

Press Release

Heraeus Electronics and Mozaik Technology Ventures sign global licensing agreement for photoimageable thick film technologies.

Technology will enable Heraeus to develop a new platform of thick film pastes for ultrafine features, furthering device performance and miniaturization.

HANAU, Germany and LONDON, England- November 21, 2017- Heraeus Electronics, a leading provider of materials solutions for the semiconductor and electronic packaging industries, today announced a global licensing agreement with Mozaik Technology Ventures Limited, an industry leader in super fine thick film technology. Under the terms of the agreement, Heraeus Electronics will license a broad range of Mozaik's photoimageable thick film paste technology.

The partnership with Mozaik will enable Heraeus to enhance its market-leading solution portfolio for customers who manufacture high-profile electronics, such as sensors, 5G high frequency communication circuits, smaller passive electronic components and touch panel displays. With the continued market trend toward smaller and finer electronics elements, advanced materials and the process technology to create them become increasingly critical requirements. The Mozaik photoimageable technology will be used to create a platform of thick film pastes such as silver, silver-platinum, silver-palladium, gold, platinum conductors and ceramic/glass insulators for these specific application areas.

According to Frank Stietz, President of Heraeus Electronics, "We have seen a market trend in thick film materials toward smaller features, such as conductors for finer lines and spaces. The industry will need to meet the demand and requirements for electronic component miniaturization and higher density microelectronic circuits. Mozaik's product lines and technologies will enable us to set new standards in electronics capabilities and performance for our customers."

Heraeus Electronics expects that by using photoimageable thick film pastes, its customers can build electronic components and circuits with lines and spaces (l/s) below 50 microns in size (demonstrated l/s already at 25 microns). The current state-of-the-art feature size with standard thick film inks is 75 microns under optimized and highly engineered conditions. In actual, practical manufacturing settings, most devices are built with 100 to 150 microns on an industrial scale.

Steve Muckett, the founder and Managing Director of Mozaik Technology Ventures, added, "We are pleased to partner with Heraeus Electronics because they are a strong and reliable supplier of electronic materials with a global reach. With Heraeus using our fine line capable pastes, it will drive benefits and innovation across our industry. We anticipate that many manufacturers of ceramic based circuits and components will be able to introduce low-cost and very fine resolution parts, which the market needs."

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About Heraeus

Heraeus, the technology group headquartered in Hanau, Germany, is a leading international family-owned company formed in 1851. With expertise, a focus on innovations, operational excellence and an entrepreneurial leadership, we strive to continuously improve the businesses of our customers around the world.

We create high-quality solutions for our customers and strengthen their long-term competitiveness by combining material expertise with technological know-how. Our ideas are focused on important issues such as the environment, energy, health, mobility and industrial applications. Our portfolio ranges from components to coordinated material systems which are used in a wide variety of industries, including the steel, electronics, chemical, automotive and telecommunications industries.

In the 2016 financial year, the FORTUNE Global 500 listed company generated revenues without precious metals of €2.0 bn and a total revenue of €21.5 bn. With approximately 12,400 employees worldwide in more than 100 subsidiaries in 40 countries, Heraeus holds a leading position in its global markets. In 2016, the Foundation for Family Businesses named Heraeus as one of the "Top 10 Family Businesses" in Germany.

About Heraeus Electronics

Heraeus Electronics - a Global Business Unit of the Heraeus Group - is one of the leading manufacturers of materials for the packaging of integrated circuits in the electronics industry. The company deals with sophisticated material solutions for semiconductor and automotive industry, consumer goods, energy, industry electronics as well as communications and telecommunications. Core competences include bonding wires, assembly materials, thick film pastes, as well as roll clad strips and substrates.

For further information, please contact:

Europe

Morvyn Lipinski
Manager Media Relations
Communications & Marketing
Heraeus Holding GmbH
Tel. +49 61 81 35-97 93
Email: morvyn.lipinski@heraeus.com

North America

Jeff Oddo
Sr. Manager, Communications
Heraeus, Inc.
Phone: +1 (215) 944-9981 or Mobile: (215) 666-3390
e-mail: jeffery.oddo@heraeus.com