

Compact and Low Power-consuming Thermal Transfer Printer Unit for Built-in Use in Mobile Devices

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Abstract

We have developed the compact and low power-consuming printer unit PTMTL27. This unit is designed especially for built-in use in mobile devices such as digital still cameras and camcorders. The unit is roughly the size of a business card, is 17.7mm thick and weighs 135g. Printing is done by the thermal transfer variable dot scale method.

As a matter of course, battery-driven operation is indispensable for mobile applications. Therefore the structure around the heat elements of the print head and the drive method were optimized in order to reduce power consumption, and print operation by battery was attained. And the number of printable pages using various kinds of dry batteries is simulated in this paper.

Biography

Shin'ichi Sagawai received his M.Sc. degree in engineering from Nagaoka University of Technology, Japan in 1988. Subsequently he joined Alps Electric Co., Ltd., System Devices Division and has been working on the development of thermal transfer technology. His interests are mainly in the control of the thermal print head and image processing. He received a technical award from The Society of the Electrophotography of Japan in 1996.

*See NIP17 Proceedings, 2001, pp. 491-494
for full paper.*