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(57) Abstract :

An automated sliding chute maintenance device, comprising a portable body 1 configured with a first 2 and second portion 3, wherein first portion 2 includes plurality of omnidirectional wheels rotating in opposite direction with respect of inclination angle associated with a chute to stabilize position of body on chute's surface, an artificial intelligence based imaging unit in connection with a microcontroller for detecting different material categories and surface defects associated with chute, a grinding module 5 arranged at second portion 3 operated by microcontroller, the module 5 grinds surface for treating scratches and providing smooth finish to surface, a repairing unit 6 attached at second portion 3 that repairs cracks by sealing or patch repairing directed on the basis of material category detected by imaging unit, a cleaning unit 7 arranged at second portion 3 operated by microcontroller for cleaning surface. Ref. Figure 1

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