

(21) Application No: 1502551.3
(22) Date of Filing: 16.02.2015
(30) Priority Data:
(31) 202014002557 (32) 22.03.2014 (33) DE

(51) INT CL:
B62D 25/20 (2006.01)

(56) Documents Cited:
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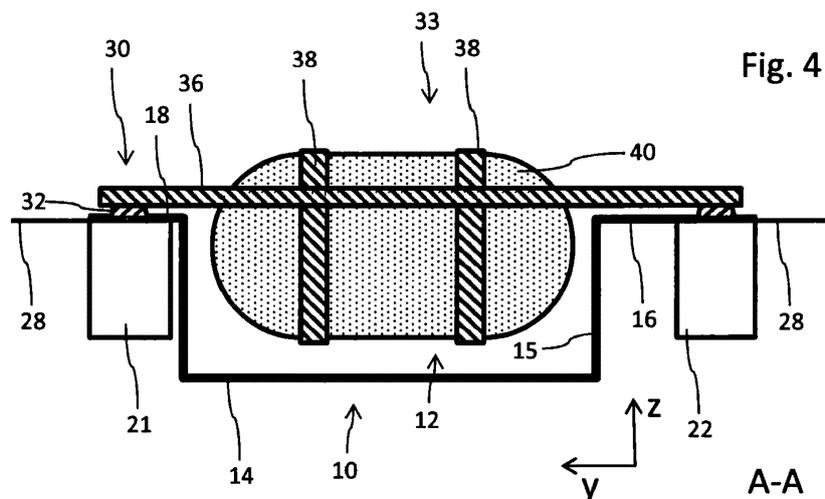
(58) Field of Search:
INT CL B62D
Other: EPODOC, WPI

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(54) Title of the Invention: Rear floor module for arrangement on a motor vehicle body
Abstract Title: Rear floor module for motor vehicle

(57) A rear floor module 10 arrangeable on a motor vehicle body (2, Figure 1) comprises a rear wall 20, to which a tail lamp (68, Figure 10) can preferably be mounted, and a trough 12 having a floor 14. A fastening structure 30 comprises at least one fastening point 32 for housing a motor vehicle component 40, such as a battery, a tank for LPG or CNG, a loudspeaker or a spare wheel, in trough 12, preferably with the component being mounted on an insert 36 mounted on fastening points 32. Module 10 is preferably a one-piece body formed of fibre-reinforced plastic, which may be temperature resistant to 200 °C. In an embodiment, component 40 may be mounted on an insert 36 having guide rails allowing it to be pulled outwardly from module 10.



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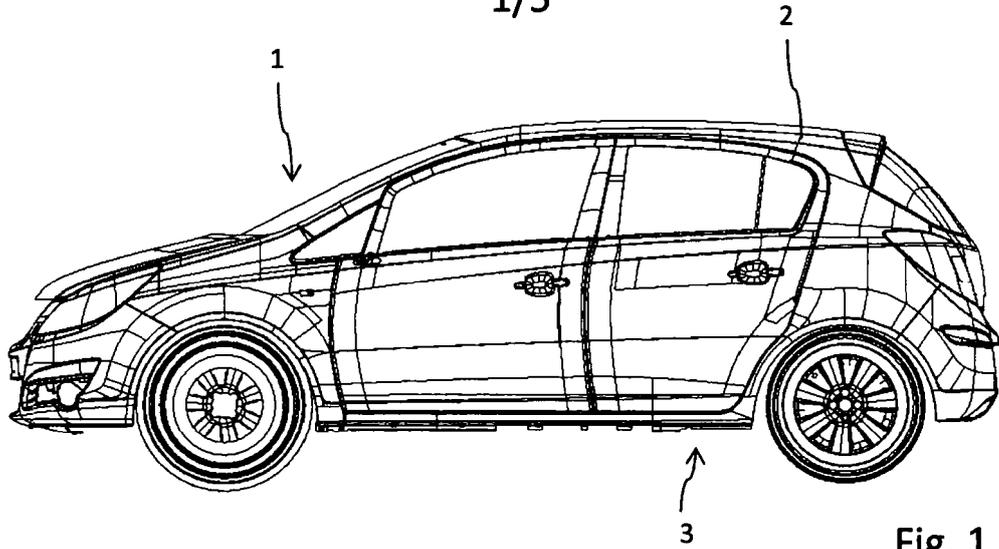


