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(72) Inventor: **RYDELL, Andreas**
40531 Göteborg (SE)

(74) Representative: **Maiwald GmbH**
Engineering
Elisenhof
Elisenstrasse 3
80335 München (DE)

(71) Applicant: **Volvo Car Corporation**
40531 Göteborg (SE)

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Amended claims in accordance with Rule 137(2)
EPC.

(54) **ENCLOSURE ARRANGEMENT FOR AN AIR CONDITIONING COMPRESSOR**

(57) The present disclosure relates to an enclosure arrangement (1) for an A/C compressor (2) of a vehicle (50). The enclosure arrangement (1) comprising a receptacle (10) configured to house the compressor (2) and a cover member (11) arranged to cover the receptacle (10). The receptacle (10) comprising a base plate (14) and a wall portion (15) extending from the base plate (14). Moreover, the receptacle (10) comprising an inner vol-

ume (12), a sound absorbing material (13) being located within the inner volume (12). Furthermore, a method for manufacturing an enclosure arrangement is disclosed. The method comprises forming (101) a receptacle (10) for housing the compressor (2), arranging (102) a sound absorbing material (13) within the inner volume (12), and forming (103) a cover member (11) for covering the receptacle (10).

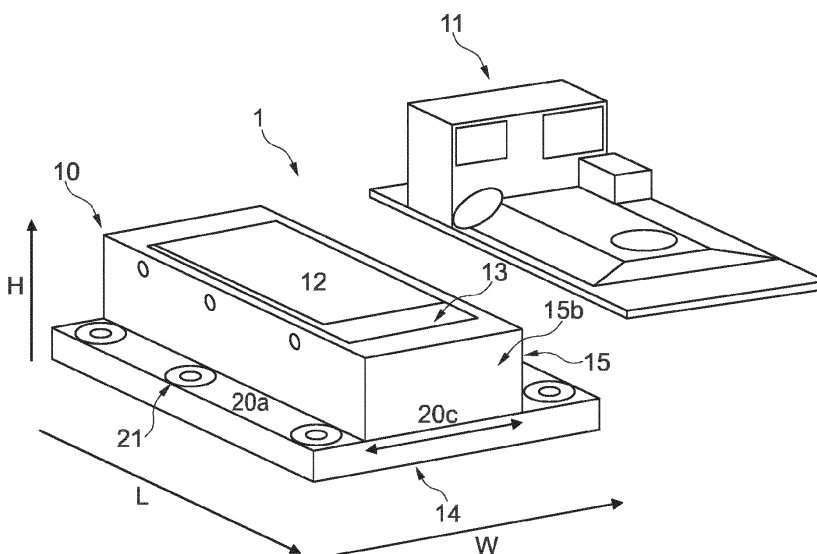


Fig. 1

Description

TECHNICAL FIELD

[0001] The present disclosure relates an enclosure arrangement for an air conditioning (A/C) compressor of a vehicle, a vehicle comprising such an enclosure arrangement and a method for manufacturing such an enclosure arrangement.

BACKGROUND ART

[0002] Modern vehicles require air-conditioning systems to provide comfortable temperature conditions to vehicle occupants by generating hot or cold air depending on the requirements of the vehicle occupants. Fundamental to these air-conditioning systems is the air conditioning (A/C) compressor. The compressor puts a refrigerant under high pressure before it pumps the refrigerant in a condenser, where it changes from gas to liquid. This process produces vibrations, which are perceived as noise by vehicle occupants. For vehicles driven by an internal combustion engine, this noise is often masked by the louder noise of the internal combustion engine. For electrically driven vehicles, which engines produce less noise, the noise of the A/C compressor is now easier to perceive for vehicle occupants, thereby reducing travelling comfort. In both cold and hot climates, as well as during fast charging, the A/C compressor needs to rotate at a high speed, which produces massive noise. There is consequently a need to provide an enclosure arrangement directed to reducing noise and vibrations arising from A/C compressors in vehicles.

[0003] Even though current enclosure arrangements provide noise and vibration isolation to some extent, these solutions are typically expensive and complex in structure while also lacking sufficient isolation properties.

[0004] Based on the above, there is a need to provide enclosure arrangements for A/C compressors in vehicles that reduce noise and vibrations arising from the A/C compressors. In particular, there is a need to provide an enclosure arrangement that reduce noise and vibrations arising from A/C compressors while also being cost-efficient and convenient in manufacturing.

[0005] Thus, it would be desirable to provide an improved enclosure arrangement for A/C compressors that fulfills requirements related to noise and vibration isolation while also being cost-efficient and convenient in manufacturing.

SUMMARY

[0006] It is therefore an object of the present disclosure to provide an enclosure arrangement, a method for manufacturing an enclosure arrangement and a vehicle comprising such an enclosure arrangement to mitigate, alleviate or eliminate one or more of the above-identified deficiencies and disadvantages.

[0007] This object is achieved by means of the subject matter of the independent claims of the present disclosure, wherein further aspects of the present disclosure are incorporated in the dependent claims.

[0008] The present disclosure relates to an enclosure arrangement for an A/C compressor for a vehicle. The enclosure arrangement comprises a receptacle arranged to house the compressor and a cover member arranged to cover the receptacle. The receptacle comprises a base plate and a wall portion extending from the base plate. Further, the receptacle comprises an inner volume and a sound absorbing material is located within the inner volume.

[0009] An advantage of the enclosure arrangement according to the present disclosure is that by providing the inner volume of the receptacle with a sound absorbing material, vibrations from the A/C compressor when in use, which may result in sound, noise, and spatial displacement of the A/C compressor, will be reduced. As the sound absorbing material is located within the inner volume of the receptacle, it provides an arrangement which effectively reduces the noise of the A/C compressor and at the same time is convenient to assemble and to manufacture.

