

CLAIMS

1. An inhaler device for delivering an inhalable liquid to a patient, the inhaler device comprising:
 - a mouthpiece; an air inlet;
 - a liquid container for hermetically storing inhalable liquid; a wicking material for supporting inhalable liquid;
 - a piercing member configured to pierce the liquid container;
 - a first one-way valve configured to enable gas to flow into the mouthpiece during inhalation, and prevent gas from flowing in the opposite direction during exhalation;wherein
 - the mouthpiece, first one-way valve, wicking material, and air inlet are fluidly connected to provide an inhalation chamber; and
 - the inhaler device is configured such that:
 - the liquid container may be provided in a first position in which the piercing member does not engage the liquid container and inhalable liquid remains hermetically stored within the liquid container;
 - the liquid container may be displaced from the first position to a second position such that the piercing member pierces the storage container to release inhalable liquid onto the wicking material, whereby during inhalation air entering the air inlet flows through the inhalation chamber to deliver inhalable liquid vapour from the wicking material to the patient via the mouthpiece.
2. An inhaler device according to claim 1, the inhaler device further comprising: a return air chamber in fluid communication with a second one-way valve, such that during inhalation the first one-way valve is open and the second one-way valve is closed, and during exhalation the first one-way valve is closed and the second one-way valve is open to enable exhaled air to flow from the mouthpiece through the return air chamber.
3. An inhaler device according to claim 2, wherein the return air chamber comprises filtering material configured to filter volatile liquid vapour from the exhaled breath of a patient upon exhalation.
4. An inhaler device according to claim 3, wherein the filtering material comprises activated carbon, optionally activated charcoal pellets.
5. An inhaler device according to any one of the previous claims, wherein the liquid container contains a halogenated volatile liquid.
6. An inhaler device according to claim 5, wherein the halogenated volatile liquid is selected

from the group consisting of halothane (2-bromo-2-chloro-1,1,1-trifluoroethane), sevoflurane (fluoromethyl-2,2,2-trifluoro-1-(trifluoromethyl)ethyl ether), desflurane (2-difluoromethyl-1,1,2,2-tetrafluoroethylether), isoflurane (1-chloro-2,2,2-trifluoroethyldifluoromethyl ether), enflurane (2-chloro-1,1,2-trifluoroethyldifluoromethyl ether) and methoxyflurane (2,2-dichloro-1,1-difluoroethylmethyl ether).

7. An inhaler device according to claim 6, wherein the halogenated volatile liquid is methoxyflurane.
8. An inhaler device according to any one of the previous claims, wherein the piercing member comprises at least one channel such that, when the liquid container is in the second position, inhalable liquid from the storage container may pass through the at least one channel and onto the wicking material.
9. An inhaler device according to claim 8, wherein the wicking material is spaced from the piercing member to allow passage of air through the at least one channel into the liquid container, thereby preventing or reducing an air-lock from restricting release of inhalable liquid from the liquid container.
10. An inhaler device according to claim 9, wherein the inhaler device comprises spacer tabs configured to space the wicking material from the piercing member.
11. An inhaler device according to any one of the previous claims, wherein the wicking material and/or the piercing member remains stationary within the inhaler device while the liquid container is displaced from the first position to the second position.
12. An inhaler device according to any one of the previous claims, wherein the liquid container comprises only a single region configured to be pieced.
13. An inhaler device according to any one of the previous claims, wherein the inhaler device is configured to enable air to pass by or around the liquid container, optionally the inhaler device is configured prevent air from passing through the liquid container.
14. An inhaler device according to any one of the previous claims, wherein the inhaler device comprises a diluter hole positioned to enable a portion of inhalation air to bypass the wicking material before passing into the mouthpiece.
15. An inhaler device according to claim 14, wherein the diluter hole is positioned and configured to enable the patient to restrict or block the diluter hole with a finger.
16. An inhaler device according to any one of the previous claims, wherein the mouthpiece comprises a filter configured to reduce or prevent inhalation of liquid droplets by the

patient.

17. An inhaler device according to claim 16, wherein the filter is formed of a polymeric non-woven material.
18. An inhaler device according to any one of the previous claims, wherein the inhaler device is configured to enable replacement of the liquid container and/or the wicking material.
19. An inhaler device according to any one of the previous claims, wherein the wicking material is configured to enable inhalation air to pass through and along multiple surfaces of the wicking material, optionally the wicking material is configured to enable inhalation air to pass through and along a first surface and a reverse surface of the wicking material.