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(54) Title: A DEVICE AND METHOD FOR VASCULARISING A CELL AGGREGATE

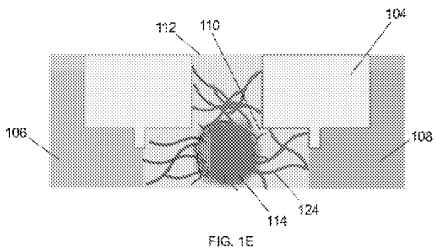


FIG. 1E

(57) Abstract: There is provided a device for vascularising a cell aggregate, the device comprising: a matrix region configured to contain a gel-like matrix and cells that form a vasculature network within the matrix region. The matrix region having at least one opening for positioning the cell aggregate therein based on a desired three-dimensional spatial location; and one or more fluidic regions configured to contain a supporting fluid that is capable of supporting vascularisation of the cell aggregate, the one or more fluidic regions being in fluid communication with the matrix region, wherein a flow passage from the one or more fluidic regions to a gel-like matrix disposed in the matrix region is configured to allow three-dimensional vascularisation around the cell aggregate and perfusion of the vasculature once formed. There is also provided a chip comprising a plurality of the device as disclosed herein and a method for vascularising a cell aggregate.

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