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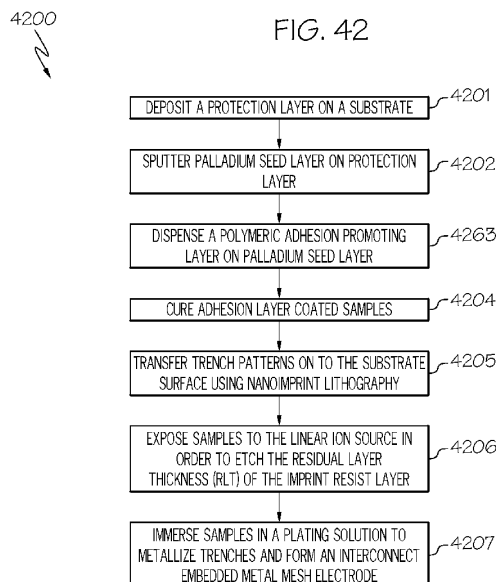
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(54) Title: ROLL-TO-ROLL NANOIMPRINT LITHOGRAPHY TOOLS PROCESSES



(57) Abstract: A method and system for configuring ultraviolet (UV)-based nanoimprint lithography (NIL) for roll-to-roll (R2R) processing, which combines the benefits of inexpensive R2R processing with the precise nanoscale patterning afforded by NIL. Furthermore, an R2R fabrication process is used to create nanoscale copper (Cu) metal mesh electrodes on flexible polycarbonate substrates and rigid quartz substrates employing jet-and-flash nanoimprint lithography (J-FIL), linear ion source etching (LIS) and selective electroless Cu metallization (ECu) using a palladium (Pd) seed layer.

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