Develop the designs of the printed glass units and connect them with the interior design of furniture furnishings in coordinates with the use of innovative technological methods

Assist. Prof. Dr. Eman Ahmed Abd-Allah
Assistant Professor, Fashion Department, Higher Institute of Applied Arts, 6th of October city
Eman.abd@hotmail.com

Dr. Manar Mohamad El- Said
Professor, Higher Institute of Applied Arts, 6th of October city
nana_moonoo@yahoo.com

ABSTRACT:
Technological innovation is the use of practical knowledge to achieve Human needs and desires and the development of society as it is used to achieve Supplies necessary to facilitate the life, comfort and survival of the human person as it assists individuals in their discoveries and inventions to achieve Their needs and desires, the technological innovation of product development is a cosmic phenomenon, the most important feature is the accumulation of experience and knowledge and the desire for change and development in various aspects of life. The technology contributes to the process of design creation and shaping the advanced features of the future, as technical progress and the use of modern techniques in designing and manufacturing has changed many of the concepts prevalent in applied sciences and the production of the arts and has led the natural docking between the design activities and Modern technological data to the transformation in the methods of competition and the measures of evaluation and the use of technology for further innovation, renewal and development and the challenges of the future requires rethinking all that surrounds the design process of theoretical bases and practical procedures in light of the modern concepts of design requirements From the scientific and technological point of view affecting the development of methods Design and production, As technological advances and innovation have been the engines of long-term economic growth, research has addressed the development of glass lighting units to obtain innovative products from printed and thermally treated glass in high-temperature furnaces reconstituted with printed textile parts. It is implemented with textile printing design techniques and the creation of consistent combinations that link the designs of thermally treated glass lighting units to the designs of printed furniture using the technology developed.

The research will address the following topics:
• The role of technological innovation in the development of design product and achievement The competition.
• Create a plastic aesthetic relationship between the glass composition of the lighting units and the designs of the printed furniture surrounding them.
• Create consistent combinations that link the design of thermally treated glass lighting units to the designs of printed furniture using the technology developed.

KEY WORDS: harmonic groups, burn technique, The dikopage technique.

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• **Introduction**

The interest in creativity and innovation to create innovative approaches to new techniques in design has changed many of the prevailing concepts in technical science. In the light of the modern concepts of design requirements from the scientific and technological point of view affecting the development of design methods, the problem lies in the challenges faced by the designer to find a new design language to cope with the increasing sophistication of modern technologies, which require updating concepts, requirements and design tools. Understand and guide the information and alternatives available from materials and methods of implementation through change in the essence of the methods of design practice. The developments in the field of integration between the art of glass composition and textile printing techniques and the conduct of many different experiments of the designer with the raw materials and techniques in which the aesthetic values were found as a result of the scientific development and industrial progress have become available to the designer to work with various plastic materials, which led to the diversity of the designer's vision in the formulation of these materials. It is based on the use of modern technologies, which have led to the discovery of innovative creative energies, which influenced the plastic techniques in the field of glass integration with printing, using raw materials, traditional techniques, Mamet innovative lighting units and create consistent groups fit with the surrounding furniture using incineration technology and dikubaj technology.

• **Problem Statement:**
  • Create a new design relationship that keeps abreast of the increasing sophistication of modern technology, which requires the updating of concepts and design tools through innovative lighting units.
  • Develop the designer's ability to absorb and direct information and alternatives available in raw materials and methods of implementation, through the events of change in methods and practice design to suit the possibility of implementation of the design.
  • Emphasis on the use of decorative elements in the development of the design of printed lighting units.
  • Create consistent sets of innovative lighting units and design of printed furnishings for the room.

• **Research goals:**
  • Creating a formal relationship between lighting units and design using modern techniques in implementation.
  • To guide the designer's thought to innovation and experimentation and to create the alternatives available from the raw materials and methods of implementation for the events of changing the innovative product to compete with international markets and encourage small enterprises.
  • Creating an aesthetic relationship through the creation of consistent sets of lighting design and design of printed furnishings for the room.

