support in a manner such that it is released from the solid support upon action of the enzymatically active hydrolase if the enzymatically active hydrolase is, in fact, present in the sample. The sample after having been contacted with the solid support is combined with an indicator. The indicator is any chemical species which is susceptible to a detectable change, usually a change in color, upon action of the reporter enzyme. A detectable change in the indicator is an indication that the enzymatically active hydrolase is present in the sample. Moreover, the presence of an enzymatically active hydrolase in a sample may indicate the presence of a particular pathogen or disease state such as, for example, candidiasis. In addition to the methods of assaying for the presence of enzymatically active aspartic protease and other hydrolytic enzymes, a dry, self-contained test device for assaying for the presence of an enzymatically active hydrolase in a sample is disclosed. In particular, a dry, self-contained test device for testing a sample for the presence of candidiasis by assaying for the presence of enzymatically active aspartic protease is also disclosed. These test devices combine a reporter enzyme immobilized on a solid support, an indicator, and all other reagents and components necessary to achieve a detectable indication of the presence or absence of the enzymatically active hydrolase whose presence is being detected in the sample, and preferred embodiments contain positive and negative controls as well.

5416005

METHOD FOR RAPID TOXICITY TESTING OF A LIQUID SAMPLE

Blankemeyer James T Stillwater, OK, UNITED STATES Assigned to Oklahoma State University

A toxicity testing assay wherein a test sample is prepared with electrochromic dye such as Di-4-ANEPPS and a living organism of the cladoceran order, Daphnia Spp. or other test organisms, and the sample is irradiated with alternately blue and yellow light to excite fluorescence. The successive groups of fluorescent emissions are then viewed at 90 degrees by a photomultiplier which develops equivalent alternate count outputs, and the count output is amplified and processed to develop data indicating (1) membrane potential of cells of the living organisms and (2) the total dye fluorescence, which combined effects provides indication of deleterious effects to the organisms.

5416022

CELL CULTURE APPARATUS

Amiot Bruce P Roseville, MN, UNITED STATES Assigned to Cellex Biosciences Inc

A compact, easily assembled cell culturing device comprising at least one cell culturing envelope, the interior of which defines a cell culturing space. The cell culturing envelope is retained within a pair of rigid plates having various reliefs which, in turn, form cavities when the plates are placed together. The cell culturing envelope includes a plurality of hollow fibers disposed in the culturing space formed between upper and lower membrane sheets which are sealed together. Tubes communicate with the culturing space. Accordingly, greater amounts of oxygen are provided to the cells at a faster rate to produce cells and/or cell products more economically and in higher yield.

5416025

SCREENING TEST FOR EARLY DETECTION OF COLORECTAL CANCER

Krepinsky Jiri; Chociej Jace; Kandel Gabor P; Yeung Ka Sin Newmarket, CANADA

A method for detecting the presence of neoplasia or cancer of the colon or rectum, which method comprises obtaining a sample of colorectal mucus from the rectum of a patient; treating the sample with Schiff's reagent and screening for neoplasia or cancer of the colon or rectum based upon the coloration produced in the sample by the treatment. The method is rapid, simple, inexpensive and provides a screening test for colorectal cancer which does not give a high percentage of false positive and false negative results. A screening test kit is provided.

5417576

MEANS AND METHOD FOR MICROBIOLOGICAL GROWTH AND IN SITU OBSERVATION WITH MICROSCOPES

Hill Dennis R Urbandale, IA, UNITED STATES Assigned to Iowa Methodist Medical Center