[0010] An advantage of the enclosure arrangement comprising the base plate and the wall portion extending from the base plate is that it provides a simple and yet effective arrangement to cover a large portion of the A/C compressors achieved with as few parts as possible. According to this example, the bottom part of an A/C compressor may be covered by the base plate and surrounded by the wall portion, in other words the wall portion may be a number of walls, preferably four. The wall portion may be a number of walls, not limited to any specific number, shape or measurements. Additionally, the base plate is not limited to a "plate" in the definition of the word, it only pertains to a part of the arrangement arranged to house the bottom part of the A/C compressor. The base plate may therefore be a planar or non-planar surface. The base plate may for example be semi-cylindrical.

[0011] Further, the receptacle may comprise at least a first isolation portion and a second isolation portion, wherein each first and second isolation portion may comprise isolation elements. Each isolation portion may extend away from the wall portion (i. e. away from an outside surface of the wall portion forming an excess portion). It should be noted that in some aspects of the disclosure, the isolation portions may extend away from the base plate. An advantage of this is that the isolation elements may further improve the sound and vibration reduction properties of the enclosure arrangement for the A/C compressor. According to this example, at least two separate portions of the base plate may comprise isolation elements. The isolation elements may be attached to the first and second isolation portion. The isolation elements are preferably bushings extending through at least a part of a thickness of the receptacle. The bushings may be made of an elastic material, for example

rubber.

[0012] Further, the base plate may comprise a central portion, wherein the first and the second isolation portion may extend away from opposing sides thereof. Accordingly, the wall portion may extend in a height direction, orthogonally from a surface of the base plate. Further, the wall portion may form an enclosed space in a width direction and a length direction of the base plate. Therefore, the central portion of the base plate may be the portion where the wall portion extends planarly, and portions extending away from the central portion may be considered isolation portions. Consequently, any portion that extends beyond the width or the length of the wall portion may be considered isolation portions. In other words, these isolation portions may also be considered excess portions of the base plate, where the base plate extends beyond the dimensions of the wall portion in a planar view.

[0013] Further, the cover member may be connected to the receptacle by a hinge mechanism. An advantage of this is that a simple arrangement to fully enclose the A/C compressor is achieved. The hinge allows also the A/C compressor to be manually inserted/removed into the enclosure arrangement in a time-efficient manner. Additionally, maintenance of the A/C compressor is more convenient as it does not require removal of the A/C compressor from the enclosure arrangement. The hinge mechanism may be attached to the wall portion and the cover member via any attachment means (e.g. bolts or screws). The hinge mechanism may rotate along a rotation axis extending along the width or the length of the wall portion.

[0014] Further, the base plate and the wall portion may be integrally formed. An advantage of this is that the complexity of the enclosure arrangement is further reduced, and assembly of the enclosure arrangement is simplified. Expressed differently, the wording integrally formed is to be understood as the base plate and the wall portion is manufactured as "unitary part" or "one part" via suitable manufacturing processes. It could also be understood as the base plate and the wall portion may form the receptacle for A/C compressor as a merged part. Therefore, a portion of the base plate may function as a bottom cover for the A/C compressor, hence enclosing the A/C compressor bottom. The wall portions may function as a cover for other portions of the A/C compressor.

[0015] Further, the sound absorbing material may be attached to at least one of a receiving surface of the base plate and an inner surface of the wall portion. "Attached" can here be understood as at least partially and preferably completely covering the respective surface. In an example, the sound absorbing material may be attached to the receiving surface and the inner surface of the wall portion. The wall portion may comprise four walls, the sound absorbing material may be attached to the receiving surface and the inner surface of all four walls of the wall portion. An advantage of this is that the sound absorbing material may be fixed to the base plate and/or

the wall portion, which further improves the ease of mounting the A/C compressor within the receptacle. An advantage of having sound absorbing material to both the base plate and wall portion is that it allows for the enclosure arrangement to be compatible with A/C compressors of different shapes i.e. such a deployment of the sound absorbing material can compensate for deviating shapes of different A/C compressors. The sound absorbing material may be attached using an adhesive during or after manufacture of the base plate and the wall portion. Alternatively, the sound absorbing material may be integrated to at least one of a receiving surface of the base plate and an inner surface of the wall portion during manufacture. In this example, the sound absorbing material may be viewed as an integrated part of the receptacle itself, either through its integration to the receiving surface of the base plate, or to the inner surface of the wall portion, or both.

[0016] Further, the receiving surface of the base plate and the inner surface of the wall portion may comprise a plurality of distributed ridges, preferably elongated ridges. An advantage of this is that the ridges may further improve the sound and vibration reduction properties of the enclosure arrangement for the A/C compressor. In other words, the ridges may be rib-shaped parts or protrusions of the receiving surface of the base plate or the inner surface of the wall portion. The ridges may be integral with the base plate, the wall portion, or both, during manufacture.

[0017] Further, the base plate of the enclosure arrangement may be arranged to be attached to a body structure or a sub-frame of a vehicle. The base plate may be attached to the body structure or the sub-frame of the vehicle by insertion of attachment means (e.g. bolts or screws) through the isolation elements so that the bottom of the base plate faces the ground when attached to the vehicle. The enclosure arrangement may be located within the rear of the vehicle, the front of the vehicle or in the cabin of the vehicle. There may exist different advantages to the aforementioned locations of attachment locations for the enclosure arrangement. As an example, arranging the enclosure arrangement in the rear end of the vehicle may further reduce perceived noise levels for the driver, as the A/C compressor may be located as far away from the driver as possible. Arranging the base plate to a body structure or a sub-frame of a vehicle provides several advantages. Firstly, such an arrangement improves the noise and vibration insulation as such. Secondly, such an arrangement allows for an easy assembly of an A/C compressor to the enclosure arrangement as it allows the A/C compressor to be manually inserted/removed into the enclosure arrangement in a time-efficient manner. For example, in the aforementioned configuration the A/C compressor can be inserted into the enclosure arrangement from above. Thus, there is no need for extra measures to insert/remove an A/C compressor in such an enclosure as the only necessary operation is to open/close the cover member before/after insertion/re-

moval.

