## MOSAIC LABYRINTHS AND UNIFORM STRUCTURES

## BILJANA STAMATOVIC

Some problems of labyrinths recognition with automata were considered in [1], [2], [3], [4], [5]. An infinite class of mosaic labyrinths was investigated in [1], [2], [3]. We proved that automation is useless if elements of this class have got a hole. Some kinds of rectangular labyrinths were considered in [4], [5]. We proved that if corresponding graph of the labyrinths have got a cycle then automata recognition is not possible. In this paper we will construct an uniform structure which is closed with respect two classes: class of all mosaic labyrinths with a hole and class of all mosaic labyrinths without a hole.

## References

- B. Stamatovic. Recognition of simply connected digits with automata, *Intelectual Systems*, 3, 1998, 291-307.
- [2] B. Stamatovic. Recognition of two connected digits with collective of automata, Intelectual Systems, 4, 1999, 321-337.
- [3] B. Stamatovic. Recognition of labyrinths with automata, *Discrete mathematics*, 12, 2000, 121-132.
- [4] B. Stamatovic. Recognition of digit 8 with collective of automata, Intelectual Systems, 6, 2001, 365-380.
- [5] B. Stamatovic. Automata recognition of exsisting cycle in rectangular labyrinths, *Intelectual Systems*), 7, 2002, 356-369.

UNIVERSITY OF MONTENEGRO *E-mail address*: biljanas@rc.pmf.cg.ac.yu