

Abstract

A high temperature-resistant fire extinguishing robot, comprising: a high temperature-resistant robot chassis system and a high temperature-resistant turret system. The high temperature-resistant robot chassis system carries the high temperature-resistant turret system to perform movements and obstacle avoidance, provides the high temperature-resistant turret system with energy, and further comprises: a high temperature-resistant tract drive system, a thermal protection system, and a control and sensor system, the high temperature-resistant track drive system being arranged outside of the thermal protection system, and the control and sensor system being arranged within the thermal protection system. The high-temperature turret system performs a fire extinguishing and cooling operation with respect to the external environment and further comprises: a water cannon, a water cannon thermal protection structure, and a cooling circulation system, the water cannon and the cooling circulation system being arranged within the water cannon thermal protection structure. In a high temperature-resistant protected state, the water cannon thermal protection structure is closed; in a fire extinguishing work state, the water cannon thermal protection structure is opened, and the water canon perform a fire extinguishing operation.

Fig. 1