[0018] Further, the enclosure arrangement may comprise at least one draining channel, the at least one channel extending through the base plate and the sound absorbing material. An advantage of this is that the draining channel increases the life-length of the sound absorbing material by getting rid of excess fluids within the inner volume of the receptacle. As the enclosure arrangement may be attached to a body structure or a sub-frame of a vehicle such that the bottom of the base plate faces the ground when attached to the vehicle, the draining channels may also face the ground. This provides a simple provision for drainage as fluids will generally be drained towards the ground due to gravity.

[0019] Further, the sound absorbing material may comprise a plurality of distributed reinforcing elements. An advantage of this is that the reinforcing elements may support the A/C compressor and at least partially maintain the noise/vibration reduction properties of the enclosure arrangement even if the sound absorbing material naturally deteriorates through prolonged use. As such, the product life-cycle of the enclosure arrangement may be extended.

[0020] Further, the reinforcing element may be a supplementary sound absorbing material having a greater density than the sound absorbing material. An advantage of this is that the reinforcing element may withstand higher forces than that of the sound absorbing material, providing improved support for the sound absorbing material as it naturally deteriorates through prolonged use. The supplementary sound absorbing material may be in the form of bricks arranged in cavities of said sound absorbing material. The reinforcing elements may be T-shaped or have any other suitable polygonal form such as a cuboidal shape. A T-shaped form of the reinforcing element allows the sound absorbing material to be compressed further without reducing the sound/vibration reduction properties of the enclosure arrangement.

[0021] Further, the wall portion of the receptacle may be of a rectangular shape. However, the wall portion may have any other polygonal shape.

[0022] Further, the cover member may comprise a shape corresponding to an associated part of the A/C compressor. In other words, the cover member may provide a snug fit of the top part of the A/C compressor to be housed in the enclosure arrangement. Additionally, the A/C compressor of choice in the enclosure arrangement may have provisions for electricity or coolant. As such, the cover member may have at least one opening to accommodate for such provisions.

[0023] Further, the sound absorbing material may be a foam, preferably polyurethane or polystyrene. However, foams with a density up to 500 kg/m³ may provide adequate sound absorption. An advantage of this is that foam materials are able to conform to the shape of the A/C compressor. As such, the enclosure arrangement may be suitable for a multitude of different shapes and sizes of A/C compressors, reducing the need to manu-

facture specialized enclosure arrangements.

[0024] In an aspect of the disclosure, at least one of the receptacle and the cover member are made of a plastic material, preferably a polyamide. An advantage of providing the receptacle and cover member made of polyamide is that polyamide provides the surprising effect of being able to reduce vibration and noise effectively while also providing heat insulation compared to other materials. Accordingly, having a receptacle and cover member made of polyamide not only improves the noise and heat insulation, it also improves the performance of the A/C compressor as such.

[0025] There is further provided a vehicle comprising the enclosure arrangement according to any aspect of the present disclosure.

[0026] Moreover, there is also provided a method for manufacturing an enclosure arrangement according to any aspect of the present disclosure. The method comprises (not necessarily in this order) forming a receptacle comprising an inner volume, arranging a sound absorbing material within the inner volume and forming a cover member for enclosing the receptacle.

[0027] Further, the method step of forming can be performed by injection molding or additive manufacturing. Injection molding may enable fast production rates and reduces the complexity of the manufacturing process by reducing secondary machining operations. Additive manufacturing may be used to decrease waste and provide customizations to shapes of the different parts of the enclosure arrangement.

[0028] It should be noted that the above examples may be combined with each other irrespective of the aspect involved. Accordingly, the method may be combined with structural features and, likewise, the connection part and the part connection may be combined with features described above with regard to the method.

[0029] These and other aspects of the present disclosure will become apparent from and elucidated with reference to the examples described hereinafter.

[0030] Examples of the disclosure will be described in the following with reference to the following drawings.

BRIEF DESCRIPTION OF DRAWINGS

[0031] In the following, the disclosure will be described in a non-limiting way and in more detail with reference to exemplary aspects illustrated in the enclosed drawings, in which:

Fig. 1 illustrates an exploded objective view of an enclosure arrangement for an A/C compressor of a vehicle;

Fig. 2 illustrates a side view of an enclosure arrangement according to the present disclosure, housing an A/C compressor, the enclosure arrangement being attached to a body structure or a sub-frame of a vehicle;

Fig. 3 illustrates a side view of an enclosure arrangement according to the present disclosure, comprising distributed reinforcing elements;

Fig. 4a illustrates a top view of an enclosure arrangement according to the present disclosure, without a cover member;

Fig. 4b illustrates a top view of an enclosure arrangement according to the present disclosure, with a cover member and housing an A/C compressor;

Fig. 5 illustrates a top view of an enclosure arrangement according to the present disclosure, comprising distributed ridges;

Fig. 6 illustrates a vehicle comprising the enclosure arrangement according to the present disclosure; and

Fig. 7 illustrates a method for manufacturing an enclosure arrangement according to the present disclosure.

[0032] The figures are merely schematic representations and serve only to illustrate examples of the present disclosure. Identical or equivalent elements are in principle provided with the same reference signs.

DETAILED DESCRIPTION

[0033] Figure 1 illustrates an enclosure arrangement 1 for an A/C compressor 2 (shown e.g. in figure 2) of a vehicle 50 (shown in figure 6). The enclosure arrangement comprises a receptacle 10 arranged to house the compressor and a cover member 11 arranged to close the receptacle 10. As the top of the A/C compressor 2 housed within the enclosure arrangement 1 may be irregular, the shape of the cover member 11 may therefore be adapted to correspond to the shape of the top of A/C compressor 2, as exemplified by the cover member 11 shown in figure 1. The receptacle comprises an inner volume 12 which contains a sound absorbing material 13. As shown in figure 1, the sound absorbing material 13 may occupy the inner volume 12 nearly fully. However, the sound absorbing material 13 may alternatively at least partially occupy the inner volume 12. The receptacle comprises a base plate 14 and a wall portion 15, which wall portion 15 extends from the base plate 14 in a height direction H, in other words orthogonally from a surface of the base plate 14. The wall portion 15 forms an enclosed space in a width direction W and a length direction L. The receptacle 10 may be integrally formed, where the base plate 14 and the wall portion 15 are in fact manufactured as one integral part. In figure 1, this wall portion 15 is illustrated to extend from the surface of the base plate 14, in the height direction H. Figure 1 illustrates a central portion 20c of the receptacle 10. As illustrated in

