

SYSTEMS AND METHODS FOR REDUCING AN OVERPRESSURE CAUSED BY A VAPOR CLOUD EXPLOSION

ABSTRACT

Systems and methods for reducing an overpressure caused by an explosion of a vapor cloud are provided. In one or more embodiments, the system can include one or more sensors operable to detect the explosion of the vapor cloud. The system can also include one or more igniters operable to ignite the vapor cloud at locations throughout, after the explosion of the vapor cloud is detected, to provide a discrete combustion zone at each location. Each combustion zone can form a discrete pressure wave, thereby reducing the overpressure caused by the explosion of the vapor cloud.

(FIG. 1)