

Design Mode and Development Trend of Intelligent Clothing

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Abstract. At present, intelligent clothing has gradually entered people's lives, and with its novel and personalized characteristics, it is more in line with people's needs, especially the requirements of special industries for clothing. The world's clothing industry will set off a climax of research on special clothing technology to bring greater convenience to human life. There are certain difficulties in intelligent apparel design. Now intelligent apparel design in China is still in the development stage. This article analyzes the design mode and development trend of intelligent apparel, and aims to provide beneficial help for the development of intelligent apparel industry.

Keywords: Intelligent clothing; Design mode; Development trend.

1. Introduction

The manufacture of clothing with permanent, waterproof, fireproof, antifouling, anticorrosion and other special requirements continues to develop. The design of intelligent clothing fully meets this demand. The research and development of intelligent clothing in China is still in its infancy. In view of the utilization of people and the demand and satisfaction of intelligent clothing, intelligent clothing in China has great development prospects.

2. The Concept of Intelligent Clothing

Intelligent clothing refers to clothing that simulates life systems and has dual functions of perception and reaction. This type of clothing aims at consumers' needs and caters to the needs of consumers. From a different perspective, combined with current science and technology, to design this model can not only actively perceive the external world, but also generate feedback based on the human body's own conditions and psychological needs.

When we first know the words *intelligent clothing*, we will undoubtedly think of the amount of Lee, diving suits, firefighters' fireproof clothing, etc. If you are not engaged in these industries, it is difficult to imagine that intelligent clothing will be relevant to us, but with the development of technology, it has gradually entered our lives. In the next few years, our wardrobe will be filled with such clothing, such as "Intelligent village shirts" that can read the heartbeat, temperature and breathing frequency of the human body. A jacket that automatically plays music, a T-shirt that can display text and images on the chest, and so on. The whirlwind of intelligent wear, such as smart watches, smart bracelets, smart glasses, etc., has now spread to the apparel market. Intelligent clothing based on big data, the Internet, and technological innovation has gradually become a revitalization of traditional textile apparel. And industry's new breakthrough.

3. Design Pattern of Intelligent Clothing

3.1 Essentials of Smart Clothing Design

The main points of the design of intelligent clothing are the characteristics of people's different needs, focusing on personalized design, citing science and technology and scientific materials, combining clothing with science and technology, and adding intelligent equipment to the design of clothing. With the rapid development of the social economy, the market competition in various industries is becoming more and more fierce. If an industry wants to truly develop and stand out, it must have its own characteristics. The key to the design of intelligent clothing is to integrate consumer consumption with the customer's needs as the first goal. The needs and consumption

patterns of consumers, when designing clothing, seriously consider the needs of consumers, and add some intelligent design to the design to better meet the needs of consumers, for example, the temperature in the Northeast is lower, especially in winter it's very cold. A down jacket with temperature control can fully meet people's needs for cold protection. It can automatically heat up when the temperature is low, and can be powered off in time when the temperature is high. Combined with people's daily life, it reflects the advantages of smart clothing.

3.2 How to Design Intelligent Clothes

Intelligent clothing is based on a personalized design method. Personalized design is the core of intelligent clothing design. It can show the relationship between clothing design patterns and fully reflect the role of personalization. "For example, the current design uses GPS positioning design In the shirt or T-shirt, it brings the gospel for the elderly and children. By wearing clothing with GPS positioning, the elderly and children can get relatives location through GPS positioning in the first place when they are lost or in danger; There are also emotional gloves designed using changes in body temperature resulting from changes in people's emotions. These gloves determine the emotional state of person by detecting the temperature, pulse and skin conductivity of the palm. The glove on the hand will give a flashing warning to warn people that they are overworked or are not suitable for work at this time, so as to better protect people's safety and improve their happiness index.

3.3 To Design Content of Intelligent Clothing

In the design of intelligent clothing, the combination of clothing and technology is closely combined. In order to realize the functional utilization of smart clothing. Adopt modern high-tech technology and materials, aiming at the needs of consumers, apply design 1 This high-tech product to clothing design, and effectively realize the effective combination of clothing without technology, for example, using GPS to design smart positioning will Smart clothing is more suitable for children, and color-changing clothing designed with polymer materials such as sunlight discoloration, temperature discoloration, or long-term luminous effect is very beneficial to the military and other special industries. Full use of evolving scientific technology makes the design of smart clothing more modern Social development.

4. Development Trend of Intelligent Clothing

Beijing Xiaomi Technology Co., Ltd. has introduced intelligence into our lives. The design of its products such as intelligent phones and intelligent homes has changed our lives. The emergence of various smart products has made people's lives more colorful. Combined with the current market demand, smart clothing, with the particularity of its products, can more closely combine the needs of wearable devices and consumers. Intelligent clothing is based on the design of traditional clothing, combining high-tech technology with clothing to meet the special needs of consumers, breaking the traditional clothing design concept, designing personalized clothing with special functions, and more in line with consumer needs . The development prospect of smart clothing is inestimable. In the following development of smart clothing, more attention will be paid to the wearability, practicality and aesthetics of clothing. While meeting the basic conditions, it will accelerate the pace of research. Reduce production costs and make more Many people have the ability to choose their own smart clothing. In terms of design methods, smart clothing combines science and technology with clothing to simplify the design process, energy efficiency and safety performance. At present, China's intelligent clothing is still in its infancy. With the increasing demand of consumers, in the future development, it is necessary to make full use of all kinds of resources, gradually face smart clothing to the vast number of consumers, and achieve commercial popularity. Further promote the development of the smart clothing industry.

The emergence of intelligent clothing breaks the significance of traditional clothing. It is far more than simply "wrapping the body", smart clothing has both the design and super functionality

of Shishu, which is in line with the future needs of the target consumers of the clothing industry. Therefore, we must be deeply aware of the future development trend of intelligent clothing and study intelligence. The design mode of clothing uses high and new technology and information technology to change and enhance traditional clothing functions, allowing more people to wear smart clothing, and at the same time using the development of the smart clothing industry to promote China's economic development and improve China's international status.

References

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