

SYSTEMS AND METHODS FOR PROCESSING SAMPLES IN A CLOSED CONTAINER, AND RELATED DEVICES

ABSTRACT

A system and method for automated processing of nucleic acids and other samples includes a disposable container comprising a tray and a flexible barrier. The barrier is configured to seal with a top edge of the tray, providing a closed, aseptic work area within the sealed tray. A pipette head and/or other sample manipulation device can be attached to the inside of the barrier, and the barrier can include an interface for a robotic arm or other device. When the barrier is sealed over the tray, the barrier separates the contents of the tray from the robot or other manipulation device. The barrier can be flexible, and allow the robotic arm to move the pipette head throughout the work area of the tray. All samples, reagents, pipette tips and other tools or devices for processing nucleic acid samples may remain within the closed compartment provided by the container during processing.

Fig. 1