(57) Abrégé/Abstract:
There is proposed a pickup-and-delivery vehicle (1) having a controllable travel mechanism, which has a load-carrying means (13) movable vertically on a lifting framework (9), a driver's cab (11) movable vertically on the lifting framework together with the load-carrying means (13) and an operating panel (19) to be operated from the driver's cab (11). Separate function regions (23, 25) of the operating panel are designed as modules separable from one another, of which at least one in the access region of the driver's cab (11) is repositionable between at least two operating positions from one side of the driver's cab (11) to another side of the driver's cab (11) -- and is capable of functional use in each of these operating positions.
Abstract

There is proposed a pickup-and-delivery vehicle (1) having a controllable travel mechanism, which has a load-carrying means (13) movable vertically on a lifting framework (9), a driver's cab (11) movable vertically on the lifting framework together with the load-carrying means (13) and an operating panel (19) to be operated from the driver's cab (11). Separate function regions (23, 25) of the operating panel are designed as modules separable from one another, of which at least one in the access region of the driver's cab (11) is repositionable between at least two operating positions from one side of the driver's cab (11) to another side of the driver's cab (11) -- and is capable of functional use in each of these operating positions.

(Fig. 4)
INDUSTRIAL TRUCK, ESPECIALLY A COMMISSIONING DEVICE

Description

The invention relates to an industrial delivery truck, in particular a pickup-and-delivery device, as a vehicle having a controllable travel mechanism, a load-carrying means controlled vertically movable on a lifting framework, a driver's cab -- in particular movable vertically on the lifting framework together with the load-carrying means -- and an operating panel, to be operated from the driver's cab, for controlling the travel mechanism and lifting functions of the load-carrying means, where the operating panel has at least two function regions, of which a first one is provided for operation chiefly by the left hand -- and a second one is provided for operation chiefly by the right hand of an operator in the driver's cab.

Industrial delivery trucks of the type described above are used in a variety of applications, including as pickup devices, in which a cabin with driver's cab for an operator is capable of being moved vertically on a lifting framework. Arranged at the
front of the cabin is a load-carrying means, for example a pair of forks pointing forward in the longitudinal direction of the vehicle, which is controlled vertically movable together with the driver's cabin -- and in addition relative to the driver's cabin. An operator standing in the cabin has available an operating panel that has operating elements for controlling the travel mechanism and the lifting functions as well as optionally a steering means. With it, the operator can selectively set forward travel operation or backward travel operation, control the speed of travel as well as the common lift of the cabin and the load-carrying means (main lift) and the lift of the load-carrying means relative to the cabin (supplementary lift), in order perhaps to steer to specific positions on a shelf in a warehouse, so that the operator can remove goods from the shelf from the cabin and place them over a front breastwork of the cabin on the load-carrying means or on a pallet carried thereon.

In known pickup-and-delivery devices of the type described above, the operating panel is mounted in a rear region of the cabin in the longitudinal direction of the vehicle, namely on the rear wall of the cabin. The operator then stands at the controls of the travel mechanism or lift operation of the pickup-and-delivery device in the cabin so that the operator's body is positioned essentially to the rear of the vehicle. The lifting framework and the cabin have regions open toward the rear, which
permit the operator a view straight ahead in backward travel. The operator is able to observe the lifting functions of the load-carrying means when -- starting from the posture described above -- he turns his upper body or his head to the front of the cabin. Such an operating configuration may be useful when in the typical use of the pickup-and-delivery device long stretches without an intermediate stop are to be covered more often in backward travel operation than in forward travel operation, as may be the case perhaps in backward travel in an aisle of shelves with completed assembly of a pickup after the shelf positions concerned have been approached for assembly of the pickup stepwise in forward travel operation.

However, if in some other use situation of the pickup-and-delivery device forward travel operation of the main travel operation, in which for example regular higher travel speeds are possible, arrangement of the operating panel at the rear of the driver's cabin is ergonomically unfavorable, and safety aspects are also affected.

