



# SYSTEM AND METHOD FOR CONTROLLING VEHICLE MOTION IN A SIMULATION ENVIRONMENT

## IITM Technology Available for Licensing

### Problem Statement

- ❑ The problem statement discussed in the present invention is **how to overcome the limitation by using Wi-Fi** which is higher bandwidth & many number of protocols available.
- ❑ Hence, subject invention addresses the issue efficiently

### Technology Category/ Market

**Technology:** System & method for controlling vehicle motion in a simulation environment

**Industry/Application:** Automobiles/ Transportations, Robotics, Automotive;

**Market:** The global motion simulation market is projected to reach at a **CAGR of 5%** during the period (2024-32).

### TRL (Technology Readiness Level)

TRL-4, Technology validated in Lab;

### Technology

- ❑ Present patent describes to a **system** and **method** for **controlling vehicle motion** in a **simulation environment**.
- ❑ Vehicle models comprises **sensors** for sensing parameters associated with the vehicle model. The parameters are shared with a ground station server.
- ❑ The **ground station server** transmits a control command to the vehicle model in response to the parameters for **optimizing the simulation** of the vehicle model.
- ❑ **Communication channel** establishes a **communication** between the **vehicle model** and the **ground station server**.
- ❑ System may be useful in a physical simulation of **ship model** for hydrodynamic studies in **towing tanks, wave basins** and **wave flumes**.

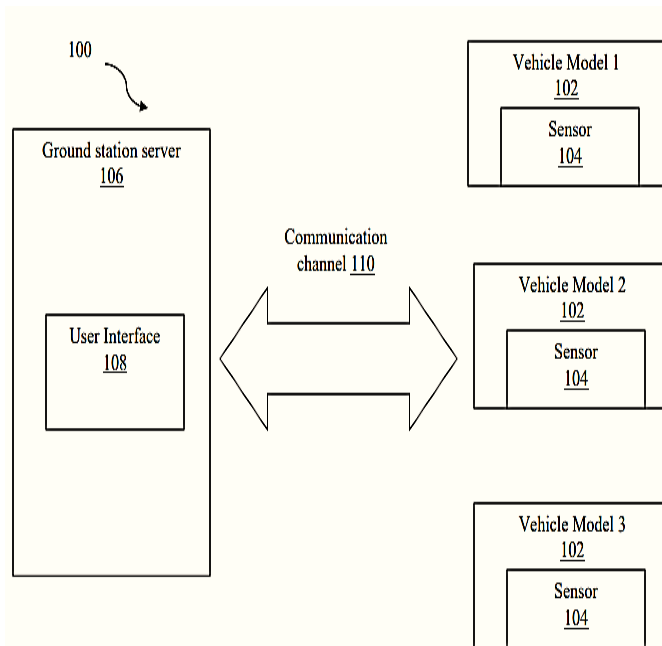


Fig.1 illustrates a block diagram of a system for controlling vehicle motion in a simulation environment,

- ❑ The claimed invention is based on the use of **Wi-Fi with high bandwidth** & available protocols. It provides an excellent feature of **server client configuration** where it allows **more than one vehicle** to be controlled from **single shore station**.

### Intellectual Property

IITM IDF Ref. 1450; Patent No. 509944  
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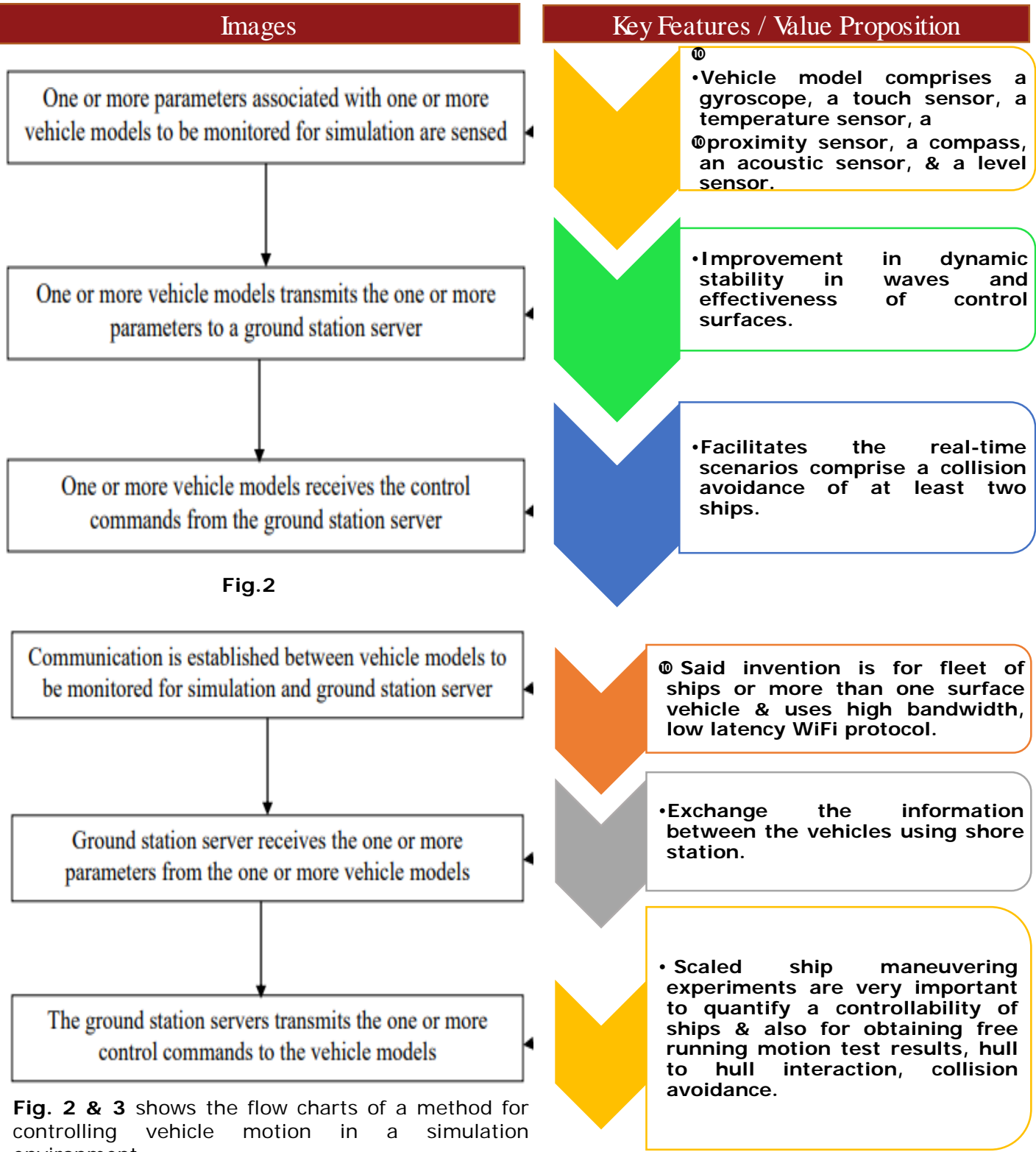


Fig. 2 & 3 shows the flow charts of a method for controlling vehicle motion in a simulation environment