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(54) Title: SPRING STEEL HIGH OVERPRESSURE VENT STRUCTURE

(57) Abstract: Rectangular or circular vent apparatus for protecting a confined space having a vent aperture for relief of an overpressure condition is provided with each including vent structure having a vent unit adapted to be positioned over the vent aperture in normal closing relationship thereto. Each vent unit preferably includes at least one spring steel panel provided with a movable pressure relief portion having an initial position extending across the vent aperture. A backstop is provided for arresting the degree of movement of the spring steel panel, that absorbs kinetic energy of opening of the spring steel panel, and that assures return of the relief portion of the spring steel panel in substantially its original shape to a selected opening position when a predetermined overpressure is applied against the relief portion of the vent unit. A line of weakness comprising a series of end-to-end slits defines the movable pressure relief portion of each spring steel panel. A synthetic resin sheet covers the slits of each line of weakness. Alternatively, the vent unit may have spring steel leaves positioned against a metal sheet provided with a relief portion and normally positioned in closing relationship to the vent aperture. The spring steel panel and the spring steel leaves have a sufficient modulus of resilience and elasticity to cause the relief portion of the spring steel panel or the metal sheet to return to their respective initial positions from the open positions thereof upon relief of the overpressure condition in the confined space.



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