(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 372 154 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
26.03.2025 Bulletin 2025/13

(21) Application number: **23383161.9**

(22) Date of filing: **14.11.2023**

(51) International Patent Classification (IPC):
E02F 9/08 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
E02F 9/0883

(54) VEHICLE FOR HANDLING MATERIALS AND EARTH MOVING

FAHRZEUG ZUR HANDHABUNG VON MATERIALIEN UND ERDBEWEGUNGEN

VÉHICULE POUR LA MANUTENTION DE MATÉRIAUX ET LE TERRASSEMENT

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **16.11.2022 ES 202231914 U**

(43) Date of publication of application:
22.05.2024 Bulletin 2024/21

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Description

Field of the invention

[0001] The present invention relates to a vehicle for handling materials and earth moving.

Background to the invention

[0002] For years now, the use of a dashboard has been commonplace in industrial vehicles for handling materials and earthmoving that do not have a cab.

[0003] This dashboard normally includes brackets for different elements, such as information displays, rear-view mirrors, push buttons, handles, electrical installations, etc.

[0004] In these vehicles, the driver protection function of the dashboard is used to house a steering column and various commands for operating the vehicle. In addition, the dashboard can also be used to house electronics inside or to support other devices.

[0005] In addition, these vehicles usually comprise plastic or metal tanks located at different positions on the machine, with a physical separation between the dashboard and the liquid storage.

[0006] A disadvantage of this type of vehicle currently known is that the number of parts and the difficulties of location have a direct impact on the cost of the vehicle, making it more expensive.

[0007] WO2007077793A1 discloses a tractor to provide an assist grip for facilitating worker's entry into and exit from an operation section. The tractor comprises a dashboard disposed at a rear portion of a bonnet, and a fuel tank or the like is housed inside the dashboard.

Description of the invention

[0008] Therefore, an objective of the present invention is to provide a vehicle for handling materials and earthmoving with reduced cost, using the vehicle's dashboard for other functions.

[0009] With the vehicle for handling materials and earthmoving of the invention, the aforementioned disadvantages are solved, presenting other advantages that will be described below.

[0010] The vehicle for handling materials and earthmoving according to the present invention is described in claim 1, and the dependent claims include additional features that are optional.

[0011] In particular, the vehicle for handling materials and earthmoving comprises a dashboard including a liquid reservoir, which advantageously is formed in one piece with the rest of the dashboard.

[0012] According to a preferred embodiment, the liquid reservoir comprises a cap that closes a filling orifice, a level sensor, and/or a filter.

[0013] Furthermore, in the vehicle for handling materials and earthmoving according to the present invention, the dashboard may also comprise a housing for electronic components, side handles, and/or one or more brackets for one or more mirrors.

[0014] Preferably, the dashboard comprises an outer skin and an inner skin.

[0015] Therefore, in the vehicle for handling materials and earthmoving according to the present invention, the empty volume of the interior of the dashboard is used to store any kind of liquid, giving an added value to the compactness of the vehicle.

[0016] In addition, it allows very accessible filling from the outside of the vehicle and reduces the vehicle's interior space.

[0017] If plastic materials are used for the construction of the dashboard, it is possible to use very complex volumes of the front and bottom of the dashboard, which are not usually used.

[0018] With the vehicle for handling materials and earthmoving according to the present invention a competitive advantage is achieved by reducing the number of parts and being more practical to assemble and maintain.

Brief description of the drawings

[0019] For a better understanding of what has been explained above, some drawings are included in which, schematically and only by way of a non-limiting example, a practical case of embodiment is represented.

Figure 1 is a perspective view of the vehicle for handling materials and earthmoving according to the present invention, showing the location of the dashboard on said vehicle; and

Figure 2 is a front view of the dashboard of the vehicle for handling materials and earthmoving according to the present invention, showing the location of its different components.

Description of a preferred embodiment

[0020] Figure 1 shows the vehicle for handling materials and earthmoving according to the present invention, comprising a dashboard, indicated in general by reference number 1. This dashboard (1) is preferably used to provide protection for the driver of the vehicle.

