

Energy Saving Mechanism of Wireless Sensor Network Based on Particle Swarm Optimization

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Abstract: Because of the rapid pace of scientific development in China, it also improves the network energy saving technology in China. Of course, when the level of information technology in China reaches a certain height, there will inevitably be network energy saving technology. The technology of our country network develops more and more mature, so there are more fields and network energy saving technology to achieve close cooperation, which not only makes the development of various fields favorable network energy saving technology after better and better, but also greatly improves the utilization rate of network energy saving technology. Nowadays many industries in our country use sensor technology in network energy saving mechanism. This technology has developed rapidly and better in China's modern information science technology, especially in the application of network energy saving mechanism, which can effectively promote the development level of network energy saving mechanism in China. Therefore, it is the center of this article to ensure the normal operation of sensor technology in the network energy-saving mechanism.

1. Foreword

In our usual scope of understanding class, many people have not heard of wireless sensors, in fact, the network energy-saving mechanism is to connect different things in a specific way, so that the two unrelated things are closely linked, the independent individual into a complete organic combination, this is the network energy-saving mechanism. The network energy saving mechanism can make the system achieve resource optimization and management optimization, which greatly improves the working efficiency. It also makes the network energy saving mechanism technology achieve the best utilization effect in the intelligent transportation security system. At present, sensor technology has been applied in various fields of network energy-saving mechanism, sensor technology attribute principle is mainly the use of relevant components to help the calculation and analysis of a technology, mainly improve an intelligent level of electromechanical systems. So because of this advantage, sensor technology can be widely used in various fields. China's "Internet +" since the implementation of the information technology strategy, in this industry has rapidly developed a large number of shared economy enterprises, because these enterprises are actually involved in a number of industries, and almost the entire market area[1]Moreover, with the rapid development of the economic market today, it is still possible to discover the problems of information management security exposed by the sharing economy model hidden in the era of large data. Among these problems, we should not only solve the technical problems of financing, but also restore our own market image. So we must rely on the common forces of markets, businesses and governments. Therefore, in the era of data economy, the combination of particle swarm optimization and wireless sensor development can effectively promote the future economic development of human beings. It brings new opportunities and development to the sharing economy through the new combination mode of learning from each other and helping each other.

4. Application of Sensor Technology in Network Energy Saving Mechanism

4.1. Application of Sensor Technology in Mechanical and Electrical Manufacturing

It is important to know that sensor technology is important in the whole machinery manufacturing industry, its dynamic performance monitoring is its most obvious advantage, because this dynamic performance monitoring let no technology can replace its position, this is the sensor technology in mechanical manufacturing electromechanical irreplaceable. The benefits of applying sensor technology to the mechanical manufacturing industry now provide staff with the latest dynamic monitoring and the most accurate information data[3]For example, the use of sensor technology can be used to monitor the vibration parameters in real time in every place, even in the machine tool holder and bed body. Through this precise and effective technology, it is possible to ensure that the parameters of each part meet the standard and requirements to the maximum extent.

4.2. Application of Sensor Technology in Environmental Monitoring

With the continuous development of our country's social economy in recent years, the environmental problems are becoming more and more prominent. Therefore, the environmental inspection work received more attention. Because environmental monitoring in practice faces more complex conditions and situations, it is necessary to use relevant monitoring instruments to carry out environmental monitoring in remote areas. in this case, sensor technology can be applied in this work. Practice has proved that it has more advantages, including: simple monitoring arrangement, low monitoring cost and high monitoring accuracy. So it becomes an essential technology for me to apply in environmental monitoring[4]. In practical applications, sensor technology can monitor the state of development and change of natural environment and biological communities, and turn on the dual-no of pay-right lights.



Figure 3 Wireless sensors

4.3. Application of the Whole Process of Machine Tool System Processing

At present, in our country, it is necessary to make use of all kinds of information technology to adjust and arrange the machining process of machine tool system. So it can reduce the error factors to a certain extent and reduce the great influence on machine tool system processing. In this process, the use of sensor technology is able to effectively monitor the whole process of machine tool system processing, through this way, to provide a strong guarantee for machine tool system processing, so that the quality of processing technology can meet the expected standards. For example, in the process of machine tool system processing and manufacturing, sensor technology is used to effectively detect the relevant parts structure[5]In this way, the main purpose is to further improve the machining quality of machine parts and related parts, and improve their utilization rate and qualified rate. In addition, the staff can carry out comprehensive monitoring and control of the process flow through sensors in the process flow of machine tool system processing, so as to improve the transparency of the process flow and improve the working efficiency.

5. The Market Prospect and Development Space of Wireless Sensor

Wireless sensor network mechanism technology is very promising in the application of wireless sensor in network system. The combination of the two is not only an opportunity for the development of wireless sensor network mechanism technology, but also an effective way for security system to improve protection security. Moreover, the rapid development of wireless sensor network mechanism technology has also involved many fields, such as: hospitals, banks, shopping malls and other large-scale industries, the stability of these fields directly affected the quality of life of residents and social stability, so it is very necessary to increase the security system wireless sensor network mechanism technology.

6. Conclusion

According to the discussion and research of this paper, it can be seen that the sensor technology can get a reasonable application in the network energy saving mechanism, which can improve the development level of the network energy saving mechanism in China, but also promote the application of science and technology in the development. It also plays a key role in promoting enterprise development. After deeply analyzing the application practice of sensor technology in network energy saving mechanism, the relevant enterprises in our country can safely and boldly invest sensor technology in network energy saving mechanism, combine sensor technology with network energy saving mechanism organically, which is of positive significance to the development of both. Wireless sensor network mechanism technology plays a great role in the modern intelligent network system in China. It can not only realize the 24-hour uninterrupted operation of full coverage which can not be realized by manpower, but also improve the information security and property security of residents. So to live a healthy and secure life, the state should increase the investment in wireless sensor network mechanism technology, whether it is human investment or financial investment, which has positive benefits for our residents. Through this article, we also understand the close relationship between particle swarm optimization and wireless sensor network energy saving mechanism, which is also of great significance to the development of our network. And in the future it will be difficult to estimate the challenges and opportunities these technologies will face, but what we can do is to develop the present.

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