Marina Chernobai V.V. Slesarev, research supervisor N.M. Nechai, language advisor SHEI "National Mining University", Dnipropetrovsk

Flexible Screen Technology

Nowadays we have a quick progress in information technologies sphere. Day by day we need constant access to Internet more and more as most of information is digitized. That is why we have a lot of problem with comfortable using devices. A lot of devices for work in the Net have certain disadvantages: weight, fragility or dimension. Using new screen technology can help in solving the problems by improving and simplifying work with information. Flexible screen technology makes production of little devices with big moving out screen possible.

Paper-thin flexible electrophoretic plastic displays made by Plastic Logic look very similar to traditional paper (polymers are used). Flexible screens save all advantages of simple touch screens like speed of typing and absence of keyboard.

Picture on flexible screens remains clear even in direct sunlight. It does not require any additional backlight. The user can change the size of screen as he needs or wrap it. Screen stretches twice and folds up ten times without loss of functionality. It gives a possibility to increase diagonal but keep the compact size of present-day gadgets. Screen mimics ink on paper. It can be black and white for reading and coloured for more difficult functions. This screen has low power consumption that gives more time of work without the need to charge the battery. Devices with flexible screen are user-friendly because it is light and thin.

This technology can be used in such helpful applications as heart monitoring, wrapping smart-watches, back upping screens of mobile phones, showing weather forecast on sphere screen. Black and white screens will be convenient for information boards and advertising stands.

Nowadays flexible screen technology is elaborated by such known companies as Samsung, LG, Nokia and Plastic Logic. They reached a peak of competition. Some smartphones using this technology were announced. Each of them wants to be the first in the World to release it. They change the dates of release of their versions and fight for every day.

Flexible screen is a revolution in the market. Further development of this technology can change our hard-ware into flexi-ware and we will use flexible mobile phones, roll-up laptops, e-ink books etc. At first, it can be difficult to understand but in future this technology has a lot of prospects.