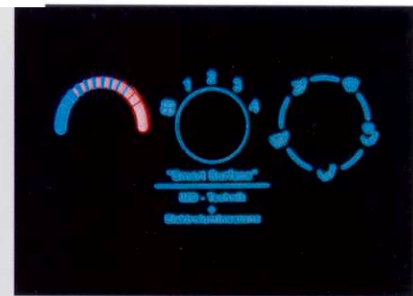


# Smart Surface Technology

## IMD\* + elektroluminescence

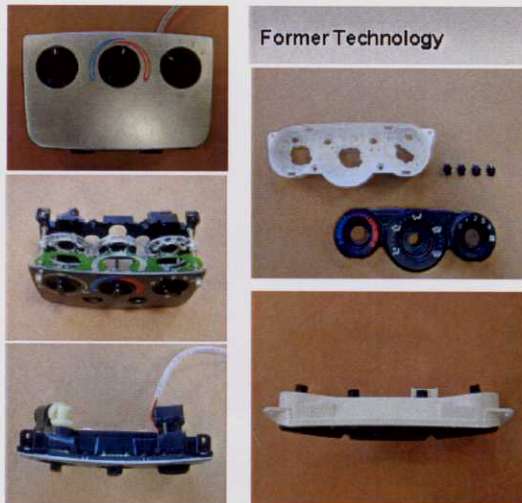
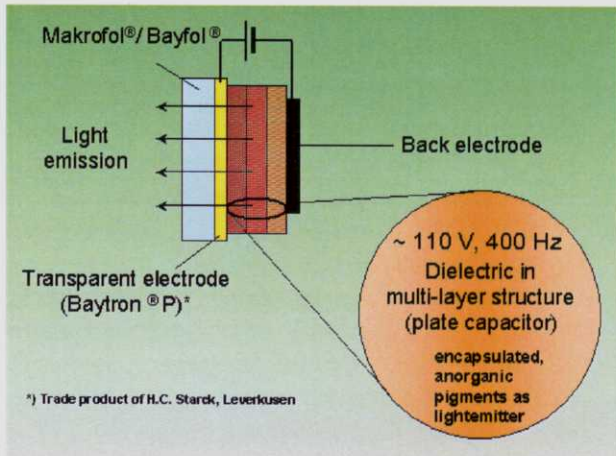


\* IMD= In Mold Decoration

### The Smart Surface Technology enables ambient lighting with luminous plastic parts.

The transparent Bayfol® or Makrofol® film is screen printed with an electroluminescence system. Lumitec AG, Switzerland, applies a luminous film that can be thermoformed and insert-molded in combination with Baytron® P as a transparent electrode (by H.C. Starck). Following process steps are HPF (high pressure forming), trimming and back molding of the film with Bayblend® T 65 (PC+ABS from Bayer Polymers).

The voltage transformer (inverter) has to be encapsulated with polyurethane resin in an especially designed pocket. The light intensity is a function of the voltage being used.



**Smart Surface Technology enables full-scale integration for luminous concepts, requires only very little space and offers nearly unlimited freedom of design.**

**Additional advantages are full scale automation, savings in number of injection molds, assembling, storage and procurement.**

**The plastic part is a maintenance free lamp.**

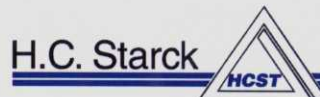
**Break through due to Smart Surface Technology**



**Advantages:**  
 - geometry, less weight  
 - less space, cold lighting  
 - assembly & no. of parts



### Our development partners:



Our gratitude to McGavigan for supporting us with the trial mold.