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(57) Abstract:

ABSTRACT SYSTEM FOR PROTECTING CROP FIELD UTILIZING THERMOPLASTIC ELASTOMER SHEET The present disclosure discloses a system (102) for protecting a crop field utilizing a thermoplastic elastomer (TPE) sheet (104), comprising a TPE sheet (104) designed to cover the entire agricultural field during severe rain and stormy weather, a side-mounted sheet box (106) configured to cover both sides of the field using sheets, two hydraulic orbital motors (108) positioned within a parallel shaft, providing rotational motion and assisting in the unfolding of the protective sheet during heavy rains and a spiral torsion spring (110) housed inside a main shaft, producing a backward reaction force to facilitate the folding of the protective sheet when the weather returns to normal.

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