Fig. 1

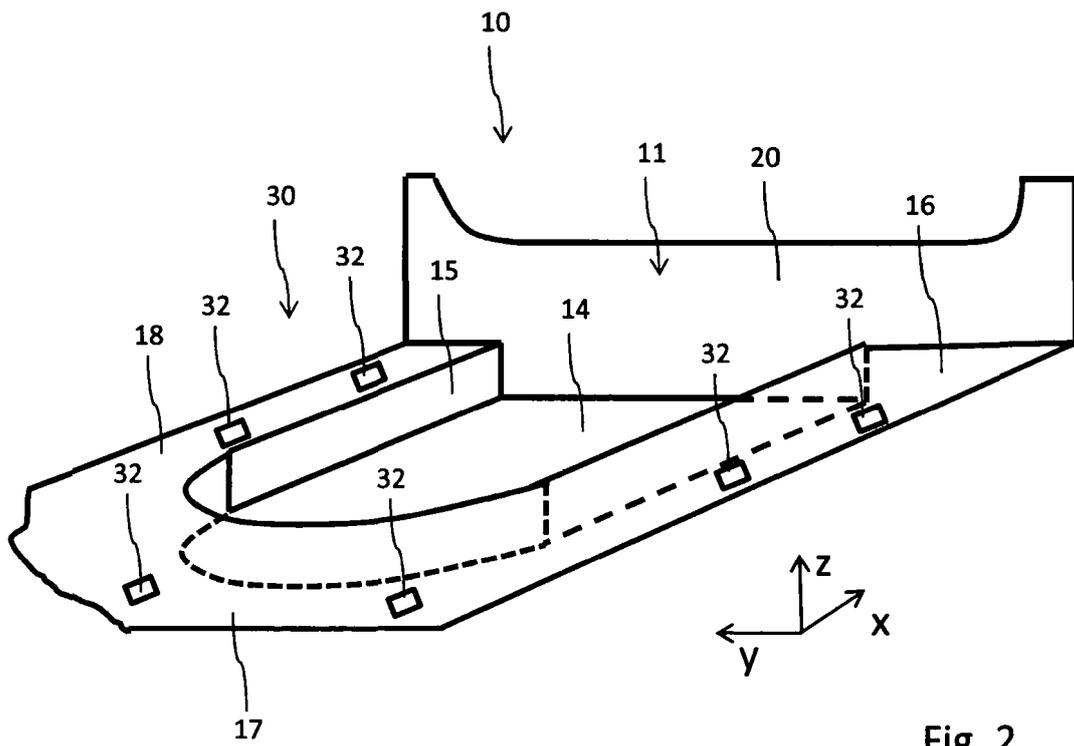


Fig. 2

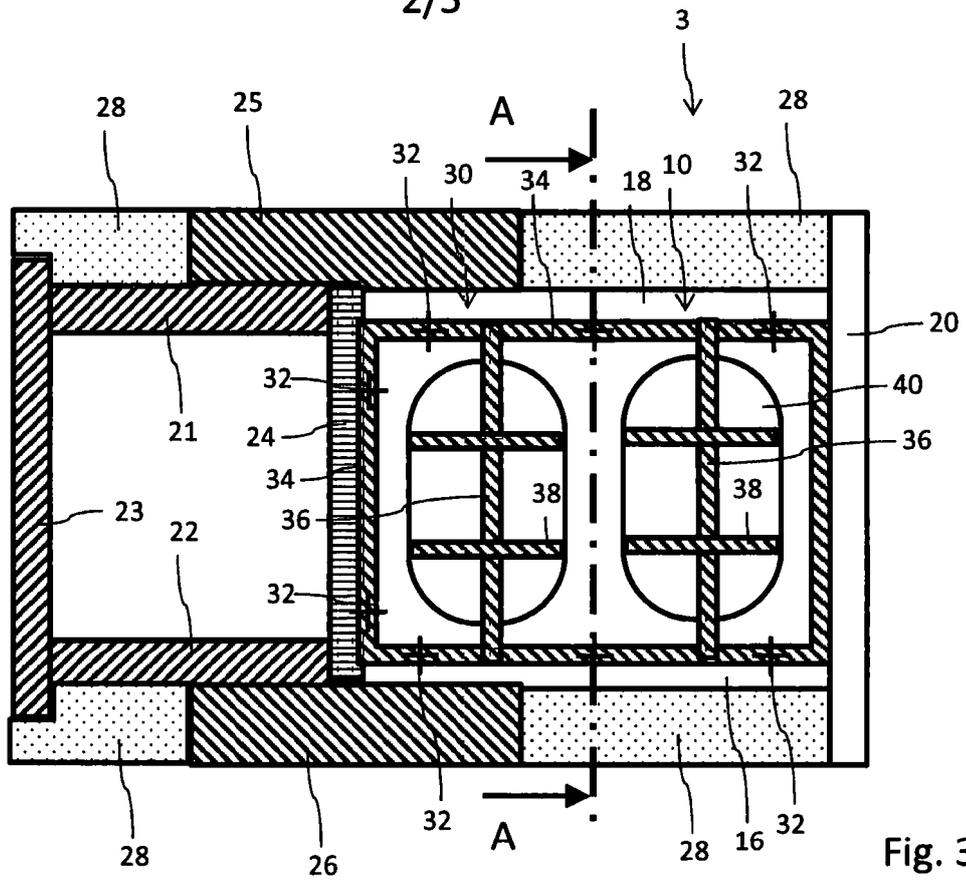


Fig. 3

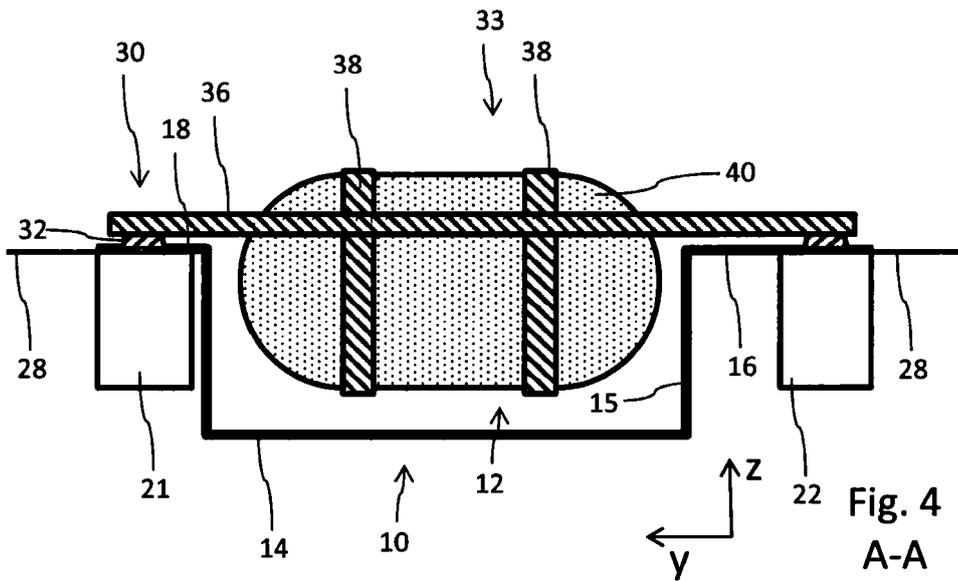


Fig. 4
A-A

