An Intelligent Fire-Fighting and Rescue System for a Building

ABSTRACT

An intelligent fire-fighting and rescue system for a building, said system comprising rescue mechanisms (1), fire extinguishing systems (2), water storage tanks (3), guide rail mechanisms (4), a central control system (5), and a standby power supply system (6). The rescue mechanisms (1), the fire extinguishing systems (2), the water storage tanks (3), the guide rail mechanisms (4), the central control system (5), and the standby power supply system (6) are provided on the top of a building. Hence, when a fire occurs, on the basis of a fire alarm signal regarding the point of origin, the central control system (5) calculates a three-dimensional map, generates an optimal escape route to reach a fire-fighting cabin (21), and, by means of mobile phone messages, sends said route to individuals trapped in the building. At the same time, the central control system (5) starts the rescue mechanisms (1) and the fire extinguishing systems (2) to rapidly carry out rescue and extinguish the fire, so that the physical strength of firefighters can be saved and the efficiency of fire-fighting and rescue can be improved.

Fig 1.