

NanoChromics - White Electronic Displays at Last!

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Abstract

NanoChromics™ technology exhibits the best-in-class white reflectivity of paper-like displays, is bistable, manufacturable on existing display industry infrastructure, can be applied to low information content displays and high information content displays, and is amenable to manufacture on flexible substrates. Furthermore, the manufactured cost of the technology today is comparable to the manufactured cost of LCD and offers excellent optical performance for that cost.

The phenomenon of electrochromism has long promised commercial display devices. Several aspects of device development have prevented this, including poor reversibility of the electrochromic effect and slow switching responses, which would make the effect useful in electronic displays. In addition, stability of the materials over long periods of time in multiple environmental conditions has been a barrier to prolific commercialisation of electrochromic technology.

NTERA has utilised the electrochromic phenomenon in NanoChromics technology by combining the properties of

nanomaterials and electrochromic materials and has overcome the performance and stability challenges and the commercialisation of display devices based on electrochromism in a wide range of applications is now possible.

We will present the latest NanoChromics products today, the technology, and the product roadmap that we believe will result in the best proposition for electronically displaying print media.

Author Biography

David is NTERA's Chief Technology Officer and is responsible for the development of NTERA's technology. His role involves R&D management and direction, strategic planning, tracking competitive technologies and the strengthening of the company's intellectual property base.

A founding member of the company, David holds a Chemistry PhD from UCD and an MBA from the Smurfit School of Business. David is a regular speaker and contributor to display and nanotechnology industry seminars and conferences.