

Graduate School of Science and Technology

Physical and Mathematical Science

Electronic Paper

Realization of readable electronic medium

Topics : Display, Paper, Ergonomics

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Background and Motivation

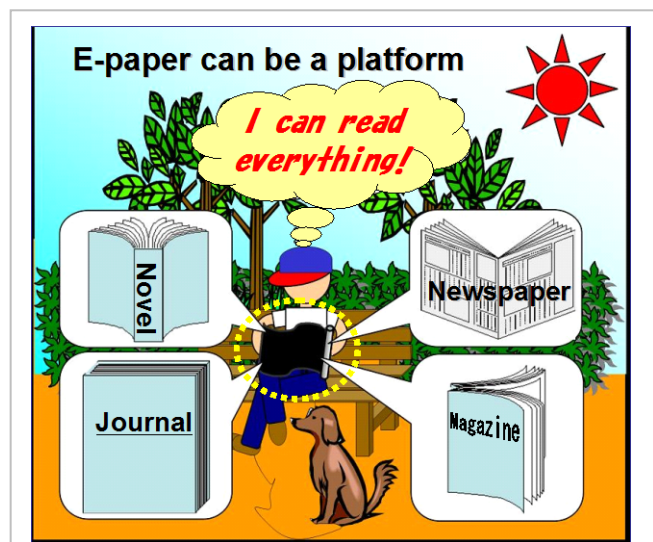
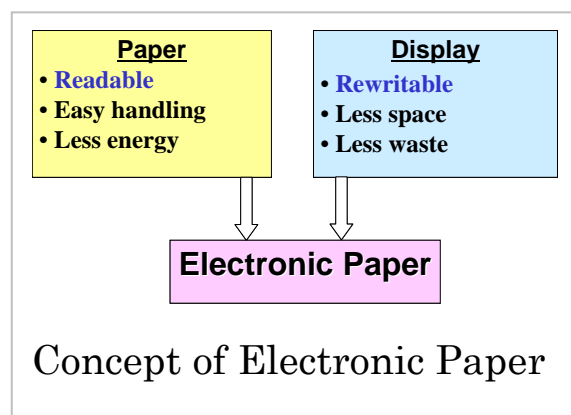
We have the general tendency to prefer reading on a paper than on an electronic display. Reasons of this tendency should be clarified systematically if we really want to realize a really readable electronic media. We know paper media have unavoidable weak points: bulky and wasteful. These weak points can be easily solved by electronic displays. The challenge for Electronic Paper (e-Paper) is to solve the conventional weak points of electronic displays: readability and fatigue.

Originality

It has not been clarified how the differences between paper and electronic media affect to readability, fatigue, and working efficiency. Advantageous properties should be adopted to e-Paper if we want to realize comfortable and convenient electronic media. We have been carried out quantitative evaluation of these effects.

Impact and Perspective

We expect e-Paper will become the main media for every kind of readings hopefully in ten years. We hope our basic studies on readability must contribute to accelerate the popularization of e-Paper.



Published papers from the group

- 1) J. Imai, M. Omodani; "Reasons why we prefer reading on paper rather than displays: studies for seeking paper-like readability on electronic paper", Journal of Imaging Science and Technology, 52(5) , 051002-051002-5 (2008). pp. 90-94(2007).
- 2) R. Ishikawa, M Omodani: "Estimation of Rotation Behavior of Balls for a Twisting Ball Display by Mobility measurement", Journal of Imaging Science and Technology vol.50.No.2(2006)

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