

Abstract: The introduction into the position coding consists of two examples of position codes on line which use the positional number system of base 4 and De Bruijn sequence constructed with the use of LFSR. The main aim of this thesis is the description of two positional codes on plane based on the patents of the Swedish company Anoto. These positional codes use mixed radix number representation and also a specific type of sequences called quasi De Bruijn sequences. The second of the described position codes represents an application of the Chinese Remainder Theorem. The thesis focuses on the position code construction, description of decoding, and the proofs of detectability. A detailed comparison of the principles of the coding of the coordinate y of both discussed codes is provided in the final part of the thesis.

Keywords: positional code, quasi De Bruijn sequence, mixed radix, Anoto Pattern