# **DETIMA. Making Magnetic Labels**

DETIMA is a new device that allows to obtain "invisible" activatable and deactivable labels cheaper than the present ones.



# **Contact information**

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# **Technological Offers type**

Technological solutions

# **Research and innovation areas**

- Digital Technologies, Artificial Intelligence, Cybersecurity, 5G, Robotics
- Industry, Materials and Circular Economy

ODS



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## Where?

## Maritime and Ports Engineering Research Group

Keywords: | label | magnetic | security

## Brief description of the technology solution and the added value it provides

Theft in Spain has meant losses of  $\in$  2,487m in the period 2014-2015, 1.33% of retail sales. Data that skyrockets up to 4,144 million euros when we add the cost of crime with the expenses in prevention that must do the companies. A total of 2.21% of Spanish retail sales.

DETIMA is a new device that allows to obtain "invisible" activatable and deactivable labels cheaper than the present ones.

Their implementation would reduce the cost of the companies at least 10%.

#### Description of the technological base

Some of the magnetic labels on the market can be turned off (when taking a product from the store) or activated (when returning a book to the library). This kind of labels are composed of a base made of soft magnetic material, with various pieces of hard magnetic material placed on it. This method involves the use of two different materials and needs an expensive and complicated manufacturing process.

DETIMA uses a single soft material, reducing costs. In addition, labels are easily hidden in products and implantable even at source.

#### "Manufacturing speed can be high enough to integrate into industrial processes efficiently"

#### **Market demands**

#### Materials

Companies engaged in the manufacture of activatable and deactivable labels need to use two different materials (soft and hard). This causes the final product to become more expensive and companies can not allocate part of their resources to other areas such as modernization of facilities, marketing, etc.

## Security

The economic losses of businesses due to the theft of their products have a very negative impact on the income statement. It is critical to invest in electronic product safety to mitigate such losses.

#### "The aging of structures or the circumstances (earthquakes) will make reinforcement of structures more important in the future"

## **Competitive advantages**

- The start up of the device is simple and fast since it is formed by very basic elements. This facilitates its implementation in security companies.
- DETIMA is not a risk because is an economic element and simple to operate.
- The labels obtained extend their durability s they do not need any degradable adhesive.
- Not needing two different materials reduces manufacturing costs by around 10%.
- The labels produced do not need a detection system different from the one that already exists, which facilitates its implantation and use in the stores.

# **Development stage**

- Concept
- Research
- Lab prototype
- Industrial prototype
- Production

## Contact

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