

(54) Title of the invention : INFLATABLE FALL PROTECTION GARMENT

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(57) Abstract :
 An inflatable garment (100) worn over waist of a wearer is disclosed. The garment (100) includes a set of belts that fasten the garment securely. The garment includes a set of sensors (202) that detectst one or more attributes while worn, and a control unit (204) is operatively coupled to the sensors. The control unit triggers an activation signal upon detection of falling of the wearer and activates an igniter (208) that ignites a propellant filled inside the garment, which facilitates inflation of the garment. The propellant is sodium azide (NaN₃) which generates Nitrogen gas (N₂) upon ignition, consequently, the garment is converted from a collapsed configuration to an expanded configuration that provides cushioning and protection to the wearer.

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