INTERNET OF THINGS

INDUSTRY SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

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LITERATURE REVIEW

Survey 1:

Grosshandler, W. L;(1992)

"An Assessment of Technologies for Advanced Fire Detection"

The main purpose of this paper is to identify the fire detection in industries.Additionally we evaluate the capabilities of these techniques in order to identify the advantages and disadvantages of using advanced fire detection as a solution.

Survey 2:

T H Chen, P.H. Wu, and Y.C. Chiou,

"An early fire detection method based on image processing"

The provides solutions To enhance the detection of fire, fire detection based on vision sensor is essential. Nowadays CCTV camera is installed all over the world for security applications. Image processing have crucial role in detection of fire

Survey 3:

Guido Wehmeier* a , Konstantinos Mitropetrosb;(2016)

"Fire Protection in the Chemical Industry"

The main aim of this paper is to establish a still more efficient risk fire management at chemical plants. Important working areas are: knowledge transfer between process safety and fire protection, evaluation and assessing the application of new technologies and learning from experiences. One risk management methodology for the prevention of fire incidents describing

protection measures in dependency of combustible components and of financial and social interests is described. The original idea of the working group "Preventive Industrial Fire Safety" was initiated by discussions of the Process-Net section Plant and Process Safety, where it became obvious that a broader approach to this important topic was needed.

Survey 4:

Shin-Juh Chen, Chris Hovde, Kristen A. Peterson and André Marsha(2007)

"Fire detection using gas and smoke sensors"

The aim of this paper is to present a new system using gas and smoke sensors. A fire detection system is developed based on simultaneous measurements of carbon monoxide, carbon-dioxide and smoke.The combination of the rate of rise of smoke and either carbon monoxide or carbon-dioxide concentration provides potential fire alarm algorithm to increase the reliability of aircraft smoke detectors,and reduce to time alarm.The fire system with the alarm algorithm detected fires that were not alarmed by smoke sensors,and alarmed in shorter times than smoke operating alone.

Survey 5:

Ayush Vidyadharan(2018)

"Fire Safety Management in India"

The purpose of this paper is ensuring a 100% safety from fire in the building, we would say a healthy fire safety management system is essential. Various views on fire safety management are reviewed in this paper. The applicability of this management system is different in case of existing buildings and new buildings. Engineering strategy is applied at the design level of fire safety provisions. A fire manual with clearly stated objectives should be given. In case of existing buildings, a ranking system should be set in place in order to check

the present fire safety provisions, and at the same time, new fire codes must be tallied for active fire protection system. Fire safety management in building basically is a day-to-day management concept for aligning a building's fire safety procedures in place so that they can be used at the time of need.

Survey 6:

T A Kurniawan, L Tambunan and L N Imaniar

"Fire Safety Parameters of High-Rise Residential Building"

The paper provides the basic concept in occupant safety assessments in high-rise building residential against fire hazard is the determination of the time the occupants can be safe/escape before the fire danger conditions occur. This concept is also called performance-based appraisal. It is known by another name Available Safety Egress Time > Required Safety Egress Time (ASET> RSET). The concept of performance-based fire safety assessment has been widely used in the concept of fire safety. Discussions related to this literature study are focused on strength and weaknesses in ASET and RSET methodologies, which are related to the parameters. This paper provides a brief overview of the methodologies and parameters of ASET and RSET. The results of this literature study provide a clear picture that the simulation of fire hazards in high-rise residential buildings can be done accurately by considering the parameters ofthe ASET and RSET. However the lack of resources and experts in using this related software make this performance-based method is difficult to achieve.