[0021] In accordance with the present invention, the dashboard (1) comprises a liquid reservoir (2), shown in figure 2, which is formed in one piece with the rest of the dashboard (1), i.e. the liquid reservoir (2) is integrated into the dashboard (1).

[0022] As can be seen in figure 2, the liquid reservoir (2) is preferably located at a lower position of the dashboard (1).

[0023] According to the embodiment shown, the liquid reservoir (2) comprises a cap (3) which closes a filling orifice, the cap (3) being easily accessible from the outside.

[0024] In addition, the liquid reservoir (2) also prefer-

ably comprises a level sensor (4) to provide information about the liquid level inside the reservoir (2) and a filter (5) to prevent unwanted elements from accidentally entering the interior of the reservoir (2).

[0025] In addition, the dashboard (1) also comprises a housing (7) for electronic components, side handles (6), and one or more brackets (8) for one or more mirrors.

[0026] As can be seen in the figures, the dashboard (1) is mainly made up of a single piece that includes different functions. This piece that forms the dashboard (1) is preferably developed with rotational molding technology and includes an external skin, where different metal inserts capable of holding other elements are made.

[0027] In addition, the part also includes an inner skin, with which it is possible to create volumes to contain the liquid. Thanks to the preferred manufacturing technology, this can be of complex shapes and make good use of all the gaps.

[0028] The fastening of the dashboard (1) to the rest of the vehicle is preferably done at the bottom, thus leaving the entire volume to the outside of the vehicle. The geometry of the dashboard (1) has an aesthetic component, but mainly the shapes it develops are to make the most of the non-interference spaces between the different moving parts of the vehicle.

[0029] Although reference has been made to a specific embodiment of the invention, it is obvious to a person skilled in the art that the vehicle for handling materials and earthmoving described is susceptible to numerous variations and modifications, and that all the details mentioned can be replaced by technically equivalent ones, without departing from the scope of protection defined by the appended claims.

Claims

1. Vehicle for handling materials and earthmoving, comprising a dashboard (1), wherein the dashboard (1) comprises a liquid reservoir (2),
   characterize in that said liquid reservoir (2) is formed in one piece with the rest of the dashboard (1).

2. Vehicle for handling materials and earthmoving according to claim 1, wherein the liquid reservoir (2) comprises a cap (3) that closes a filling orifice.

3. Vehicle for handling materials and earthmoving according to any one of the preceding claims, wherein the liquid reservoir (2) comprises a level sensor (4).

4. Vehicle for handling materials and earthmoving according to any one of the preceding claims, wherein the liquid reservoir (2) comprises a filter (5).

5. Vehicle for handling materials and earthmoving according to any one of the preceding claims, wherein the dashboard (1) also comprises a housing (7) for electronic components.

6. Vehicle for handling materials and earthmoving according to any one of the preceding claims, wherein the dashboard (1) also comprises side handles (6).

7. Vehicle for handling materials and earthmoving according to any one of the preceding claims, wherein the dashboard (1) also comprises one or more brackets (8) for one or more mirrors.

8. Vehicle for handling materials and earthmoving according to any one of the preceding claims, wherein the dashboard (1) comprises an outer skin and an inner skin.

Patentansprüche

1. Fahrzeug für Materialtransport und Erdbewegung, das ein Armaturenbrett (1) umfasst,
   wobei das Armaturenbrett (1) ein Flüssigkeitsbehälter (2) umfasst, **dadurch gekennzeichnet, dass** der Flüssigkeitsbehälter (2) in einem Stück mit dem Rest des Armaturenbretts (1) ausgebildet ist.

2. Fahrzeug für Materialtransport und Erdbewegung nach Anspruch 1,
   wobei der Flüssigkeitsbehälter (2) einen Deckel (3) umfasst, der eine Einfüllöffnung verschließt.

3. Fahrzeug für Materialtransport und Erdbewegung nach einem der vorhergehenden Ansprüche,
   wobei der Flüssigkeitsbehälter (2), einen Füllstandsensor (4) umfasst.

