

ABSTRACT

GAS LEAK DETECTION AND LOCATION DETERMINATION

A method of gas detection includes receiving, by a data collection device, reports of detected concentrations of a particular gas from one or more gas sensing devices having one or more associated gas sensors, receiving an alarm from a gas sensing device indicating a detected concentration greater than a predetermined threshold, and receiving concentration updates from the alarming device at a rate faster than that provided by its predetermined reporting schedule. The method may further include sending a command to one or more gas sensing devices nearby the alarming device to send concentration updates. The method may further include determining a location of a gas leak by triangulating the received updates from the alarming device and the nearby devices based on their locations and/or creating and displaying a gas concentration map based on the received updates from the alarming device and the nearby devices and their locations.

FIG. 1