Figure 1, the central portion 20c may be limited by the width of the wall portion 15. Further, Figure 1 illustrates that a first isolation portion 20a and a second isolation 20b extend away from the receptacle 10, more specifically, figure 1 illustrates that said isolation portions 20a, 20b extend from the base plate 14 beyond the width of the wall portion 15 in the width direction W. The isolation portions may alternatively or additionally extend in the length direction L, in which the central portion 20c would be limited by the length of the wall portion 15, as seen in the length direction L. The first isolation portion 20a and/or the second isolation portion 20b comprises isolation elements 21. As shown in Figure 1, these isolation elements may comprise a bushing of an elastic material, for example rubber. The isolation elements 21 in Figure 1 extend in the height direction H but may extend in different directions. Additionally, or alternatively, the outer surface 15b of the wall portion 15 may comprise isolation elements 21 (not shown). Further, the cover member 11 may be attached to the receptacle 10 by a hinge mechanism (not shown), the hinge mechanism may be attached to wall portion 15 and the cover member 11 with a rotation axis extending in the width direction W or the length direction L.

[0034] Figure 2 illustrates a side view of the enclosure arrangement 1 housing an A/C compressor 2. As shown in figure 2, the A/C compressor 2 is housed within an inner volume 12 of the receptacle 10 of the enclosure arrangement 1. The base plate 14 covers the bottom part of the A/C compressor 2, whereas the wall portion 15 covers the sides of the A/C compressor. The sound absorbing material 13 located in the inner volume 12 may be a foam and is therefore displaced by the A/C compressor 2. Figure 2 illustrates that the sound absorbing material 13 is attached to a receiving surface 14a of the base plate 14 and an inner surface 15a of the wall portion 15. Preferably, the foam is attached to the receiving surface 14a of the base plate 14 and the inner surface 15a of the wall portion 15, surrounding the inner surface 15a of the wall portion 15. However, the sound absorbing material 13 may solely be attached to the receiving surface 14a or the inner surface 15a. The sound absorbing material 13 may also only be attached partially to either or both of the receiving surface 14a and the inner surface 15a. The receiving surface 14a is here shown to be the part of the base plate 14 that is enclosed by the wall portion 15, whereas the inner surface 15a is the inner surface of the walls of the wall portion 15. The enclosure arrangement 1 may be arranged to a vehicle 50 (not shown), for example a body structure or sub-frame 51 of said vehicle 50. The base plate 14 may be attached to the body structure or sub-frame 51 of the vehicle 50 by insertion of attachment means 23 (e.g. bolts or screws) through the isolation elements 21. However, the attachment means 23 may be entirely separate from the isolation elements 21. At least one draining channel 24 may extend through the base plate 14 and the sound absorbing material 13.

[0035] Figure 3 illustrates a side view of the enclosure arrangement 1 housing an A/C compressor 2. The enclosure arrangement comprises reinforcing elements 22, the reinforcing elements 22 are located within the sound absorbing material 13 of the inner volume 12. The reinforcing elements 22 may be of any material with a higher density than the sound absorbing material 13. The shape and distribution of the reinforcing elements 22 may differ. For example, cavities in the base plate 14 or the wall portion 15 of the receptacle 10 may be used to arrange the reinforcing elements 22 therein. The reinforcing elements 22 shown in figure 3 are of a generic shape but may be specifically designed to reinforce the sound absorbing material 13 optimally with regards to the sound absorbing material chosen and the A/C compressor 2 housed within the enclosure arrangement 1.

[0036] Figure 4a illustrates a top view of the enclosure arrangement 1 absent of an A/C compressor and a cover member. From the top view, the shape of the wall portion 15 illustrated is rectangular, but other shapes are possible.

[0037] Figure 4b illustrates a top view of the enclosure arrangement 1, housing an A/C compressor 2 and closed by the cover member 11. As shown in figure 4b, the cover member 11 may have openings to accommodate for electrical connections or cooling provisions of the A/C compressor 2.

[0038] Figure 5 illustrates another top view of the enclosure arrangement 1. The receiving surface 14a of the base plate 14 is here shown with a plurality of distributed ridges 25. Alternatively, or additionally, the ridges 25 may be distributed on the inner surface 15a of the wall portion 15 (not shown in figure 5). The ridges 25 may be of the same material as the base plate 14 or wall portion 15 and formed integrally with either or both of the base plate 14 or the wall portion 15.

[0039] Figure 6 illustrates a vehicle 50 comprising the enclosure arrangement 1 according to any aspect of the present disclosure, as discussed herein, the enclosure arrangement 1 may be attached to a body structure 51 of the vehicle 50.

[0040] Figure 7 illustrates a flowchart of a method for manufacturing an enclosure arrangement 1 according to any aspect of the present disclosure, the method comprising the steps of forming 101 a receptacle 10 comprising an inner volume 12, arranging 102 a sound absorbing material 13 within the inner volume 12, and forming 103 a cover member 11 for enclosing the receptacle 10. Any of the forming steps 101 and 103 may be performed by injection molding or additive manufacturing to retrieve the receptacle 10 or the cover member 11, respectively.

[0041] Other variations to the disclosed examples can be understood and effected by those skilled in the art in practicing the claimed invention, from the study of the drawings, the disclosure, and the appended claims. In the claims the word "comprising" does not exclude other elements or steps and the indefinite article "a" or "an" does not exclude a plurality. The mere fact that certain

measures are recited in mutually different dependent claims does not indicate that a combination of these measures cannot be used to advantage. Any reference signs in the claims should not be construed as limiting the scope of the claims.

