

EL makes backpacks lighter

Oryon, a leading safety clothing brand in the US will make its jackets and backpacks more visible by integrating flexible EL lights.

Lightweight high-visibility jackets for cyclists and backpacks for campers will be launched across Asia, the US and Europe by Q4 2007.

Orgacon, a printed electronics spin-off from Agfa is producing the EL lights with its own line of inks and materials.

Traditionally, EL has been avoided by the clothing industry because of its inability to withstand water. Louis Bollens, business manager at Orgacon claims the EL lights are more durable than others on the market and are rugged enough to be laminated into apparel.

Orgacon is also developing its business in the automotive industry.

The company has formed joint development partnerships with European EL manufacturers Elumic and Schreiner Variolight. to produce lights for number plates and interior lighting.

In Q3 2006 the German government passed legislation for all drivers and motorcyclists to use EL lamps on their number plates to improve visibility in the dark.

Trucks and large freight lorry companies in Germany began using them in Q1 2007. He adds: 'This could have excellent commercial opportunities for Orgacon. Over the next five

years we expect most number plates on German roads to use our technology.'

Interior car lighting is another new area for Orgacon as leading car designers are taking lighting design far more seriously.

Luxury car brand Jaguar is the first to use EL in this way. In 2006, Jaguar integrated thin strips of flexible blue light into its CXF concept car.

Orgacon is also launching new EL materials with higher transparency, meaning the lamps will be able to emit more light. Bollens says the screen printable materials can also be used to produce other flexible displays apart from EL. 'We are moving into more optical applications such as flexible displays and more advanced signage modules,' he says.

Bikers chill-out in smart cycle suit

A German motorcycle clothing firm is designing a suit with an electronic cooling system to protect riders from dehydration in hot temperatures.

The unnamed clothing firm supplies traditional bike leather to leading car manufacturer BMW. Entrak, a technology start-up in Germany will provide the electronic cooling device.

Talks are at an advanced stage and work on a prototype could start in Q4 2007.

Michael Wiesner, manager of marketing and sales at Entrak says a similar project with a UK-based motorcycle clothing company is in the planning

The Entrak cooling jacket



Source: Entrak

phase. Small extractor fans embedded in the material blow cold air through the fabric. Any damp air from sweat is evaporated.

The fans have three levels of power and are controlled by a switch at the bottom of the garment.

According to Entrak the evaporation process provides a chill that can regulate body temperature.

He says: 'The technology needs to be smaller and less heavy so it fits easily into the leather, so the shape of the device doesn't show through the suit. 'First generations of the cooling system will be integrated into thousands of vests for Firemen and women within two weeks.

Wiesner explains: 'The jackets will be ideal for fireman working in very hot, hazardous situations. The body gets

uncomfortably hot when under mental pressure, especially when putting out fires.'

One jacket costs €299 and is powered using a small battery inserted into the lining of the vest.

A handful of fire brigades in Spain, Greece, Japan, UK, and Australia will use the jackets in mid August 2007.

'For the next six months we will focus our efforts into commercialising the health and safety products for the emergency services. Eventually we want to penetrate the sports and leisure market,' says Wiesner.

Entrak plans to work with leading sports brands to integrate the cooling technology into sports clothing for professional track and field athletes to keep them cool while they wait to compete in an event.