4. Fahrzeug für Materialtransport und Erdbewegung nach einem der vorhergehenden Ansprüche,
   wobei der Flüssigkeitsbehälter (1) einen Filter (5) umfasst.

5. Fahrzeug für Materialtransport und Erdbewegung nach einem der vorhergehenden Ansprüche,
   wobei das Armaturenbrett (1) auch ein Gehäuse (5) für elektronische Komponenten umfasst.

6. Fahrzeug für Materialtransport und Erdbewegung nach einem der vorhergehenden Ansprüche,
   wobei das Dashboard (1) auch seitliche Griffe (6) umfasst.

7. Fahrzeug für Materialtransport und Erdbewegung nach einem der vorhergehenden Ansprüche,
   wobei das Armaturenbrett (1) auch eine oder mehrere Halterungen (8) für einen oder mehrere Spiegel umfasst.

8. Fahrzeug für Materialtransport und Erdbewegung

nach einem der vorhergehenden Ansprüche, wobei das Armaturenbrett (1) eine äußere Hülle und eine innere Hülle umfasst.

Revendications

1. Véhicule pour la manutention de matériaux et le terrassement, comprenant un tableau de bord (1), dans lequel le tableau de bord (1) comprend un réservoir de liquide (2),
caractérisé en ce que ledit réservoir de liquide (2) est formé d'un seul tenant avec le reste du tableau de bord (1).

2. Véhicule pour la manutention de matériaux et le terrassement selon la revendication 1, dans lequel le réservoir de liquide (2) comprend un capuchon (3) qui ferme un orifice de remplissage.

3. Véhicule pour la manutention de matériaux et le terrassement selon l'une quelconque des revendications précédentes, dans lequel le réservoir de liquide (2) comprend un capteur de niveau (4).

4. Véhicule pour la manutention de matériaux et le terrassement selon l'une quelconque des revendications précédentes, dans lequel le réservoir de liquide (2) comprend un filtre (5).

5. Véhicule pour la manutention de matériaux et le terrassement selon l'une quelconque des revendications précédentes, dans lequel le tableau de bord (1) comprend également un boîtier (7) pour des composants électroniques.

6. Véhicule pour la manutention de matériaux et le terrassement selon l'une quelconque des revendications précédentes, dans lequel le tableau de bord (1) comprend également des poignées latérales (6).

7. Véhicule pour la manutention de matériaux et le terrassement selon l'une quelconque des revendications précédentes, dans lequel le tableau de bord (1) comprend également une ou plusieurs consoles (8) pour un ou plusieurs miroirs.

8. Véhicule pour la manutention de matériaux et le terrassement selon l'une quelconque des revendications précédentes, dans lequel le tableau de bord (1) comprend un revêtement externe et un revêtement interne.

