Breathalyzer Style COVID Test Device

One of the hurdles brought forth by the Covid-19 pandemic is reliable and rapid testing. Common methods include oropharyngeal tests, nasal swabs, or blood-based antibody assays. Limitations of these methods have led to a need for a non-invasive mass testing method. Coronaire is a device which will enable rapid large-scale testing of soldiers upon deployment for travel, ships, and command centers. Similar to a breathalyzer, patients blow air into a regulated path for maximum containment of respiratory droplets with coronavirus, which are then trapped and processed on a biological membrane. This reduces time for sample collection and processing with minimum discomfort to the patient. Using a multi-stage collection methodology, this device will significantly increase the amount of viral sample collected on the membrane, leading to accurate results. COVID testing is only the beginning with this device, as it can be used in future to test other respiratory illnesses across the globe and effectively contain outbreaks early on.

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