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Author: Mrs. İlaha İsgandarova
Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

"RSH: ADVANCED PROTECTIVE HEADGEAR FOR RADIATION MONITORING AND USER SAFETY"

Abstract

Radiation Safety Helmet (RSH) is designed to monitor user's radiation and oxygen levels and provide warnings in hazardous situations. The primary objective of this design is to ensure user safety and protect them from potential dangers. The camera embedded within RSH is used to identify potential hazards around the user in advance. Sensors continuously monitor radiation and oxygen levels, transmitting this information to the indicator panel, which provides information to the user through color changes. For instance, depending on the intensity of radiation, red, yellow, or green lights may illuminate. Specifically, if the user feels unwell and is in danger, specially designed hand signals can be used to assist the user. These signals can be monitored via the camera by observers, allowing for a quick response to emergencies. The use of RSH enables users to be protected from potential hazards and take appropriate measures in emergencies. Continuous monitoring and warnings contribute to an increased awareness of safety. Thanks to its flexible design, RSH can adapt to different user needs and has a broad range of applications. The flexible design of RSH enables it to adapt to various user needs and offers a wide range of applications. While ensuring user safety, this headgear system also provides a user-friendly experience. Its flexibility allows it to adapt to different industrial and personal use scenarios , enabling RSH to be utilized in various fields. This system, capable of quickly adapting to user needs and environmental conditions, enhances safety standards while considering user comfort.