

ABSTRACT

Automated Decontamination of Complex Areas

5 Provided are mobile decontamination units and methods of using such units for
decontaminating various areas, such as aircraft cabins. A mobile decontamination unit comprises at
least one aerosol dispersing nozzle and at least one aerosol directing fan. The nozzle disperses
disinfectant in the aerosol form, while the fan directed this aerosol to surfaces being
decontaminated. Aerosol dispersing parameters, such the nozzle and fan orientations, dispersing
10 rate, fan speed, and the like, are determined based on area characteristics. Specifically, orientations
of different surfaces, temperature, humidity and/or other like characteristics may be considered.
Some characteristics may be obtained by the mobile decontamination unit after its deployment in
the area, such as using its sensors. Other characteristics, such as area layout, may be preloaded to
the mobile decontamination unit prior to its deployment. The dispersing parameters are determined
15 to ensure through decontamination of the surfaces in the area.

Fig. 2A