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(54) **HEADREST AND CHAIR, SEAT FOR VEHICULAR APPARATUS AND VEHICULAR APPARATUS INCLUDING THE HEADREST**

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(57) **ABSTRACT**

A headrest includes a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

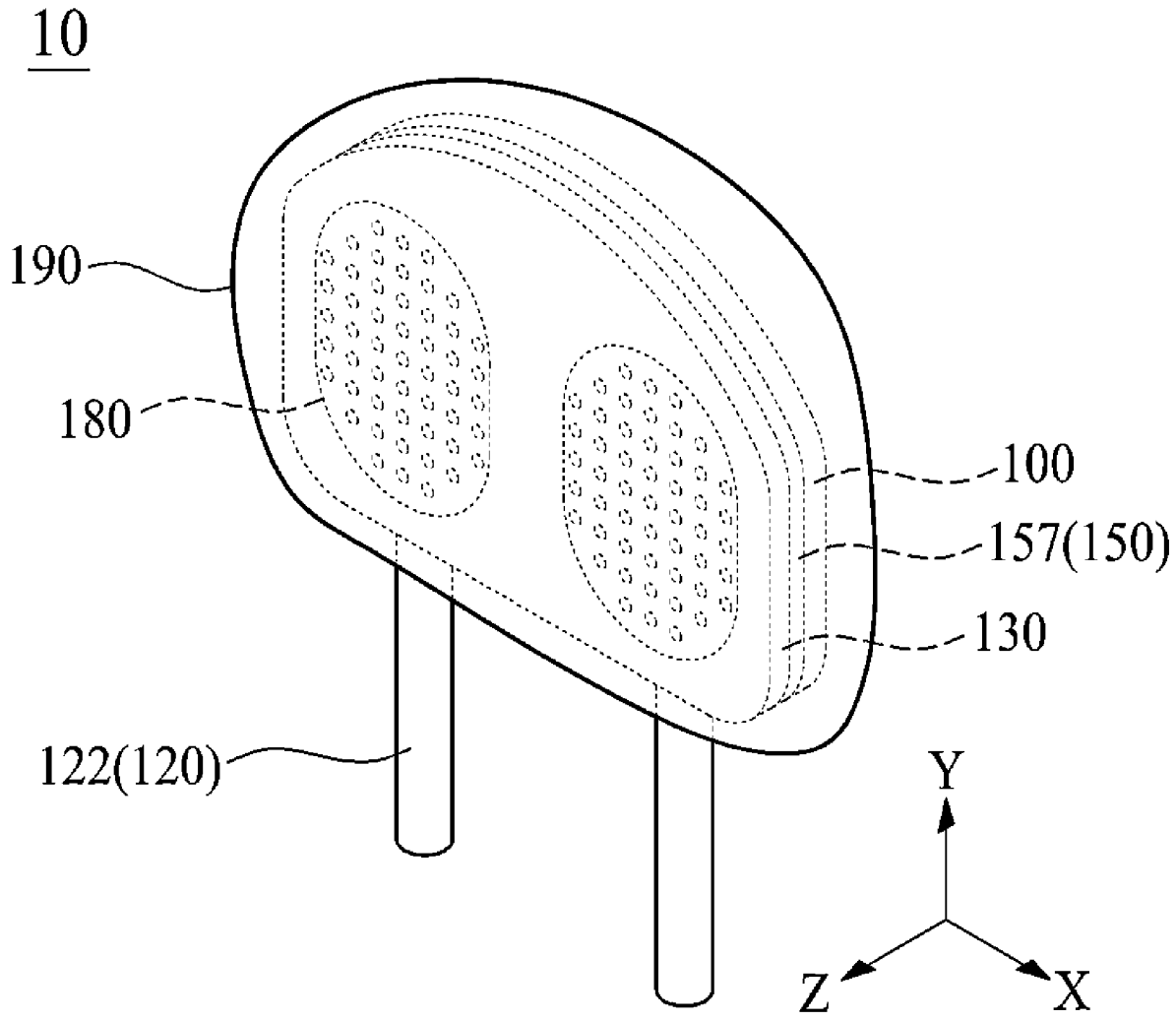


FIG. 1

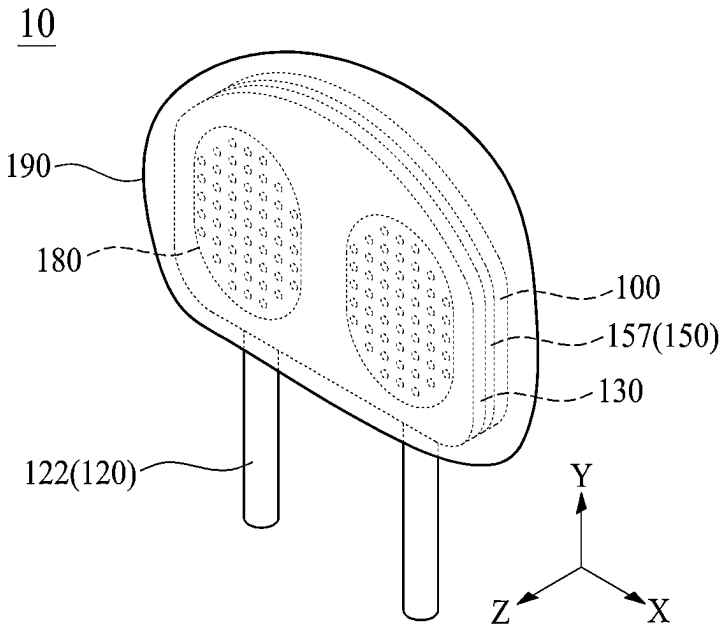

10
190
180
100
157(150)
130
122(120)
Y
Z
X

FIG. 2

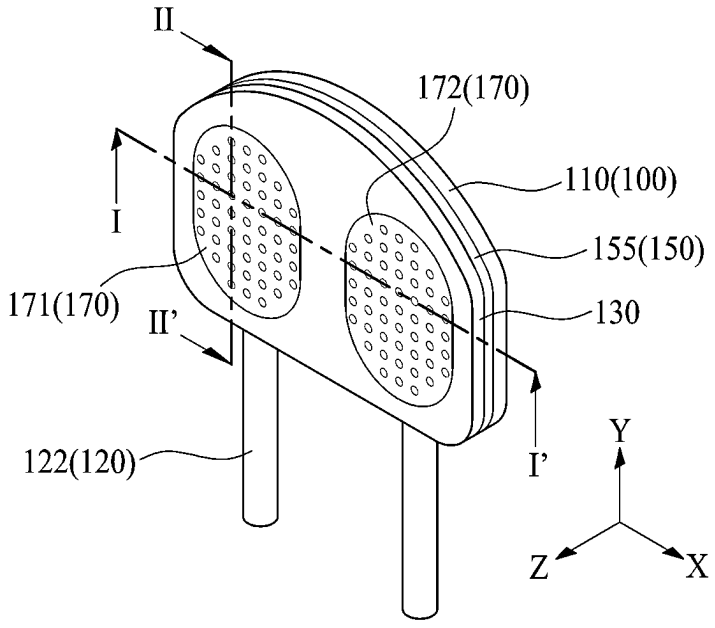
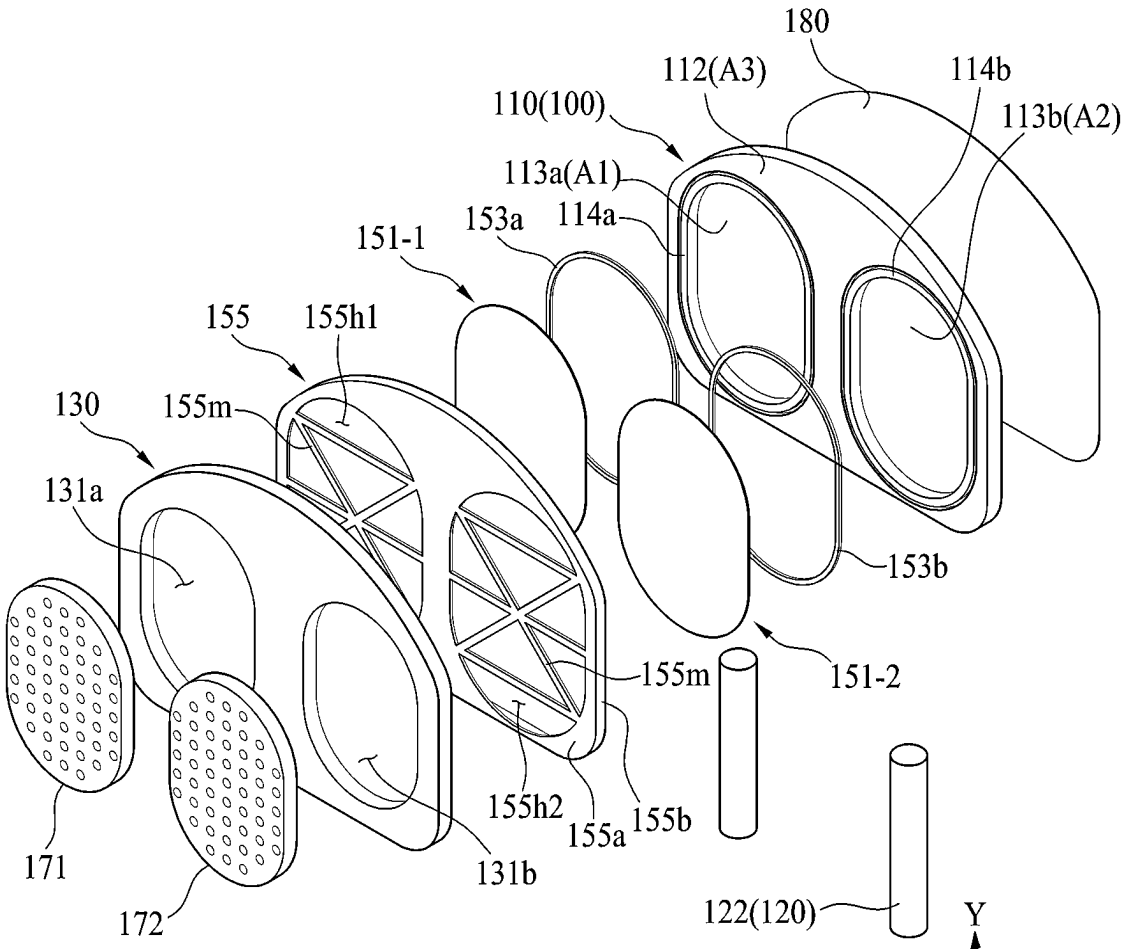

II
172(170)
110(100)
I
155(150)
171(170)
II'
130
122(120)
I'
Y
Z
X

FIG. 3



110: 112, 113, 114a
114: 114a, 114b
150: 151, 153, 155
153: 153a, 153b
155h: 155h1, 155h2

113: 113a, 113b
131: 131a, 131b
151: 151-1, 151-2
155: 155a, 155b, 155h, 155m
170: 171, 172

