

ABSTRACT

BIOREACTOR WITH MULTIPLE COUPLED VESSELS

A bioreactor system may include (a) two or more fluidically coupled vessels configured to collectively carry out a bioreaction; (b) one or more fluidic paths coupling the two or more vessels to one another, where the fluidic paths are configured to provide flow of culture medium between the two or more vessels; (c) one or more fluid transfer devices along at least some of the one or more fluidic paths; and (d) a control system. The control system may be configured to (i) read or receive values of one or more parameters characterizing the culture medium in one or more of the vessels, and (ii) use the values to determine an adjusted flow rate in at least one of the fluidic paths to maintain substantially uniform values of the one or more parameters in the culture medium from vessel-to-vessel among the two or more vessels.

Figure 4