

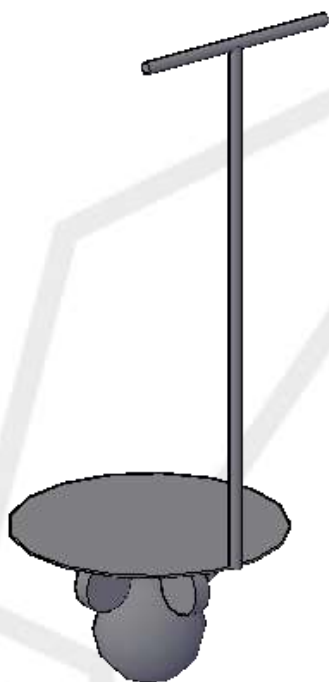


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## **VEHICLE ON SPHERICAL SUPPORT AND METHOD FOR MANAGING THE MOVEMENT OF SAID VEHICLE**

Moving in a new way: Ecological, compact and safe



Category:

**Engineering**

Patent Ownership:

**UNIVERSITA' DI TRIESTE**

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Patent Application Number:

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Patent Status:

**Patent pending in Italy and Europe**

Licensing Availability:

**Available**

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### **Brief description**

This patent describes a method for manage the movement for a vehicle using a spherical support capable of omnidirectional movement. It can perform real-time synchronization of data gathered from two parallel and independent subsystems that rules the forward/backward movement and the left/right movement: it is well suited for personal movement in indoor and structured environments.

### **Innovative aspects and main advantages**

This patent is related to an electric vehicle that can simplify the movement in urban spaces that can be crowded as it allows to move in all the direction without having a wide space for manoeuvres. It is also well suited as a basis for wheelchairs to simplify movement in structured environments.

### **Applications**

This type of personal mobility vehicle is more flexible with respect with existing electric ones (e.g. Segway) as it allows the user to move easily in all the directions without complex manoeuvres to steer the vehicle. Moreover, the parallel and synchronized management method is computational inexpensive and can be implemented on state of the art hardware.

### **Potential market**

The vehicle is well suited for a wide range of structured environments, both indoor (industrial plants, warehouses, shops, malls, hospitals, houses) and mixed indoor-outdoor (parking areas, railway stations, airports, etc).

### **Development status**

The technology is ready to be implemented in the real world market.

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