FIG. 4

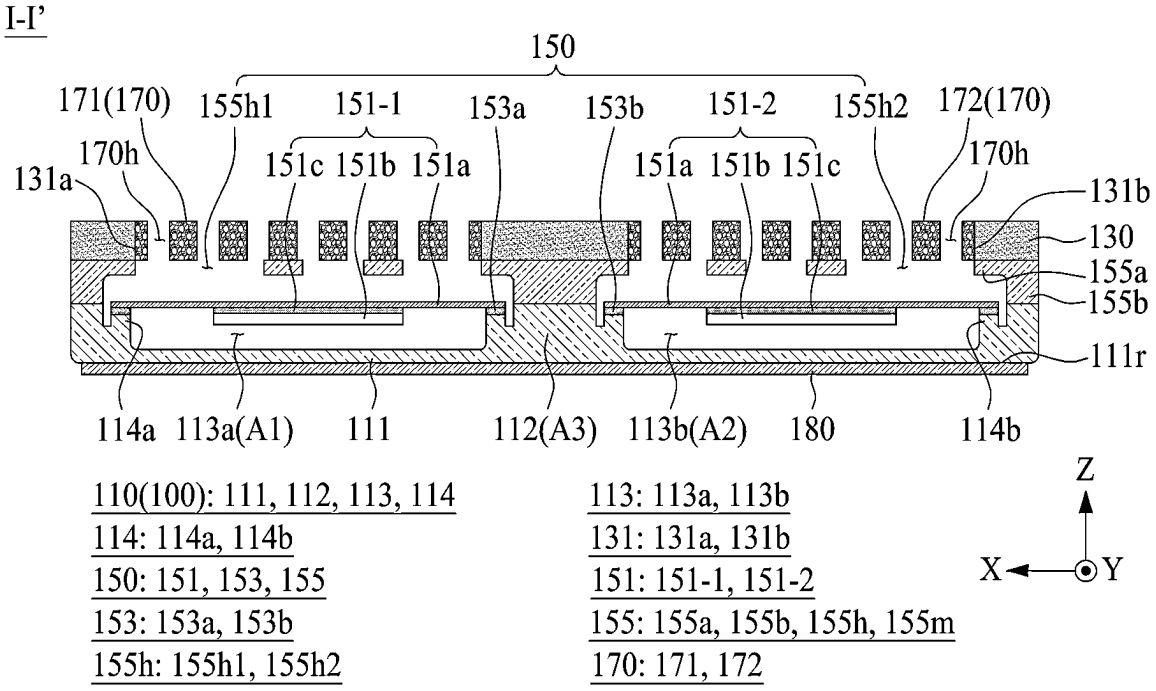

I-I'
150
171(170)
155h1
151-1
153a
153b
151-2
155h2
172(170)
170h
131a
151c 151b 151a
151a 151b 151c
170h
131b
130
155a
155b
111r
114a
113a(A1)
111
112(A3)
113b(A2)
180
114b
Z
X
Y
110(100): 111, 112, 113, 114
114: 114a, 114b
150: 151, 153, 155
153: 153a, 153b
155h: 155h1, 155h2
113: 113a, 113b
131: 131a, 131b
151: 151-1, 151-2
155: 155a, 155b, 155h, 155m
170: 171, 172

FIG. 5

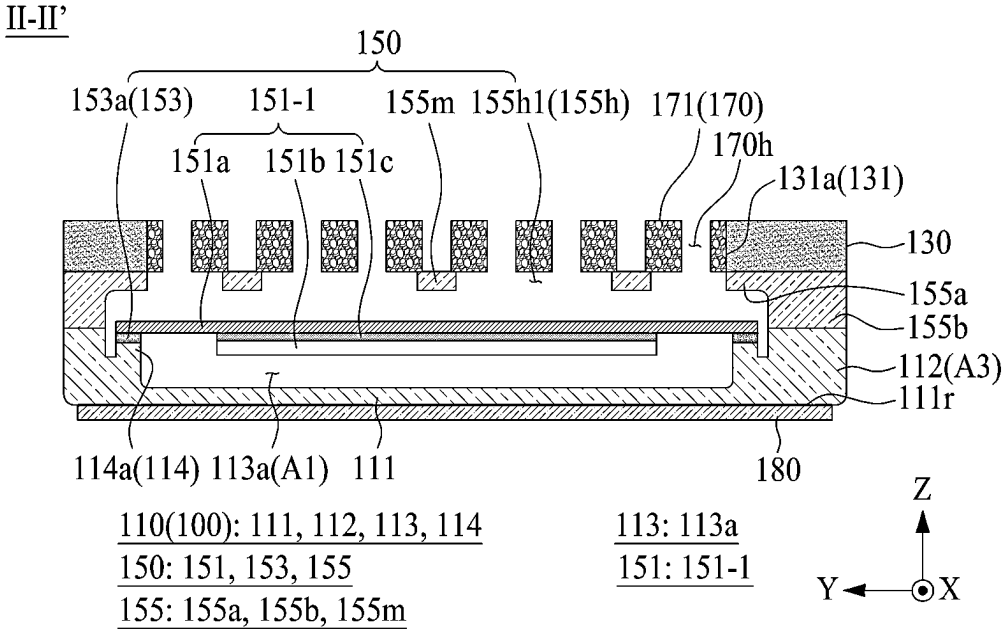

II-II'
150
153a(153)
151-1
155m
155h1(155h)
171(170)
170h
151a
151b 151c
131a(131)
130
155a
155b
112(A3)
111r
114a(114)
113a(A1)
111
180
Z
Y
X
110(100): 111, 112, 113, 114
150: 151, 153, 155
155: 155a, 155b, 155m
113: 113a
151: 151-1

FIG. 6

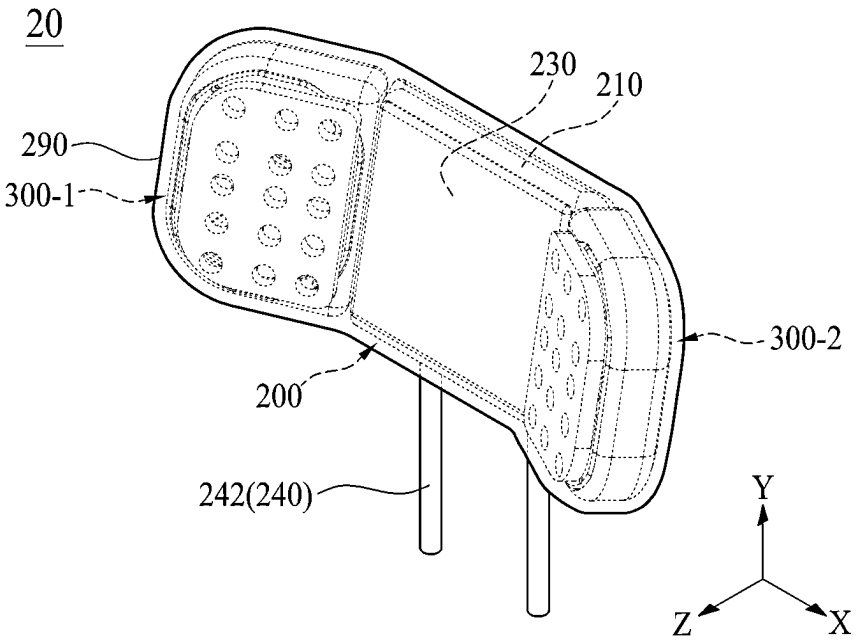

20
230
210
290
300-1
300-2
200
242(240)
Y
Z
X

FIG. 7

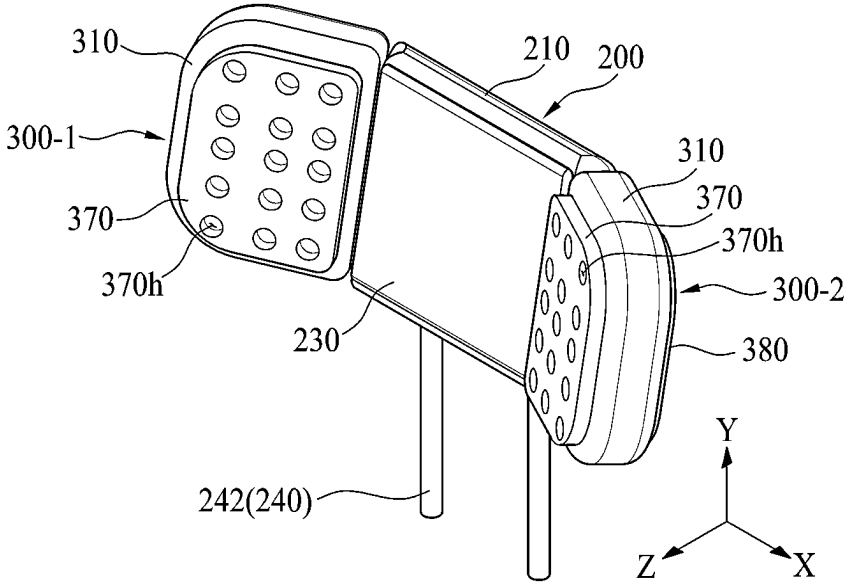

310
210
200
300-1
310
370
370
370h
370h
300-2
230
380
242(240)
Y
Z
X

FIG. 8

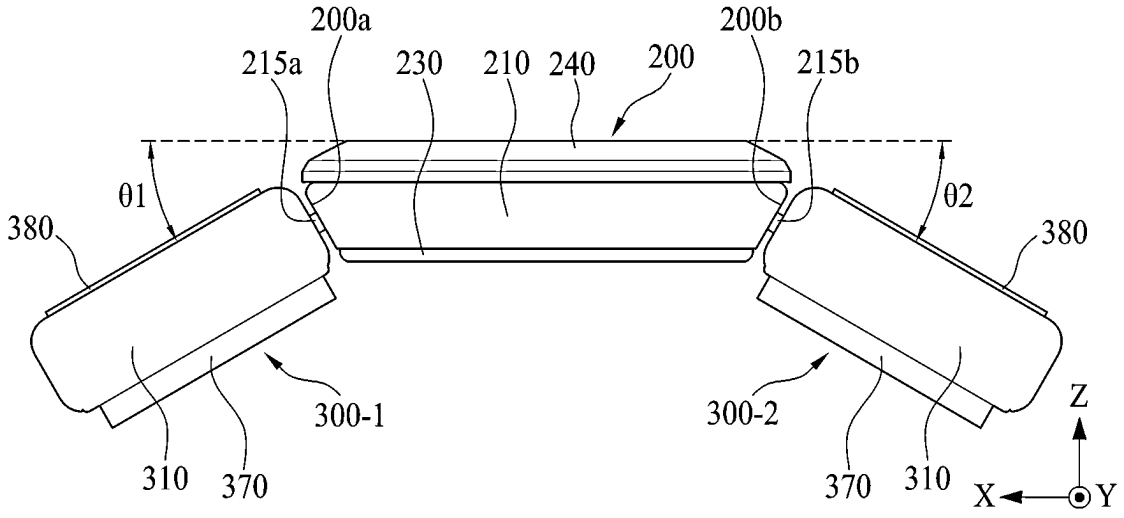

200a
200b
215a
230
210
240
200
215b
θ1
θ2
380
380
300-1
300-2
310
370
370
310
Z
X
Y