LIST OF REFERENCE SIGNS

Enclosure arrangement	1
A/C compressor	2
Receptacle	10
Cover member	11
Inner volume	12
Sound absorbing material	13
Base plate	14
Receiving portion	14a
Wall portion	15
Inner surface	15a
Outer surface	15b
First isolation portion	20a
Second isolation	20b
Central portion	20c
Isolation element	21
Reinforcing element	22
Attachment means	23
Draining channel	24
Distributed ridges	25
Vehicle	50
Sub-frame	51
Forming	101
Arranging	102
Forming	103

Claims

1. An enclosure arrangement (1) for an A/C compressor (2) of a vehicle (50), the enclosure arrangement (1) comprising:

- a receptacle (10) configured to house the compressor (2),
- a cover member (11) arranged to cover the receptacle (10),

the receptacle (10) comprising a base plate (14) and a wall portion (15) extending from the base plate (14), and
the receptacle (10) comprising an inner volume (12), a sound absorbing material (13) being located within the inner volume (12).

2. The enclosure arrangement (1) according to claim 1, the receptacle (10) comprising at least a first isolation portion (20a) and a second isolation portion (20b), wherein each first and second isolation portion

- (20a, 20b) comprising isolation elements (21), wherein each isolation portion (20a, 20b) extend away from the wall portion (15).
3. The enclosure arrangement (1) according to claim 2, the base plate comprising a central portion (20c), wherein the first and the second isolation portion (20a, 20b) extend away from opposing sides thereof.
 4. The enclosure arrangement according to any of the preceding claims, the cover member being connected to the receptacle (10) by a hinge mechanism.
 5. The enclosure arrangement (1) according to claims 2-4, the base plate (14) and the wall portion (15) being integrally formed.
 6. The enclosure arrangement (1) according to any of the preceding claims, the sound absorbing material (13) being attached to at least one of a receiving surface (14a) of the base plate (14) and an inner surface (15a) of the wall portion (15).
 7. The enclosure arrangement (1) according to claim 6, at least one of the receiving surface (14a) of the base plate (14) and the inner surface (15a) of the wall portion (15) comprising a plurality of distributed ridges (25).
 8. The enclosure arrangement (1) according to claims any of the preceding claims, the base plate (14) being configured to be attached to a body structure or a sub-frame (51) of a vehicle.
 9. The enclosure arrangement according to any of the preceding claims, the sound absorbing material (13) comprising a plurality of distributed reinforcing elements (22).
 10. The enclosure arrangement according to claim 9, the reinforcing element (22) being made of a supplementary sound absorbing material having a greater density than the sound absorbing material (13).
 11. The enclosure arrangement (1) according to any of the preceding claims, the sound absorbing material (13) being made of a foam, preferably polyurethane or polystyrene.
 12. The enclosure arrangement (1) according to any of the preceding claims, at least one of the receptacle (10) and the cover member (11) being made of a plastic material, preferably a polyamide.
 13. A vehicle (50) comprising the enclosure arrangement (1) according to any of claims 1-12.
14. A method for manufacturing an enclosure arrangement (1) for an A/C compressor (2) of a vehicle (50), comprising the steps of:
 - forming (101) a receptacle (10) for housing the compressor (2) and comprising an inner volume (12), the receptacle (10) comprising a base plate (14) and a wall portion (15) extending from the base plate (14),
 - arranging (102) a sound absorbing material (13) within the inner volume (12), and
 - forming (103) a cover member (11) for covering the receptacle (10).
 15. A method according to claim 14, at least one of the steps of forming (101, 103) being performed by injection molding or additive manufacturing.
- Amended claims in accordance with Rule 137(2) EPC.**
1. An enclosure arrangement (1) for an A/C compressor (2) of an electrically driven vehicle (50), the enclosure arrangement (1) comprising:
 - a receptacle (10) configured to house the compressor (2),
 - a cover member (11) arranged to cover the receptacle (10),
 the receptacle (10) comprising a base plate (14) and a wall portion (15) extending from the base plate (14), and
 the receptacle (10) comprising an inner volume (12), a sound absorbing material (13) being located within the inner volume (12), **characterized in that**,
 the receptacle (10) further comprises at least a first isolation portion (20a) and a second isolation portion (20b), wherein each first and second isolation portion (20a, 20b) comprising isolation elements (21), wherein each isolation portion (20a, 20b) extend away from the wall portion (15) beyond a width of the wall portion (15) in a width direction (W).
 2. The enclosure arrangement (1) according to claim 2, the base plate comprising a central portion (20c), wherein the first and the second isolation portion (20a, 20b) extend away from opposing sides thereof.
 3. The enclosure arrangement according to any of the preceding claims, the cover member being connected to the receptacle (10) by a hinge mechanism.
 4. The enclosure arrangement (1) according to claims 2-4, the base plate (14) and the wall portion (15) being integrally formed.

5. The enclosure arrangement (1) according to any of the preceding claims, the sound absorbing material (13) being attached to at least one of a receiving surface (14a) of the base plate (14) and an inner surface (15a) of the wall portion (15). 5
 6. The enclosure arrangement (1) according to claim 6, at least one of the receiving surface (14a) of the base plate (14) and the inner surface (15a) of the wall portion (15) comprising a plurality of distributed ridges (25). 10
 7. The enclosure arrangement (1) according to claims any of the preceding claims, the base plate (14) being configured to be attached to a body structure or a sub-frame (51) of a vehicle. 15
 8. The enclosure arrangement according to any of the preceding claims, the sound absorbing material (13) comprising a plurality of distributed reinforcing elements (22). 20
 9. The enclosure arrangement according to claim 9, the reinforcing element (22) being made of a supplementary sound absorbing material having a greater density than the sound absorbing material (13). 25
 10. The enclosure arrangement (1) according to any of the preceding claims, the sound absorbing material (13) being made of a foam, preferably polyurethane or polystyrene. 30
 11. The enclosure arrangement (1) according to any of the preceding claims, at least one of the receptacle (10) and the cover member (11) being made of a plastic material, preferably a polyamide. 35
 12. A vehicle (50) comprising the enclosure arrangement (1) according to any of claims 1-12. 40
 13. A method for manufacturing an enclosure arrangement (1) for an A/C compressor (2) of an electrically driven vehicle (50), comprising the steps of: 45
 - forming (101) a receptacle (10) for housing the compressor (2) and comprising an inner volume (12), the receptacle (10) comprising a base plate (14) and a wall portion (15) extending from the base plate (14), 50
 - arranging (102) a sound absorbing material (13) within the inner volume (12), and
 - forming (103) a cover member (11) for covering the receptacle (10), 55
- characterized in that**, the receptacle (10) further comprises at least a first isolation portion (20a) and a second isolation portion (20b), wherein each first
- and second isolation portion (20a, 20b) comprising isolation elements (21), wherein each isolation portion (20a, 20b) extend away from the wall portion (15) beyond a width of the wall portion (15) in a width direction (W).
14. A method according to claim 14, at least one of the steps of forming (101, 103) being performed by injection molding or additive manufacturing.