A brochure of the firm of BT Products AB, Sweden, under the title "BT Production Information PAL OM/OMW" of the year 1996 describes a pickup-and-delivery device in which the operating panel or operating console as a whole can be shifted from the rear inside of the cabin to the front inside of the cabin. For operating the operating panel shifted to the front, the operator
stands with his body positioned toward the front in the cabin. The operating configuration last mentioned may be useful when forward travel is the principal travel operation, i.e., long stretches are to be covered without interruption more frequently in forward travel operation than in backward travel operation.

However, there are also situations of use in which frequent changes in the direction of travel and intermediate lifting operations of the pickup-and-delivery device are required, perhaps in searching runs in an aisle of shelves for assembly of a pickup of numerous small parts. In such case, none of the arrangements mentioned above provides optimal ergonomic conditions for the operator in controlling the pickup-and-delivery means. In frequent runs in the direction opposite the side of the cabin on which the operating panel is provided, the operator then each time has to assume a posture essentially with his upper body and/or head turned toward the rear in order to be able to observe the behavior of the vehicle in the direction of travel and look for shelf positions to be approached.

The object of the invention is to provide an industrial delivery truck, in particular a pickup-and-delivery device, of the kind mentioned at the beginning that permits more operating configurations and hence more ergonomic performance of tasks for the operator in various situations of use of the pickup-and-delivery device.
To accomplish this object, it is proposed that, starting out from an industrial delivery truck with the features mentioned at the beginning, the two function regions be designed as modules separable from one another, of which at least one in the access region of the driver's cab is repositionable between at least two operating positions from one side of the driver's cab to another side of the driver's cab -- and is capable of functional use in each of these operating positions.

For example, if a use situation exists in which backward travel is the main travel operation, in which for example higher travel speeds are possible, both modules of the operating panel may be arranged in the rear region of the driver's cab, preferably on the rear wall of a driver's cabin.

If forward travel is the main travel operation for the industrial delivery truck, it may be advantageous to arrange both modules in the front region of the cabin.

However, a very interesting possibility is obtained in that one of the modules may be arranged in the front region of the driver's cab and the other module in the rear region of the driver's cab. For operation of the two modules, the operator can now stand in the driver's cab transverse to the longitudinal direction of the vehicle. Such a posture is a very good compromise in certain use situations of the industrial delivery truck from an ergonomic viewpoint, when for example frequent
changes in the direction of travel after short stretches of travel in each instance -- and numerous lifting motions are required in searching runs in an aisle of shelves. Then, the operator, by corresponding positioning of his head and without much turning of his upper body, can survey a large visual range including the two opposite directions of travel and direct his sight to shelf positions of an opposite shelf.

The two function regions of the operating panel preferably are repositionable between two respective operating positions, where the two modules, at least in some predetermined combinations of their operating positions, are arranged and spaced with respect to one another so that they can be operated simultaneously by an operator of average height in the driver's cab.

According to a preferred embodiment, each repositionable module is in each instance separable from a connection assigned to the first operating position and having electrical connection means as well as mechanical mounting means for the module and is electrically and mechanically connectable to a second connection assigned to the second operating position. This results in short transfer times, where transfer of the module or modules is possible in simple fashion. The connections and the modules preferably form plug-in systems with automatic mechanical safety locks.

It may be provided within the scope of the invention that
each connection is connection-compatible with regard to each of
the two repositionable modules, so that the variety of possible
operating configurations can be still further increased.

At least one of the function regions of the operating panel,
in particular the first function region, preferably contains a
steering means, in particular a steering wheel, for a steerable
wheel of the industrial delivery truck, while the other function
region contains means for switching between forward travel and
backward travel of the vehicle.

In addition, it is provided that one of the function
regions, in particular the second function region, contains means
for controlling vehicle speed. Additionally, at least one of the
function regions, in particular the second function region,
contains means for controlling the lift of the load-carrying
means. For an industrial delivery truck in which the driver's
cab is vertically movable together with the load-carrying means
on the lifting framework and in which the load-carrying means in
addition is controlled vertically movable relative to the
driver's cab, at least one of the function regions, in particular
the second function region, has means for controlling common lift
of the driver's cab and the load-carrying means, as well as means
for controlling the motion of the load-carrying means relative to
the driver's cab. The lifting function operating means may be
combined with an actuating element or a plurality of actuating
elements. Operating elements optionally may be equipped with switchable double functions.