• **Research hypotheses:**
  • The creation of coordinated group designs links printed printing units with the interior design of printed furniture for the room.
Developing the creative designer's capabilities to achieve a renewed source of excellence, where creativity and innovation becomes a feature of development, success and uniqueness.

Create new ideas of modern applied innovations that help the youth community to work in small projects, which increases the national income of the country.

**Research Methodology:**
- The research follows the experimental descriptive analytical method.

**Search tools:** Glass fiber materials, Glass plates, Chips, waxes, Thermal glass colorants, Colored oxides, Ovens.

**CONCLUSIONS:**
The study showed the aesthetics of lighting units and their relation to interior design.
- Leading the designer's thought to create consistent sets of aesthetic values that have made it an important source of connection between the lighting units and the interior design of printed furnishings.
- The use of incandescent and combustible techniques in the integration of printed fabrics and glass formations is an invaluable part of the value of innovative application designs.
- Utilization of printed decorative elements in the development of the design of printed lighting units of the value of the designs executed.
- The integration of different printing techniques of the printed design on the glass composition with the diversity of raw materials give innovative results enriched by the aesthetics of innovative design.
- There is a mechanical relationship between the lighting units and the design using modern techniques in implementation.
- An aesthetic relationship through the creation of harmonized sets of lighting units design and design of printed furnishings for the room.
- The creation of harmonized group designs led to the connection between the printed lighting units and the interior design of the printed furnishings of the room.

**Recommendations:**
- The need to pay attention to creating a new design relationship that keeps abreast of the increasing sophistication of modern technologies and the modernization of concepts and design tools in lighting units.
- Develop the sense of aesthetic taste of the recipient by linking the lighting units and the interior design of the printed furniture in innovative designs.
- Conducting a lot of research in the designs of consistent groups because of their high aesthetic values that link innovative designs.
- To guide the designer's thought to innovation and experimentation and to create the alternatives available from the raw materials and methods of implementation for the events of changing the innovative product to compete with international markets and encourage small enterprises.
- The interest in the integration of many techniques in printed designs, which makes the Egyptian product the ability to compete with foreign products and achieve excellence and exclusivity.
The interest in the use of manual techniques leads to the ability of the designer and graduates of the faculties of arts to be able to work small projects that lead to increase the national income of the country.

Develop the designer's ability to absorb and direct the information and alternatives available in raw materials and methods of implementation to change the methods and practice design to suit the possibility of implementing the innovative product.

Create consistent sets of innovative lighting units and design of printed furnishings for the room.

Creating new ideas from modern applied innovations that help the youth community to work in small projects, thus increasing the national income of the country.

**Implemented design experiments:**

*First: designs implemented by burning technology*

Design No. (1)
## Coordinates design (1)

| (A) | Basic design inspired by the natural plant elements, applied to the raw material of the glass fabric using in the implementation of monobrint printing technique and direct painting with the implementation of high temperature glass resistant glass. |
| (B) | The design after the burning process in the ovens 800 degrees where the interaction of printed glass and coated glass panels design, which produced a creative idea and unique. |
| (C) | The design is derived from the basic design, which is similar to the method of distribution of plant elements and the emphasis on the distribution of elements using specific engineering circles in black to emphasize the unit used and distributed vertical direction, which gives a motion in the design, with participation in the same color group. |
| (D) | The plant elements used in the basic design were used in a simple linear manner of varying sizes, while retaining the direction of vertical distribution and convergence in the color group and using free linear contact to connect design elements and ground to achieve bonding and balance. |
| (E) | A design that checks the diversity in the sizes of plant elements used and the use of geometric lines in the form of squares of various sizes to emphasize the units, which achieve harmony through convergence in color grades and diversity in the method of distribution of elements and the diversity of sizes. |

**Abstract:** From the above we note the harmonization between the design group through the participation in the color group and the style of its formulation as well as the involvement in the quality of elements and vocabulary with the change in size and status and movement with the addition of some engineering lines to link the consistent groups.
The idea of employment

المراجع:


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