STRUCTURAL RESEARCH MODEL OF DESIGN PRINCIPLES OF HOUSING ENVIRONMENT EQUIPPED WITH INTELLIGENT CONTROL SYSTEMS

One of the main interior designer's focus areas is to design dwellings. Considering the importance of dwelling for every person, the designer should pay particular attention to create the most comfortable conditions for the future inhabitants. The rapid development of high technologies has led to a significant increase in the quantity and quality of electronic devices in everyday life. Housing environment is not an exception: a growing number of new equipment and devices fill the people's homes. Thus, researching the modern dwellings design principles, we should not ignore the necessity of technological innovations implementation that facilitate the house management and improve the level of life.

The aim of the article is to develop a structural research model of design principles of housing environment equipped with intelligent control systems. The model proposed by the author consists of three consecutive phases.

The first phase of the research is to determine the modern concept of a comfortable living environment and systematize its components. To identify the coherence with the visual environment the principles of comfortable dwelling design should be divided into two groups: the principles, which modify a visual environment, and the principles that do not change the appearance of the premises. According to the obtained data, the comfort conditions are classified due to the type of dwelling functional areas.

The second phase of the research is generalization of major intelligent housing management systems and their division into two groups: house environment control systems, and monitoring systems. This phase also includes the search of correspondences between the principles of comfortable housing design and intelligent systems possibilities in their ensuring.

The third phase is based on the previous researches, it develops structural and typological classification of intelligent systems that provide comfortable housing design principles according to the type of dwelling functional areas. The developed research model of design principles of housing environment, which is equipped with intelligent control systems, will allow to explore the subject systematically and deeply for further result implementations at the interior designers’ workflow.

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