weight objects are changed when sizes of the pallets are changed, shifts in the destination locations occur, and such changing in the destination location is frequently performed. Therefore, it becomes extremely large that the burden of re-installing the tape and the like which serve as the flow line each time the sizes of the pallets are changed.

[0006]

As the unmanned transport vehicle, there is an autonomous traveling transport vehicle configured not to travel along the designated flow line, but to travel so as to aim at the destination location while performing an autonomous travel by grasping a surrounding environment (obstruction, etc.) using sensing. However, it is dangerous that the unmanned transport vehicle transporting the weight object can freely travel on a path in a field where a human is also passing through, such as a factory or warehouse.

SUMMARY OF THE INVENTION

[0007]

Embodiments of the present invention aim to provide a new unmanned transport system for transporting a weight object to a destination location on the premise that it may travel on a designated flow line.

[0008]

An unmanned transport system according to an aspect of the present invention is an unmanned transport system configured to transport a weight object by traveling on a virtual flow line designated from among virtual flow lines defined in a map of a field to a designated destination location, and having a configuration comprising: an unmanned transport vehicle configured to travel unmanned according to a control signal; one or more cameras configured to image the field on which the unmanned transport vehicle is to travel from above the field to generate a still image or video; and an operation control means configured to generate the control signal for controlling such that the unmanned transport vehicle travels on the virtual flow line based on the still image or video, and wherein the operation control means comprises: a detecting portion configured to detect the unmanned transport vehicle from the still image or video; a position grasping portion configured to grasp