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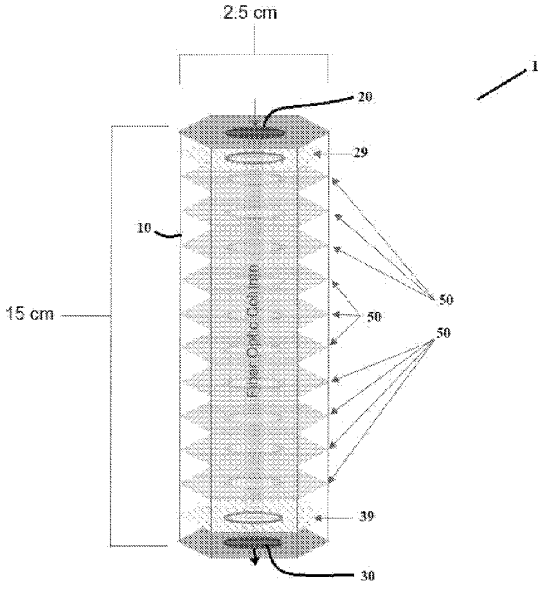


FIGURE 1

(57) Abstract: Biological cartridges comprising a housing chamber defining an interior region that houses one or more porous hydrogel block (PHB) seeded with at least one cell type of interest are provided. The biological cartridges include an inlet orifice and an outlet orifice to enable culture media and other fluids to enter into the PHB(s) to cultivate cell types seeded within the PHB(s). The biological cartridges can be interconnected in series and/or parallel to define a biological cartridge network (BCN) that can mass produce a particular cell type of interest and/or cultivate multiple cell types of interest simultaneously, and/or produce one or more biologies of interest.

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