CLAIMS

1. An intracutaneous delivery system comprising a plurality of microprojections that are adapted to penetrate or pierce the stratum corneum of a human patient, the microprojections having a coating thereon comprising a therapeutically effective amount of psilocybin, LSD or MDMA.

2. A system according to Claim 1, in which at least 95% of the psilocybin, LSD or MDMA is released within about 20 minutes after application of the system to the stratum corneum of the human patient, preferably in which at least 95% of the psilocybin, LSD or MDMA is released within about 10 minutes or about 5 minutes after application of the system to the stratum corneum of the human patient.

3. A system according to Claim 1 or 2, in which the coating further comprises an excipient.

4. A system according to Claim 1, 2 or 3, in which the therapeutically effective amount of psilocybin, LSD or MDMA is about 1 mg to about 10 mg.

5. A system according to Claim 4, in which the therapeutically effective amount of psilocybin, LSD or MDMA is about 2 mg to about 5 mg.

6. A system according to any preceding claim, in which the coating further comprises an acid.

7. A system according to Claim 6, in which the acid is tartaric acid.

8. A system according to any preceding claim, in which the coating is a solid coating.

9. A system according to any preceding claim, in which the system comprises a disposable patch assembly having a plurality of microprojections disposed in an array of about 3 cm2 to about 6 cm2, the array having a density of about 200 to about 2000 microprojections/cm2.

10. A system according to any preceding claim, in which the microprojections are rectangular with a triangular tip.

11. A system according to any preceding claim, in which the microprojections have:

(i) a length of about 25 to about 600 μm;

(ii) a width of about 10 μm to about 500 μm;

(iii) a thickness of about 1 μm to about 500 μm; and

(iv) a tip angle of about 30 to about 70 degrees.

12. A system according to any preceding claim, in which the coating covers about 10% to 80% of the length of each microprojection measured from the tip to the base.

13. A system according to any preceding claim, in which the system is stable at room temperature for at least 6 months, preferably in which it is stable at room temperature for at least 12 months.

14. Use of a therapeutically effective amount of psilocybin, LSD or MDMA in the manufacture of a medicament for treating depression in a human patient, in which:

(a) the medicament takes the form of an intracutaneous delivery system as defined in any preceding claim; and

(b) the psilocybin, LSD or MDMA is to be administered by applying the microprojections of the intracutaneous delivery system to a selected area of skin of the patient.

15. Use according to Claim 14, in which the psilocybin, LSD or MDMA is to be self-administered.

16. Use according to Claim 14 or 15, in which when the psilocybin, LSD or MDMA is to be administered to a population of patients, a statistically significant number of patients are successfully treated for depression as measured by a method or scale selected from the group consisting of the Beck Depression Inventory (BDI), the Center for Epidemiologic Studies Depression Scale (CES-D), the EQ-5D, the HRSD, the MADRS, and combinations thereof.

17. Use according to Claim 14, 15 or 16, in which the system has a wear time of about 5 to 30 minutes.