GAS PURGE SYSTEM FOR ISOLATION ENCLOSURE FOR CONTAMINATION SENSITIVE ITEMS

ABSTRACT OF THE DISCLOSURE

A reusable isolation enclosure (100) has a shell (110) and a closure member (112) adapted for purging gases from the enclosure. The closure member (112) includes filters (328) and vapor and moisture drains (127, 128). Replacement of ambient environmental gases in the sealed enclosure is provided. A purge gas is provided by the gas replacement system which quickly connects to the enclosure and quickly disconnects from the enclosure. Suction cups surrounding the ends of gas connection lines form the interface to the filter membrane and form a sealed connection with the closure member. No other mechanical connection than the suction cups is required. The outlets and inlets of the purging system and the exhausting system are automatically disconnected by a spring valve when the isolation container to be purged is removed. When the closure member of the isolation enclosure is placed upon the purge system the weight of the package compresses the valve spring opening the valves, permitting the purge gas to flow. An empty isolation enclosure has insufficient weight to open the spring actuated valve system. Only enclosures carrying the weight of a product are purged. A flow indicator for measuring the rate of flow of gas through the quick connection means is connected thereto.

(Fig. 1)

This Sheet Has Been Replaced

