

Electronic Paper Comes of Age

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Abstract

The acceptance of electrophoretic display technology as an important alternative to both paper publishing and conventional display readers has now been proven by both the diversity and quantity of new products on the market. Properties that are driving this acceptance over conventional LCD displays are the paper-like look, daylight readability, low power consumption, and viewing angle independence. In addition, electrophoretic display frontplane technology is suitable for use with the new generations of flexible and printed electronic backplanes. Many of these new backplane technologies utilize new materials and processes from conventional semiconductor manufacture. The current E Ink display performance as well as the recent advances in these technologies will be discussed.

Biography

Michael McCreary is the Vice President of Research and Advanced Development of E Ink Corporation where his responsibilities include the creation of advanced technologies that is enabling a new generation of flexible, ultra-low power, daylight-readable displays. Dr. McCreary is a 36-year veteran of the imaging industry. He previously held a number of leadership positions with the Eastman Kodak Company including General Manager of Kodak's Microelectronics Technology Division, a semiconductor business unit that developed high performance solid state image sensors. Dr. McCreary also serves on the Board of Directors of the US Display. He earned a B.S. with Honors in Chemistry from Principia College, a Ph.D. in Physical Organic Chemistry from the Massachusetts Institute of Technology, and has additional coursework in solid-state physics from the Rochester Institute of Technology.