

## Fastening member with checkable integrity

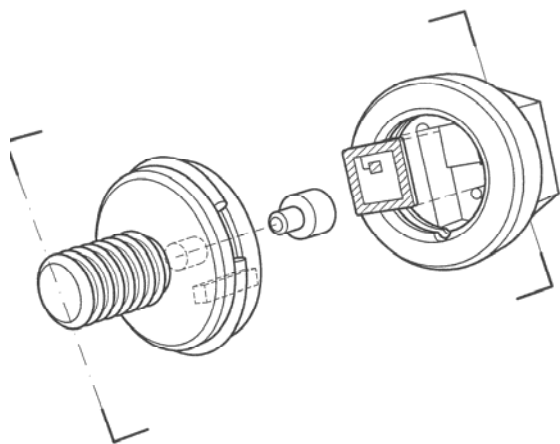
### Description

The present invention relates to the safety, the control and traceability of products or materials requiring special security measures, such as nuclear materials. The invention consists in a fastening member containing a passive transponder with a unique and remotely interrogatable identity. The antenna of the transponder is broken when removing the screw which guarantees the integrity of the system. The proposed solution is very robust and its production costs are very low (< 5 euros). The identification of the fastening member is done very rapidly with a portable reader which reduces the cost related to the identification procedure.

The size of the transponders memory can be adapted so as to store data directly in the sealing device. Encryption of the identity by using programmable transponders is also possible.

### Innovative aspects and main advantages

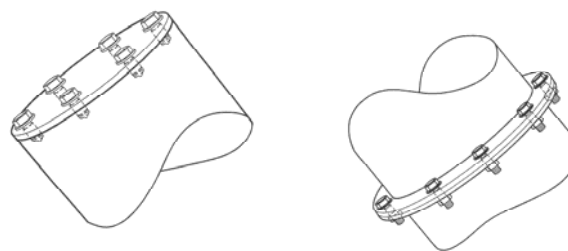
- Control of integrity without screw alteration or removal
- Portable reader for controlling integrity
- Electronic storage of identity codes
- Time and cost saving
- Possibility to encrypt the identity
- Storage of information in transponder memory
- Low production cost and very robust technology



Schematic view of the components of the seal

### Areas of application

- Nuclear safety and inspections
- Custom Services
- Transport and storage industry
- Engine manufacturer
- Aeronautic safety and maintenance
- Transport of hazardous goods



### Stages of development

Patent Priority date 30.10.02  
Patent granted EP1556622; AR040898 ;  
US7246980  
Patent pending JP and CA

Technology mature. Licence available.

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### Licensing Contact

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