

ABSTRACT

AUTOMATED PARTICLE REMOVAL SYSTEM

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A foreign particle removal system for removing a particle from a surface of a fragile object has a tool gripper which grips a particle removal tool. A force sensing device determines a cleaning position of the particle removal tool relative to the surface whereat a threshold force is exerted on the surface, the
10 threshold force being a force that is exerted by the particle removal tool on the surface that would pick up the foreign particle but would not damage the object. The particle removal tool is conveyed over a location of the foreign particle and is moved towards the surface to the cleaning position whereat the threshold force is exerted on the surface. The particle removal tool is then lifted away
15 from the surface together with the foreign particle.

(FIG. 6)