

Innovative Technology for Aroma Extraction and Volatile Organic Compounds Identification, Seeking Commercial Agreement, Including Aroma of Dangerous Drugs, Biomarkers for Various Diseases or Infections, and Biodetection

Summary

Profile type	Company's country	POD reference
Technology offer	Spain	TOES20250218018
Profile status	Type of partnership	Targeted countries
PUBLISHED	Commercial agreement with technical assistance	• World
Contact Person	Term of validity	Last update
Enrico FRANZIN	24 Feb 2025 24 Feb 2026	24 Feb 2025

General Information

Short summary

Spanish Start-Up has developed a disruptive technology to extract aroma, seeking a commercial agreement, with an innovative methodology that combines the study and selection of new materials, along with knowledge of the chemical behavior of the compounds that make up the aroma. This is achieved through the use of high-end analytical instrumentation and data processing based on machine learning algorithms, together with green chemistry principles.

Full description

The Spanish Start-Up business activity is aimed at creating baits for training canine units in the forensic field, as well as in animal health and welfare. The Start-Up has developed two training devices or baits, called HAUTS and HODEI-TATP, designed according to the characteristics demanded by the police. Both devices are composed solely of pure TATP, but thanks to the technology developed, they are completely safe to handle and achieve incomparable results in TATP detection, with a selectivity of 94.8% and specificity of 98.8%. Moreover, the company's technology, seeking a commercial agreement, aims to expand the development of training baits into other sectors, allowing product diversification such as the aroma of a dangerous drug, biomarkers for various diseases or infections, and biodetection.

Advantages and innovations

The Start-up has developed effective training devices. These devices feature real scents, previously identified through an internal study. They are solvent-free to avoid false negatives caused by solvent masking. They produce a real scent cone, not a simulated one, since in real situations, detector dogs do not encounter simulated cones. The devices are made with inexpensive, recyclable materials that allow for single use, ensuring that the scent in the bait is 100% from the target molecule. They are safe, as the target molecules are absorbed/adsorbed securely and irreversibly, ensuring no impact on health or well-being. Additionally, they are easy to handle, requiring no temperature application or other manipulations for use.

Main values of the devices composed of pure TATP: Reliability, High security and Great Efficacy.

Technical specification or expertise sought

Stage of development

Under development

IPR Status

Secret know-how

IPR Notes

Sustainable Development goals

- **Goal 16: Peace and Justice Strong Institutions**
- **Goal 3: Good Health and Well-being**

Partner Sought

Expected role of the partner

The firm is looking for any company that needs scent technology to solve any problem. Companies that are looking for a characteristic aroma or molecule to implement in their products.

The Start Up can analyze the volatile compounds present in all types of samples (sweat, feces, liquids) and identify which characteristic molecules make up the aroma that the company requests.

Type of partnership

Type and size of the partner

Commercial agreement with technical assistance

• SME ≤ 10

Dissemination

Technology keywords

- **05001001 - Analytical Chemistry**
- **06005001 - Safety & systems**
- **07001003 - Biocontrol**

Targeted countries

- **World**

Market keywords

- **04005 - Biochemistry / Biophysics**
- **08002002 - Industrial measurement and sensing equipment**
- **08001009 - Speciality/performance materials: producers and fabricators**
- **07006 - Other Consumer Related (not elsewhere classified)**

Sector groups involved