



Joint News Release

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PPG, Vision Systems to develop aircraft window shading applications

SYLMAR, Calif., and BRIGNAIS, France, May 19, 2017 – PPG (NYSE:PPG) and Vision Systems have reached a commercial agreement to work together on developing new applications utilizing Vision Systems' electronically dimmable window shading solutions for aircraft. The agreement provides a framework for PPG and Vision Systems to pursue opportunities in commercial, regional, military and general aviation applications that capitalize on each company's expertise.

Both companies already have considerable experience supplying electronically dimmable window shading systems. PPG has supplied electrochromic window shading systems for commercial aircraft and ground vehicles since 2007. Vision Systems, based near Lyon, France, is an established supplier of aircraft shading systems and associated electronics.

According to Brent Wright, PPG global business director for aerospace transparencies, PPG's ability to provide its customers with innovative solutions for managing window light and heat transmission is enhanced with Vision Systems' product.

"PPG is excited to work with Vision Systems to create new applications for a product that provides unique performance characteristics," Wright said. "As a pioneer in the electrochromic window segment, PPG recognized the added value offered by Vision Systems to the standard dimmable film technology, especially with the interface that makes its system work."

Vision Systems' dimmable window solutions offer instant response time for changing light transmittance and have no size limitations relative to aircraft transparency applications. The dimmable windows can be controlled individually by a seatside wired or wireless interface or cabinwide through the aircraft cabin window management system.

"As a result, we can develop applications for larger transparencies with flat or curved shapes as well as retrofit installations including with add-on panels," Wright said.

"We are very pleased about this agreement with PPG, internationally renowned for ALTEOS® interactive window systems and OPTICOR™ advanced transparency material, which, when combined with the NUANCE™ V2 product by Vision Systems, will offer aircraft manufacturers and operators exciting new shading options," said Catherine Robin, Vision Systems group managing director. "This agreement is fully in line with our commitment to continuous innovation and customer satisfaction. Furthermore, this constructive collaboration will allow Vision Systems to strengthen its presence throughout the world."

Vision Systems developed its latest-generation *Nuance* V2 dimmable window through its Smart Lite division devoted to the design, production and sales of new electronically dimmable solutions. It is based on suspended particle device film technology licensed from Research Frontiers and an innovative Vision Systems interlayer that offers unprecedented optical quality with 2.5 percent haze, 100 percent clarity and 99.6 percent blockage of visible light with the ultra-dark version of the *Nuance* product.

Note to editors: This video about Vision Systems' electronically dimmable windows may be included in news coverage https://www.youtube.com/watch?v=Mljo9bG9eyl.

PPG's global aerospace business offers coatings, sealants, transparencies, packaging and application systems, and transparent armor, as well as chemical management and other services. For more information, visit www.ppgaerospace.com.

About Vision Systems

Headquartered near Lyon, France, with a production and sales unit in Florida, USA, and a trade office in Singapore and Dubai, Vision Systems is a tier-one system supplier in the aeronautic, land transport and marine industries, designing and producing bespoke solutions for specific market segments in complex environments. The company's genuine expertise in solar protection places it today as the world leader in this area, and the development of customized entertainment and connectivity solutions allows it to rank as a competitive challenger in embedded systems. Vision Systems combines complementary skills in electronics, mechanics and composite to provide ever more innovative solutions for cost reduction, heightened safety and improved comfort. For further information: www.visionsystems.fr.

PPG: WE PROTECT AND BEAUTIFY THE WORLD™

At PPG (NYSE:PPG), we work every day to develop and deliver the paints, coatings and materials that our customers have trusted for more than 130 years. Through dedication and creativity, we solve our customers' biggest challenges, collaborating closely to find the right path forward. With headquarters in Pittsburgh, we operate and innovate in more than 70 countries and reported net sales of \$14.8 billion in 2016. We serve customers in construction, consumer products, industrial and transportation markets and aftermarkets. To learn more, visit www.ppg.com.

Forward-Looking Statements

Statements in this news release relating to matters that are not historical facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 reflecting the companies' current view with respect to future events or objectives and financial or operational performance or results. The forward-looking statements contained herein include statements relating to Vision Systems' electronically dimmable window shading product (the "Product") and the agreement to develop new applications utilizing the Product. Actual events may differ materially from current expectations and are subject to a number of risks and uncertainties, including the parties' ability to develop applications utilizing the Product, the performance and commercial acceptance of applications utilizing the Product and the timing and amount of future sales of applications utilizing the Product, and the other risks and uncertainties discussed in PPG Industries' periodic reports on Form 10-K and Form 10-Q and its current reports on Form 8-K filed with the Securities and Exchange Commission. Forward-looking statements speak only as of the date of their initial issuance, and PPG Industries does not undertake any obligation to update or revise publicly any forward-looking statement, whether as a result of new information, future events or otherwise.

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Nuance is a trademark of Vision Systems Aeronautics SAS.



PPG (NYSE:PPG) and Vision Systems have reached a commercial agreement to work together on developing new applications utilizing Vision Systems' electronically dimmable window shading product for aircraft. At a display of the product are Nicolas Laurent, left, Vision Systems Aeronautics sales director, and Brent Wright, PPG global business director for aerospace transparencies.