An industrial delivery truck, in particular a pickup-and-delivery device, is proposed under an additional aspect of the invention. This is designed as a vehicle having a steerable travel mechanism, a driver's cab controlled vertically movable on a lifting framework, a load-carrying means, vertically movable on the lifting framework together with the driver's cab, on the side of the driver's cab lying in front in the longitudinal direction of the vehicle, which additionally is controlled vertically movable relative to the driver's cab, and a first operating panel, to be actuated from the driver's cab, for controlling the travel mechanism and lifting functions of the load-carrying means including the vertical position of the driver's cab, the operating panel being arranged in a rear region of the driver's cab in the longitudinal direction of the vehicle and having at least two function regions, of which a first one is provided for operation chiefly by the left hand and a second one is provided for operation chiefly by the right hand of an operator in the driver's cab. According to the invention, this industrial delivery truck is characterized in that a second operating panel is provided in a front region of the driver's cab in the longitudinal direction of the vehicle, the second operating panel containing operating elements for controlling the vertical motion
of the load-carrying means relative to the driver's cab.

The two operating panels preferably are arranged and spaced with respect to one another so that one of the two function regions of the first operating panel and a function region of the second operating panel are actuable simultaneously by an operator of average height standing in the driver's cab, positioned transverse to the longitudinal direction of the vehicle.

According to an especially preferred embodiment, it is provided there that the second operating panel has operating functions corresponding to one of the function regions of the first operating panel.

The invention is explained in detail below, with the aid of the figures, wherein

Fig. 1 shows, in a simplified representation, a perspective view of an industrial delivery truck according to the invention,

Figs. 2 - 4, in a schematic top view of the industrial delivery truck according to Fig. 1, a variety of operating positions of the operating-panel module,

Figs. 5 - 6, additional embodiments of the invention in views similar to those of Figs. 2 - 4, respectively.

The industrial truck shown in Fig. 1 is a so-called pickup-
and delivery device 1 with an undercarriage 6 supported on three
wheels 3, 4, 5. The wheel 3 is steerable.

Under the cover 7 in the rear region of the pickup and
delivery device 1 are located the electric motor travel
mechanism, the batteries for electrical supply and hydraulic
components for the drive of a driver's cabin 11 controlled
vertically displaceable on the lifting framework 9 and a load-
carrying means 13 projecting forward from the driver's cabin 11,
which is hydraulically displaceable vertically together with the
driver's cabin 11 on the lifting framework and additionally
relative to the driver's cabin 11.

The driver's cabin has a breastwork 15 at its front end,
over which the operator standing in the driver's cabin has access
to the load-carrying means 13 or to a pallet (not shown) carried
by the load-carrying means 13, for setting down goods removed
from a shelf, for example.

In an alternative embodiment, the load-carrying means 13
shown as a pair of forks in Fig. 1 could be replaced by a
walkable load-carrying means. In such a variant, the breastwork
15 could have a passage for the operator.

In the schematic top view of Fig. 2, in which the protective
roof 17 of the driver's cabin 11 seen in Fig. 1 is not drawn in
and the mast region is represented in section, an operating panel
19 can be seen on the rear wall 21 of the driver's cabin 11. The
operating panel 19 comprises two consoles or modules 23 and 25, physically separable from one another if necessary. The first module 23, arranged at the rear on the left in the driver's cabin in Fig. 2, is designed for operation with the left hand -- and the second module 25, arranged at the rear on the right in the driver's cabin 11 in Fig. 2, is designed for operation with the right hand of an operator 27 standing in the driver's cabin 11 with his back to the load-carrying means 13.

