

## **PRESS RELEASE**

PolyIC GmbH & Co. KG: November 13th, 2012

### **Function meets design – Kurz and PolyIC present innovations at Fakuma**

The 22nd international trade show for plastics processing "Fakuma" was hosted in Friedrichshafen from 16 to 20 October. Nearly 1,700 exhibitors presented their novelties and innovations in 12 exhibition halls. PolyIC co-exhibited at the stand of its parent company Leonhard Kurz. PolyIC presented two application examples at the trade show stand: an automobile center console featuring sensor controls and a multi-touch demonstrator showing different display applications of PolyTC<sup>®</sup> films.

Kurz and PolyIC have developed a technology for directly applying the transparent, conductive PolyTC<sup>®</sup> films for touch sensors and decorative coatings on the components simultaneously during the injection molding process. The functional PolyTC<sup>®</sup> films by PolyIC and the decorative films from Kurz are integrated into a combined process of Inmold Labeling (IML) and Inmold Decoration (IMD). PolyTC<sup>®</sup> films are produced as individual in-mold labels and inserted into one mold half. During back injection molding, the films are bonded with the back side of the plastic part. At the same time, a carrier film with a decorative coating is fed through the second mold half which is removed from the carrier during the injection molding process and bonds with the front side of the part. In order to implement the two applications in one molding process, a special tool technology had to be developed.

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**Information number: PolyIC 201211-005 en**

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Additionally, functional films were required which can be processed using the IML process. The transparent and conductive PolyTC<sup>®</sup> films are suitable for being processed using the IML process.

When Kurz and PolyIC use the new technology to produce transparent touch displays, the touch functionality can be integrated using the in-mold technology which is a significant advantage. When the process is applied to touch sensor control panels of electrical and electronics devices, a consistent and elegant surface finish can be obtained. Typical application examples include control panels for automotive applications or white goods, multi-touch sensors for use in mobile communications and innovative capacitive control elements in consumer electronics applications. For instance, this technology enables the touch operation of a notebook computer or tablet PC to be implemented. This would allow, for instance, playing MP3 songs also when the housing is closed. The design variety and quality that can be manufactured with the IMD process can thus be fully used.

The manufacturing process of transparent touch displays and touch sensors was demonstrated at the trade show stands of the project partners at Fakuma. The company Roth-Werkzeugbau presented how touch sensors including decorative film and functional film can be produced. Sumitomo-Demag demonstrated how touch displays are manufactured in one work step.

This process is another milestone in new technologies for Kurz and PolyIC. It is an example of the outstanding synergies of parent company and subsidiary.

## **PolyIC GmbH & Co. KG**

### ***smart and flexible printed solutions***

PolyIC develops and markets products based on the platform technology printed electronics: In the course of this PolyIC offers products from the fields “Touch Sensors & Passive Devices” as well as “Printed Electronics & Displays”.

#### „Touch Sensors & Passive Devices“

Touch sensors based on the PolyTC<sup>®</sup> technology offer transparent, conductive and flexible possibilities for touch screens and capacitive keys in any variants. Furthermore, this technology enables the setup of flexible circuit structures as passive devices for a huge variety of further applications. The highlight is the possibility to combine decoration and function to achieve a maximum of design flexibility.

#### „Printed Electronics & Displays“

Printed smart objects concerning the PolyLogo<sup>®</sup> product line offer interesting possibilities such as radio activated displays in the field of marketing. Printed RFIDs with the brand name PolyID<sup>®</sup> enable thin and flexible applications of radio detection. In the future Organic Photovoltaics (OPV) will make energy harvesting possible.

PolyIC focuses on its expertise in materials, new adapted chip design methods as well as mature and newly developed mass production processes of roll-to-roll printing in order to develop and market this new technology.

PolyIC is a member of the OE-A (Organic Electronics Association), a working group under the umbrella of the VDMA (Verband Deutscher Maschinen- und Anlagenbau). The OE-A promotes organic electronics internationally. Furthermore, PolyIC is a member of DFF, the German Flat Panel Display Forum and of AIM-D e.V., an association for automatic identification and mobile data capture.

Leonhard Kurz Stiftung & Co. KG owns 100% of PolyIC's shares which results excellent synergies in the field of decoration and function. PolyIC is headquartered within the Nuremberg Metropolitan Region in Fuerth.

PolyIC's webpage is accessible at [www.polyic.com](http://www.polyic.com).

**Expressive pictures regarding the topic of organic electronics are ready to download at <http://www.polyic.com/press-news-events/pictures-for-the-press.html>.**

#### Picture suggestions:



Touchkey-Demonstrator mit PolyTC®  
Folien und Dekorfolie von Kurz



Multitouch-Demonstrator mit PolyTC®  
Folien und Dekorfolie von Kurz