

Abstract

UNDER-CART TYPE GUIDED TRACTOR

An under-cart type guided tractor comprising a frame provided with a driving unit including driving wheels on the underside thereof, the guided tractor being adapted to travel guided by a guide signal sent out from a guide element, such as a magnetic tape laid along a traveling path on a floor surface, and to draw a cart provided with free wheels and loaded with goods, with the guided tractor located under a load-carrying platform of the cart.

The frame of the guided tractor has a height that allows the guided tractor to move under the frame of the cart, and a structure that does not allow the vertical load of the cart to act on the guided tractor. The frame of the guided tractor comprises at least two separate frame components that are arranged in line with the travelling direction of the guided tractor and joined by a pin in a manner such that the frame components are allowed to take an upward or downward bent formation. The frame of the guided tractor is provided with free wheels that are adapted to travel on the floor surface along with the driving wheels. The frame components are equipped with a clamp mechanism capable of being raised and lowered, the clamp mechanism being adapted to be raised and clamp the frame of the cart when the guided tractor has come to an appropriate position under the frame of the cart. A sensor is provided at a portion suitable for detecting the guide signal sent out from the guide element, such as a magnetic tape.

(Figure 1)



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