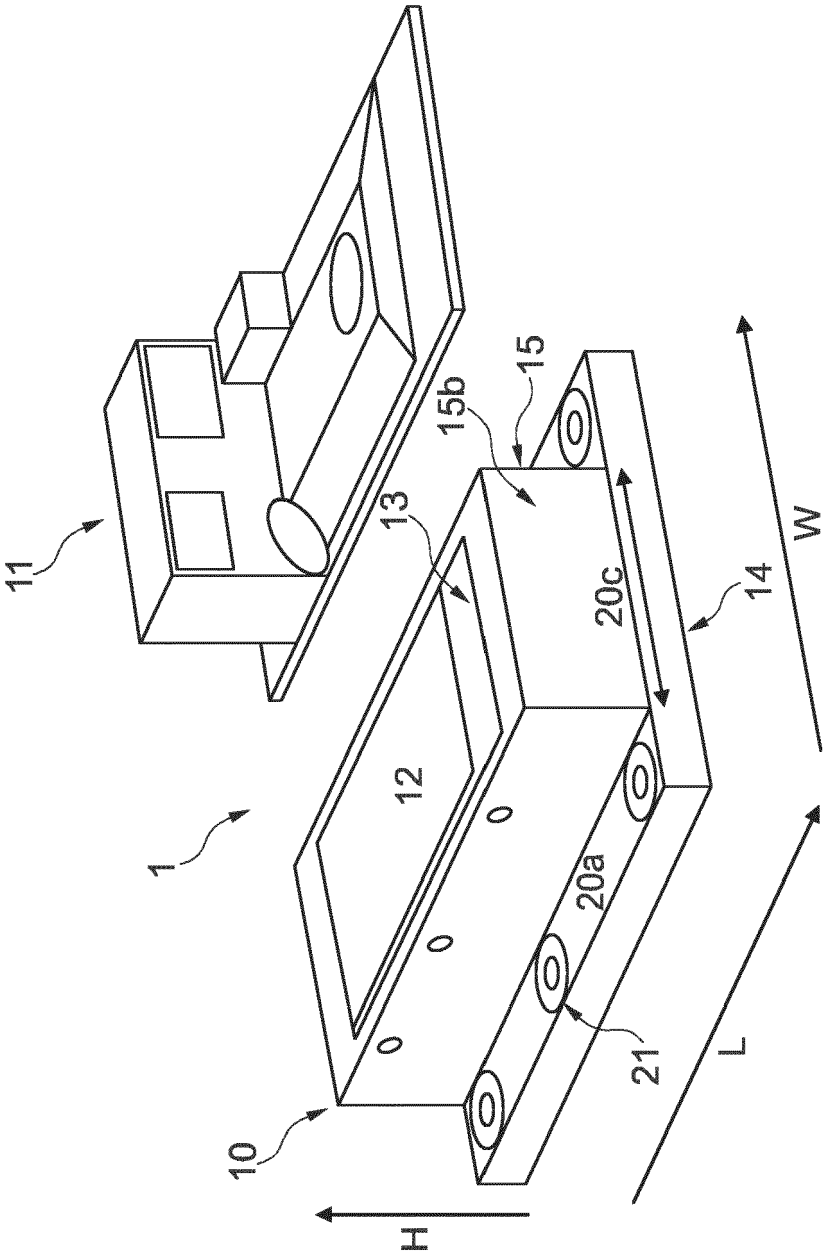
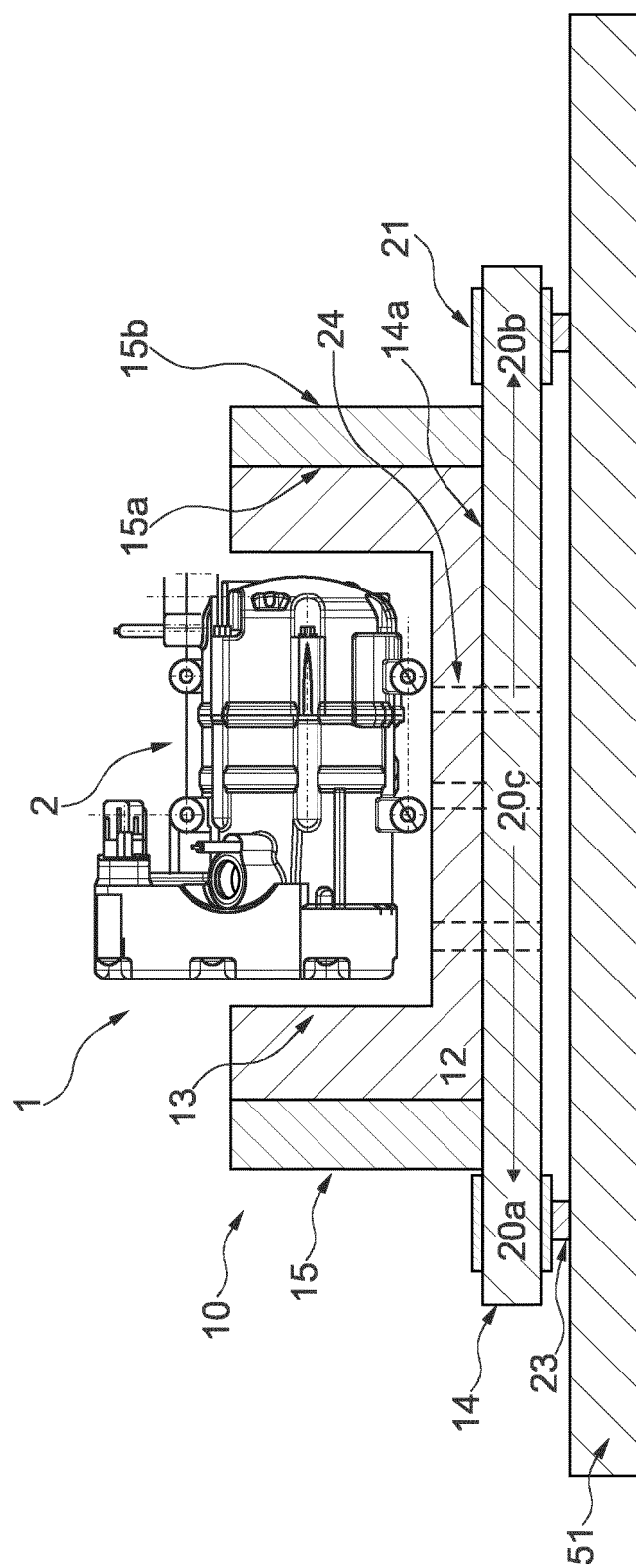


