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(54) Title: MICROFLUIDIC SYSTEM UTILIZING THIN-FILM LAYERS TO ROUTE FLUID

(57) Abstract: Systems (10), including apparatus and methods, for microfluidic processing and/or analysis of samples. The systems include a microfluidic device (14) having a substrate (160) and a thin-film layer (190) formed on the substrate (160). The thin-film layer (190) may be included in electronics (58) formed on the substrate (160). The electronics (58) may provide electronic devices configured to sense or modify a property of the sample. The thin-film layer (190) defines an opening (188) for routing movement of fluid and/or sample within the device.

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