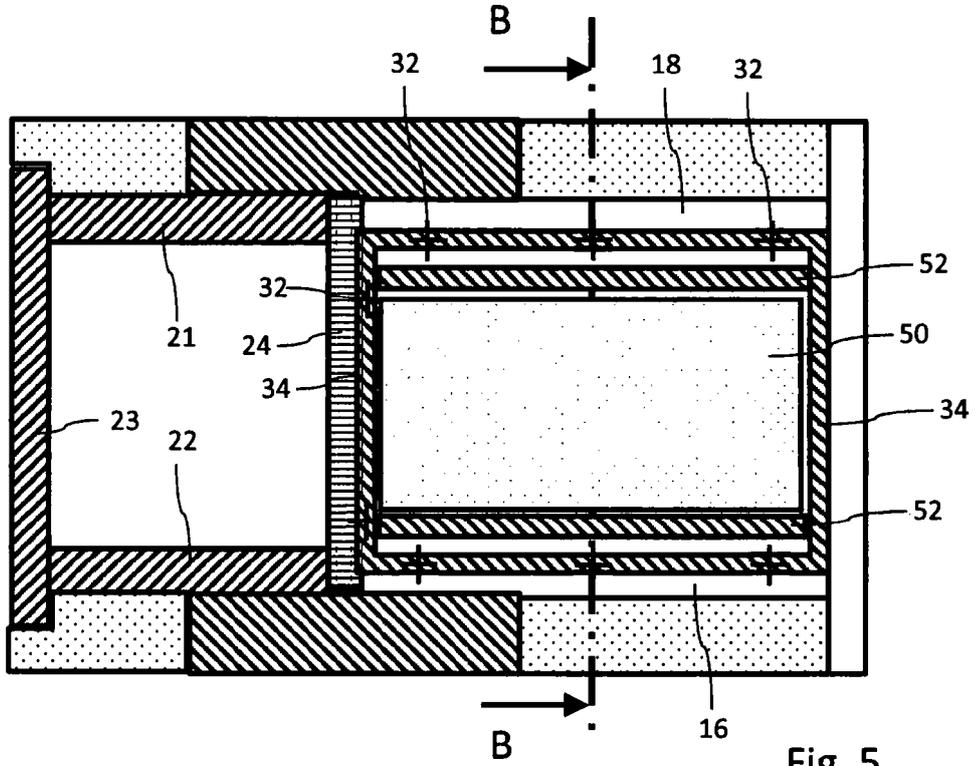


Fig. 5

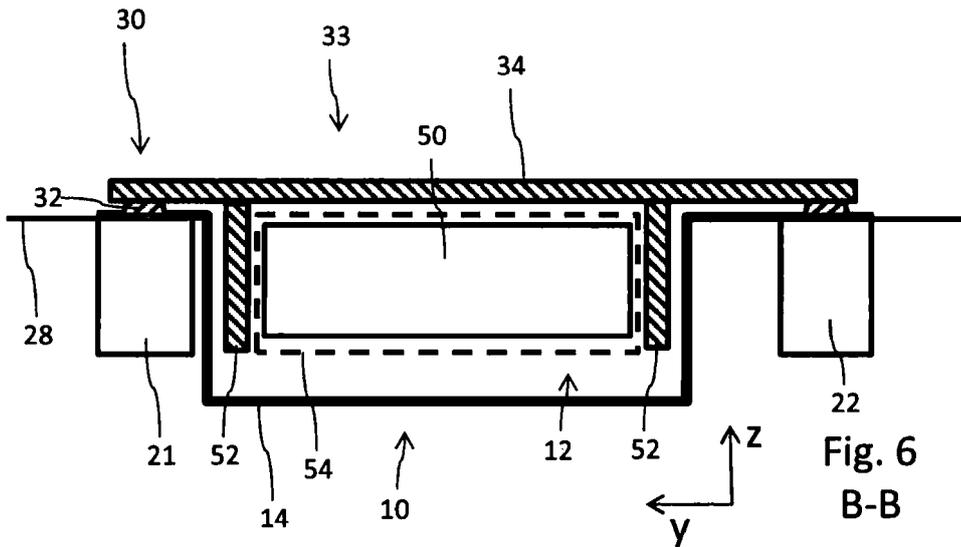


Fig. 6
B-B

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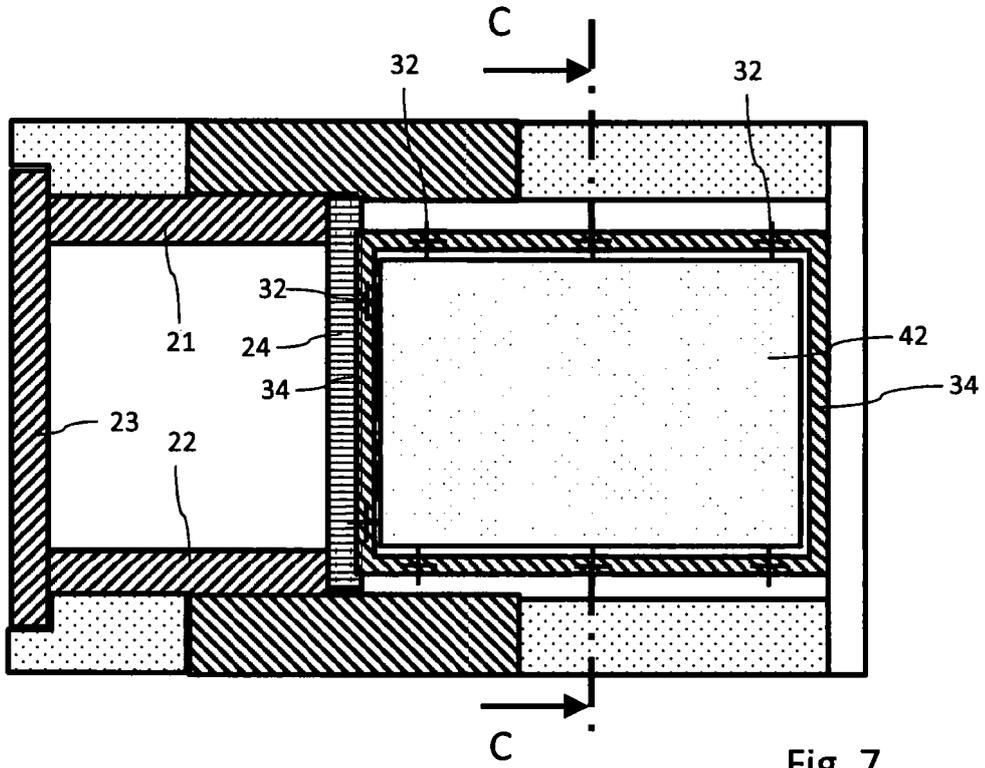


