complete high temperature MEA Product line

East Hartford, CT, March 21, 2014: Advent Technologies has acquired a license from BASF SE that grants the right to fabricate and market BASF's high temperature membrane electrode assemblies (MEAs) that are based on polybenzimidazole (PBI) membranes and gas diffusion electrodes (GDEs) developed by BASF. MEAs are used in commercially available systems such as micro combined heat and power, backup power, and battery range extenders.

Additionally, BASF granted Advent a second license for the right to manufacture and market BASF's gas diffusion electrodes. Gas diffusion electrodes are essential components in membrane electrode assemblies and are ultimately responsible for the power, durability, and a significant portion of the costs for MEAs. They can also be used in electrochemical separations such as hydrogen purification.

Membrane Electrode Assemblies are the heart of proton exchange fuel cells (PEFC), and are believed to be the low cost path to manufacture fuel cells. They are employed in applications ranging from portable power, stationary systems, and transportation systems using hydrogen. Advent's high temperature MEAs are based on phosphoric acid. Traditional phosphoric acid fuel cells currently have established the longest operational time in the field. High temperature MEAs that operate greater than 100°C provide for simpler systems due to the absence of membrane water management and a greater tolerance to impurities. Low temperature MEAs are constrained by water management and sensitivity to contaminants in the hydrogen feed and air.

Dr. Vasilis Gregoriou, Advent CEO, says "This license consolidates the high temperature MEA market, and validates Advent's capabilities and leadership position in the field. By offering a complementary product to Advent's own TPS® MEA, we address a greater portion of the market and our customers gain in synergies between the two approaches. The GDE technology is relevant to our entire high temperature MEA portfolio and other developing applications, and represents an important milestone to further our business."

Dr. Emory De Castro, Advent CTO added "The BASF licenses bring highly developed materials and processes into the Advent family of products, as well as proven quality systems. The GDE technology developed by BASF represents a significant advancement in the state of the art, as evidenced by the

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Department of Energy's Manufacturing R&D Award given to this technology in 2013. This new license provides us the opportunity to make available materials based on this work to all interested parties. Our customers and existing products will greatly benefit from both of these licenses.”

About Advent Technologies, Inc.

Advent Technologies is a pioneer in the development of new materials and systems for energy applications. Specifically, Advent Technologies is dedicated to commercializing the technology of high temperature membrane electrode assemblies (HT MEAs) and to scale up manufacturing to the level that covers existing and near future demands. In addition, the Company possesses world class technology in the area of materials for organic photovoltaic applications (OPVs) and organic optoelectronic materials in general. Advent Technologies is headquartered in East Hartford Connecticut USA. The company also occupies research and development space in Patras, Greece where pilot manufacturing is taking place. The company was founded in 2005 by scientists from the Foundation for Research and Technology Hellas and the University of Patras. To date, Advent has raised capital from institutional investors (Connecticut Innovations, Piraeus Capital Management, Dolphin Capital PLC etc), industrial partners (Systems Sunlight S.A., Velti PLC, ILPRA S.A.) as well as private investors.