FIG. 9

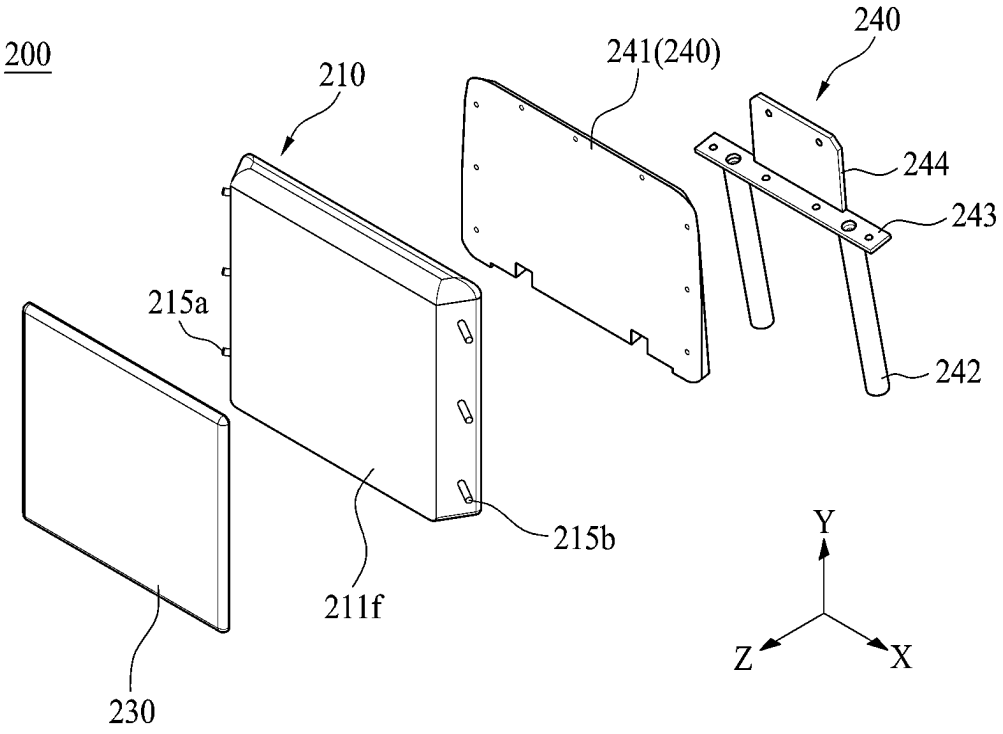

200
210
241(240)
240
244
243
215a
242
215b
211f
230
Y
Z
X

FIG. 10

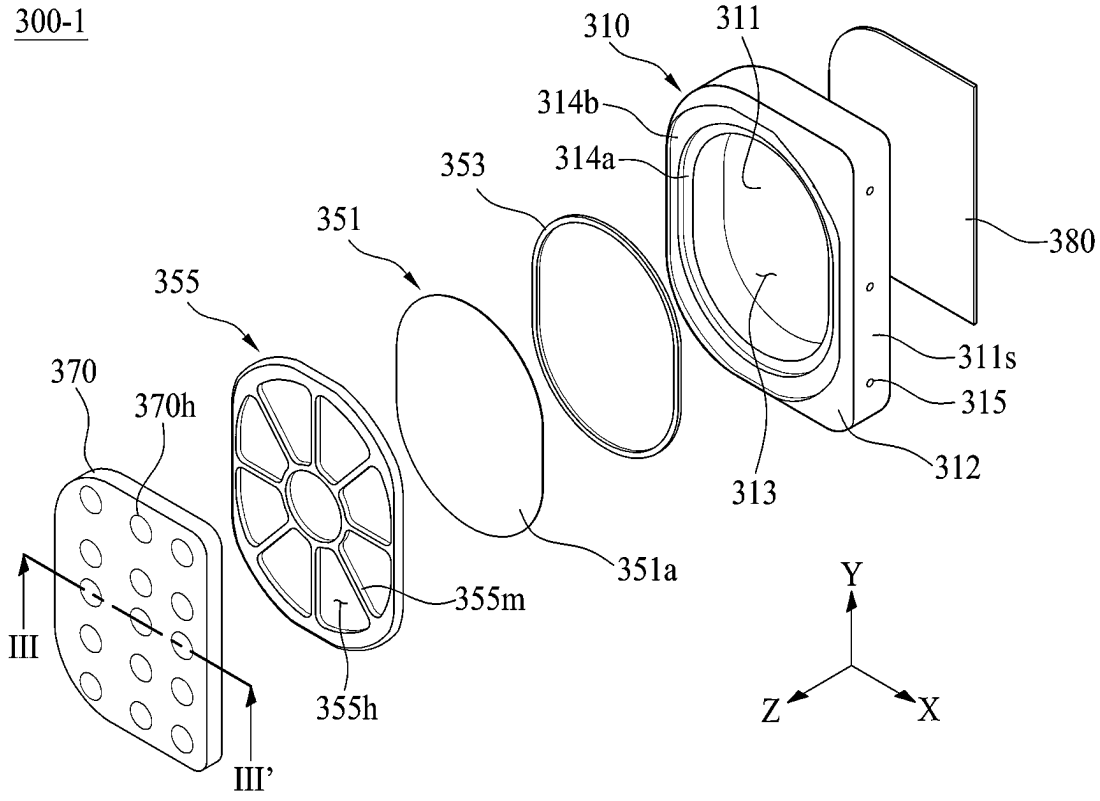

300-1
310
311
314b
314a
353
351
355
380
370
370h
311s
315
312
313
351a
355m
355h
III
III'
Y
Z
X

FIG. 11

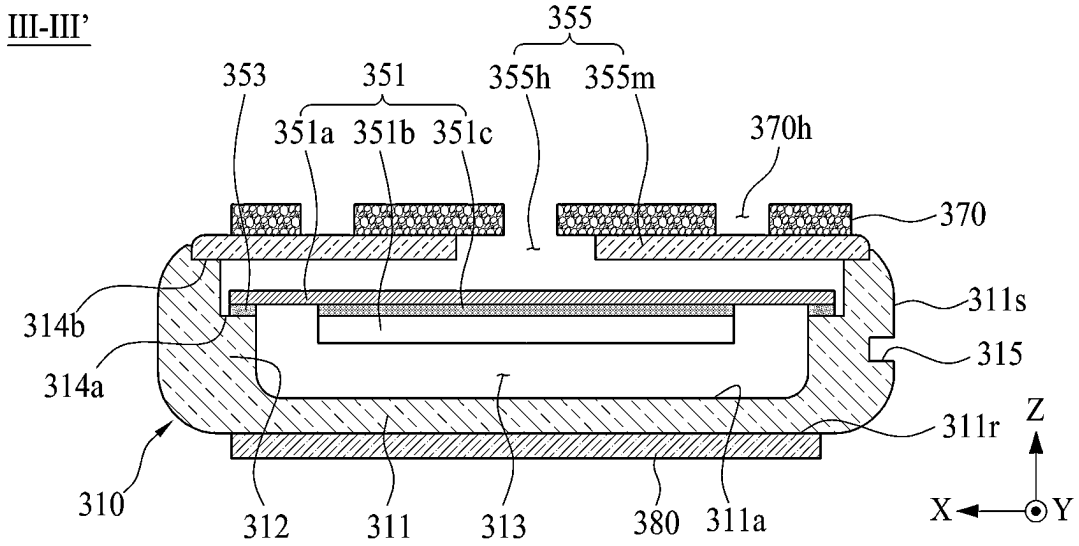

III-III'
355
353
351
355h
355m
351a
351b
351c
370h
370
311s
314b
315
314a
311r
Z
310
312
311
313
380
311a
X
Y

FIG. 12

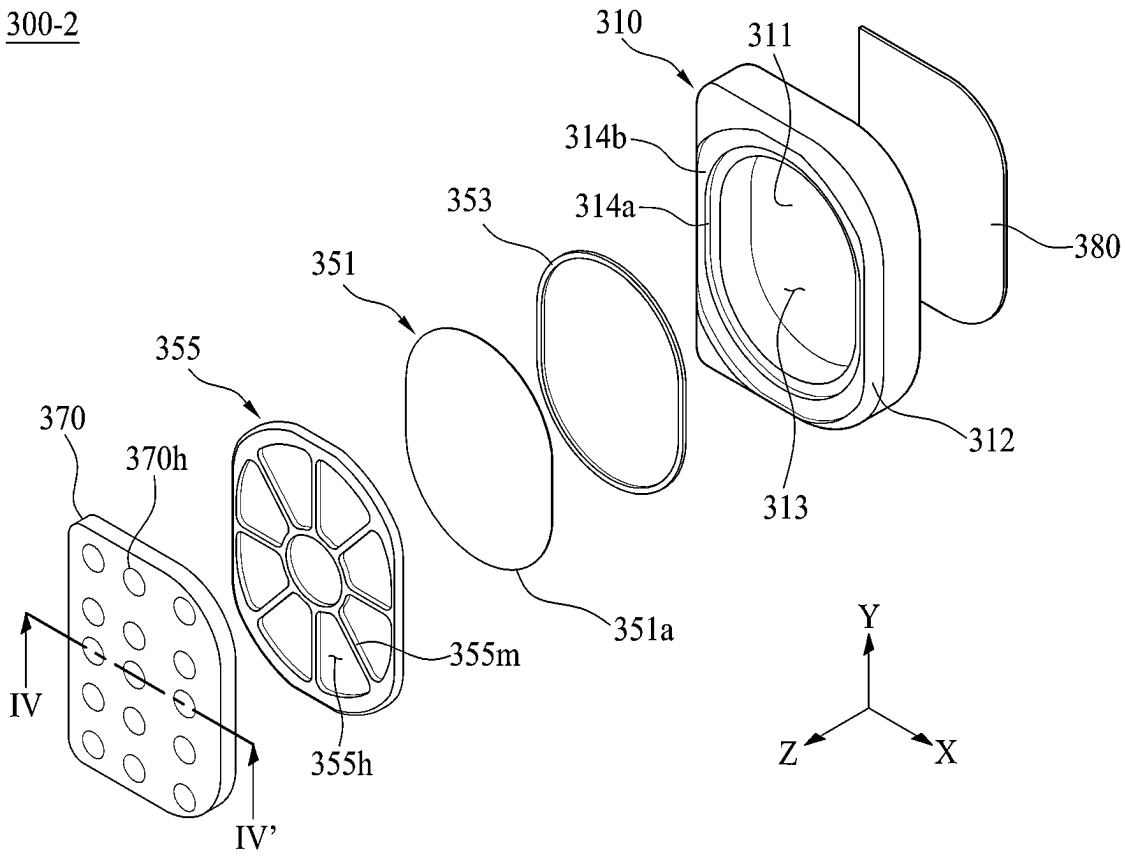

300-2
310
311
314b
314a
353
380
351
355
370
370h
312
313
351a
355m
355h
IV
IV'
Y
Z
X

FIG. 13

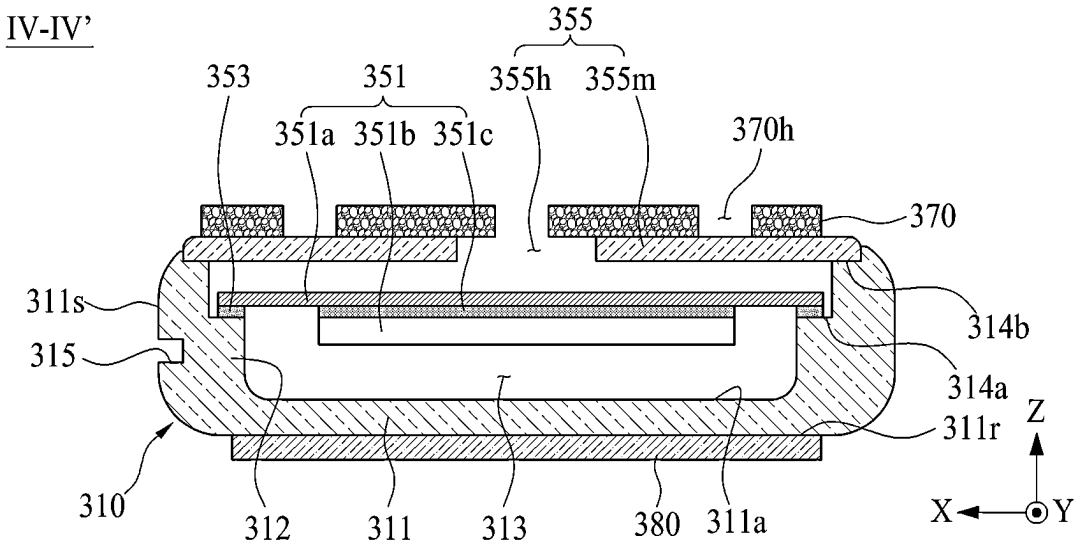

IV-IV'
355
353
351
355h
355m
351a
351b
351c
370h
370
311s
315
314b
314a
311r
Z
X
Y
310
312
311
313
380
311a

