Nowadays it is much harder to impress a modern person or persuade them to do something. Therefore, developers of design objects should constantly examine and study effective methods to influence a potential consumer. For modern people it is no longer interesting to use ordinary objects of the created environment, they want to be real members of the creative process. The participation and interaction in the process of creation provide the tactile communication of people with the object of creation. Certainly, it is the tactile cognition that refers to the higher level of processing and integration of tactile information due to the active touch [5]. The touch implies the effect of temperature sensation on receptors for cold or warm stimulation that is caused by the contact with the object [3]. The possibility of the usage of hot and cold feelings as tactile and visual communication became the innovative one in design practice.

A considerable number of information sources reveal the topic of tactile communication only in the context of psycho-physiological [3; 5] and marketing influence on a consumer due to the activation of sensory sensations [6]. The information about the using of thermal sensations in design objects has the advertising nature exclusively and demonstrates the using of various thermal effects [1; 2; 4]. Consequently, the analysis of temperature sensations as the visual communication element from the standpoint of design requires the systematic theoretical and practical research. Therefore, the aim of the study is to reveal design features of thermal sensations using in dynamical visual communication.

The touch sensation is one of the main social feelings and ways to contact with the environment. The neuromarketing experts believe that the touch is an important way of communication during the products selling [6]. So, the using of hot and cold sensations and their visual effects in communication with a consumer gains the huge popularity.

Dynamical temperature effects creation is based on the thermochromic paints using. These are the materials that have the ability to change colour of discoulour due to the temperature change. Pigments, included in the paint, are created according
to the technology of liquid crystals that are in microcapsules. Thus, they are mixed very well with various paints, varnishes, printing ink, resin, plastic and rubber and are widely used in different areas of design. They are implemented in the design of subject environment, for example, thermoreactive wall surfaces in interactive elevators, drawing surfaces, furniture, gadget cases and covers, interactive installations, etc. In design of printed products, clothes, toys and packages dynamical features of thermostensitive ink attract attention to the form and content of products.

The integration of thermochromic paints with a design product is used not only for decorative purposes, but as an indicator of surface temperature changes, for example, on containers for cool or, conversely, hot drinks and food. Besides the functional role, the concept of design development, which visually demonstrates dynamical changes, is definitely important.

The using of thermal sensations as the means of visual and tactile communication with the audience and a consumer gives the object not only material, but communicative and educational features. Judging by the analysis of discovered design objects, design features, which form the visual dynamics of a system interaction “Author – Work – Audience”, were established.

Firstly, the consumers’ attention is focused on individuality and personification, which visually demonstrates the temperament and aesthetic charisma of the owner of the design object. For example, the heat-sensitive paint of the smart phone body reacts to the unique temperature of the user by changing the colour and texture of its colouring.

Secondly, the research of material, physical and visual connection between people’s actions and design object reaction makes it possible to change the perception of the ordinary material environment. During the temperature contact the hidden essence of things is revealed and the new content, which was not noticeable before, appears [1; 2; 4]. An example of changing the way you look at everyday objects is the development of the book Fahrenheit 451 by the team of graphic designers Super Terrain [2]. In the book with black pages, covered with heat-sensitive coating, the text can be read by pages heating.

Thirdly, intuitive conversation and establishment of communication between the audience, the author, and the object at the level of tactile and visual connection are specific visual-communicative design features. Dynamical colour visualization reveals the ways of social interaction and harmonization of attitude to the nature (e.g. map-table of Murakami’s motives, Tribeca Issey Miyake installation in New York, the interactive elevator Architextiles, Devid Loy’s book Heat [4]).

Conclusions. In the work the action of the senses of heat and cold as the means of visual and tactile communication, which have wide possibilities for designers due to the specific features of thermochromic materials, are represented. Personification, the change of environment perception and the intuitiveness of communication reveal the project content of design objects. Their project features are characterized by the visual dynamics and encourage to cognition, research and communication with the material environment as the visual-communicative system. The promising direction for the study is the practice of integration of temperature sensations to the inclusive design, especially for blind and deaf-blind people to use.
References:


