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(54) Title: CELLING-ONLY DRY SPRINKLER SYSTEMS AND METHODS FOR ADDRESSING A STORAGE OCCUPANCY FIRE

(57) Abstract: A ceiling-only dry sprinkler system configured to address a storage occupancy fire event with a sprinkler operational area sufficient in size to surround and drown fire. The system and method preferably provide for the surround and effect by activating one or more initial sprinklers, delaying fluid flow to the initial activated sprinklers for a defined delay period to permit the thermal activation of a subsequent-one or more sprinklers so as. to form lthe preferred sprinkler Operational area. The sprinklers of the operational area are preferably: configured so as to provider sufficient fluid volume and cooling to address the fire event with a surround and drown configuration, the defined delay period is of a defined period having a maximum and a minimum. The preferred sprinkler system is adapted for fire protection of storage commodities and provides a ceiling only system that eliminates or otherwise minimizes the economic disadvantage and design penalties current dry sprinkler system design.



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