Fig. 7

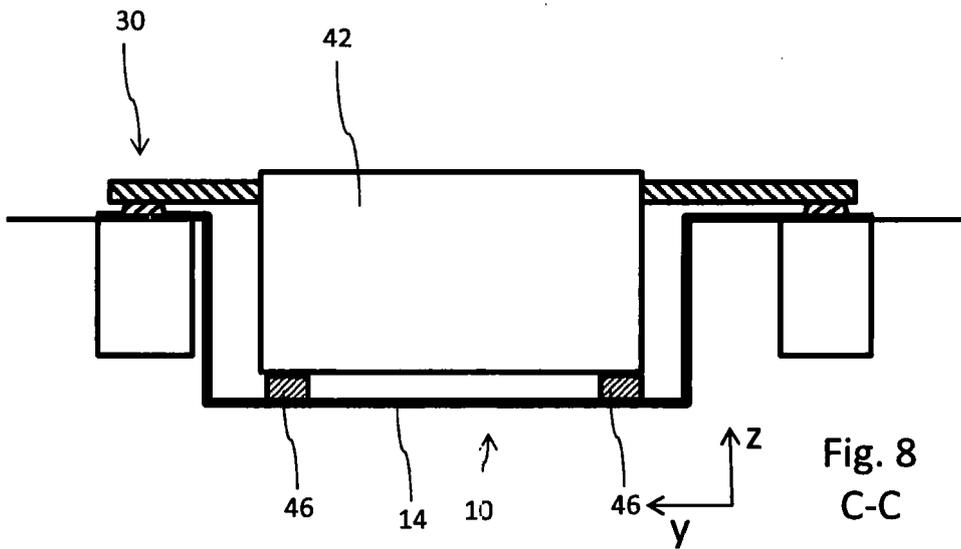


Fig. 8
C-C

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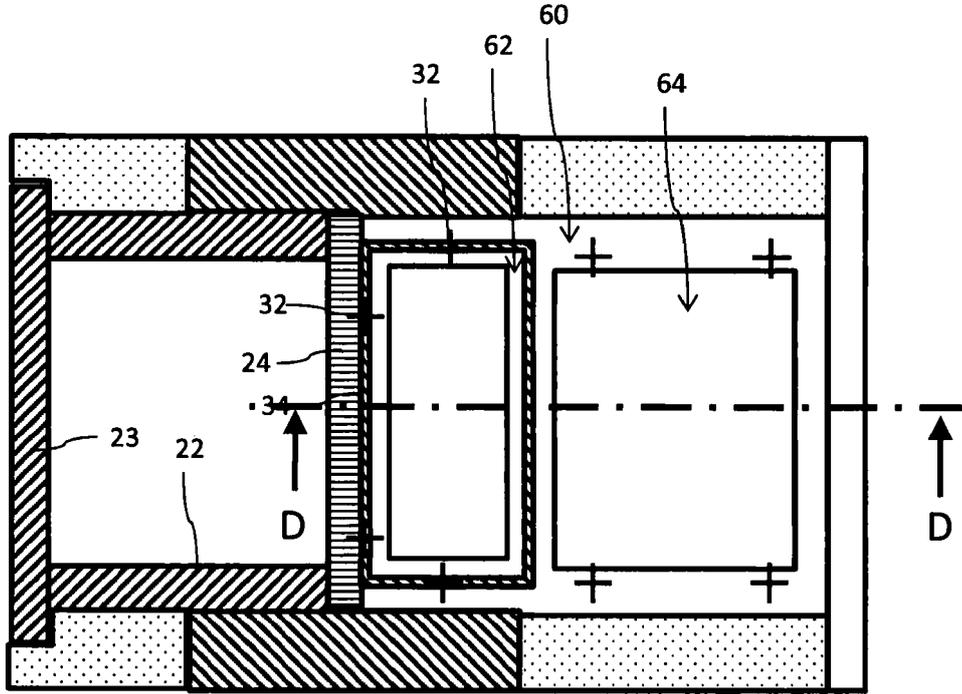


Fig. 9

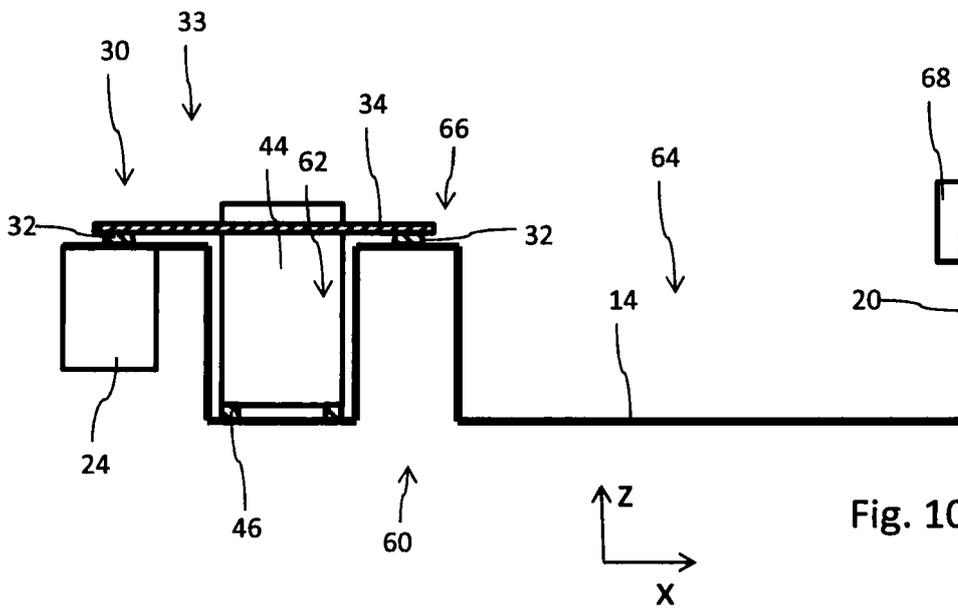


Fig. 10

5 **REAR FLOOR MODULE FOR ARRANGEMENT ON A MOTOR VEHICLE BODY**

Description

10 **Technical Area**

 In an embodiment, the present invention relates to a rear floor module for arrangement on a motor vehicle body. The rear floor module comprises at least one trough with a floor and a back wall.

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Background

 Different drive concepts and a plurality of individual configuration possibilities for motor vehicles require the installation of vehicle components which are adapted to the respective configuration and the respective drive concept. Accordingly, corresponding batteries and tanks have to be installed for example for hybrid vehicles or for gas-operated vehicles. Preferred places of installation for batteries are typically located in the floor region, for example in the rear floor region of the motor vehicle body.

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 Since motor vehicles with alternative and in part very different drive concepts possibly have to be produced in only a comparatively low production quantity it is desirable to be able to use one and the same unchanged support structure for the different drive concepts and equally also for different motor vehicle configurations. Providing different body support structures, for example for drive concepts based on the one hand for internal combustion engines and on the other hand hybrid drives is comparatively expensive and involved not only in the development but also under assembly and production-related aspects.

