SYSTEM FOR THE AUTONOMOUS NAVIGATION OF A FARM VEHICLE

ALMA MATER STUDIORUM-UNIVERSITÀ DI BOLOGNA

Method and system for the autonomous navigation of a farm vehicle in both open field and orchard rows scenarios.

Protection: Italy

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INVENTION

Autonomous navigation methods based on stereoscopic cameras and high precision laser devices (LiDAR) assisted by GPS systems have been proposed, but in the case of complex environments, i.e. not perfectly geometric or flat, they involve very long training times.

The autonomous navigation system allows the agricultural vehicle to move autonomously both in open field environments and in restricted environments such as rows. Navigation is allowed through a plurality of markers that are detected by the vehicle thanks to a self-learning system.

ADVANTAGES

- Self-learning system
- Ease of configuration
- Better precision during navigation
- Flexibility of the platform in terms of navigation sensors

APPLICATIONS

- Agriculture

CONTACTS

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