Summary

According to a first aspect of the present disclosure there is provided a wearable air purifier comprising a headgear; an air purifier assembly, the air purifier assembly comprising a filter and an airflow generator for creating an airflow through the filter; and a nozzle assembly comprising a conduit for receiving a filtered airflow from the air purifier assembly, and an outlet body releasably connected to the conduit, the outlet body defining an air outlet for emitting filtered airflow from the nozzle assembly.

The wearable air purifier according to the first aspect of the present disclosure may be beneficial principally as the nozzle assembly comprises a conduit for receiving a filtered airflow from the air purifier assembly, and an outlet body releasably connected to the conduit, the outlet body defining an air outlet for emitting filtered airflow from the nozzle assembly.

In particular, as the outlet body is releasably connected to the conduit, the outlet body may be easily removed and separated from the conduit to allow for cleaning of the outlet body. For example the outlet body may be separated from the conduit and placed in a cleaning solution, or placed under UV light, which may eliminate bacteria and/or other pollutants from the outlet body, thereby ensuring the airflow emitted from the nozzle assembly in use is as clean as possible for the wearer. Furthermore, such an arrangement may enable ease of cleaning for the conduit, and in some examples may enable ease of access to an interior of the conduit for cleaning.

The nozzle assembly may be supported by the headgear. The nozzle assembly may be directly connected to the headgear, for example with no intervening components therebetween, or may be indirectly connected to the headgear, for example with one or more intervening components therebetween.

The air purifier assembly may be supported by the headgear. The air purifier assembly may be directly connected to the headgear, for example with no intervening components

conduit into first and second conduit portions, with the first and second filtered airflows being conveyed through respective first and second conduit portions in use.

The air purifier assembly may comprise a first outlet aperture configured to emit a first filtered airflow to the first end of the conduit, and the air purifier assembly may comprise a further filter, a further airflow generator for creating a further airflow through the further filter, and a second outlet aperture configured to emit a second filtered airflow to the second end of the conduit.

An air purifier assembly comprising an airflow generator and a further airflow generator may enable use of airflow generators of a smaller size relative to a single airflow generator designed to provide the same total airflow, and smaller airflow generators may be easier to package.

The air purifier assembly may comprise first and second purifier assembly housings, with the airflow generator and the filter located within the first purifier assembly housing, and the further airflow generator and the further filter located within the second purifier assembly housing. The first and second purifier assembly housings may be located at opposing sides of the head wearable air purifier, for example at opposing ends of the headgear and opposing ends of the nozzle assembly. This may provide a weight balanced arrangement, which may provide comfort for a wearer in use.

According to a second example of the present disclosure there is provided a nozzle assembly for a wearable air purifier, the nozzle assembly comprising a conduit for receiving a filtered airflow, and an outlet body releasably connected to the conduit, the outlet body defining an air outlet for emitting filtered airflow from the nozzle assembly.

According to a third example of the present disclosure there is provided a wearable air delivery apparatus comprising a headgear; and a nozzle assembly supported by the headgear, the nozzle assembly comprising a conduit for receiving a filtered airflow from

an air purifier assembly, and an outlet body releasably connected to the conduit, the outlet body defining an air outlet for emitting filtered airflow from the nozzle assembly. Features of examples of the present disclosure may be equally applied to other examples of the present disclosure, where appropriate.

Brief Description of the Drawings

Embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a schematic front view of a wearable air purifier according to the present invention;

Figure 2 is a schematic rear underside view of the wearable air purifier of Figure 1;

Figure 3 is a cross-sectional view of the wearable air purifier of Figure 1 with a nozzle assembly removed;

Figure 4 is a schematic rear view of a nozzle assembly of the wearable air purifier of Figures 1 and 2 in a disassembled configuration; and

Figure 5 is a schematic rear view of a nozzle assembly of the wearable air purifier of Figures 1 and 2 in an assembled configuration.

Detailed Description of the Invention

A wearable air purifier, generally designated 10, is shown schematically in Figures 1 and 2.

The wearable air purifier comprises a headgear 12, 14, 16, a purifier assembly 42,44, and a nozzle assembly 100.