30

From DE 10 2005 017 249 A1 a body section, comprising a rear floor with substantially rectangular form is known, which has to be arranged in the region of the rear fenders between two rear side members and a rear axle cross member running transversely to the side members. The rear floor in this case is supported
5 as an integratable rear structure module by the two side members and the rear axle cross member. Here it is provided that the front region of the rear floor forms a part of the rear axle cross member. The part of the rear axle cross member belonging to the body in white can in this case constitute a shell that is open towards the top, which is complemented by the front part of the rear floor plate into a hollow profile,
10 when the rear floor plate is installed in the body.

In contrast with this, a configuration of the invention is based on the object of providing a rear floor module for arrangement on a motor vehicle body which makes possible the attachment and the installation of a wide range of motor vehicle
15 components in and on the motor vehicle without having to change the body in white or the support structure of the motor vehicle body or adapt these to the respective drive concept or the intended motor vehicle configuration. Here it is an objective in particular to lower the development, production and assembly costs as well as the gross weight of the motor vehicle.

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Advantageous configurations

This object is solved with a rear floor module according to Patent Claim 1, a motor vehicle body according to Claim 13 and with a motor vehicle according to
25 Patent Claim 15. Advantageous configurations in this case are subject of dependent claims.

The rear floor module that is provided in this respect is provided for arrangement on a motor vehicle body, in particular a motor vehicle rear. It
30 comprises at least one trough comprising a floor and a back wall, which typically projects upwards, based on the installation position on the motor vehicle in vehicle vertical direction (z) later on. Furthermore, the rear floor module is provided with a fastening structure which comprises at least one fastening point for fastening at least one motor vehicle component that can be arranged in the trough. By means of

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the fastening structure, motor vehicle configuration-specific or drive-specific motor vehicle components can be arranged preconfigured on the rear floor module.

By means of the defined fastening structure, the rear floor module can be
5 fitted with configuration and/or drive-specific motor vehicle components and in this
respect be produced as preconfigured assembly independently of the actual
production and assembly process of the body in white and made available for the
vehicle final assembly. The rear floor module furthermore comprises a connection
10 structure for fastening to the motor vehicle body. With respect to its geometrical
configuration, the rear floor module can vary and in each case be structurally and
geometrically adapted to its motor vehicle component to be arranged thereon.

The connecting structures of differently configured rear floor modules
however are always constant so that each rear floor module of a plurality of
15 differently configured rear floor modules can be fastened in the same manner to the
motor vehicle body, in particular to its support structure. As a consequence of this,
the support structure, consequently the body in white of the motor vehicle can
remain unchanged at least in the rear floor region for any vehicle configuration as
well as for any drive concept.

20
According to a further configuration, the rear floor module comprises an
insert that can be fastened to the fastening structure, by means of which the motor
vehicle component can be fastened to the rear floor module. Typically, the insert
comprises a fastening structure corresponding to the fastening structure of the rear
25 floor module side for this purpose. The insert can for example be fitted with different
motor vehicle components. The insert can also make available motor vehicle
component-specific fastening points. The insert can in particular act as a carrier for
motor vehicle components to be fastened thereon, so that mechanical fastening of
the motor vehicle components that can be arranged in the trough can take place
30 solely via the insert.

Mechanical forces and loads, which originate from the motor vehicle
components for example due to gravity can be specifically discharged and transfer
into the fastening structure of the rear floor module via the insert. Furthermore, the

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insert makes possible a module-like production of the rear floor module. For example, the individual motor vehicle components can be initially fastened on the insert before the insert preconfigured and fitted in this manner is fastened to the rear floor module. Not only the mechanical stability but also the production
5 rationality of the rear floor module can be increased by means of the insert.

According to a further configuration, the insert comprises a support frame, which can be fastened to multiple fastening points of the fastening structure located outside the trough. Providing a support frame imparts the insert high mechanical
10 strength and stiffness. Furthermore, the rear floor module by being connected to an insert configured in such a manner can undergo additional reinforcement. Because of the fact that the fastening point for the insert, consequently for the support frame, are located outside the trough, these can for example come to lie congruently with one or with multiple support structure components of the motor vehicle body, such
15 as for example a side member or cross member.

In this respect, direct or indirect fastening of the insert, consequently of the motor vehicle component, to the support structure of the motor vehicle can also take place by way of the fastening points provided on the rear floor module. The
20 mechanical loads originating from the motor vehicle components can be exclusively or predominantly introduced and discharged into the support structure of the motor vehicle body in this way. Accordingly, the trough and the back wall of the rear floor module are exposed to only comparatively low mechanical loads. The trough and the back wall accordingly can be designed comparatively thin-walled and thus in a
25 material and weight saving manner.

According to a further configuration, the rear floor module furthermore comprises at least one support profile facing away from the back wall and projecting from the trough towards the front. Alternatively or complementarily, the rear floor
30 module however can also comprise at least one, typically two support profiles laterally projecting from the trough. On the at least one support profile or on the multiple support profiles the at least one fastening point of the fastening structure is typically arranged. By means of the support profile projecting laterally or towards the front the rear floor module can rest on individual support structure components of

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the motor vehicle body typically adjoining the trough. The support profile which extends to the front and typically in motor vehicle transverse direction (y) can for example rest on a rear axle cross member while support profiles laterally projecting from the trough can rest on the side members laterally adjoining the trough and
5 running in vehicle longitudinal direction (x).

By means of the support profiles projecting towards the front and/or laterally from the trough, a particularly preassembly of the rear floor module on the motor vehicle body is possible. It can be placed onto the support structure
10 components of the motor vehicle body in a simple manner and for example be at least preassembled by means of positive-locking elements such as for example clips, screws or engagement elements. In addition, a comparatively large support and contact area to adjoining support structure components of the motor vehicle body can also be formed by means of the at least one support profile. This proves
15 to be particularly advantageous for adhesive fastening of the rear floor module to the motor vehicle body.

According to a further configuration, inserts which are differently configured and fitted with different motor vehicle components can be optionally fastened to the
20 fastening structure. Structural and geometrical modifications which are caused by different motor vehicle components can be completely offset via the rear floor module. If for example a hybrid drive is provided, the rear floor module can be fitted with hybrid drive-specific motor vehicle components, while in a different type of motor vehicle configuration, which for example provides a pull-out load carrier or a
25 spare wheel trough, the rear floor module can be fitted with a motor vehicle component configured as a pull-out.