In the case of the example, the first module 23 of the operating panel 19 has as operating element a steering wheel 29 for controlling the steering position of the steered wheel 3 (Fig. 1). The second module 25 of the operating panel 19 has operating elements 31 for controlling the travel mechanism, in particular for switching between forward travel and backward travel, as well as for controlling travel speed, and in addition operating elements 33 for controlling lifting functions of the load-carrying means 13, in particular for controlling the common lifting motion of the driver's cabin 11 and the load-carrying means 13. Optionally, the second module 25 may have a multiple-function operating element, perhaps in the manner of a joystick, with which a plurality of operating functions can be controlled.

Arrangement of the operating panel 19 in the rear region of the cabin 11 of Fig. 2 may be expedient for reasons of ergonomics and safety in travel operation, in the event that in the typical
use of the pickup-and-delivery device 1 long stretches are to be covered without interruption more frequently in backward travel operation than in forward travel operation. Such a situation exists, for example, when the operator, by stepwise forward travel, approaches particular shelf positions in an aisle of shelves in order to remove particular goods from the shelf after corresponding vertical adjustment of the cabin 11 and the load-carrying means 13 on the lifting frame 9 and put assemble a pickup, and then after preparation of the pickup the pickup-and-delivery device 1 in the aisle of shelves is driven backward without intermediate stops to an unloading station, for example in the entrance to the aisle of shelves, in order to unload the goods carried on the load-carrying means 13. The arrangement of the operating panel 19 of Fig. 2 is also advisable when the load-carrying means 13 is loaded with objects or goods that -- viewed from the driver's cabin -- obstruct the view ahead. The cabin 11 and the lifting framework 9 have open viewing regions 37, 38 (Fig. 1), through which the operator 27 can look in the backward direction of the vehicle 1.

The modules 23 and 25 are arranged at connections 35 and 36 respectively, where each connection 35 and 36 has electrical connection means (not shown) and mechanical mounting means (not shown). The connections 35 and 36 preferably are provided so that the modules 23 and 25 can be attached, so that the correct
electrical connections are automatically produced there and mechanical fastening and securing of the modules is likewise effected automatically, perhaps by detachable catch means if necessary.

Fig. 3 shows the modules 23 and 25 of the operating panel 19 in Fig. 2 after repositioning to a respective second operating position at the front breastwork 15 of the driver's cabin 11, specifically at connections 35' and 36', which are designed to correspond to the connections 35 and 36. In the arrangement of the operating panel 19 of Fig. 3, the operator 27 works in a posture oriented to the load-carrying means 13.

Arrangement of the modules 23 and 25 in the front region of the driver's cabin 11 of Fig. 3 may be expedient if, in typical use of the pickup-and-delivery device 1 long stretches are to be covered without interruption more frequently in forward travel operation than in backward travel operation or if the device 1 is operated more frequently in forward travel operation than in backward travel operation.

The arrangement of the modules 23 and 25 shown in Fig. 3, at a respective horizontal distance from the midplane of the pickup-and-delivery device 1 at 39, makes it possible for the operator 27, without hindrance by operating elements, to bend over a greater average region of the breastwork 15 to the load-carrying means 1, in order to take goods from a shelf or the like. In
addition, it can be seen in Fig. 3 that all operating elements 29, 31, 33 are arranged in a recess or depression 40, 41 on the respective modules 23 and 25. There, the operating elements 29, 31, 33 do not project outward beyond a lower wall region 43, 44 or beyond an upper wall region 43', 44' of the respective modules 23 and 25, so that they fit into a protected position and do not obstruct the operator 27 upon loading of the load-carrying means 13 from the driver's cabin 11.

In a variant (not shown here) of the industrial truck according to the invention with an arrangement of the modules 23 and 25 at a horizontal distance apart from one another according to Fig. 3, a passage from the driver's cabin to the load-carrying means is provided between the modules 23, 25.

A very interesting possibility for arrangement of the modules 23 and 25 is shown in Fig. 4.

