

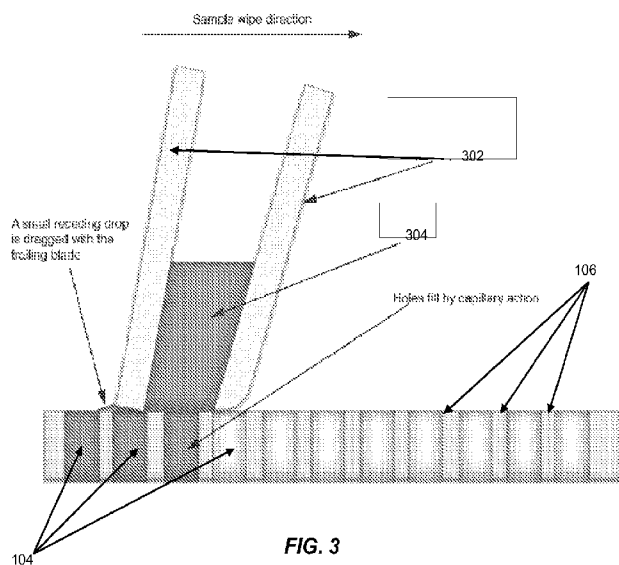


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(54) Title: COATED SUBSTRATE FOR BIOLOGICAL REACTION SYSTEMS



(57) Abstract: An apparatus for biological reactions is provided. The apparatus includes a substrate and a plurality of reaction sites within the substrate. A surface of the substrate is configured to have a first hydrophilicity and each surface of the plurality of reaction sites is configured to have a second hydrophilicity to load a substantial number of reaction sites with a sample volume. The sample volume of each loaded reaction site is substantially confined to its respective reaction site. The sample volume is configured to undergo a biological reaction within the reaction site.



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