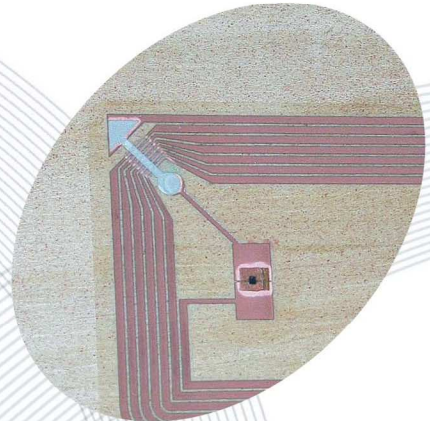


COROT

Communicating works of art

• Motion capture - UWB Localisation



> Description

The developed device implements technological families related to the sensors, telecom and antennas. It allows flawless detection, without false alarm of object theft (in this case a work of art) as well as the graphic visualization of localisation of the object in a building. It offers opportunities in traceability coupled to follow-up of maintenance actions and ambient environment (temperature, humidity,...)

Technologies developed

- Ultra Wide Band
- Radio frequency
- Contactless RFID

Associated research topics

- Motion capture
- Wireless transmission
- Ultra Wide Band localisation
- Contactless powered tag and sensors

Potential fields of application

- Theft detection
- Traceability

Presentation

Museums have to face up to a necessity of management of works of art with growing complexity due to the nature of these works. Let us note for instance the requirement that they be subjected to no deterioration, that they come under very different forms, dimensions, weights, volumes, and that they have long lifetimes with respect to the extremely quick renewal of technologies. The transistors density doubles every other year (Moore's law), and an electronic technology is out-of-date in some years while the existence of some works of art exceeds several thousand years.

The expressed need covers 4 major fields:

- security of collections
- work of art security,
- information on collections of work of art
- conservation of the works of art.

The functions implemented here, are the secure detection of the theft of paintings, localisation in a building by radar and its traceability by a contactless badge which also measure the temperature, the moisture and the shocks undergone by the mechanical work.