In Fig. 4, a module, in the case of the example the second module 25, is located in its operating position, shown in Fig. 3, at the front breastwork 15 and the other module, in the case of the example the first module 23, is in the operating position, shown in Fig. 2, at the rear wall 21 of the driver's cabin. The operator 27, standing positioned essentially transverse to the direction of travel or the forward-backward direction, can actuate operating elements of the first module 23 with his left hand and operating elements of the second module 25 with his
right hand. The arrangement of the modules 23 and 25 shown in Fig. 4 can be very advantageous when, for example, if in the typical use of the pickup-and-delivery device 1 frequent switching between forward travel operation and backward travel operation takes place, perhaps in searching runs in an aisle of shelves (not shown) along a shelf facing the operator. As indicated at 23' and 25' in Fig. 4, the modules may alternatively be arranged at the other side of the cabin 11. In addition, one of the modules 23 or 25 or both of the modules 23 and 25 may be provided in duplicate, so that combinations of the arrangement of the modules 23 and 25 shown in Figures 2 - 4 are permanently available without repositioning of modules 23 and/or 25.

In Figures 2 - 4, foot switches, which are designed as so-called dead man's switches, are shown at 47 and 49. Travel operation and lifting operation of the pickup-and-delivery device 1 are unblocked only when a respective foot switch 47 or 49 is depressed. The switches 47 and 49 are positioned so that in each instance one of them can be depressed with a foot by the operator in the respective posture of the operator of Figs. 2 - 4.

It is to be added that at the first module 23 a key 50 may be provided for so-called free-hand safety operation. Travel operation of the pickup-and-delivery device 1, but not lifting operation of the cabin 11 and of the load-carrying means 13, is possible in the unpressed state of the key 50. The lifting
function operating elements 33 of the second module 25 are then switched off.

When the key 50 is pressed, travel operation of the pickup-and-delivery device 1 is prevented, but lifting operation of the driver's cabin 11 and of the load-carrying means 13 is possible.

In the example of Figs. 2 - 4, there is additionally provided on the first module 23 a lifting-function selection switch or key 52, which may be actuated together with the key 50 with one hand. The switches 50 and 52 may alternatively be combined in a common operating element. In a first position of the lifting-function selection switch 52, an electronic control means (not shown) engages the lifting function operating elements 33 on the second module 25 having the functions of raising and lowering the driver's cabin 11 together with the load-carrying means 13 (main lift) arranged thereon. In a second switch position of the lifting-function selection switch 52, the control means engages the lifting function operating elements 33 having the functions of raising and lowering of the load-carrying means 13 relative to the driver's cabin 11 (supplementary lift).

An additional principal aspect of the invention is explained below with reference to Fig. 5. Fig. 5, in a top view similar to that of Figs. 2 - 4, shows a pickup-and-delivery device 101 that has substantially the design shown in Fig. 1. Elements in Fig. 5 that correspond to elements of Figs. 1 - 4 are labelled with the
same reference numerals plus 100 in each case. A first operating panel 119 with a function region 123 for operation with the left hand and a second function region 125 for operation with the right hand of an operator standing positioned in the cabin 111 to the rear of the pickup-and-delivery device 101 is arranged at the rear wall 121 of the driver's cabin 111. Unlike the examples previously described, the operating panel 119 may be installed fixed. The function of the operating elements 129, 131, 133, 150 and 152 preferably corresponds to the function of the operating elements 31, 33, 50 and 52 of the embodiment of Figs. 2 - 4.

A second operating panel 119' with function regions 125' and 126 is arranged at the front breastwork 115 of the driver's cabin 111. The same operating functions are assigned to the function region 125' as to the function region 125. The function region 126 has a two hand-operation safety switch 150 and a lifting-function selection switch or key 152.

