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(54) Title: BIOLOGICAL CULTURE UNIT

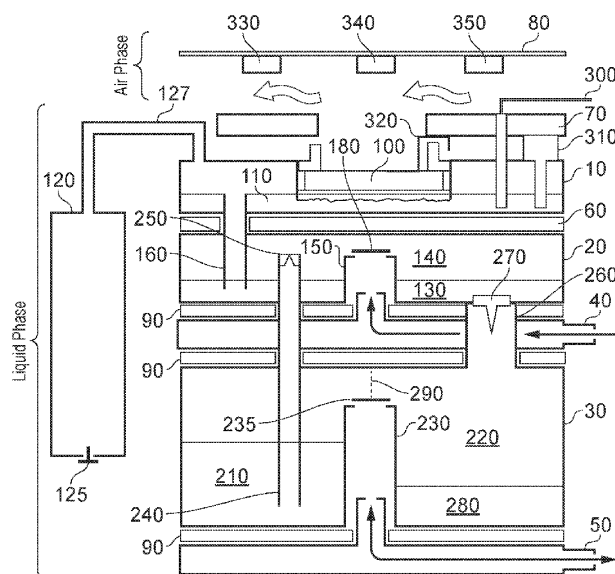


FIG. 1

(57) Abstract: Aspects and embodiments relate to a biological sample culture unit, a biological sample culture module comprising at least two biological sample culture units and culturing apparatus including a biological sample culture unit or biological sample culture module. Aspects and embodiments also provide methods to culture biological samples within a biological culture unit, biological culture module or biological culture apparatus. All aspects utilise a biological sample culture unit comprising a first chamber configured to accommodate a biological sample, culture medium and a gas reservoir; a second chamber configured to accommodate a reservoir of culture medium and a further gas reservoir, the second chamber comprising a gas port configured to couple the further gas reservoir to a gas source; an inlet conduit linking the second chamber with the first chamber configured to allow flow of fluid between the second chamber and the first chamber in dependence upon a pressure difference between the gas reservoirs in the second chamber and the first

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chamber. Aspects support provision of a small footprint biological sample culture environment which is highly scalable, which can sustain a culture environment with controllable conditions for an extended period and in which maintenance of, and testing a biological sample within, the culture environment can be automated, thus facilitating high throughput, minimal disruption to biological samples under study and improved reproducibility.