In a further configuration, the rear floor module can be fastened via the fastening structure of the support structure of the motor vehicle body. The fastening
30 structure of the rear floor module in this case fulfils two different functions. On the one hand, the insert can be fastened to the rear floor module with the at least one motor vehicle component arranged thereon in a preassembly configuration, for example for forming a preconfigured assembly. The rear floor module preconfigured in this manner can then be fastened to the motor vehicle body with the same

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fastening structure, which for example coincides with the connecting structure of the rear floor module. Because of this it can be achieved furthermore that the fastening points on the insert side can be directly or indirectly fastened to the support structure of the motor vehicle body. Mechanical stresses and loads on the trough and the back wall can be kept as low as possible in this manner.

According to a further configuration, the at least one trough and the back wall are designed in one piece. Trough and back wall can be configured as sections of a one-piece molding or casting. Because of this, a separate mutual assembly of trough and back wall is omitted. Because of this, the total number of components for the rear floor module can also be reduced.

According to a further configuration, the rear floor module is formed as a fiber-reinforced plastic body. In this respect, the at least one trough and the back wall form a fiber-reinforced plastic body. The rear floor module can be configured as a fiber composite component. As plastic material, long fiber-reinforced plastics, in particular long fiber-reinforced thermoplastic materials are employed. The reinforcing fibers can be glass fibers, carbon fibers or aramid fibers and combinations formed from these. It is conceivable, furthermore, that fiber-reinforced mats, in particular glass fiber mats, are embedded in the plastic body.

The configuration of the rear floor module in the form of a one-piece plastic body makes possible a weight and cost reduction. Typically, the plastic material should be temperature resistant up to at least 200 °C. This makes possible the use of thermally activatable or thermally settable adhesives for the final fastening of the rear floor module to the motor vehicle body. Here it is also conceivable that the rear floor module can be structurally connected to the motor vehicle by means of such adhesives during the course of a painting or drying process.

According to a further configuration, the fastening structure is integrated in the plastic body. The fastening points of the fastening structure can for example be designed as fastening domes, which for example protrude from or out of the surface of the support profiles. In this respect, the fastening points can provide defined support points for the insert or for the support frame of the same. The fastening

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points can also be stiffened and thus structurally reinforced locally for example by means of metal inserts or by means of a suitable fiber-reinforcement.

According to a further configuration, the at least one motor vehicle
5 component that can be arranged on the rear floor module in a preconfigured manner is configured as an electric energy storage device, a liquid or gas tank. The motor vehicle component can for example be configured as a battery, as a hybrid battery, as a range extender, as a tank for liquefied petroleum gas (LPG), for liquid
10 gas or as a tank for compressed natural gas (CNG), i.e. for compressed natural gas. The motor vehicle component can furthermore be designed as a loudspeaker, for example as a Hi-Fi subwoofer, as amplifier or as final stage. It is conceivable, furthermore, that the trough acts as spare wheel trough, so that the motor vehicle component constitutes a spare wheel.

15 Furthermore, different motor vehicle components for example in the form of a hybrid or auxiliary battery can be configured together with a further trough for example for receiving a spare wheel on one and the same rear floor module.

In a further embodiment, the motor vehicle component is configured as a
20 pull-out, which by means of at least one guide rail of the insert can be transferred through a lockable recess of the rear wall into a pulled-out position. The motor vehicle component in this case is fastened on the insert via the guide rail and consequently arranged on the rear floor module via the insert. Typically, the motor vehicle component, consequently the pull-out, is displaceably or longitudinally
25 displaceably mounted in vehicle longitudinal direction (x) on the insert and thus on the rear floor module via at least two guide rails arranged laterally of the pull-out. The pull-out can act in the manner of a drawer as a pull-out load carrier. By the rear wall of the rear floor module having a recess or passage opening corresponding to the geometry of the pull-out, the pull-out can be passed through the rear wall so that
30 it protrudes for example from the tail of the motor vehicle in its pulled-out position.

It is conceivable furthermore that the rear floor module is fitted both with a pull-out as well as with an energy storage device. It is conceivable, furthermore, that the rear floor module comprises multiple troughs which for example are separated

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Finally, according to a further aspect, a motor vehicle is provided which comprises a previously described rear floor module or a previously described motor vehicle body.

5 Brief description of the figures

Further objectives, features and advantageous configurations of the rear floor module, of the motor vehicle body and of the motor vehicle are explained in the following description of exemplary embodiments making reference to the figures.

10 There it shows:

Fig. 1 a lateral view of a motor vehicle,

Fig. 2 a schematic perspective representation of a rear floor module,

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Fig. 3 a top view from above onto a rear floor module according to a first embodiment arranged on the motor vehicle body,

Fig. 4 a cross section along A-A according to Fig. 3,

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Fig. 5 a top view from the top onto a second configuration of a rear floor module arranged on the motor vehicle body,

Fig. 6 a cross section along B-B according to Fig. 5,

25

Fig. 7 a further configuration of a rear floor module arranged on the motor vehicle body in a top view from above,

Fig. 8 a cross section along C-C according to Fig. 7,

30

Fig. 9 a further embodiment of the rear floor module in top view from above and

Fig. 10 a cross section along C-D according to Fig. 9.

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Detailed description

In Fig. 1, a motor vehicle 1 configured as a passenger car is shown in lateral view. The motor vehicle 1 comprises a self-supporting motor vehicle body 2 with a support structure 3. As is exemplarily indicated in Fig. 3, the support structure 3 comprises two longitudinally extending side members 21, 22 which are structurally connected to one another via cross members 23, 24 which are spaced from one another in motor vehicle longitudinal direction (x). The side members 21, 22 typically extend as far as to the vehicle rear, i.e. they extend backwards, opposite to the travelling direction of the motor vehicle, beyond the cross member 24 configured as axle cross member.

Outside the side members 21, 22, the motor vehicle 2 comprises a right and a left wheel housing 25, 26 each. In travelling direction in front of and behind the wheel housings 25, 26, floor plate sections 28 are arranged between the side members 21, 22 and side walls laterally spaced from these, which are not shown here. Between the side members 21, 22, a rear floor module 10 can be arranged, which in Figure 2 is shown insulated and in a perspective view. The rear floor module 10 comprises a one-piece plastic body 11, which is typically fiber-reinforced.