FIG. 14

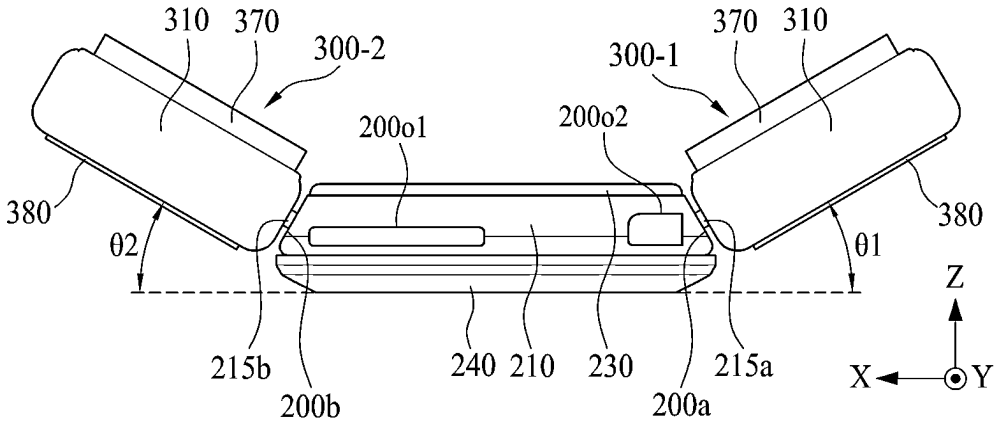

310
370
300-2
370
310
300-1
200o1
200o2
380
380
θ2
θ1
Z
X
Y
215b
200b
240
210
230
200a
215a

FIG. 15

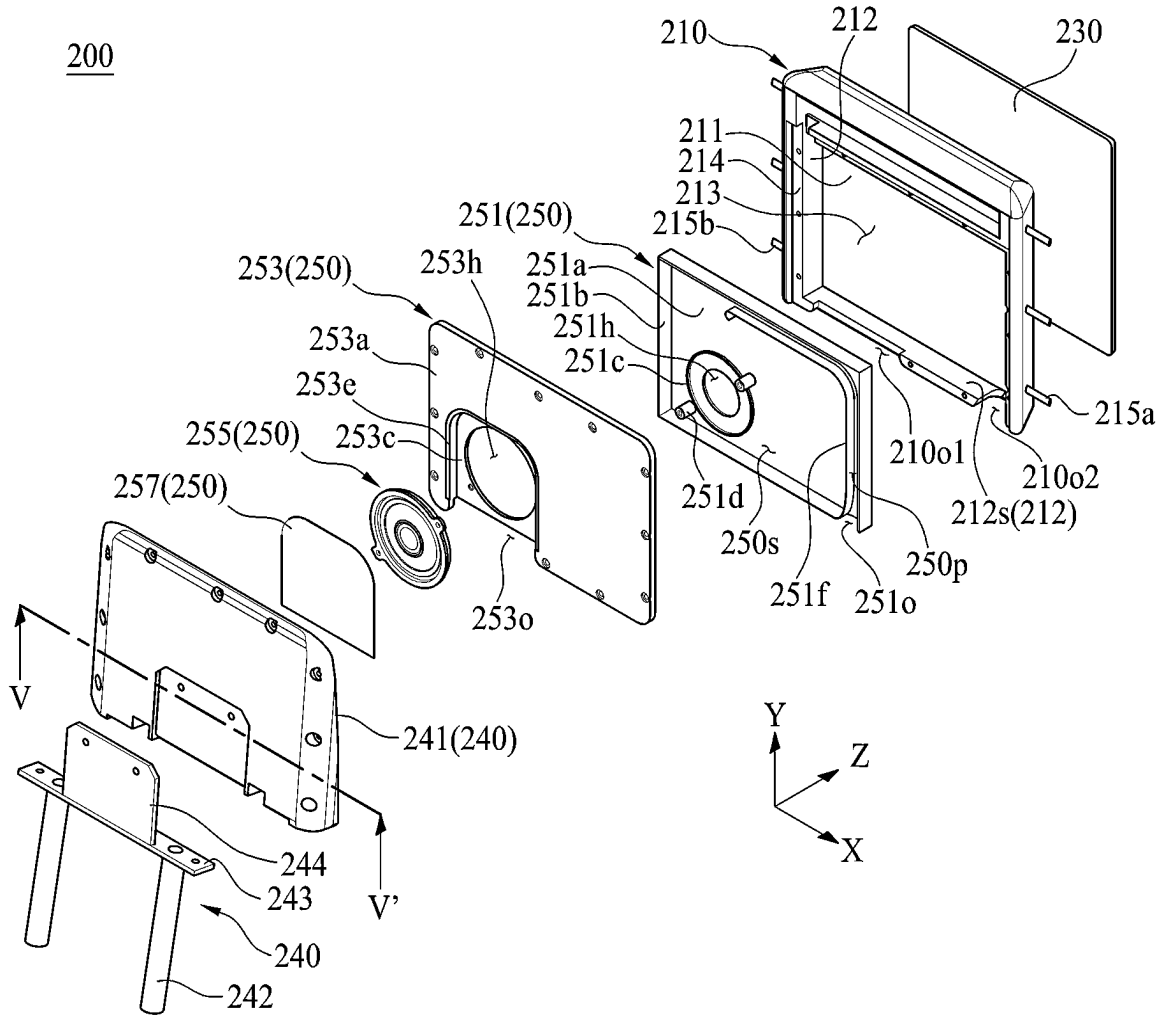

200
210
212
230
211
214
213
215b
251(250)
253(250)
253h
251a
251b
251h
251c
253a
253e
255(250)
253c
257(250)
215a
210o1
210o2
212s(212)
251d
250s
250p
251f
251o
253o
V
241(240)
244
243
V'
240
242
Y
Z
X

FIG. 16

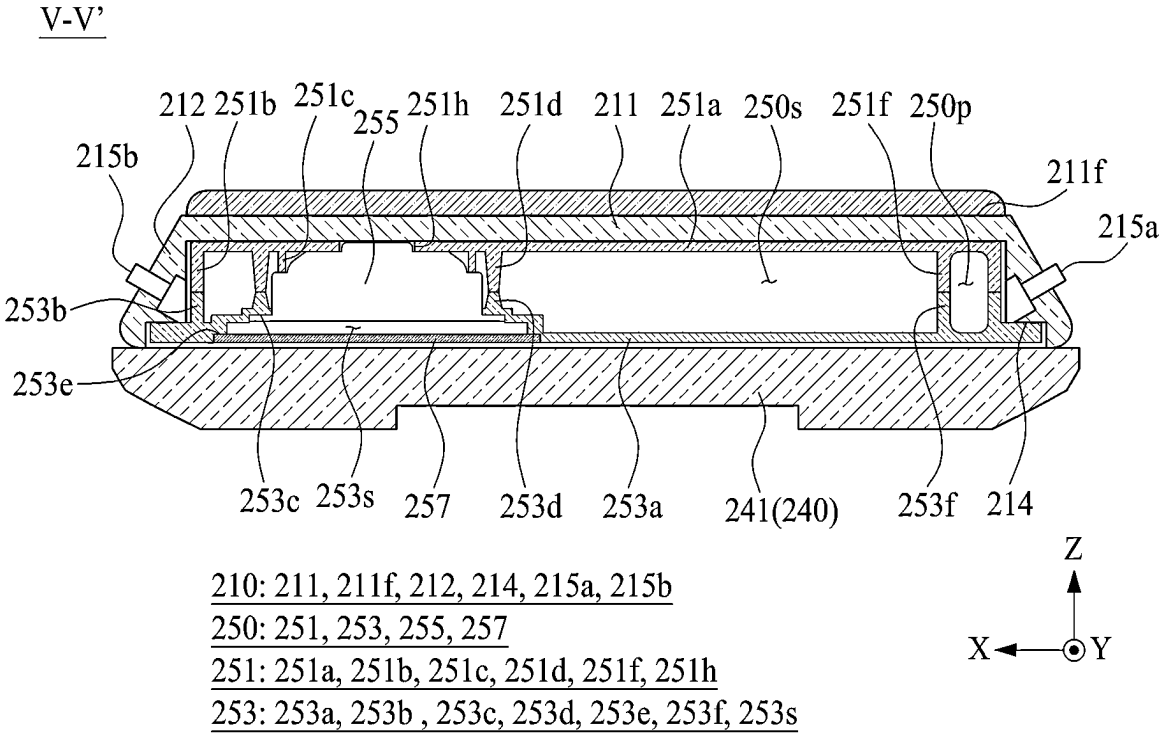
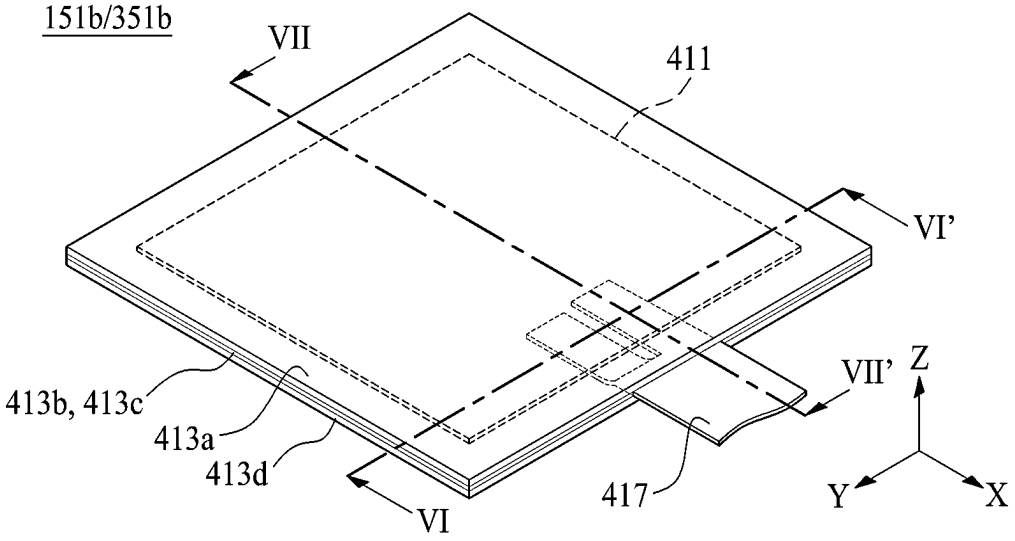

V-V'
212
251b
251c
255
251h
251d
211
251a
250s
251f
250p
215b
211f
215a
253b
253e
253c
253s
257
253d
253a
241(240)
253f
214
Z
X
Y
210: 211, 211f, 212, 214, 215a, 215b
250: 251, 253, 255, 257
251: 251a, 251b, 251c, 251d, 251f, 251h
253: 253a, 253b , 253c, 253d, 253e, 253f, 253s

