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## (54) Title: BIOREACTOR AND USES THEREOF

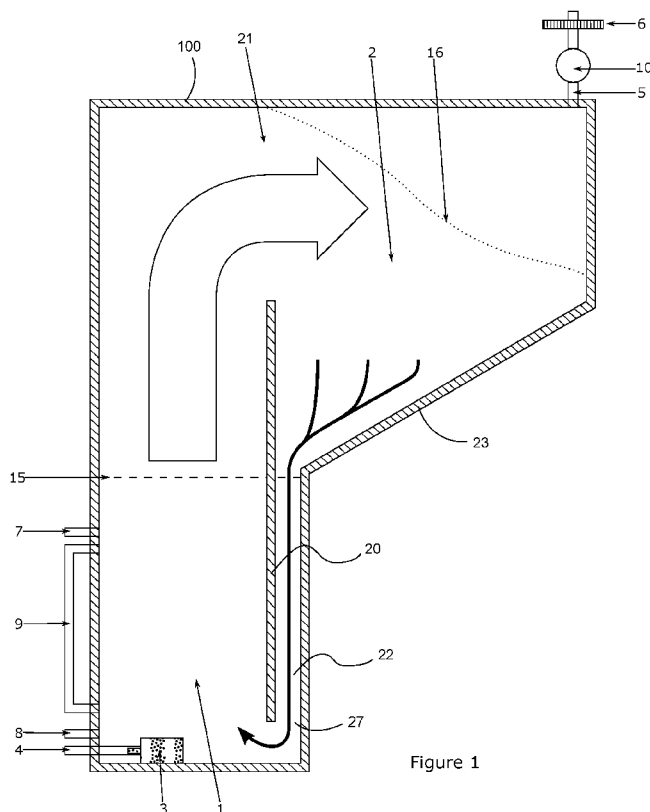


Figure 1

(57) Abstract: The present invention relates to the field of fermentation. In particular, the present invention relates to a method and apparatus for production of products by use of living cells or active components derived from such cells using a bioreactor having a built in gas distributor and a specific system/device for handling foam formed in the process. The invention also relates to a bioreactor comprising: a reaction chamber having a fermentation zone and a foam settling zone, wherein the reaction chamber is arranged such that the foam settling zone is spaced from or physically separated from the fermentation zone so as to reduce the effect of activity in the fermentation zone on foam in the settling zone. The separation of the fermentation zone from the activity of the fermentation zone encourages settling of the foam. The invention also provides a method of forming a bioreactor comprising: overlapping two flat, flexible sheets of material; and causing said two sheets to adhere to each other in selected areas so as to define a reaction chamber. This is a particularly cost-effective way to produce a single use, disposable reactor.



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