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(54) Title: MICROCOSM BIO-SCAFFOLD AND APPLICATIONS THEREOF

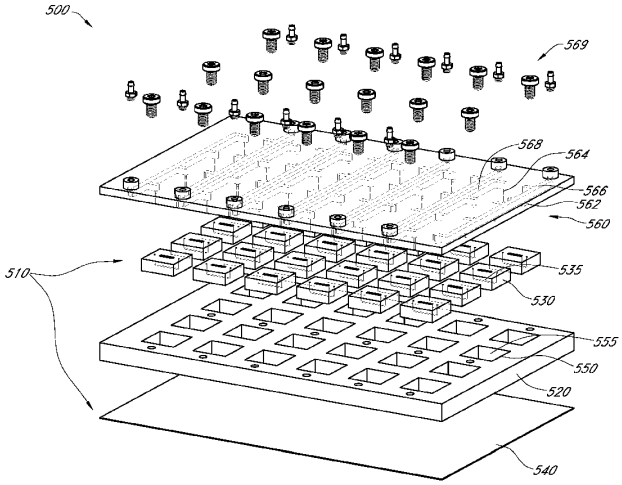


FIG. 5A

(57) Abstract: A bio-assembly, a kit for a bio-assembly and methods of using the same are provided. The bio-assembly includes a substrate and a bio-scaffold affixed to the substrate. In accordance with various embodiments, a loader plate having a partition or a loader and a plate having a partition are provided. In accordance with various embodiments, the loader plate includes a partition outlet and a partition inlet, wherein the partition outlet and the partition inlet in fluid communication with the gel. In accordance with various embodiments, the partition comprising an internal volume and shaped to receive the bio-scaffold, and the loader includes a loader inlet and a loader outlet in fluid communication with the gel. In accordance with various embodiments, a bio-compatible adhesive positioned between the substrate and the loader plate or plate. In accordance with various embodiments, a fluid mixture is injected into the bio-scaffold.

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