FIG. 17



413: 413a, 413b, 413c, 413d

FIG. 18

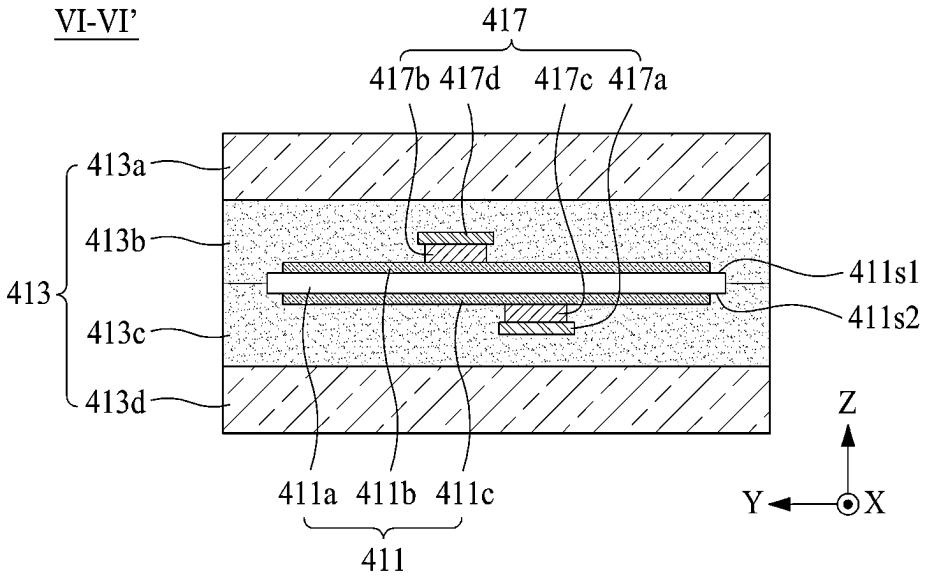


FIG. 19

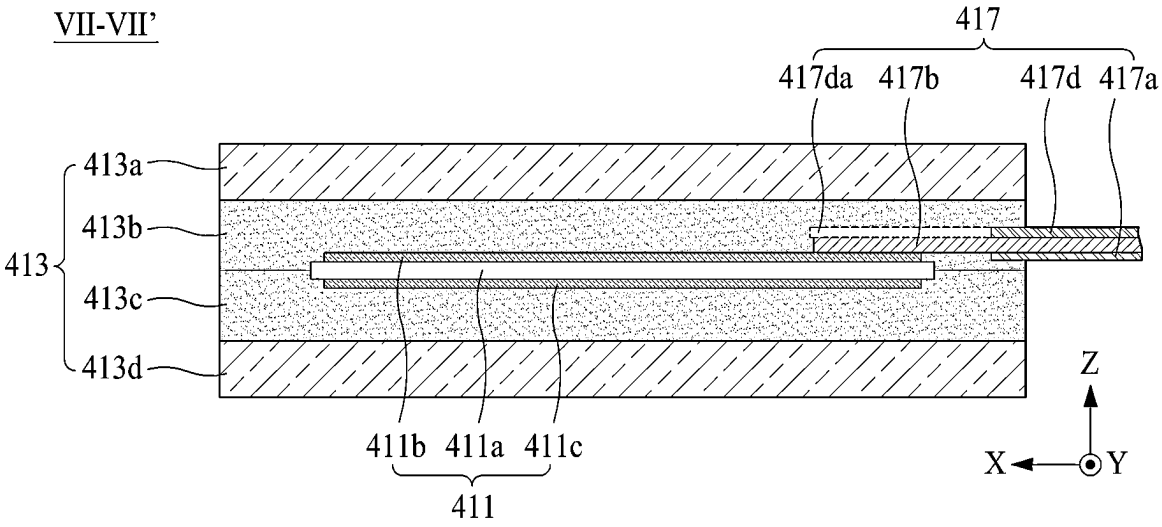

VII-VII'
417
417da
417b
417d
417a
413a
413b
413
413c
413d
411b
411a
411c
411
Z
X
Y

FIG. 20

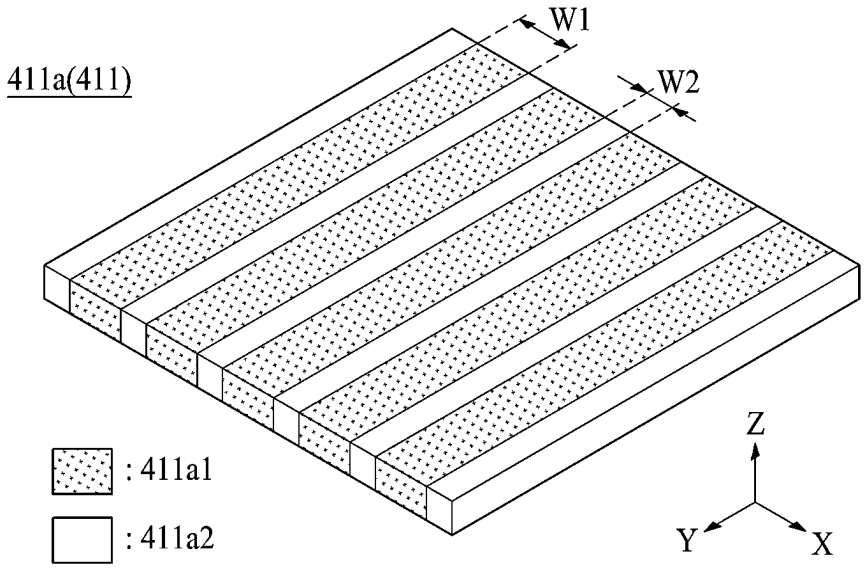

411a(411)
W1
W2
: 411a1
: 411a2
Z
Y
X

FIG. 21

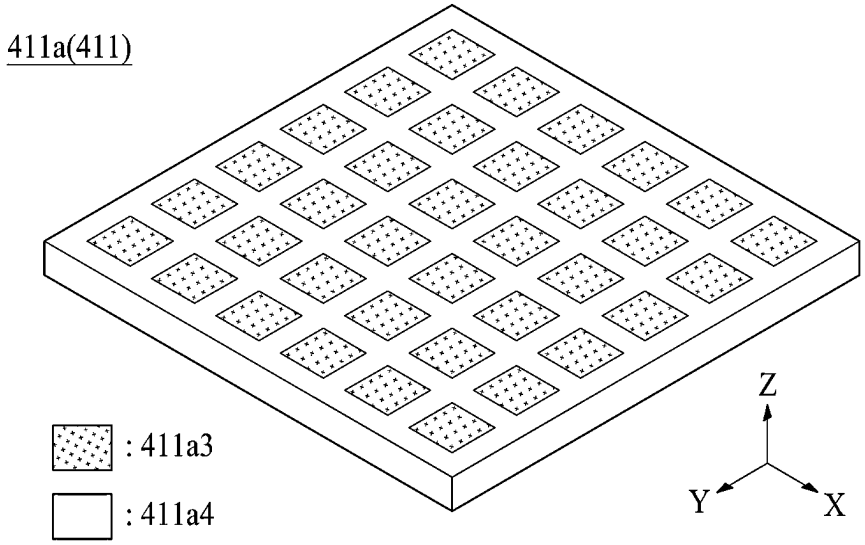

411a(411)
: 411a3
: 411a4
Z
Y
X

FIG. 22

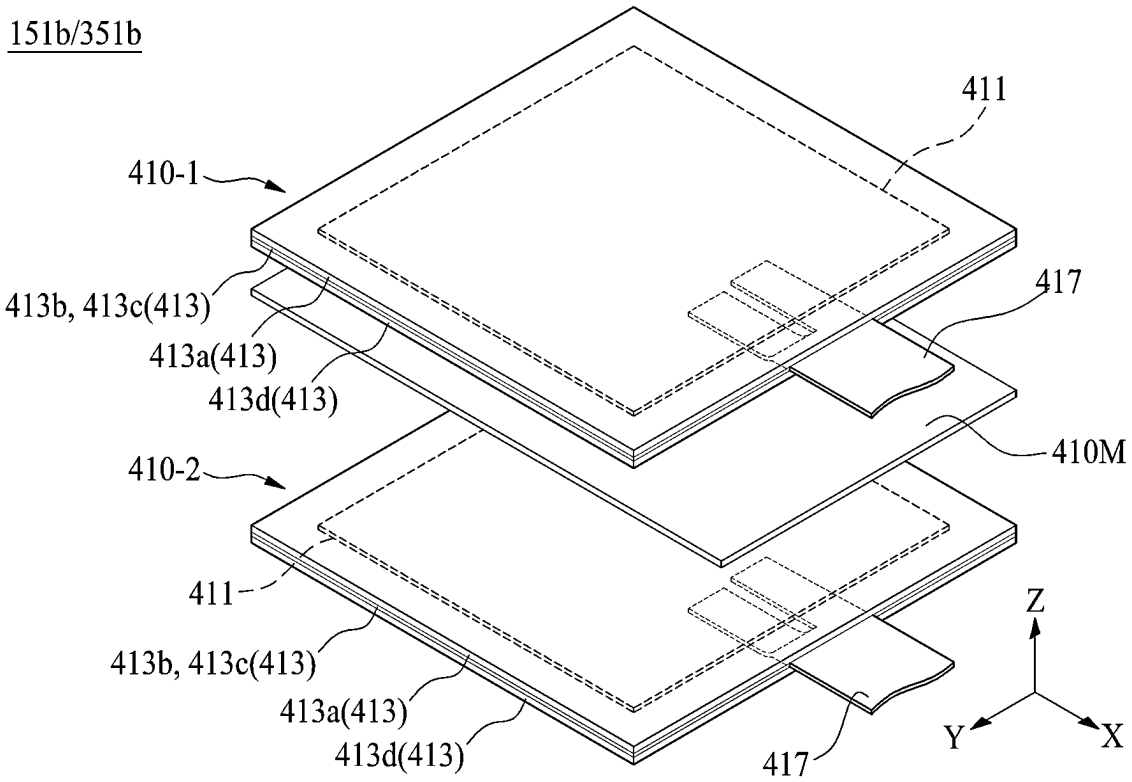

151b/351b
411
410-1
413b, 413c(413)
413a(413)
413d(413)
417
410M
410-2
411
413b, 413c(413)
413a(413)
413d(413)
417
Z
Y
X

