

Profile View

Details

Title: Eco-friendly plant extraction at industrial scale to develop and produce natural extracts for use in cosmetics, food, feed, fragrances, flavors or agriculture

POD Reference: TOFR20210729001

Summary: A French SME, specialising in green vegetal eco-extraction offers the access to its patented electromagnetic extraction technology to develop and produce natural extracts according to technical specifications. Industries with specific plant extraction needs can cooperate with the SME, to design and manufacture natural solvent-free extracts such as cosmetic active ingredients, preservatives and natural colorants. Commercial agreements with technical assistance are sought with industrial partners.

Description:

In the actual changing world, a French SME aims to provide natural solutions based on the resilience of plants to satisfy today's societal and environmental issues.

As a result, the SME has fully developed a technological green solution which is combining several extraction techniques, mainly microwaves, in association with mixing, cooling capabilities and vacuum. The SME can develop protocols of extraction for targeted molecules with objectives fixed by the industrial partner and, can extract the molecules from pilot up to industrial scale.

A pilot scale equipment is used for all process developments, including post-treatment such as concentration, freeze-drying, spray-drying.

An industrial equipment is used for production of extracts, including post-treatment like concentration and spray-drying. This equipment may transform up to 10 tons of biomass par week.

Modern capabilities for extracts analysis and characterisation of biomarkers are also part of the support offered by the French SME which can also offer plant sourcing in Asia, Africa and Europe, including valorisation of agriculture by-products via an important network of providers.

Commercial agreement with technical assistance is sought with industrial partner with needs of plant extraction in a green and cost-effective way.

Advantages and Innovations:

The French SME has a strong know-how in plant extraction for flowers, leaves, fruits, woods, roots and algae. It offers the possibility to start from plant sourcing up to industrial scale, including extract characterization.

The technology is already at industrial scale with a brand new plant. It is innovative because it is based on microwave performance and added value.

It offers advantages such as:

- Elimination of the use of solvent for the extraction, meaning the possibility to access to natural certifications
- Short extraction time, generally around 30 min, meaning preservation of the plant naturality
- Higher extraction yields
- Phytochemical profile enriched in molecules of interest versus the other extractions techniques, meaning a unique extract, providing differentiation in Naturals on the partner's markets

Stage of Development:

Already on the market

Comments Regarding Stage of Development:

The technology is operated at industrial scale (10tons of biomass). The production capacity is going to be increased in the next 2 years.

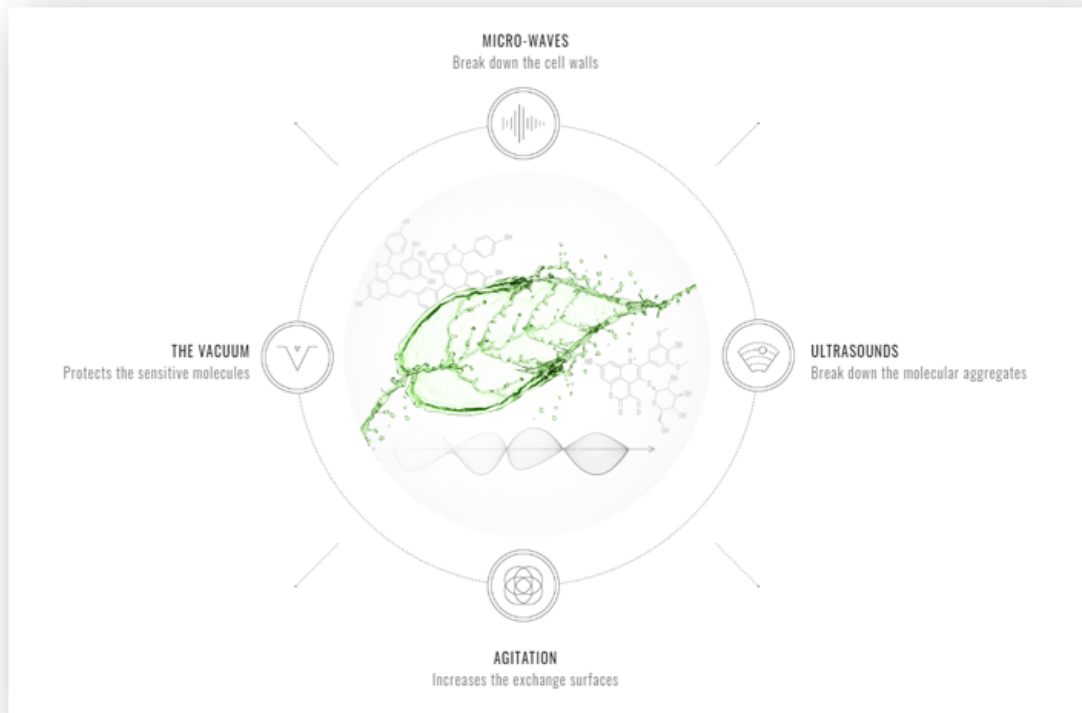
IPR status::

Patents granted
Secret Know-how

Profile Origin:

COSME

Attachments



Solvent-free technology of plant extraction

Keywords

Technology 03004011 Care, Hygiene, Beauty

Keywords: 05004002 Extraction

07001003 Biocontrol

08001002 Food Additives/Ingredients/Functional Food

10002013 Clean Production / Green Technologies

Market Keywords: 05008002 Food and feed ingredients

05009001 Food & feed ingredients

07003002 Health food

08001023 Other chemicals and materials (not elsewhere classified)

08005 Other Industrial Products (not elsewhere classified)

NACE Keywords: C.10.8.9 Manufacture of other food products n.e.c.

C.20.2.0 Manufacture of pesticides and other agrochemical products

C.20.4.1 Manufacture of soap and detergents, cleaning and polishing preparations

C.20.4.2 Manufacture of perfumes and toilet preparations

C.20.5.3 Manufacture of essential oils

Partner Sought

Type and Role of Partner Sought:	Type: Industrial companies or distributors
	Sector: Cosmetics, Food, Feed, Fragrances, Flavors, Agriculture
	Role: to provide the specifications, price/volume, botanical name of the plant to be extracted
	The French company can develop, with its innovative technology, protocols of extraction for targeted molecules with specifications fixed by the industrial partner and, can extract the molecule from pilot scale up to industrial scale.
Type and Size of Partner Sought:	>500 >500 MNE 251-500 SME <10 SME 11-50 SME 51-250
Type of Partnership Considered:	Commercial agreement with technical assistance

Client

Type and Size of Client:	Industry SME 11-49
Year Established:	2014
Turnover (euro):	<1M
Already Engaged in Trans-National Cooperation:	Yes
Languages Spoken:	English French
Client Country:	France

Dissemination

Relevant Sector Groups:	Agrofood Bio Chem Tech Environment Healthcare
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