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Text of the abstract

An air disinfection device utilizing Ultraviolet (UV) light is disclosed. The said device has an outer body coverstructure made from UV absorbent material. The device consists of three parts of an exhaust fan, a UV tunnel and a UV source. Air masses sucked by an exhaust fan flow into the UV tunnel for disinfection by the UV lightsilluminated by the UV source and flow out the UV tunnel through another exhaust fan. A reflector plate, whichis with an undulating shape and peaks in equal size and angles of corners of each peak is in a range of 130-150 degrees, is arranged in the UV tunnel to reflect the air masses for generating turbulence within the UV tunnel. The air masses flowing through the UV tunnel is thus disinfected as sterilized air. Through this process, the air masses in a room where the device is installed can be sterilized, the growth of pathogens in the air can be inhibited and the spread of infectious agents cand be prevented.