Abstract

CELL CULTURE SYSTEM AND CELL CULTURE METHOD

The cell culturing system comprises: a culturing tank housing a liquid culture medium containing cells to be cultured; a fluid force separation device for separating liquid culture medium supplied from the culturing tank into a cell-rich fraction having a relatively high cell density and a cell-poor fraction having a relatively low cell density; and a filtration-separation device for removing cells from the cell-poor fraction separated by the fluid force separation device and recovering the liquid culture medium. The liquid force separator device uses a vortex flow generated by flow along curved flow path having a rectangular cross section to separate the liquid culture medium. Alternatively, the cell-poor fraction from the fluid force separator device is supplied to the culturing tank to reduce the cell density of the liquid culture medium in the culturing tank, and the liquid culture medium is supplied to the filtration-separation device to remove the cells and recover the liquid culture medium.

FIG. 1