

# Business *Spectator*

## NEWS

10:09 AM, 28 Nov 2007

### Exxon develops hybrid battery technology

By Michael Erman of Reuters

NEW YORK -- Exxon Mobil Corp on Tuesday said a new technology developed by its chemicals business will be key in helping the automotive industry switch to lighter, more efficient batteries for hybrid and electric vehicles.

The technology is a film that will allow battery companies to make larger lithium ion batteries that will not overheat, Exxon said.

Lithium ion batteries, often used in consumer electronics like cell phones and laptop computers, hold a charge longer than the nickel metal hydride batteries now used widely in automobiles. They are also lighter than their predecessors.

But the batteries' tendency to overheat -- and even catch fire -- has been a hold-up in shifting to the more efficient power source.

ExxonMobil Chemical and its Japanese affiliate Tonen Chemical said they have developed new separator film technologies that can stand up at higher heat levels.

Separator films are thin membranes that keep the battery's positive and negative electrodes apart.

"This new technology for making films, will make the next generation of hybrid and electric vehicles possible," said Jim Harris, a senior vice president at ExxonMobil Chemical Co.

"The battery separator film makes a bigger lithium ion battery possible ... it will continue to be hot, but it will not fail," he said.

This technology could help automakers address one of the biggest challenges in producing a plug-in car, as they try to lower the cost of the batteries and boost their power and storage capacity.

Unlike earlier gasoline-electric hybrids, which run on a system that twins battery power and a combustion engine, plug-ins are designed for short trips powered entirely by an electric motor and a battery charged through a socket at home.

General Motors Corp plans to launch an electric car using lithium ion batteries -- the Chevrolet Volt -- by the end of 2010.

Exxon Mobil's chemical unit has been producing separator films for lithium ion batteries for consumer electronics and other non-automotive technologies for about 20 years, Mr Harris said, and is the second largest producer in the market.

The company would not quantify its earnings from the business or make projections about the profitability of the new film.

Still, Mr Harris said he believes the market for lithium ion batteries for hybrid vehicles will substantially swamp the battery market for consumer electronics.

Exxon Mobil, the largest US oil company, has long been dogged by criticisms of its environmental record. Critics claim that the company funds groups to mislead the public about climate change and under invests in research and development for renewable energy.

Mr Harris said the new technology should make hybrid batteries more efficient, affordable and lighter.

"We think we'll help the industry reduce fuel consumption and emissions," he said.