Smart technology for Smart borders: JENETRIC GmbH enables automated Entry/Exit systems

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JENETRIC's fingerprint scanner shows users exactly where, how and for how long they have to place their fingers. LIVETOUCH quattro thereby fulfills the demand of US and European authorities for an optimum user guidance during a biometric identity check.

In times of increasing terrorist threats and at the same time steadily growing number of global travellers both, the European Union and the United States are considering to protect their external borders more effectively.

In future the authorities rely on self-service terminals and automated border control gates, in order that the enhanced security won't be disadvantageous to travelers and does not prolong waiting times unnecessary. The efficient recording of fingerprints plays a key role in the identification of travelers.

"In order to avoid errors, such automated control systems require an easy to understand user guidance," says Roberto Wolfer, one of the founders and CEOs of JENETRIC GmbH. Last fall the German company launched an intelligent technology to record fingerprints, which is particularly designed to facilitate self-service fingerprinting. "Users need to know exactly where, how and for how long they have to place their fingers on the scanning surface. Our LIVETOUCH quattro meets the authorities' requirements for devices, namely, that they communicate with the user," states Wolfer.

For the first time the LIVETOUCH technology allows to combine the fingerprint capture area with the user display for instructions and real-time feedback. The graphical display beneath the sensor can display graphical elements, animations or videos. With this support, the travelers can place their fingers properly and will receive an immediate feedback whether the recording has been performed correctly.
The lack of such efficient user guidance might lead to a poor outcome and to confusion for passengers. These are findings from a two-year test phase with more than 1500 participants of different national and ethnic origin, performed by the US Department of Homeland Security for designing the future Entry/Exit system at US air borders.

JENETRIC, together with experts in human-machine interaction from the Technical University of Chemnitz, has performed their own user studies. "Our results confirm the US studies, the more the device communicates with a user in an easily understandable manner, the more successful the fingerprint capture process," says Dirk Morgeneier, co-founder of JENETRIC GmbH, and emphasized: "All instructions are designed in a way that they can be understood by users independent of language, culture or previous knowledge. LIVETOUCH quattro is ideally suited for use at airports as now planed by the authorities in the US and the EU under the keyword Smart Borders."

The results of the aforementioned user studies are already integrated into the LIVETOUCH quattro and are therefore fully available for JENETRIC's customers. Furthermore, detailed results will be presented at the upcoming International Biometric Performance Conference in the United States.

JENETRIC GmbH was founded in 2014 in Jena, Germany - a location famous for cutting-edge optical technology - by engineers with significant experience in fingerprint technology and special focus on the development of biometric systems. The multidisciplinary team includes hardware and software specialists as well as production and sales professionals. The company is financed by internal ownership, a business angel and by the "Thuringian Gründerfond" as well as by the „High-Tech Gründerfonds". The company follows a holistic approach in its product development with a clear and strong focus on customer requirements and with the ambitious goal of enhancing living and working conditions by using biometric systems.