FIG. 23

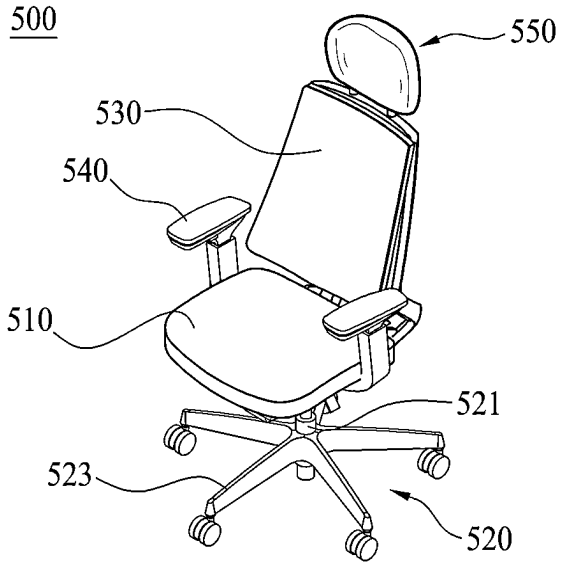


FIG. 24

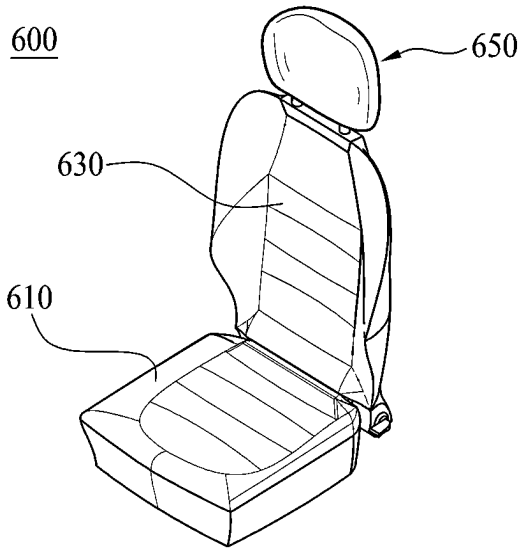
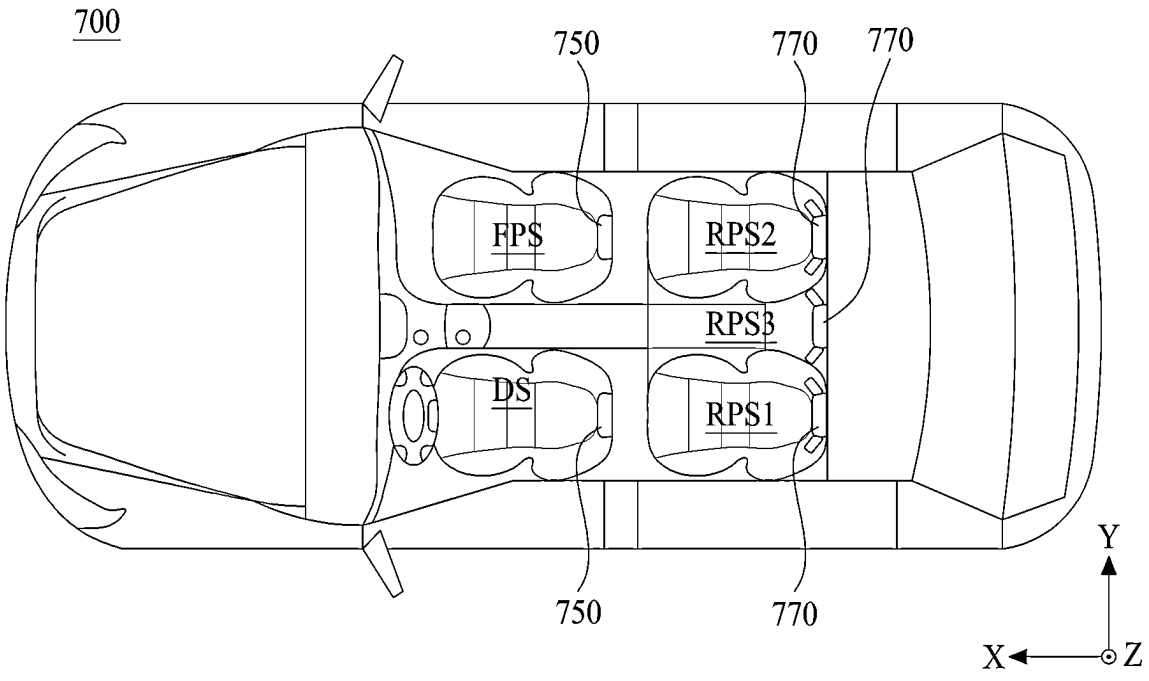


FIG. 25



HEADREST AND CHAIR, SEAT FOR VEHICULAR APPARATUS AND VEHICULAR APPARATUS INCLUDING THE HEADREST

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of and priority to Korean Patent Application No. 10-2024-0021890 filed on Feb. 15, 2024, the entirety of which is hereby incorporated by reference for all purposes as if fully set forth herein.

BACKGROUND

Technical Field

[0002] The present disclosure relates to a headrest and chair, a seat for a vehicular apparatus, and a vehicular apparatus including the same.

Discussion of the Related Art

[0003] Vehicles may include a sound apparatus which outputs a sound, based on an audio signal output from a multimedia device such as a car audio. For example, sound apparatuses applied to vehicles may include a front speaker and a rear speaker, which are configured as a coil type.

SUMMARY

[0004] A sound apparatus of a vehicle may have a limitation in outputting a realistic sound or stereophonic sound of a multichannel through a front speaker and a rear speaker. When the number of speakers increases, the sound apparatus of the vehicle may output a stereophonic sound, but due to a spatial limitation of a vehicle and a size of a speaker based on a coil type, there may be a limitation in increasing the number of speakers.

[0005] The inventor has recognized the problems described above and has performed various research and experiments for outputting a sound through a headrest. Based on the various research and experiments, the inventor provides a headrest for outputting a sound and a chair and a vehicular apparatus including the headrest.

[0006] Accordingly, embodiments of the present disclosure are directed to a headrest and chair, a seat for a vehicular apparatus, and a vehicular apparatus including the same that substantially obviate one or more of the problems due to limitations and disadvantages of the related art.

[0007] An aspect of the present disclosure is to provide a headrest for outputting a sound and a chair, a seat for a vehicular apparatus, and a vehicular apparatus including the headrest.

[0008] An aspect of the present disclosure is to provide a headrest for outputting a sound of a clear middle-high pitched sound band and a chair, a seat for vehicular apparatus, and a vehicular apparatus including the headrest.

[0009] Another aspect of the present disclosure is directed to providing a headrest for outputting a stereo sound and/or a stereophonic sound and a chair, a seat for vehicular apparatus, and a vehicular apparatus including the headrest.

[0010] Additional features and aspects will be set forth in the description that follows, and in part will be apparent from the description, or may be learned by practice of the inventive concepts provided herein. Other features and aspects of the inventive concepts may be realized and attained by the structure particularly pointed out in the written description, or derivable therefrom, and the claims hereof as well as the appended drawings.

[0011] To achieve these and other aspects of the inventive concepts, as embodied and broadly described herein, a headrest comprises a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0012] In another aspect, a headrest comprises a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus comprises an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0013] In another aspect, a chair comprises a seat part, a backseat part connected to the seat part, and a headrest connected to an upper portion of the backseat part. The headrest comprises a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0014] In another aspect, a chair comprises a seat part, a backseat part connected to the seat part, and a headrest connected to an upper portion of the backseat part. The headrest comprises a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus comprises an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0015] In another aspect, a seat for a vehicular apparatus comprises a seat cushion, a seat back connected to the seat cushion, and a headrest connected to an upper portion of the seat back. The headrest comprises a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0016] In another aspect, a seat for a vehicular apparatus comprises a seat cushion, a seat back connected to the seat

cushion, and a headrest connected to an upper portion of the seat back. The headrest comprises a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus comprises an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0017] In another aspect, a vehicular apparatus comprises a seat for vehicular apparatus. The seat for vehicular apparatus comprises a seat cushion, a seat back connected to the seat cushion, and a headrest connected to an upper portion of the seat back. The headrest comprises a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0018] In another aspect, a vehicular apparatus comprises a seat for a vehicular apparatus. The seat for vehicular apparatus comprises a seat cushion, a seat back connected to the seat cushion, and a headrest connected to an upper portion of the seat back. The headrest comprises a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus comprises an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0019] Details of other exemplary embodiments will be included in the detailed description of the disclosure and the accompanying drawings.

[0020] According to one or more embodiments of the present disclosure, a headrest for outputting a sound and a chair, a seat for vehicular apparatus, and a vehicular apparatus including the headrest may be provided.

[0021] According to one or more embodiments of the present disclosure, a headrest for outputting a sound of a clear middle-high pitched sound band and a chair, a seat for vehicular apparatus, and a vehicular apparatus including the headrest may be provided.

[0022] According to one or more embodiments of the present disclosure, a headrest for outputting a stereo sound and/or a stereophonic sound and a chair, a seat for vehicular apparatus, and a vehicular apparatus including the headrest may be provided.

[0023] According to one or more embodiments of the present disclosure, in a sound generating apparatus, a vibration element and a signal supply member may be configured as one component (or one part or one element), and thus, an effect of uni-materialization may be obtained.

[0024] Other systems, methods, features and advantages will be, or will become, apparent to one with skill in the art upon examination of the following figures and detailed description. It is intended that all such additional systems, methods, features and advantages be included within this description, be within the scope of the present disclosure, and be protected by the following claims. Nothing in this section should be taken as a limitation on those claims. Further aspects and advantages are discussed below in conjunction with aspects of the disclosure.

[0025] It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory and are intended to provide further explanation of the inventive concepts as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0026] The accompanying drawings, which are included to provide a further understanding of the disclosure, are incorporated in and constitute a part of this application, illustrate embodiments of the disclosure and together with the description serve to explain principles of the disclosure.

[0027] FIG. **1** is a perspective view illustrating a headrest according to an embodiment of the present disclosure.

[0028] FIG. **2** is a perspective view illustrating an embodiment where a sheath member on the headrest illustrated in FIG. **1** has been removed.

[0029] FIG. **3** is an exploded perspective view illustrating a headrest according to an embodiment of the present disclosure.

[0030] FIG. **4** is a cross-sectional view taken along line I-I' illustrated in FIG. **2**.

[0031] FIG. **5** is a cross-sectional view taken along line II-II' illustrated in FIG. **2**.

[0032] FIG. **6** is a perspective view illustrating a headrest according to another embodiment of the present disclosure.

[0033] FIG. **7** is a perspective view illustrating an embodiment where a sheath member on the headrest illustrated in FIG. **6** has been removed.

[0034] FIG. **8** is a plan view illustrating a headrest according to another embodiment of the present disclosure.

[0035] FIG. **9** is an exploded perspective view illustrating a headrest part illustrated in FIGS. **6** to **8** according to an embodiment of the present disclosure.

[0036] FIG. **10** is an exploded perspective view illustrating a first sound generating apparatus illustrated in FIGS. **6** to **8** according to an embodiment of the present disclosure.

[0037] FIG. **11** is a cross-sectional view taken along line III-III' illustrated in FIG. **10**.

[0038] FIG. **12** is an exploded perspective view illustrating a second sound generating apparatus illustrated in FIGS. **6** to **8** according to an embodiment of the present disclosure.

[0039] FIG. **13** is a cross-sectional view taken along line IV-IV' illustrated in FIG. **12**.

[0040] FIG. **14** is a rear view illustrating a headrest according to another embodiment of the present disclosure.

[0041] FIG. **15** is a perspective view illustrating a headrest according to another embodiment of the present disclosure.

[0042] FIG. **16** is a cross-sectional view taken along line V-V' illustrated in FIG. **14**.

[0043] FIG. **17** is a perspective view illustrating a vibration element according to an embodiment of the present disclosure.

[0044] FIG. **18** is a cross-sectional view taken along line VI-VI' illustrated in FIG. **17**.

[0045] FIG. **19** is a cross-sectional view taken along line VII-VII' illustrated in FIG. **17**.

[0046] FIG. **20** is a perspective view illustrating a vibration layer according to another embodiment of the present disclosure.

[0047] FIG. **21** is a perspective view illustrating a vibration layer according to another embodiment of the present disclosure.

[0048] FIG. **22** is a perspective view illustrating a vibration element according to another embodiment of the present disclosure.

[0049] FIG. **23** is a perspective view illustrating a chair according to an embodiment of the present disclosure.

[0050] FIG. **24** is a perspective view illustrating a seat for vehicular apparatus according to an embodiment of the present disclosure.

[0051] FIG. **25** is a plan view illustrating a vehicular apparatus according to an embodiment of the present disclosure.

[0052] Throughout the drawings and the detailed description, unless otherwise described, the same drawing reference numerals should be understood to refer to the same elements, features, and structures. The sizes, lengths, and thicknesses of layers, regions and elements, and depiction of thereof may be exaggerated for clarity, illustration, and convenience.

DETAILED DESCRIPTION

[0053] Advantages and features of the present disclosure, and implementation methods thereof, are clarified through the aspects described with reference to the accompanying drawings. The present disclosure may, however, be embodied in different forms and should not be construed as limited to the example aspects set forth herein. Rather, these example aspects are examples and are provided so that this disclosure may be thorough and complete to assist those skilled in the art to understand the inventive concepts without limiting the protected scope of the present disclosure.

