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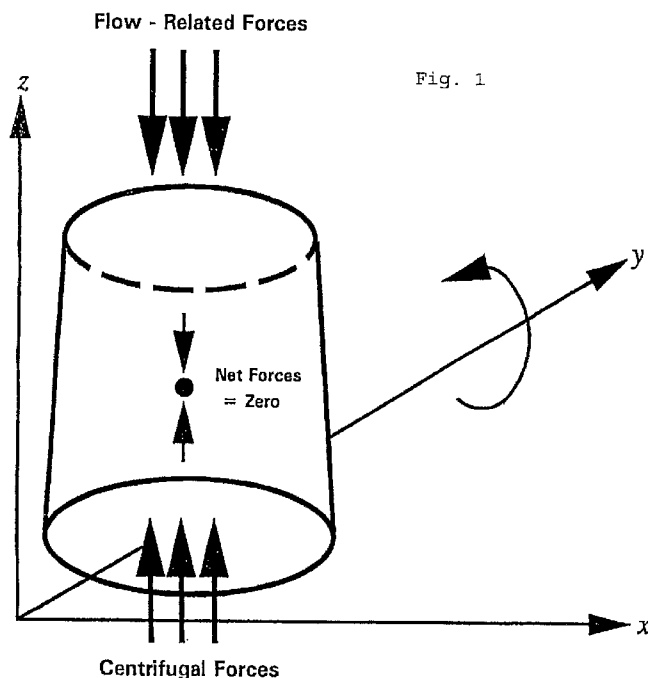
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(54) Title: METHODS AND SYSTEMS FOR MANIPULATING PARTICLES USING A FLUIDIZED BED



(57) Abstract: The present invention comprises methods and systems for manipulation of media and particles, whether inert materials or biomaterials, such as cells in suspension cell culture. The methods and systems comprise use of an apparatus comprising a rotating chamber wherein the actions of the combined forces fluid flow force and centrifugal force form a fluidized bed within the rotating chamber.



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