October 2, 2024

Joyson Safety Systems and Forciot Announce Cooperation and Signing of Development Agreement Related to Printed Steering Wheel Sensor and Heater Solutions

Aschaffenburg, Germany – Joyson Safety Systems (JSS), a leading global supplier of mobility safety systems, and Forciot, the stretchable electronics-focused technology scale-up company, announced the signing of a development and industrialization collaboration agreement. Both companies will closely cooperate on bringing to market a new advanced steering wheel sensor and heater solution.

“JSS sees that Forciot sensor technology is a Game Changer in steering wheel hand sensing business due to its ability to sense and heat with its thin printed stretchable mat solution. This solution is cost effective and increases sensing and heating performance. The signed agreement aims to develop the new sensor and heater solution to industrialization in the 2026-2027 timeframe.”, said Po Hu, Vice President Global Product Line Steering Wheels at Joyson Safety Systems.

The development targets the industrialization of Forciot’s thin printed stretchable heater and sensor mats for JSS steering wheel heating and hand sensing systems. The system's functionality is scalable from steering wheel heating to hand sensing with one or multiple sensing zones. Thus, the solution enables multiple use cases for capacitive hand sensing systems beyond future potential hands-on-classification based on camera and steering system sensors. These use cases range from detecting the closed grip of two hands around the steering wheel rim for advanced driver assistant systems, hand position detection on the steering wheel for driver intention classification as well as intuitive gesture inputs and seamless integration of switches on the steering wheel rim. The development lines up with JSS’ competitive in-production sensor and heater mats based on conductive fabric materials and embroidered copper wires.

Forciot’s sensing and heating technology is unique in thinness and conformability as it is utilizing printed stretchable electronics. The steering wheel sensor and heater solution can be structurally integrated into different JSS steering wheel models cost effectively to provide increased sensing and heating functionality. A significant benefit of this solution is also Forciot’s innovative manufacturing automation methodology and tooling innovation for the mat with quality, performance and manufacturing yield improvements. Jointly JSS and Forciot will work on further automating the steering wheel mat wrapping process with the newly developed thin printed stretchable mats.

“Forciot has, in recent years, focused on developing, verifying and patenting a unique technology suitable for automotive solutions. Development and verification of steering wheel sensor and heater solutions have been at the core of R&D due to significant customer demand in this sector. Forciot Technology is now verified and mature, ready for mass production in steering wheel solutions and for other automotive concepts. Joyson Safety Systems is pioneering in mobility safety. We are thrilled to cooperate with such a great company that strives for innovation and market introductions with its spearheading solutions. Collaboration has been extremely productive and progressing quickly. We are looking forward to introducing new joint product solution to the world“, said Maria Alm, CEO at Forciot.

About Joyson Safety Systems

Joyson Safety Systems is a global leader in mobility safety providing safety-critical components, systems and technologies to automotive and non-automotive markets. Joyson Safety Systems is headquartered in Auburn Hills, Michigan, USA, with a global network of more than 43,800 employees in 25 countries. It is a subsidiary of Ningbo Joyson Electronic Corp. (SHA: 600699, “Joyson Electronics”).

About FORCIOT:

Forciot is a fast-paced, award-winning deep-tech company. The company offers cutting-edge stretchable electronics solutions that enable customers to transform their products, to sense and interact with the changing world, in extraordinary new and sustainable ways to conquer growing markets. Forciot’s stretchable electronics solution accurately measures a broad variety of parameters such as force, weight, load, balance, pressure, and touch in real time and very uniquely the same system functions simultaneously as a printed heater as well. The Forciot technology works on and with several surface materials, which means it can be utilized with various products and equipment of different sizes and shapes. In addition, it can be used on both rigid and soft surfaces.

Forciot’s key market focus areas are the automotive, other vehicles and logistics sectors.

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