[0054] A shape, a size, a ratio, an angle, and a number disclosed in the drawings for describing embodiments of the present disclosure are merely an example, and thus, the present disclosure is not limited to the illustrated details. Like reference numerals refer to like elements throughout. In the following description, when the detailed description of the relevant known function or configuration is determined to unnecessarily obscure the important point of the present disclosure, the detailed description will be omitted.

[0055] In a situation where "comprise," "have," and "include" described in the present specification are used, another part can be added unless "only" is used. The terms of a singular form can include plural forms unless referred to the contrary.

[0056] In construing an element, the element is construed as including an error range although there is no explicit description.

[0057] In describing a position relationship, for example, when a position relation between two parts is described as "on," "over," "under," and "next," one or more other parts can be disposed between the two parts unless 'just' or 'direct' is used.

[0058] In describing a temporal relationship, for example, when the temporal order is described as "after," "subsequent," "next," and "before," a situation which is not continuous can be included, unless "just" or "direct" is used.

[0059] It will be understood that, although the terms "first," "second," etc. can be used herein to describe various elements, these elements should not be limited by these terms. These terms are only used to distinguish one element from another. For example, a first element could be termed a second element, and, similarly, a second element could be termed a first element, without departing from the scope of the present disclosure.

[0060] In describing elements of the present disclosure, the terms "first," "second," "A," "B," "(a)," "(b)," or the like can be used. These terms are intended to identify the corresponding element(s) from the other element(s), and these are not used to define the essence, basis, order, or number of the elements.

[0061] For the expression that an element is "connected," "coupled," or "contact," to another element, the element may not only be directly connected, coupled, or contacted to another element, but also be indirectly connected, coupled, or contacted to another element with one or more intervening elements interposed between the elements, unless otherwise specified.

[0062] For the expression that an element is "contacts" or "overlaps" with another element, the element can not only directly contact, overlap, or the like with another element, but also indirectly contact or overlap with another element with one or more intervening elements disposed or interposed between the elements, unless otherwise specified.

[0063] The term "at least one" should be understood as including any and all combinations of one or more of the associated listed items. For example, the meaning of "at least one of a first item, a second item and a third item" denotes the combination of all items proposed from two or more of the first item, the second item and the third item as well as the first item, the second item or the third item.

[0064] Features of various embodiments of the present disclosure can be partially or overall coupled to or combined with each other and can be variously inter-operated with each other and driven technically as those skilled in the art can sufficiently understand. The embodiments of the present disclosure can be carried out independently from each other or can be carried out together in co-dependent relationship.

[0065] Hereinafter, example embodiments of a light emitting display apparatus according to the present disclosure will be described in detail with reference to the accompanying drawings. For convenience of description, a scale of each of elements illustrated in the accompanying drawings differs from a real scale, and thus, is not limited to a scale illustrated in the drawings.

[0066] FIG. **1** is a perspective view illustrating a headrest according to an embodiment of the present disclosure. FIG. **2** is a perspective view illustrating an embodiment where a sheath member on the headrest illustrated in FIG. **1** has been removed. FIG. **3** is an exploded perspective view illustrating a headrest according to an embodiment of the present disclosure. FIG. **4** is a cross-sectional view taken along line I-I' illustrated in FIG. **2**. FIG. **5** is a cross-sectional view taken along line II-II' illustrated in FIG. **2**.

[0067] Referring to FIGS. **1** to **5**, a headrest **10** according to an embodiment of the present disclosure may be configured to output a sound. For example, the headrest **10** may be configured to output a left channel sound and a right channel sound. For example, the headrest **10** may be configured to

output a 2-channel stereo sound including the left channel sound and the right channel sound. For example, the headrest **10** may be a headrest apparatus, a headrest speaker, a headrest speaker apparatus, a headrest for chair, a headrest speaker for chair, a headrest speaker apparatus for chair, a headrest for vehicular apparatus, a headrest speaker for vehicular apparatus, and a headrest speaker apparatus for vehicular apparatus, but embodiments of the present disclosure are not limited thereto.

[0068] The headrest **10** may include a headrest part **100**, a support rod part **120**, a cushion member **130**, a sound generating apparatus, and a sheath member (or an outer member or an outer skin member) **190**.

[0069] The headrest part **100** may include a headrest frame **110**. For example, the headrest part **100** or the headrest frame **110** may be a body of the headrest **10**, a main structure, a housing, or an enclosure, but embodiments of the present disclosure are not limited thereto. For example, the headrest part **100** or the headrest frame **110** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto.

[0070] The headrest part **100** or the headrest frame **110** according to an embodiment of the present disclosure may be configured in a plastic material such as plastic or styrene material, but embodiments of the present disclosure are not limited thereto.

[0071] The plastic material of the headrest part **100** or the headrest frame **110** may be configured in polyethylene terephthalate, polycarbonate, polyimide, polypropylene, polyarylate, polyethersulfone, polyethylene naphthalate, polysulfone, cyclo-olefin copolymer, or carbon fiber reinforced plastic (CFRP), or the like, but embodiments of the present disclosure are not limited thereto.

[0072] The material of the headrest part **100** or the headrest frame **110** may be an ABS material. The ABS material may be acrylonitrile, butadiene, and styrene.

[0073] The headrest part **100** or the headrest frame **110** according to an embodiment of the present disclosure may be configured to accommodate a sound generating apparatus **150**. For example, the headrest part **100** or the headrest frame **110** may be configured to accommodate a driving circuit part for driving the sound generating apparatus **150**, but embodiments of the present disclosure are not limited thereto.

[0074] The headrest part **100** or the headrest frame **110** according to an embodiment of the present disclosure may include a base frame **111** and an accommodating portion **113**.

[0075] The base frame **111** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto. The base frame **111** may include a first surface (or a front surface) and a second surface (or a rear surface) **111***r*.

[0076] The accommodating portion **113** may be formed or configured in the base frame **111**. For example, the accommodating portion **113** may be formed or configured in the base frame **111** to accommodate or support the sound generating apparatus **150**. For example, the accommodating portion **113** may be formed or configured in the base frame **111** by a protrusion portion **112** protruding from the first surface of the base frame **111**. For example, the accommodating portion **113** may be an accommodating space, a groove, an accommodating groove, or a supporting groove, but embodiments of the present disclosure are not limited thereto.

[0077] The base frame **111** according to an embodiment of the present disclosure may include a first region A**1**, a second region A**2**, and a third region A**3**.

[0078] The first region A**1** may be one region or a left region of the base frame **111**. The second region A**2** may be the other region or a right region of the base frame **111**. The first region A**1** and the second region A**2** may be disposed or configured in parallel.

[0079] The third region A**3** may surround the first region A**1** and the second region A**2**. For example, the third region A**3** may be disposed to surround each of the first region A**1** and the second region A**2**. For example, the third region A**3** may include the protrusion portion **112** surrounding each of the first region A**1** and the second region A**2**. For example, the protrusion portion **112** may protrude from the third region A**3** of the base frame **111** and may thus provide the accommodating portion **113** of the base frame **111**.

[0080] The accommodating portion **113** of the base frame **111** may include a first accommodating portion **113***a* and a second accommodating portion **113***b*.

[0081] The first accommodating portion **113***a* may be in the first region A**1** of base frame **111**. For example, the first accommodating portion **113***a* may be provided by the protrusion portion **112** surrounding the first region A**1** of the first to third regions A**1**, A**2**, A**3** of the base frame **111**.

[0082] The second accommodating portion **113***b* may be in the second region A**2** of base frame **111**. For example, the second accommodating portion **113***b* may be provided by the protrusion portion **112** surrounding the second region A**2** of the first to third regions A**1**, A**2**, A**3** of the base frame **111**.

[0083] Each of the first accommodating portion **113***a* and the second accommodating portion **113***b* may be provided in the base frame **111** by the protrusion portion **112** and may have a height corresponding to a height of the protrusion portion **112**.

[0084] The support rod part **120** may be configured to be connected (or coupled) to the headrest part **100** or the headrest frame **110** or support the headrest part **100** or the headrest frame **110**.

[0085] The support rod part **120** according to an embodiment of the present disclosure may include one or more support rods **122**.

[0086] The one or more support rods **122** may be configured to be connected to a lower surface of the headrest part **100** or the headrest frame **110**. For example, the one or more support rods **122** may be configured to be connected to the base frame **111**. For example, the one or more support rods **122** may be configured to be connected to the lower surface of the base frame **111**. For example, the support rod part **120** may include a pair of support rods **122**. For example, the one or more (or a pair of) support rods **122** may be connected to an upper portion of a seatback of a seat for vehicle or a backrest frame of a chair.

[0087] The cushion member **130** may be configured at a front surface of the headrest frame **110**. For example, the cushion member **130** may be configured to cover the front surface of the headrest frame **110**. The cushion member **130** may be configured to have a same size and shape as those of the headrest frame **110**, but embodiments of the present disclosure are not limited thereto. For example, the cushion member **130** may include a material which absorbs an

impact. For example, the cushion member **130** may include a foam material or a sponge material, but embodiments of the present disclosure are not limited thereto.

[0088] The cushion member **130** according to an embodiment of the present disclosure may include a hollow portion **131** overlapping (or corresponding to) the accommodating portion **113** of the headrest frame **110**.

[0089] The hollow portion **131** may be a path through which a sound generated (or output) by the sound generating apparatus **150** is output to the outside. For example, the hollow portion **131** may be configured to pass through the cushion member **130** in a thickness direction Z of the cushion member **130**.

[0090] The hollow portion **131** according to an embodiment of the present disclosure may include a first hollow portion **131***a* and a second hollow portion **131***b*.

[0091] The first hollow portion **131***a* may overlap (or correspond to) the first accommodating portion **113***a* of the headrest frame **110**. The second hollow portion **131***b* may overlap (or correspond to) the second accommodating portion **113***b* of the headrest frame **110**.

[0092] The sound generating apparatus **150** may be between the headrest frame **110** and the cushion member **130** and may be configured to output a sound. The sound generating apparatus **150** may be accommodated into or supported by the accommodating portion **113** of the headrest frame **110** to output a sound. For example, the headrest frame **110** may include a supporting portion **114**. For example, the headrest frame **110** may include the supporting portion **114** for supporting the sound generating apparatus **150**. For example, the supporting portion **114** may be configured to support a periphery of the sound generating apparatus **150**. For example, the supporting portion **114** may be configured along an edge portion of the accommodating portion **113** to support an edge portion of the sound generating apparatus **150**.

[0093] The sound generating apparatus **150** may be configured to include a piezoelectric material. The sound generating apparatus **150** may vibrate (or displace) based on a piezoelectric effect based on a driving signal to output (or generate) a sound (or a sound wave).

[0094] The sound generating apparatus **150** according to an embodiment of the present disclosure may include a vibration apparatus **151**.

[0095] The vibration apparatus **151** may be between the accommodating portion **113** of the headrest frame **110** and the cushion member **130** and may be configured to output a sound. The vibration apparatus **151** may be accommodated into or supported by the accommodating portion **113** of the headrest frame **110** to output a sound. For example, the vibration apparatus **151** may be configured to be supported by the supporting portion **114** of the headrest frame **110**. For example, the edge portion of the vibration apparatus **151** may be configured to be supported by the supporting portion **114**.

