ross an individual membrane into or from an adjacent compartment. The capillaries are so dimensioned that the nutrients and gases are diffused over distances typical of human tissue.

4663045

ORGANIC WASTE BIOCONVERTING METHOD

Henry Yeagley

The bioconverter includes a collecting vessel having a plurality of stirring shafts rotatably mounted therein, each of which is driven by a separate electric motor. Adjacent shafts operate in opposite directions and stirring arms are oriented relative to each shaft moving the carrier mixture within the vessel which is in close proximity to a shaft in opposite directions along adjacent shafts. A moisture sensing device is adapted to be located below the level of the carrier mixture within the vessel for sensing the percentage moisture content of the mixture and waste material added thereto. A first fan is provided for exhausting the air from the vessel and a second fan is provided for moving the air over the surface of the mixture within the vessel. A first heating coil is located on the bottom of the vessel for heating the mixture within the vessel, and a second heating coil is provided adjacent the second fan for heating the air which is blown over the upper surface of the mixture within the vessel. A lid responsive switch is provided for controlling the fan, the motors for driving the stirring shafts and at least the first heating coil. If too much moisture is present, the moisture sensing device energizes the second heating coil and if the percentage moisture content drops to a very low value, the mixing motors, the fan, and the heating coils will be shut off.

4663287

BIOLOGICALLY ACTIVE CONJUGATES AND THEIR PREPARATION AND USE

Sydney A Barker, Birmingham, United Kingdom assigned to Gist-Brocades N V

Water-soluble, biologically active conjugates comprising residues of (1) a biologically active protein or glycoprotein having primary amino groups, (2) a heteropolymer of D-mannuronic acid and L-guluronic acid and (3) an alkyleneglycol of 2 to 6 carbon atoms, the said residue (2) being linked to (1) by an amide linkage and to (3) by an ester linkage, which conjugates have increased activity at higher pH values and higher temperatures and a process for their preparations.

4663291

METHOD FOR SOLUBILIZING MICROBIAL PROTEIN OBTAINED FROM CHLAMYDIA TRACHOMATIS

Philip S Rose assigned to Becton Dickinson and Company

A method of specimen treatment preparatory to conducting an immunoassay is disclosed whereby a microbial protein is solubilized by a detergent at elevated temperatures and in the presence of an alkali or alkaline earth metal ion. At elevated temperatures, the detergent is soluble. However, at lower temperatures, the presence of the metal ion renders the detergent insoluble so that it is prevented from interacting in the immunoassay procedure. A specific application is in the solubilization of the principal outer membrane protein of Chlamydia trachomatis.

4663292

HIGH-VOLTAGE BIOLOGICAL MACROMOLECULE TRANSFER AND CELL FUSION SYSTEM

Daniel T Wong, Tai-Ki Wong

A high-voltage biological macromolecule transfer and cell fusion system for transforming a low input voltage into a high-voltage discharge output. The system comprises voltages source means, a frequency source means, a burst control means, a cycle control means, a pulse generating means, a pulse control means, and a high-voltage discharge generating means. The voltages source means is adapted to transform the generally low input voltage into a system-enabling control signal, a direct-current base voltage, and a generally low-voltage direct-current system voltage. The frequency source means generates system-enabling control pulses. The burst control means is provided to control the burst time of the high-voltage discharge output. The cycle control means is adapted to control the number of cycles in the high-voltage discharge output. The pulse generating means