



# POINTING AND MOVING ACCESSORY

*New technological solution for 3D positioning*

## Technological benefits

### A practical technology

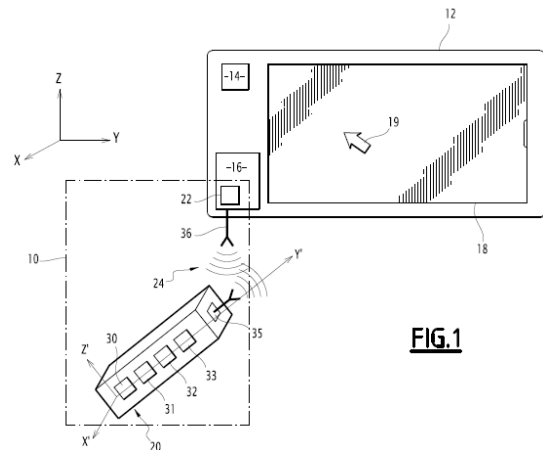
- There is no need to calibrate the sensors for the invention operation
- The simultaneous use of the measurements provided by the accelerometer and the magnetometer permits to know the vectorial orientation of the mobile element without using an additional locating accessory

### A precise system

- A distinction between the quasi-stationary and non-quasi-stationary regime is introduced

### A robust invention

- The patented solution is based on a robust patents family widely spread throughout the world



**FIG.1**

## Invention overview

The solution combines two magnetometers with an accelerometer and a gyroscope.

The use of the second magnetometer allows to avoid the disturbances of the magnetic field: TV, telephones, electronic equipment,

## Potential applications

### Video games

- Indoor positioning in the space applied to video game controllers and smartTV.

### Versatility

- An augmented reality functionality, virtual reality and 3D

### Medecine

- Micro-camera guidance during surgical operations

### Robotique

- Robot arm guidance more accurate

## Commercial benefits

### Low cost electronic components

- Use of general electronics (magnetometer, accelerometer, gyroscope)

### SmartTV and game console

- The prototype can interact with smartTV which use a more efficient, simpler, less expensive and different technologie from the major manufacturers solutions and the current game consoles

### Casque de réalité 3D

- Functioning in 3D space, virtual reality and augmented reality

**TRL : 4 -5**

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