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(57) Abstract :

An automated surface finishing device comprises of a cuboidal shaped body 1 arranged with multiple rods 2 that provide support to body 1, a motorized omnidirectional wheel for providing movement to body 1, an imaging unit 5 for capturing images of surface, a motorized spool 6 to unwind a tape 7 towards a pair of motorized calendar rollers 8 that pulls and directs tape 7 towards an outlet 9, a robotic gripper 10 for gripping and placing tape 7 over crack, a chamber 11 for storing a filling paste, an electronic nozzle 12 for dispensing paste on tape 7 that results in filling of crack with paste during affixing of tape 7 on crack, a motion sensor for detecting movement of body 1 on crack and a motorized hinge joint 13 configured with a flap 14 for providing movement to flap 14 results in pressing of tape 7 on crack.

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