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Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the
earlier application (Rule 4.17(iii))

- (54) **Title:** METHOD OF QUANTIFYING PSILOCYBIN'S MAIN METABOLITES, PSILOCIN AND 4-HYDROXYIN-
DOLE-3-ACETIC ACID, IN HUMAN PLASMA

FIG. 1A. Psilocybin

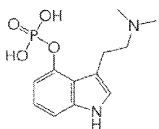


FIG. 1B. Psilocin

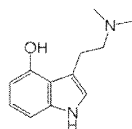


FIG. 1C. Psilocin-O-glucuronide

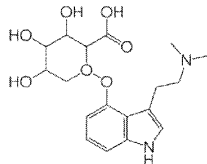


FIG. 1D. 4-HIAA

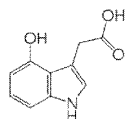
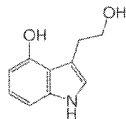


FIG. 1E. 4-HT



(57) **Abstract:** A method of measuring and identifying metabolites of a tryptamine compound, by obtaining a sample from an individual, and measuring and identifying metabolites of the tryptamine compound in the sample by performing a LC-MS/MS analysis. A method of adjusting dosing in patients with tryptamine compound-assisted psychotherapy in therapeutic drug monitoring (TDM), by obtaining a sample from an individual, measuring and identifying metabolites of the tryptamine compounds in the sample by performing a LC-MS/MS analysis, and adjusting a dose of the tryptamine compounds based on the measured metabolites.

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