The plastic body 11 can in particular be long fiber-reinforced. It is also conceivable that the plastic body 11 is at least locally reinforced with fiber mats. Furthermore, the plastic body 11 can be configured reinforcement-profiled at least in sections. It is conceivable that individual part regions of the plastic body for example comprise ribs or a hexagonal reinforcing structure. The rear floor module 10 furthermore comprises a trough 12 configured as receiving depression, which is bounded laterally and towards the front by lateral cheeks 15. The rear floor module 10 furthermore comprises a back wall 20, which typically extends in the plane formed by vehicle vertical axis (z) and vehicle transverse direction (y).

The back wall 20 can be incorporated surface-flush in the outer paneling of the motor vehicle in the final assembly configuration on the motor vehicle 1. Towards the top, the back wall 20 can for example bound a trunk or tail aperture towards the bottom or contribute to the loading edge of a tail or trunk aperture or

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form the same. The back wall 20 can also bound the trough 12 towards the back towards the vehicle rear. In the region of the trough 12, the rear floor module has a floor 14 which is typically configured flat, which serves as insert for a floor plate.

5 The rear floor module 10 furthermore comprises support profile 16, 17, 18 adjoining the lateral cheeks 15 of the trough 12 projecting towards the outside and towards the front. Here, the support profiles 16, 17, 18 are configured in one piece and in a manner of speaking configured as an assembly rim protruding towards the outside and enclosing the trough 12. For the final assembly of the rear floor module
10 10 on the support structure 3 of the motor vehicle body it is provided in particular that the support profile 16, 18 projecting towards the left and towards the right and resting on the associated left and right side members 22, 21 can be pushed on from the back towards the front in vehicle longitudinal direction (x). For the final assembly of the rear floor module 10, lifting of the motor vehicle body 2 is thus not required.
15 The support profile 17 projecting towards the front can rest on the cross member 24 on reaching the final assembly configuration shown in Fig. 3.

 In the region of the support profiles 16, 17, 18, the rear floor module 10 has a fastening structure 30 for arrangement and fastening of at least one motor vehicle
20 component 40, 42, 44, 50 that can be arranged in the trough 12. The fastening structure 30 in particular comprises multiple fastening points 32 which are arranged distributed over the support profile 16, 17, 18, by means of which a wide range of motor vehicle components 40, 42, 44, 50 can be fastened to the rear floor module 10 in a preconfigured manner. By arranging a wide ranging of motor vehicle
25 components 40, 42, 44, 50 on the rear floor module 10, a preconfigured assembly can be formed in this respect, which can be arranged and fastened as a whole to the support structure 3 during the final motor vehicle assembly.

 The fastening structure 30 for the preconfigurable fastening of motor
30 vehicle components 40, 42, 44, 50 on the rear floor module 10 can typically coincide with a connecting structure of the rear floor module 10. By means of the connecting structure, the rear floor module 10 can be fastened to the support structure 3 of the motor vehicle body 2. In other words, the fastening points 32 of the fastening structure 30 have a dual function. On the one hand, the various motor vehicle

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components 40, 42, 44, 50 can be fastened to the rear floor module 10 via the fastening points 32. The rear floor module 10 that is preconfigured in this respect can furthermore be fastened together with the motor vehicle component 40, 42, 44, 50 concerned to the support structure 3 via the same fastening points 32.

5

As is shown in the exemplary embodiment of Fig. 3 and 4, the rear floor module 10 can be configured for receiving an insert 33. The insert 33 in this case comprises a surrounding support frame 34 with two cross members 36. On the cross members 36 in turn a support corset 38 is arranged, which for example serves for receiving and fastening a motor vehicle component 40 configured as a tank.

By way of and by means of the support frame 34, the motor vehicle component 40 configured as an energy storage device can be held and arranged quasi floatingly in the trough 12 so that the trough 12 itself is not exposed to any or only minor mechanical loads. The weight force of the energy storage device 40 is discharged via the support frame 34 into the fastening points 32 of the fastening structure 30 of the rear floor module 10. As is shown in Fig. 4, the fastening points 32 of the rear floor module 10 are directly located above the side member 21, 22, so that the weight force of the motor vehicle component 40 can be directly or indirectly transmitted to the support structure 3 of the motor vehicle body 2. The trough 12 in this respect can be configured comparatively thin-walled, in a weight and cost saving manner.

Fig. 5 and 6 shows a further configuration of the rear floor module 10. In this embodiment, a similar or identical trough 12 and a support frame 34 which is comparable to or identical with Fig. 3 is provided. On the support frame 34 however guide rails 52 which are laterally extended longitudinally and projecting downwards into the trough are arranged, between and on which a motor vehicle component 50 configured as pull-out is displaceably mounted in longitudinal direction. The back wall 20 for this purpose comprises a lockable recess 54, through which the motor vehicle component 50 acting as drawer can be transferred into a pulled-out position projecting from the vehicle tail.

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Instead of a drawer-like pull-out 50, the motor vehicle component 50 concerned can for example be configured also as a pull-out load carrier, in particular as a bicycle or generally a two-wheel vehicle carrier.

5 In a further embodiment shown in Fig. 7 and 8 the rear floor module 10 is fitted with an insert 33 likewise comprising a support frame 34. In contrast with the two previously described configurations, the motor vehicle component 42 in this case is configured as a comparatively large battery which fills out almost the entire internal volume of the trough 12. Here it is also provided that the weight force of the
10 motor vehicle component 42 can be predominantly transmitted via the support frame 34 via the various fastening points 32 directly onto the side members 21, 22 and/or onto the cross member 24.

 In addition to this, one or multiple spacing elements 46 can be arranged in
15 the intermediate space between a floor of the motor vehicle component 42 and the floor 14 of the trough 12, via which at least a part of the weight force of the motor vehicle component 42 can also be transmitted to the trough 12. In this way, mechanical loads can be transmitted to the support structure 3 of the motor vehicle body both via the support frame 34 and the insert 33 as well as via the trough 12
20 which is typically configured in a fiber-reinforced manner.

 Fig. 9 and 10 show a further configuration of the rear floor module 60. Said rear floor module 60 in contrast with the rear floor modules of Fig. 2 to 8 comprises two troughs 62, 64, which are separated from one another via a support section 66.
25 Here, the trough 62 is configured as a front trough, while the trough 64 is designed as a rear trough spaced therefrom in vehicle longitudinal direction (x). Opposite to the travelling direction of the motor vehicle 1, the trough 64 is bounded by the back wall 20. On the back wall 20, for example a back lamp 68 can be arranged in a preconfigured manner.