FIG. 1

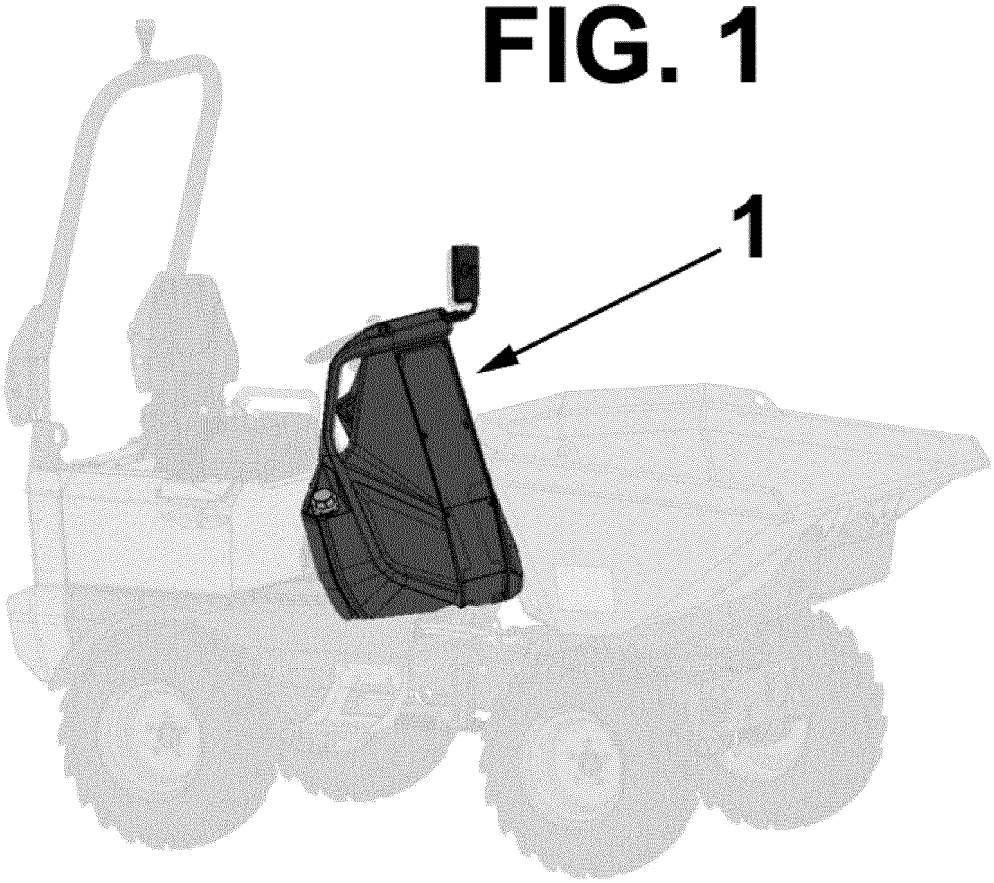
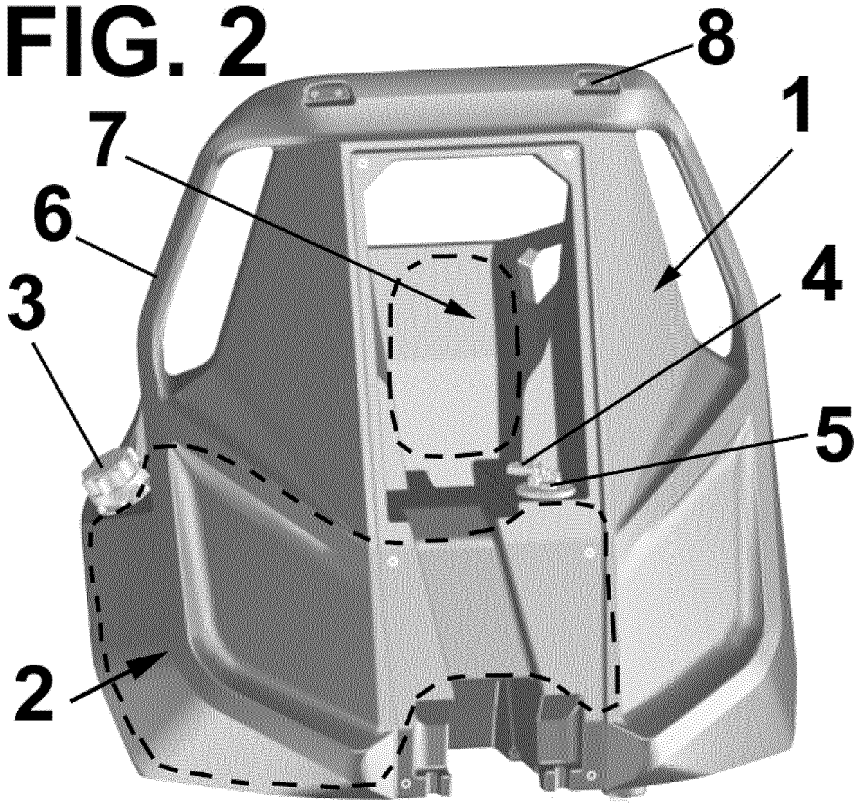


FIG. 2



REFERENCES CITED IN THE DESCRIPTION

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