Fig. 1



2.9.4

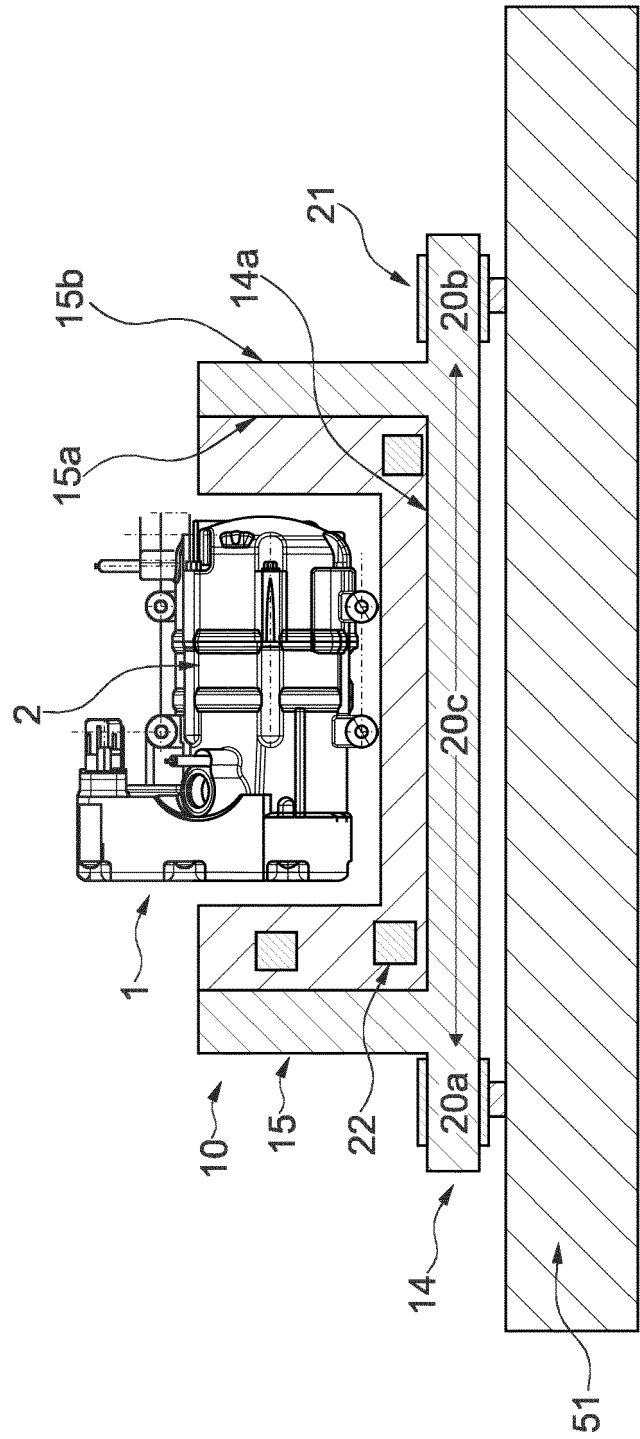


Fig. 3

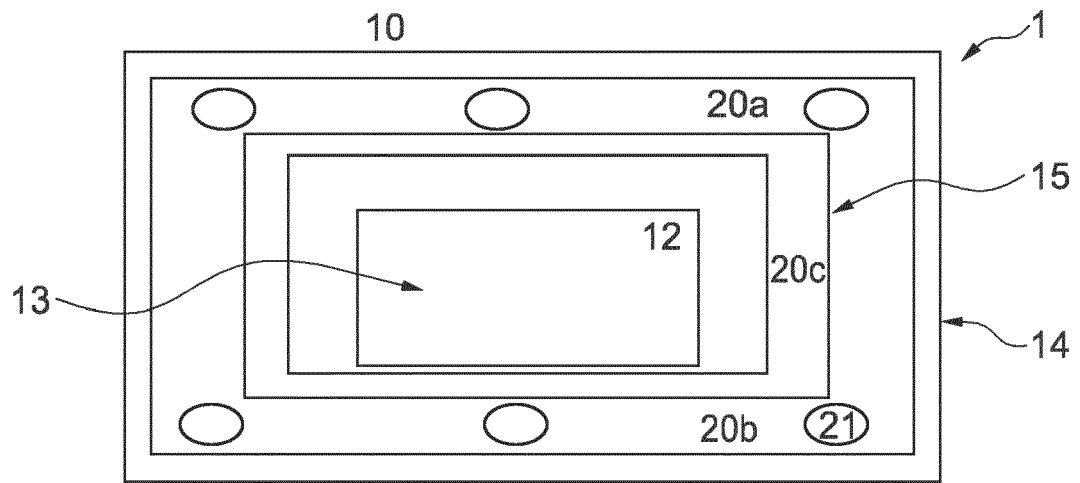


Fig. 4a

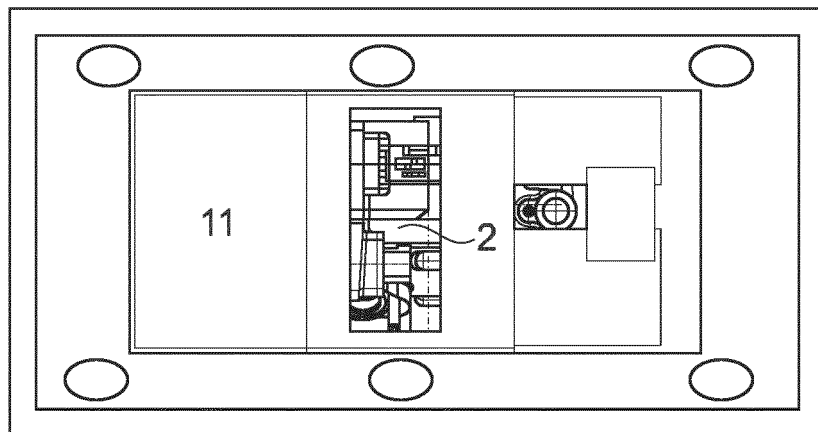


Fig. 4b

