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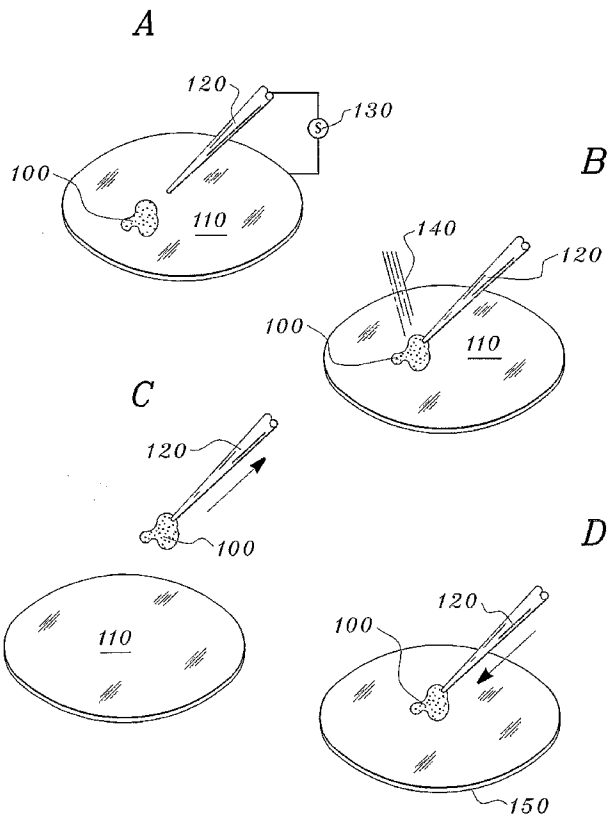
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(54) Title: METHOD FOR MANIPULATING MICROSCOPIC PARTICLES AND ANALYZING THE COMPOSITION THEREOF



(57) Abstract: We disclose a method for analyzing the composition of a microscopic particle (100) resting on a first sample surface (110). The method comprises positioning a micro-manipulator probe (120) near the particle (100); attaching the particle (100) to the probe (120); moving the probe (120) and the attached particle (100) away from the first sample surface (110); positioning the particle (100) on a second sample surface (150); and, analyzing the composition of the particle (100) on the second sample surface (150) by energy-dispersive X-ray analysis or detection of Auger electrons. The second surface (150) has a reduced or non-interfering background signal during analysis relative to the background signal of the first surface (110). We also disclose methods for adjusting the electrostatic forces and DC potentials between the probe (120), the particle (100), and the sample surfaces (110, 150) to effect removal of the particle (100), and its transfer and relocation to the second sample surface (150).

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