

# Fast and reliable liquid authentication system

Quality control / Safety- Security / Device



## REFERENCE

LIQUID FINGERPRINT [L787]

## KEYWORDS

QUALITY CONTROL / SAFETY SECURITY / LIQUIDS / ELECTRONIC DEVICE /



## APPLICATIONS

- Determination of product origins, traceability, fight against counterfeiting (drinks, perfumes, chemicals, ...)
- Rapid on-line and/or off-line control of quality, aging, stability (food, cosmetics, biomedical industries...)
- Security : authentication of dangerous chemical or explosive products, drugs...



## TARGET MARKETS

- Quality control in all fields of industry : pharmaceuticals, food & drinks, cosmetics, chemicals...
- National & industrial security

## Technology readiness level

TRL 4



## INTELLECTUAL PROPERTY

- Priority patent applications FR3000547 and FR3000549 pending in FR, EP, US and JP.

## CONTACT US

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## DESCRIPTION

A powerful device has been designed for quick and accurate identification and authentication of liquids. A sample of the liquid to analyze is set on a semi conductor plate. A luminous scan of the surface combined with a laser source and measurement of the current generated through the plate gives a characteristic picture of the sample liquid, to be compared with the picture of a reference sample. The user can create a database of these reference products, and control the quality and authenticity of the products. The chemical treatment on the plate surface can be adapted according to the tested liquid, to get an optimal signal.

## COMPETITIVE ADVANTAGES

- Quick analysis, on and/or off-line
- Product traceability
- Possible miniaturization / portability
- Low cost manufacturing
- Multi-parametrical highly-reliable control
- High sensitivity and selectivity
- Small sample volume required

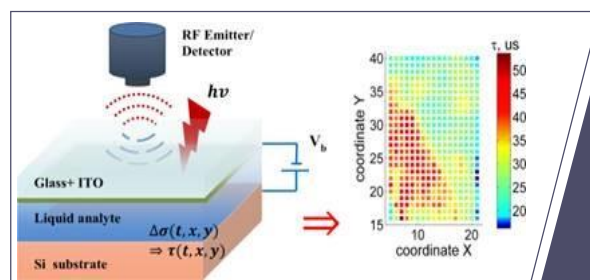
## DEVELOPMENT STATUS

Prototype and tests available on various liquid samples :

- Identification of edible oils (800 pictures analyzed by treatment of images compared with reference images),
- Identification of several alcohol drinks (cognac, armagnac, whiskies),
- Identification of different waters.

## PARTNERSHIP

PULSALYS is looking for industrial partners interested in testing the device on their own liquids, and/or in a licence agreement to further develop this product.



## OUR OPPORTUNITIES

[www.pulsalys.fr/entreprise/offres-technologies/](http://www.pulsalys.fr/entreprise/offres-technologies/)

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