

ABSTRACT

A multi-dimensional fire detection method for a locomotive, comprising: obtaining fire characteristic data in a reference application scenario and preprocessing said fire characteristic data, and obtaining average values of the fire characteristic data in initial working states in the reference application scenario and an actual application scenario; obtaining effective first fire characteristic data in the actual application scenario and a weight coefficient of the first fire characteristic data in the actual application scenario; obtaining effective second fire characteristic data; and finally, obtaining a system fire alarm output determination parameter W to provide a basis for locomotive staff to determine whether a fire alarm has occurred.

[FIG. 1]