

## **Novel Respirator for COVID-19 Treatment**

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We design and fabricate a smart water-vapor-feeding device that can effectively target the coronavirus aggregates in the lung and disinfect them via applying suitable range and pattern of the vapor pulse waves. Scientifically-proven idea is that the higher amount of temperature  $T$  and relative humidity  $RH$  with the suitable amount of applied pressure  $P$  for uniform disinfection can effectively suppress the functionality of coronavirus and disinfect them on-site [1, 2]. This is specifically important for Lebanon since many patients lack affordable medical equipment due to economical poverty, especially during the recent/ongoing economic crisis.