

Determination of the Combined Index of Quality of Braille Printouts and Convex Copies for the Blind

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Abstract

The development of the convex print on paper implies improvement of the quality of education and quality of life of the blind. This development has also important economical aspect, as the number of manufacturers of Braille writing and copying equipment is increasing. The development of the convex printing techniques enables the increase in the prints' quality specifications. Reliable mechanism of the quality control of convex prints may become a tool for the evaluation of the publications for the blind. Quantitative and objective quality control of convex prints could help to improve the design and performance of Braille printers and copiers. In the paper we present the attempt at measurements of the parameters (high of the convexity, non-uniformity of shape of Braille points, diameter of Braille point), influencing the perceived quality of Braille printouts. We also present trial determination of a

combined index of the quality of the Braille characters and convex copies of graphics. We intend to apply the index to assess the influence of the parameters of the copying process on the quality of the copies in order to improve the design of the copying device on microcapsule paper being developed.

Biography

Ludwik Buczynski received his PhD degree in micromechanics from Warsaw University of Technology in 1972. Since 1963 he has worked in Micromechanics and Phonics Institute of Warsaw University of Technology and since 1986 in R&D Center Office Technique, PREBOT, Radom Poland. He is a member of IS&T, and since 1990 his main area of interests are computer peripherals devices and image quality investigations.