

Development status of household air purifier

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Abstract

Since Chinese rapid development, it has not only improved our quality of life, but also brought a series of environmental pollution. Among them, air pollution has caused a lot of inconvenience and adverse effects on people's life. Oxygen is an indispensable material for human survival, and people can only obtain oxygen from the air, but the inhalation of polluted air into the human body will affect people's health. Although it is impossible to control the external air quality in a short time, there are still ways to control the indoor air in a short time. The purpose of this research is to use the household air purifier at home to effectively improve the indoor air quality, reduce the use cost of the air purifier and increase the popularity of the air purifier in the household environment, Ensure that the air quality in the house can reach a good level when people are at home.

Keywords

Household air purifier; domestic development status; foreign development status.

1. Introduction

Under the background of the rapid development of Chinese society, it has brought social prosperity and the improvement of people's living standards, as well as a series of environmental pollution. Environmental pollution has caused many adverse effects on people's life. Air pollution is related to this graduation project.

Air pollution is also known as air pollution. In the definition of the international organization for standardization, air pollution generally refers to the phenomenon that some substances enter the atmosphere due to human activities or natural processes, show sufficient concentration and reach sufficient time, and thus endanger human comfort, health and welfare or the environment.

Who once had a report: air pollution is the cause of premature death of 5.5 million people around the world every year. Air pollution is the cause of death of one in every eight deaths in the world. The task of purifying air is imminent. People spend most of their life indoors. Many work, sports and recreational activities can be completed indoors. Shopping doesn't have to go out to the mall every day. The appropriate indoor micro climate makes it unnecessary for people to often go outdoors to adjust the thermal effect. In this way, people spend more time indoors, Under certain circumstances, people can spend more than 93% of their time indoors. Therefore, the relationship between people's health and indoor air quality is more close and important.

After the investigation of relevant professionals, it is found that if the room decoration containing harmful materials is used, the degree of indoor pollution will increase, and these indoor pollution will have a more serious impact on children and women. According to relevant statistics, the cause of death of about 2.1 million children in China is upper respiratory tract infection, of which more than 1 million children are directly or indirectly related to indoor air pollution, especially the indoor environmental pollution of some newly built and newly decorated families and kindergartens is very serious. The number of children with leukemia in developed cities such as Beijing, Guangzhou and Shenzhen has shown an increasing trend in recent years, and living in over decorated rooms is one of

the important reasons for the increase in the number of children with leukemia. Although we can't improve the outdoor air in the short term, we can use the air purifier to purify the indoor air, so that we are in a relatively clean air environment most of the time.

2. Domestic development status

At present, although there are many kinds of air purifiers in the domestic market, the quality of these air purifiers is mixed, and the number of miscellaneous products is dazzling. In real life, the price of air purifier products with excellent purification effect is relatively expensive, so it also makes room for most inferior products. Many bad businessmen use the low prices of these inferior products to attract consumers, which leads to many candidates to fake and inferior products, resulting in serious phenomena such as shoddy products, ineffective products in real life and exaggerated nominal products. After a long time, consumers' patience and confidence in the air purifier gradually dissipate, which makes consumers think that the air purifier is a flashy and exaggerated machine at the psychological level.

At present, most of the mainstream air purifier brands in the domestic market use filter screen technology [3] to purify the air. From the sales of online shopping, the domestic air purifiers generally adopt HEPA filtration, catalyst filtration, activated carbon filtration and ion filtration systems. Among the above filtration systems, the products of ion filtration system and activated carbon filtration system account for a large market share. The outstanding brands of domestic air purifiers include Midea, Gree, Haier, etc. As shown in Figure 1.



Figure 1 Domestic air purifier

According to rough statistics, the models with better sales of Midea air purifiers include Midea kj210g-c46, Midea kj550g-ja32, Midea kj400g-e33 and Midea kj700g-h32. The models with good sales of Gree air purifier include Gree kj500g-a01, Gree kj450g-a01, Gree kj320g-a01 and Gree kj700g-a01. Haier kj200f-a180a, Haier kj650f-hy01, Haier kj199f-eaa and Haier zkj-f40a1 are the models with better sales of Haier air purifiers.

3. Foreign development status

The process of improving air pollution is very long and can not be completely changed overnight. In some foreign countries, the control of air pollution has been effective for decades. Even now, the popularity of indoor air purifiers is very high.

At present, outstanding foreign air purifier brands mainly include stevedore air purifier, Philips air purifier, Samsung air purifier, 3M air purifier and buleir air purifier. Among them, the stevedore air purifier is the most prominent. The latest product A8 released by stevedore has a particle Cadr value of up to 800m / h and a formaldehyde Cadr value of up to 400m / h. It is developed by using British mother infant technology in combination with China's air conditions, and adopts light sensing technology and pure natural coconut shell activated carbon, which not only improves the air purification accuracy, but also improves the product experience.

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