The following operating possibilities, depending upon the posture or position of an operator in the driver's cabin 111, are obtained:

a) The operator stands positioned toward the rear of the pickup-and-delivery device 101 and with his left hand operates the function region 123 and with his right hand operates the function region 125, depressing the foot switch
147 with his right foot. In this operating configuration, alternately steered travel operation or lifting operation of the driver's cabin 111 and optionally supplementary lifting operation of the load-carrying means 113 relative to the driver's cabin 111 are possible.

b) The operator stands positioned transverse to the longitudinal direction of the vehicle and actuates the function region 123 with his left hand and the function region 125' with his right hand, depressing the foot switch 149 with his right foot. In this operating configuration, the same operating functions as indicated above under a) are possible.

c) The operator stands oriented to the front breastwork 115 and with his right hand operates the function region 125' and with his left hand the function region 126, depressing the foot switch 149 with his right foot. In this operating configuration, alternately unsteered travel operation or lifting operation of the driver's cabin 111 or the load-carrying means 113 relative to the driver's cabin 111 is possible. Unsteered travel operation takes place for example in guided travel of the pickup-and-delivery device in an aisle of shelves.
The embodiment represented in Fig. 6 differs from that of Fig. 5 in that the second operating panel 219' is modified at the front breastwork 215. The function region 225' has operating elements 233 for the lifting functions of raising and lowering of the driver's cabin 211 and/or of the load-carrying means 213 relative to the driver's cabin 211. The function region 226 has a lifting-function selection switch 252, which assigns the operating elements 233 either to the main lift (driver's cabin 211) or to the supplementary lift (load-carrying means 213 relative to the driver's cabin).

The invention is not limited to the assignment of functions or operating elements described in the examples to the operating function regions described. The operating function regions may optionally be engaged with other combinations of operating functions and optionally have additional operating functions.
CLAIMS:

1. Industrial delivery truck comprising:
   a controllable travel mechanism,
   a load-carrying means controlled vertically movable on a listing framework,
   a driver's cab, and
   an operating panel, to be operated from the driver's cab, for controlling
   the travel mechanism and lifting functions of the load-carrying means,
   where the operating panel has at least two function regions for hand
   operation by the operator in the driver's cab,
   characterized in that the two function regions are designed as modules
   separable from one another, of which at least one in an access region of the driver's
   cab is repositionable between at least two operating positions from one side of the
   driver's cab to another side of the driver's cab and is capable of functional use in each
   of these operating positions.

2. Industrial delivery truck according to Claim 1, characterized in that the
   load-carrying means is arranged in front of the driver's cab in a longitudinal direction
   of the truck, in that the repositionable module in a first operating position is arranged
   in a rear region of the driver's cab in the longitudinal direction of the vehicle – and in
   a second operating position is arranged in a front region of the driver's cab in the
   longitudinal direction of the vehicle.

3. Industrial delivery truck according to Claim 1 or 2, characterized in
   that the two function regions of the operating panel are modules that are
   repositionable between a particular first operating position and a particular second
   operating position, where the two modules, at least in some predetermined
   combinations of their operating positions, are arranged and spaced with respect to
   one another so that they can be operated simultaneously by an operator of average
   height in the driver's cab.
4. Industrial delivery truck according to Claim 3, characterized in that each repositionable module is in each instance separable from a connection assigned to the first operating position and having electrical connection means as well as mechanical mounting means for the module and is electrically and mechanically connectable to a second connection assigned to the second operating position.

5. Industrial delivery truck according to Claim 3 or 4, characterized in that the modules are selectively configurable with respect to one another in the operating positions indicated below:

a) both modules are positioned in a front region of driver's cab in a longitudinal direction of the truck, where the module assigned to the first function region, viewed from the driver's cab, is arranged at the front on the left – and the module assigned to the second function region is assigned to the front on the right,

b) one of the modules is positioned in a front region of the driver's cab in the longitudinal direction of the vehicle – and the other module is positioned in a rear region of the driver's cab in the longitudinal direction of the vehicle,

c) the two modules are arranged in a rear region of the driver's cab in the longitudinal direction of the vehicle, where the module assigned to the first function region, viewed from the driver's cab is arranged at the rear on the left and the module assigned to the second function region is arranged at the rear on the right.

6. Industrial delivery truck according to any one of claims 1 to 5 characterized in that at least one of the function regions of the operating panel contains a steering means for at least one steerable wheel and in that the other function region of the operating panel contains means for switching between forward travel and backward travel of the industrial delivery truck.
7. Industrial delivery truck according to Claim 6, characterized in that at least one of the function regions of the operating panel contains means for controlling travel speed.

