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(57) Abstract :
 A biomedical waste disposal device, comprising a housing 101 having an external design mimicking profile of a dustbin, an input platform 102 provided centrally on the housing 101 for authorized personnel to place biomedical waste securely, a waste detection module integrated with housing 101 to identify and classify the waste items deposited, a decontamination unit 104 connected to the input platform 102 via a conveyor belt 105 and integrated with a sterilizing module includes a Peltier unit 106, a plurality of UV light emitters 107, and a set of carbon filters 108, to eliminate bacteria from the waste, a segregation assembly arranged in continuation with the decontamination unit 104, configured inside the housing 101 to sort waste based on the type, an injection storing assembly configured inside the housing 101 to safely separate needles from other parts of an injection.

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