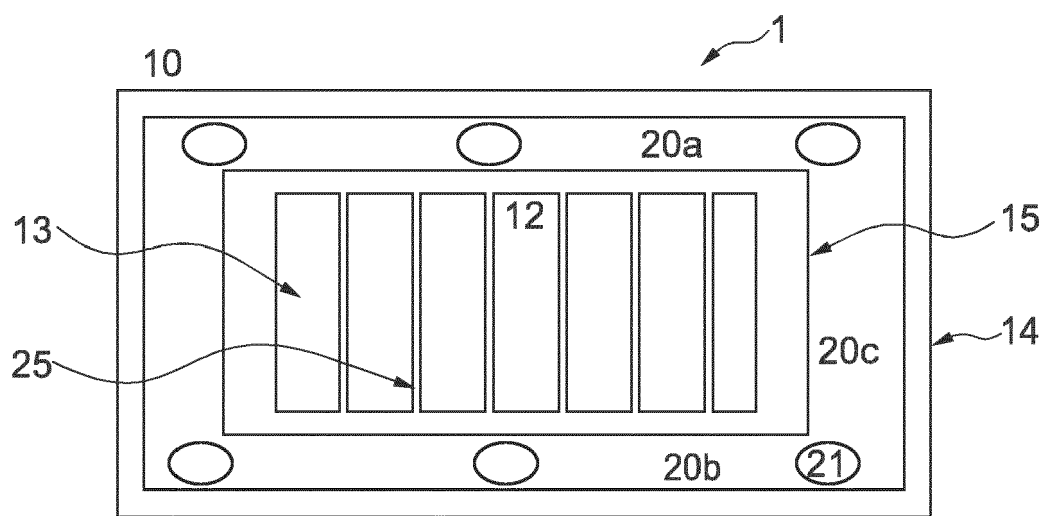


Fig. 5

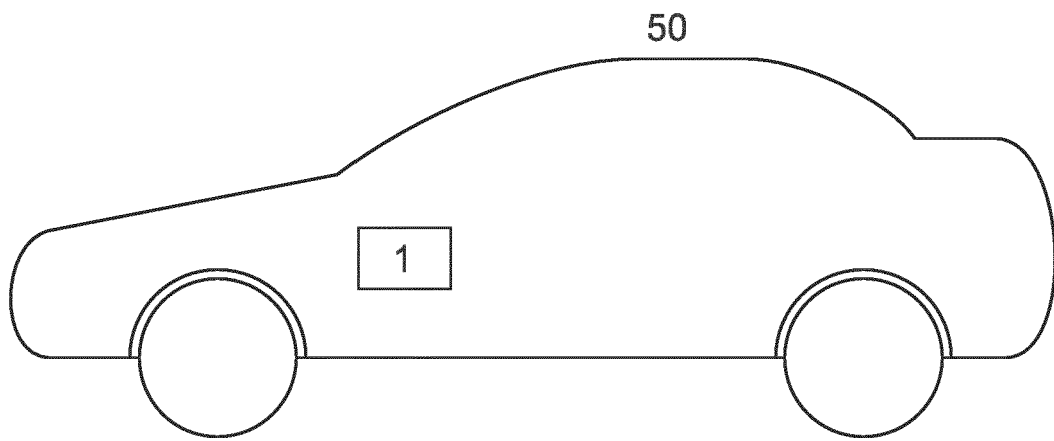


Fig. 6

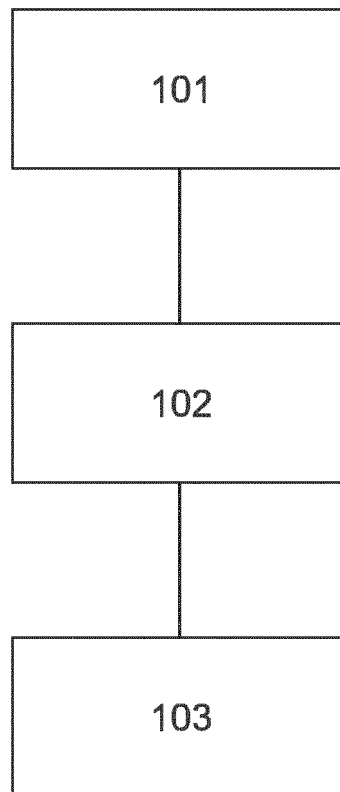


Fig. 7



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