

GREENHOUSE ROBOT

Description:

In recent years there has been a notable interest in intelligent automation systems in the field of agriculture and horticulture. On the one hand, there are market conditions that demand high-quality production in a profitable and sustainable way. On the other hand, growing technological advances in fields such as computing, robotics and sensors have led to automation systems capable of a high degree of flexibility. In this sense, research in robotic systems has mainly focused on automation of nursery, harvest and collection operations and autonomous vehicle navigation. Thus, the present invention consists of a robotic system for greenhouse service, consisting of a sensor-capable tractor unit and a controller, to which a trailer can optionally be attached. Both the tractor unit and the trailer can carry payload, which can consist of sprayers, handlers, inspection systems or any equipment that may be considered necessary for work in a greenhouse.

Keywords:

[Greenhouse](#), [Robot](#), [Automation](#), [Agricultura](#), [Horticultura](#), [Robotic](#), [Sensors](#)

Sectors:

[Engineering](#), [Agri-food](#)

Areas:

[Industrial](#), [Mechanics](#), [Robotics](#)



Advantages:

Among the advantages of this invention are: • Allows the user to interact with the system through instructions, including the possibility that this interaction can be carried out through a remote workstation. • It allows obtaining a three-dimensional image in real time of the system's working environment. • It has the possibility of autonomous or semi-autonomous movement. • Can perform a wide variety of functions related to agricultural tasks. • The system can be programmed and controlled by a computer relatively easily.

Uses and Applications:

The present technology is useful for the performance of various functions in greenhouses, either in an autonomous way, as semi-autonomous, and even under remote control.

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