30

 The front trough 62 in this case can serve for receiving a comparatively minor and accordingly small-dimensioned motor vehicle component 44. This can for example be configured as a hybrid battery. Similar to the configuration shown in Fig. 8, the motor vehicle component 44 can be fastened to the plastic body 11 of the

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rear floor module 10 via a support frame 44 and an insert 33. Corresponding fastening points 32 can also be located for example above the cross member 24 of the support structure 3 in this case, so that direct or indirect discharge of mechanical forces into the support structure is also provided here.

5

The support section 66 of the rear floor module 60 can be typically provided with a structural reinforcement. This can be structurally stiffened either by a suitable stiffened configuration of the plastic body 11 or by embedding fiber mats and/or structurally reinforced metal inserts, so that adequately stable and torsionally rigid fastening and assembly is provided for the support frame 34.

10

The shown embodiments merely show possible configuration of the invention to which further numerous versions are conceivable and within the scope of the invention. The exemplarily shown exemplary embodiments must in no way be interpreted as restrictive with respect to the scope, the applicability or the configuration possibilities of the invention. The present invention merely shows the person skilled in the art a possible implementation of an exemplary embodiment according to the invention. Accordingly, a wide range of modifications can be performed with respect to the function and arrangement of described elements without leaving the scope of protection as defined by the following claims or its equivalent.

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List of reference numbers

5	1	Motor vehicle
	2	Motor vehicle body
	3	Support structure
	10	Rear floor module
	11	Plastic body
10	12	Trough
	14	Floor
	15	Lateral cheek
	16	Support profile
	17	Support profile
15	18	Support profile
	20	Back wall
	21	Side member
	22	Side member
	23	Cross member
20	24	Cross member
	25	Wheel housing
	26	Wheel housing
a	28	Floor plate section
	30	Fastening structure
25	32	Fastening point
	33	Insert
	34	Support frame
	36	Cross member
	38	Support corset
30	40	Motor vehicle component
	42	Motor vehicle component
	44	Motor vehicle component
	46	Spacer element
	50	Motor vehicle component

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	52	Guide rail
	54	Recess
	60	Rear floor module
	62	Trough
5	64	Trough
	66	Support section
	68	Tail lamp

Patent Claims

1. A rear floor module for arrangement on a motor vehicle body (2), with at least one trough (12; 60, 62) comprising a floor (14), with a back wall (20)
5 and with a fastening structure (30), which comprises at least one fastening point (32) for fastening at least one motor vehicle component (40, 42, 44, 50) that can be arranged in the trough (12; 60).
2. The rear floor module according to Claim 1, furthermore with an insert (33)
10 that can be fastened to the fastening structure (30), by means of which the motor vehicle component (40, 42, 44, 50) can be fastened to the rear floor module.
3. The rear floor module according to Claim 2, wherein the insert (33)
15 comprises a support frame (34), which can be fastened at multiple fastening points (32) of the fastening structure (30) located outside the trough (12; 60, 62).
4. The rear floor module according to any one of the preceding claims, which
20 furthermore comprises a support profile (16, 17, 18) facing away from the back wall (20) projects from the trough (12; 60, 62) towards the front or at least one support profile (16, 17, 18) laterally projecting from the trough (12; 60, 62), on which the at least one fastening point (32) is arranged.
- 25 5. The rear floor module according to any one of the preceding claims 2 to 4, wherein inserts (33) which are differently configured and fitted with different motor vehicle components (40, 42, 44, 50) can be optionally fastened to the fastening structure (30).
- 30 6. The rear floor module according to any one of the preceding claims, which can be fastened to a support structure (3) of the motor vehicle (2) via the fastening structure (30).

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7. The rear floor module according to any one of the preceding claims, wherein the at least one trough (12; 60, 62) and the back wall (20) are formed in one piece.
- 5 8. The rear floor module according to any one of the preceding claims, wherein the at least one trough (12; 60, 62) and the back wall (20) form a fiber-reinforced plastic body (11).
9. The rear floor module according to Claim 8, wherein the fastening structure
10 (30) is integrated in the plastic body (11).
10. The rear floor module according to any one of the preceding claims, wherein the motor vehicle component (40, 42, 44) is configured as an electric energy storage device, as a liquid or as a gas tank.
- 15 11. The rear floor module according to any one of the preceding claims, wherein the motor vehicle component (50) is configured as a pull-out, which by means of at least one guide rail (52) of the insert (33) can be transferred through a lockable recess (54) of the back wall (20) into a pulled-out
20 position.
12. The rear floor module according to any one of the preceding claims, wherein on the back wall (20) at least one tail lamp (68) is arranged.
- 25 13. The motor vehicle body with a rear floor module (10; 60) according to any one of the preceding claims.
14. The rear floor module according to Claim 13, wherein the rear floor module (10; 60) fitted with the at least one motor vehicle component (40, 42, 44, 50)
30 can be pushed in vehicle longitudinal direction (x) into a region located between rear side members (21, 22) of the support structure (3) of the body and can be connected to the support structure (3) via the fastening structure (30).

...

15. A motor vehicle with a rear floor module (10; 60) according to any one of the preceding claims.



Application No: GB1502551.3

Examiner: Simon Rose

Claims searched: 1-15

Date of search: 14 July 2015

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1, 6-10, 12-13, 15	GB 2486521 A (GM) See particularly Figures 1 and 4 and abstract
X	1, 6-7, 10, 12-13, 15	CN 103523100 A (DONGFENG) See particularly Figures 1-12 and WPI abstract accession number 2014-E94547
X	1-2, 4-7, 12-13, 15	US 2010/0225135 A1 (TANEDA) See particularly Figures 1-5 and abstract
X	1, 6-10, 12-13, 15	DE 102007041382 A1 (AUDI) See particularly Figures 1-8 and WPI abstract accession number 2009-F39682
X	1-2, 4-7, 10, 12-13, 15	US 2011/0262801 A1 (SCHWAB) See particularly Figures 1-4 and abstract
X	1, 6-7, 12-13, 15	CN 201205930 Y (SAIC CHERY) See particularly Figures 1-4 and WPI abstract accession number 2009-G42702
X	1, 6-7, 12-13, 15	DE 102005017249 A1 (DAIMLERCHRYSLER) See particularly Figures 1-4 and WPI abstract accession number 2006-307465

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
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Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

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Worldwide search of patent documents classified in the following areas of the IPC

B62D

The following online and other databases have been used in the preparation of this search report



EPODOC, WPI

International Classification:

Subclass	Subgroup	Valid From
B62D	0025/20	01/01/2006