8. Industrial delivery truck according to Claim 6 or 7, characterized in that at least one of the function regions of the operating panel contains means for controlling the movement of the load-carrying means.

9. Industrial delivery truck according to any one of Claims 6 to 8, characterized in that the driver's cab is vertically displaceable on the lifting framework together with the load-carrying means, in that the load-carrying means additionally is controlled vertically movable relative to the driver's cab, and in that at least one of the function regions contains means for controlling the common lift of the driver's cab and the load-carrying means as well as means for controlling the motion of the load-carrying means relative to the driver's cab.

10. In an industrial delivery truck of the pickup-and-delivery type comprising a vehicle having a controllable travel mechanism, a load-carrying means controlled vertically movable on a lifting framework, a driver's cab including an operating panel, to be operated from the driver's cab, for controlling the travel mechanism and lifting functions of the load-carrying means, the operating panel having at least two function regions, a first one of which is provided for operation chiefly by the operator's left hand and a second one of which is provided for operation chiefly by the operator's right hand, the improvement comprising:

    the two function regions of the operating panel being configured as first and second modules that are separable from one another, at least the first of which is located in the access region of the driver's cab and is repositionable, separately from the second module between at least two operating positions from one side of the driver's cab to another side of the driver's cab and is capable of functional use in each of said operating positions.
11. The industrial delivery truck according to claim 10, wherein the load-carrying means is arranged in front on the driver's cab in the horizontal longitudinal direction of the vehicle, at least the first module, in a first operating position, is arranged in a rear region of the driver's cab in said longitudinal direction of the vehicle and, in a second operating position, is arranged in a front region of the driver's cab in said longitudinal direction of the vehicle.

12. The industrial delivery truck according to claim 10 or 11, wherein at least the first module is repositionable between a particular first operating position and a particular second operating position, the two modules, at least in certain predetermined combinations of their operating positions, being arranged and spaced with respect to one another so that they can be operated simultaneously by an operator of average height in the driver's cab.

13. The industrial delivery truck according to claim 12, wherein each repositionable module is in each instance separable from a connection assigned to the first operating position and having electrical connection means and mechanical mounting means for the module and is electrically and mechanically connectable to a second connection assigned to the second operating position, said second connection having electrical connection means and mechanical mounting means for the module.

14. The industrial delivery truck according to claim 12, wherein the modules may be selectively arranged with respect to one another in the following operating positions:
   a) both modules are positioned in a front region of the driver's cab in the horizontal longitudinal direction of the vehicle, the module assigned to the first function region, viewed from the driver's cab, being arranged at the left front and the module assigned to the second function region being arranged at the right front;
   b) one of the modules is positioned in a front region of the driver's cab in said longitudinal direction of the vehicle and the other module is
positioned in a rear region of the driver's cab in said longitudinal direction of the vehicle, and

c) the two modules are arranged in a rear region of the driver's cab in the longitudinal direction of the vehicle, the module assigned to the first function region, viewed from the driver's cab, being arranged at the left rear and the module assigned to the second function region being arranged at the right rear.

15. The industrial delivery truck according to claim 10, wherein at least one of the function regions of the operating panel contains a steering means for at least one steerable wheel of the vehicle and the other function region of the operating panel contains means for switching between forward travel and backward travel of the industrial delivery truck.

16. The industrial delivery truck according to claim 15, wherein at least one of the function regions of the operating panel contains means for controlling travel speed.

17. The industrial delivery truck according to claim 15 or 16, wherein at least one of the function regions of the operating panel contains means for controlling the movement of the load-carrying means.

18. The industrial delivery truck according to claim 15, wherein the driver's cab is vertically displaceable on the lifting framework together with the load-carrying means, the load-carrying means additionally is mounted for controlled vertical movement relative to the driver's cab, and at least one of the modules contains means for controlling the common lift of the driver's cab and the load-carrying means as well as means for controlling the motion of the load-carrying means relative to the driver's cab.