CLAIMS:

1. A transdermal delivery device comprising:

a) a housing including

i) an external body shell comprising a fluid chamber assembly access cover detachably engaged with the external body shell;

ii) an interior compartment including an open-ended delivery outlet and a vapor producing assembly compartment; and

iii) a cartridge retaining container comprising an external covering shell and an internal cartridge compartment configured to hold a compressed gas cartridge, wherein the cartridge retaining container is detachably engaged with the external body shell;

wherein the vapor producing assembly compartment is located between the open-ended delivery outlet and the cartridge retaining container; and

b) a vapor producing assembly including

i) a fluid chamber assembly comprising a fluid container and a removable fluid container cap; and

ii) a pressure-temperature regulator assembly comprising at least two pressure regulators connected via an adaptor, wherein a first pressure regulator is connected to a second pressure regulator, and wherein the pressure-temperature regulator assembly is set to reduce the pressure and increase the temperature of a compressed gas from the compressed gas cartridge;

wherein the vapor producing assembly is substantially contained within the vapor producing assembly compartment.

2. The transdermal delivery device of Claim 1, wherein the external covering shell defines the internal cartridge compartment.

3. The transdermal delivery device of Claim 1, wherein the device further includes a control switch assembly.

4. The transdermal delivery device of Claim 3, wherein the control switch assembly is a mechanical switch or an electronic switch.

5. The transdermal delivery device of Claim 1, wherein the compressed gas cartridge is a 16 g compressed gas cartridge.

6. The transdermal delivery device of Claim 1, wherein the compressed gas cartridge includes a compressed gas.

7. The transdermal delivery device of Claim 6, wherein the compressed gas is carbon dioxide.

8. The transdermal delivery device of Claim 6, wherein the pressure-temperature regulator assembly is configured to reduce a pressure of the compressed gas to below 40 psi (about 275 kPa).

9. The transdermal delivery device of Claim 6, wherein the pressure-temperature regulator assembly is configured to increase a temperature of the compressed gas to at least 0°C.

10. The transdermal delivery device of Claim 1, wherein fluid container includes water.

11. A method of producing a substance comprising a supersaturated amount of dissolved gas using a transdermal delivery device according to Claim ~~1~~7, the method comprising the steps of:

a) placing the substance in an air-tight container; and

b) exposing the substance to carbon dioxide, wherein upon exposure, the carbon dioxide dissolves into the substance in an amount greater than the substance could dissolve at 25 °C and 1 atm.

12. The method of Claim ~~12~~11, wherein the substance is a liquid or a colloid.

13. The method of Claim 12, wherein the colloid is a foam, a liquid, an aerosol, an emulsion, a gel, or a sol.

14. The method of Claim ~~14~~12, wherein the liquid is water at pH 4.

15. The method of Claim 11, wherein dissolved carbon dioxide is produced at a concentration of at least 30,000 ppm.