ABSTRACT

Fire has been a source of light and heating element every now and then; but beyond control consequently of an accident or act of human's negligence it can be devastating. Fire alarms in all sorts of sensors, as well as water sprinkler system are available in the market. Nevertheless they are fixed, uneconomical, require installation of the entire system, and the water sprinkler system may cause serious damages to most of the surrounding goods. Heat and smoke sensor can be sluggish; by the time they pick up the signal, it's been already too late to extinguish the fire. Besides, cameras using infrared or high contrast video are line of sight. The solution is simple – *Autonomous Fireman Robot*. Apart from low-priced, it can be located anywhere at anytime plus it is versatile; versatile in the sense that it's compact, mobile, autonomous, and the performance is absolutely great. On top of that, it will definitely keep the goods away from serious damages as using water sprinkler system due to the reason that its fire extinguisher system covers only small area. Detecting and extinguishing the flame even at the beginning stages is the key of success to *Autonomous Fireman Robot* as the best way to overcome the problem is from its root. In addition it can be adapted to any environment merely by software update. Although the approach is very similar to the infrared camera, yet the mobility of the robot is guaranteed to cover every inch of the area as a complement to the imperfect system – tight or shadowed area as well can be under its surveillance. The most appropriate place to apply it is within the building compound especially from office or even to our own rooms in the house.