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(54) Title: COMPACT BLOOD CULTURE APPARATUS

(57) Abstract

THIS SHEET HAS BEEN REPLACED

The present invention describes an apparatus (1) for detecting biological activities in a large number of blood culture containers (20). The containers are placed in a plurality of wells (35) arranged in concentric rows (36, 37, 38) on a turntable that is rotated about a central axis. Each well is designed to receive and hold one of a plurality of sealable containers inserted base first, with each container having optical sensing means for sensing microorganisms therein and a bar code pattern attached thereto for identification purposes. Each well has an opening (39) in its base (40) to allow a sensor station to monitor a fluorescence chemical sensor (27) in each container to determine whether there is microorganism growth within the container. Prior to inserting each container into a well on the turntable, a culture medium and blood specimen are introduced into the container and the bar code is scanned to identify the container. As the containers are rotated on the turntable they are exposed to conditions enabling a variety of metabolic, physical, and chemical changes to take place in the presence of microorganisms within the specimen. The apparatus also includes a door on the front that opens and permits the turntable to be loaded and unloaded from the front of the apparatus with simultaneous access to all containers.

