

Lightwave Logic Announces Issuance of U.S. Patent for Innovative Thiophene-based EO Polymers with Improved Performance

Company Further Strengthens IP Portfolio and Commercial Opportunities with Patent Issuance for Innovative Chromophore Design Using Novel Thiopene Bridge, Increasing Overall EO Polymer Performance.

ENGLEWOOD, Colo., May 31, 2023 /PRNewswire/ -- Lightwave Logic, Inc. (NASDAQ: LWLG), a technology platform company leveraging its proprietary electro-optic polymers to transmit data at higher speeds with less power, today announced the issuance of a U.S. patent for an advanced chemical structural design that enhances the overall performance of non-linear organic optical chromophores using a novel thiophene bridge.

The patent - entitled "Nonlinear Optical Chromophores, Nonlinear Optical Materials Containing the Same, and Uses Thereof in Optical Devices" (Patent No. US 11,661,428) - details an innovative organic chromophore design using a novel 'thiophene bridge' to significantly improve material performance in a production environment. This is accomplished by designing thiophene-containing bridging groups that are positioned between the electron-donating and electron-accepting ends of the chromophore. These designs provide nonlinear optical chromophores with significantly improved optical properties and improved stability.

Dr. Michael Lebby, Chairman and Chief Executive Officer of Lightwave Logic, commented: "I am pleased to announce the issuance of this exciting new patent, based on a novel thiophene bridge design, which we expect will help us progress our commercial discussions with other potential customers. The fortification of our patent portfolio, with innovative new patents such as this, will be critical as we progress our commercialization journey - all with the goal of creating sustainable, long-term value for our shareholders."

About Lightwave Logic, Inc.

Lightwave Logic, Inc. (NASDAQ: LWLG) is developing a platform leveraging its proprietary engineered electro-optic (EO) polymers to transmit data at higher speeds with less power. The company's high-activity and high-stability organic polymers allow Lightwave Logic to create next-generation photonic EO devices, which convert data from electrical signals into optical signals, for applications in data communications and telecommunications markets. For more information, please visit the company's website at lightwavelogic.com.

Safe Harbor Statement

The information posted in this release may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. You can identify these statements by use of the words "may," "will," "should," "plans," "explores," "expects," "anticipates," "continue," "estimate," "project," "intend," and similar expressions. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. These risks and uncertainties include, but are not limited to, lack of available funding; general economic and business conditions; competition from third parties; intellectual property rights of third parties; regulatory constraints; changes in technology and methods of marketing; delays in completing various engineering and manufacturing programs; changes in customer order patterns; changes in product mix; success in technological advances and delivering technological innovations; shortages in components; production delays due to performance quality issues with outsourced components; those events and factors described by us in Item 1.A "Risk Factors" in our most recent Form 10-K and 10-Q; other risks to which our company is subject; other factors beyond the company's control.

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5/31/2023 8:31:00 AM