

Ford to Commercialize New Method of Attaching Windshields Through Cleaner Technology

- Ford has invented a new method of preparing vehicle windshields for attachment to cars and trucks that is simpler, more cost-efficient and eco-friendly
- Ford is working with companies like Elgin, Ill.-based Plasmatreat U.S. L.P. to bring new technology to market

DEARBORN, Mich., Nov. 17, 2011 – Ford wants to innovate the way vehicle windshields are installed through a new patented process that makes the attachment less costly, simpler and more eco-conscious than current practices.

One patent covers cleaning and activating the edge of the windshield glass in less than 10 seconds. A second Ford patent covers the application of a plasma-reacted nano-coating that modifies the surface for bonding of the adhesive that holds the windshield in place. The entire patented process takes less than one minute.

Larry Haack, technical expert, Ford Research & Innovation, said there are several benefits of the new patented technology including elimination of the primers that contain volatile organic compounds (VOCs).

"The new patented process has the potential to reduce costs because it requires far less material to create the ultra-thin bond coating, and the fully automated process is much less labor-intensive," said Haack. "This new process also lessens the use of chemicals including VOCs, which is good for the environment."

Ford's corporate sustainability efforts call for reduction of VOC emissions in its facilities while still meeting Federal safety requirements.

The typical method to attach a windshield – used currently at Ford and throughout the industry – is to first wipe the glass with a solvent cleaner, then apply a primer and adhesive to secure the windshield to the vehicle. Part of the problem, said Haack, is that this method releases a small amount of highly undesirable solvent emissions.

The Ford patented technology eliminates the use of the solvents that contain VOCs and simplifies the manufacturing process by reducing steps, such as wiping the glass clean.

Ford recently signed a nonexclusive, worldwide license agreement with Elgin, Ill.-based Plasmatreat U.S. L.P. that grants the right to use Ford's new process patents and incorporate the Ford technology into Plasmatreat's own equipment and patented processes. Also, Ford will provide technical assistance to Plasmatreat and its customers to implement technology using Ford's experience and know-how.

Chris Danowski, technology commercialization director, Ford Global Technologies L.L.C., said the new technology will be offered worldwide first in equipment that Plasmatreat plans to sell or lease to Ford, other automotive OEMs, the heavy truck market, motor home and bus industries and other customers who want to use it.

"Ford is excited about working with companies like Plasmatreat to commercialize new technologies and make them available to the market faster," said Danowski. "Such relationships are very beneficial as we are simplifying the manufacturing process and making it more environmentally friendly, too."

Ford Global Technologies manages intellectual property for Ford and commercializes technologies for use inside and outside the automotive industry.

###

About Ford Motor Company

Ford Motor Company, a global automotive industry leader based in Dearborn, Mich., manufactures or distributes automobiles across six continents. With about 166,000 employees and about 70 plants worldwide, the company's automotive brands include Ford and Lincoln. The company provides financial services through Ford Motor Credit Company. For more information regarding Ford's products, please visit www.ford.com.

About Plasmatreat US LP

Plasmatreat, the market leader in atmospheric plasma-jet technology, is a global enterprise with leading innovation engineering centers located in Germany, the United States, Canada, Japan and China. The company focuses on the development and sale of atmospheric-pressure plasma products and manufacturing equipment to automotive OEMs and their supply base. Plasmatreat's patented "Openair-Plasma" technology is also utilized in production of many other industrial sectors around the globe. For further information, please visit www.plasmatreat.com.

Contacts: Dan Pierce Eddie Fernandez

313.594.0949 415.677.2742

<u>dpierc41@ford.com</u> <u>eddie.fernandez@ogilvy.com</u>