

Title (en)  
CULTURING APPARATUS AND CULTIVATING METHOD

Title (de)  
KULTURVORRICHTUNG UND KULTIVATIONSVERFAHREN

Title (fr)  
APPAREIL ET PROCEDE DE CULTURE

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Application  
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Abstract (en)  
[origin: WO9954433A1] Disclosed is a culturing apparatus (100) that includes a gas-permeable solid phase culturing bed (110) disposed within an interior space of a vessel (108). The culturing bed comprises a solid substrate that includes a biological agent disposed thereon. A gas inlet (115, 116) permits selective introduction of gas into the vessel (108) under pressure sufficient to cause gas to flow through at least a portion of the bed (110). Also disclosed is a method of cultivating a biological agent. The method comprises providing a gas-permeable culturing bed, flowing a gas through the bed and recovering at least a portion of the biological agent. The gas preferably is an oxygen-containing gas, whereby the flow of gas through the bed provides convective mass transfer of oxygen to the biological agent. The apparatus and method of the invention permit "pressure pulsing" of gas through the bed.

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