[0096] The vibration apparatus **151** according to an embodiment of the present disclosure may be configured to include a piezoelectric material. The vibration apparatus **151** may vibrate (or displace) based on a piezoelectric effect based on the driving signal (or vibration driving signal or voice signal) to output (or generate) a sound (or a sound wave). For example, the vibration apparatus **151** may be a piezoelectric type vibration apparatus which includes the piezoelectric material. For example, the vibration apparatus **151** may include a piezoelectric material, and thus, may output a sound of a clear middle-high pitched sound band. For example, the vibration apparatus **151** may be configured to output a sound of about 200 Hz to about 20 kHz.

[0097] The vibration apparatus **151** according to an embodiment of the present disclosure may include a first vibration apparatus **151-1** and a second vibration apparatus **151-2**.

[0098] The first vibration apparatus **151-1** may be accommodated into or supported by the first accommodating portion **113***a* of the headrest frame **110** to output a sound. The second vibration apparatus **151-2** may be accommodated into or supported by the second accommodating portion **113***b* of the headrest frame **110** to output a sound. For example, the supporting portion **114** of the headrest frame **110** may include a first supporting portion **114***a* for supporting the first vibration apparatus **151-1** and a second supporting portion **114***b* for supporting the second vibration apparatus **151-2**. For example, the first supporting portion **114***a* may be configured along an edge portion of the first accommodating portion **113***a* and may be configured to support an edge portion of the first vibration apparatus **151-1**. For example, the second supporting portion **114***b* may be configured along an edge portion of the second accommodating portion **113***b* and may be configured to support an edge portion of the second vibration apparatus **151-2**.

[0099] According to an embodiment of the present disclosure, the first vibration apparatus **151-1** and the second vibration apparatus **151-2** may be configured to output different sounds. For example, the first vibration apparatus **151-1** may be configured to output a first sound (or a right channel sound). The second vibration apparatus **151-2** may be configured to output a second sound (or a left channel sound). Therefore, the sound generating apparatus **150** or the vibration apparatus **151** may generate (or output) a 2-channel stereo sound which includes the first sound based on the first vibration apparatus **151-1** and the second sound based on the second vibration apparatus **151-2**.

[0100] Referring to FIGS. **3** to **5**, each of the first vibration apparatus **151-1** and the second vibration apparatus **151-2** according to an embodiment of the present disclosure may include a vibration member **151***a* and a vibration element **151***b*.

[0101] The vibration member **151***a* may output a sound (or a sound wave) based on a vibration (or displacement) of the vibration element **151***b*. For example, the vibration member **151***a* may be a diaphragm, a vibration plate, a vibration substrate, a vibration panel, a sound plate, a sound panel, a passive vibration plate, a passive vibration member, a passive vibration panel, a sound output plate, or a sound vibration plate, but embodiments of the present disclosure are not limited thereto.

[0102] The vibration member **151***a* may include a single nonmetal material or a composite nonmetal material, but embodiments of the present disclosure are not limited thereto. For example, the single nonmetal material or the composite nonmetal material of the vibration member **151***a* may include one or more of wood, rubber, plastic, carbon, glass, fiber, cloth, paper, mirror, and leather, but embodiments of the present disclosure are not limited thereto. For example, the paper may be cone paper for speakers. For

example, the cone paper may be pulp or foamed plastic, or the like, but embodiments of the present disclosure are not limited thereto.

[0103] The vibration member **151***a* according to an embodiment of the present disclosure may be configured in a plastic material such as plastic or styrene material, but embodiments of the present disclosure are not limited thereto.

[0104] The plastic material of the vibration member **151***a* may be configured in polyethylene terephthalate, polycarbonate, polyimide, polypropylene, polyarylate, polyethersulfone, polyethylene naphthalate, polysulfone, cyclo-olefin copolymer, or carbon fiber reinforced plastic (CFRP), or the like, but embodiments of the present disclosure are not limited thereto.

[0105] The material of the vibration member **151***a* may be an ABS material. The ABS material may be acrylonitrile, butadiene, and styrene.

[0106] The vibration member **151***a* according to another embodiment of the present disclosure may be configured in a porous material. For example, the vibration member **151***a* may include a micro cellular plastic material. For example, the vibration member **151***a* may be configured in a polyethylene terephthalate material or a polycarbonate material, but embodiments of the present disclosure are not limited thereto. For example, the vibration member **151***a* may be configured in a Micro Cellular polyethylene terephthalate (MCPET) material. The vibration member **151***a* configured in the MCPET may have high capability for original sound reproduction because having a low density and an excellent elastic force, thereby enhancing the quality of a sound.

[0107] The coupling member **153** may be disposed (or interposed) between the headrest frame **110** and the vibration member **151***a*. For example, the coupling member **153** may be disposed (or interposed) between the supporting portion **114** of the headrest frame **110** and the vibration member **151***a*. For example, the coupling member **153** may be disposed (or interposed) between the supporting portion **114** of the headrest frame **110** and a rear edge portion of the vibration member **151***a*.

[0108] The vibration member **151***a* may be accommodated into the accommodating portion **113** of the headrest frame **110** and may be connected or coupled to the supporting portion **114** of the headrest frame **110** by using the coupling member **153**. For example, an edge portion of the vibration member **151***a* may be connected or coupled to the supporting portion **114** of the headrest frame **110** by using the coupling member **153**. The vibration member **151***a* may be spaced apart from a bottom surface of the accommodating portion **113**. For example, a center portion, except an edge portion, of the vibration member **151***a* may be spaced apart from the bottom surface of the accommodating portion **113**. The vibration member **151***a* may be configured at the accommodating portion **113**. For example, the vibration member **151***a* may be configured to cover the accommodating portion **113**. For example, the vibration member **151***a* may have a same shape as that of the accommodating portion **113** and may have a size which is greater than that of the accommodating portion **113**, so as to cover the accommodating portion **113**, but embodiments of the present disclosure are not limited thereto.

[0109] In the first vibration apparatus **151-1**, the vibration member **151***a* may be accommodated into the first accommodating portion **113***a* and may be connected or coupled to the first supporting portion **114***a* of the supporting portion **114** by using a first coupling member **153***a* of the coupling member **153**. For example, the edge portion of the vibration member **151***a* may be connected or coupled to the first supporting portion **114***a* by using the first coupling member **153***a*. For example, the center portion, except the edge portion, of the vibration member **151***a* may be spaced apart from a bottom surface of the first accommodating portion **113***a*. The vibration member **151***a* may be configured on the first accommodating portion **113***a*. For example, the vibration member **151***a* may be configured to cover the first accommodating portion **113***a*. For example, the vibration member **151***a* may have a same shape as that of the first accommodating portion **113***a* and may have a size which is greater than that of the first accommodating portion **113***a*, so as to cover the first accommodating portion **113***a*, but embodiments of the present disclosure are not limited thereto.

[0110] In the second vibration apparatus **151-2**, the vibration member **151***a* may be accommodated into the second accommodating portion **113***b* and may be connected or coupled to the second supporting portion **114***b* of the supporting portion **114** by using a second coupling member **153***b* of the coupling member **153**. For example, the edge portion of the vibration member **151***a* may be connected or coupled to the second supporting portion **114***b* by using the second coupling member **153***b*. For example, the center portion, except the edge portion, of the vibration member **151***a* may be spaced apart from a bottom surface of the second accommodating portion **113***b*. The vibration member **151***a* may be configured on the second accommodating portion **113***b*. For example, the vibration member **151***a* may be configured to cover the second accommodating portion **113***b*. For example, the vibration member **151***a* may have a same shape as that of the second accommodating portion **113***b* and may have a size which is greater than that of the second accommodating portion **113***b*, so as to cover the second accommodating portion **113***b*, but embodiments of the present disclosure are not limited thereto.

[0111] The vibration element **151***b* may be configured to vibrate (or displace) the vibration member **151***a*. For example, the vibration element **151***b* may be configured to vibrate (or displace or driven) the vibration member **151***a* by a vibration (or displacement or driving) based on the driving signal (or vibration driving signal or voice signal). For example, the vibration element **151***b* may output (or generate) a sound by using the vibration member **151***a* as a vibration plate. For example, the vibration element **151***b* may include a piezoelectric type vibration element which include a piezoelectric effect. For example, the vibration element **151***b* may be a vibration generating device, a vibration film, a vibration generating film, a vibrator, an active vibrator, an active vibration generator, an actuator, an exciter, a film actuator, a film exciter, an ultrasonic actuator, or an active vibration member, or the like, but embodiments of the present disclosure are not limited thereto.

[0112] The vibration element **151***b* may be disposed (or connected to) or configured on the accommodating portion **113** of the headrest frame **110** to vibrate (or displace) the vibration member **151***a*. The vibration element **151***b* may be disposed (or connected to) or configured at the vibration member **151***a*. For example, the vibration element **151***b* may be disposed (or connected to) or configured at one or more of a first surface and a second surface, which is opposite to

the first surface, of the vibration member **151***a*. As an embodiment of the present disclosure, the vibration element **151***b* may be disposed (or connected to) or configured at the first surface of the vibration member **151***a*. As another embodiment of the present disclosure, the vibration element **151***b* may be disposed (or connected to) or configured at the second surface of the vibration member **151***a*. As another embodiment of the present disclosure, the vibration element **151***b* may be disposed (or connected to) or configured at each of the first surface and the second surface of the vibration member **151***a*. For example, the vibration element **151***b* may have a bimorph structure disposed with the vibration member **151***a* therebetween.

[0113] Referring to FIGS. **3** to **5**, each of the first vibration apparatus **151-1** and the second vibration apparatus **151-2** according to an embodiment of the present disclosure may further include an adhesive member **151***c*. For example, the vibration element **151***b* may be connected (or coupled) to the vibration member **151***a* by using the adhesive member **151***c*.

[0114] In the first vibration apparatus **151-1**, the vibration element **151***b* may be connected or coupled to one or more of a first surface and a second surface, which is opposite to the first surface, of the vibration member **151***a* by using the adhesive member **151***c*. For example, the vibration element **151***b* may be connected (or coupled) to a rear surface of the vibration member **151***a* by using the adhesive member **151***c* and may be spaced apart from a bottom surface of the first accommodating portion **113***a* of the accommodating portion **113**. For example, the vibration element **151***b* of the first vibration apparatus **151-1** may vibrate the vibration member **151***a* to output the first sound (or right channel sound). The vibration member **151***a* of the first vibration apparatus **151-1** may vibrate based on a vibration (or displacement or driving) of the vibration element **151***b* to output (or generate) the first sound.

[0115] In the second vibration apparatus **151-2**, the vibration element **151***b* may be connected or coupled to one or more of the first surface and the second surface, which is opposite to the first surface, of the vibration member **151***a* by using the adhesive member **151***c*. For example, the vibration element **151***b* may be connected (or coupled) to the rear surface of the vibration member **151***a* by using the adhesive member **151***c* and may be spaced apart from a bottom surface of the second accommodating portion **113***b* of the accommodating portion **113**. For example, the vibration element **151***b* of the second vibration apparatus **151-2** may vibrate the vibration member **151***a* to output the second sound (or left channel sound). The vibration member **151***a* of the second vibration apparatus **151-2** may vibrate based on a vibration (or displacement or driving) of the vibration element **151***b* to output (or generate) the second sound.

[0116] Referring to FIGS. **3** to **5**, the sound generating apparatus **150** according to an embodiment of the present disclosure may further include a cover **155**.

[0117] The cover **155** may be configured to absorb an impact applied to the headrest frame **110** and/or the vibration apparatus **151**. The cover **155** may be configured at the vibration apparatus **151** or the vibration element **151***b* of the vibration apparatus **151**. For example, the cover **155** may be configured to cover the vibration apparatus **151** or the vibration element **151***b* of the vibration apparatus **151**. The cover **155** may be configured at a front surface of the headrest frame **110** and a front surface of the vibration apparatus **151**. For example, the cover **155** may be configured to cover the front surface of the headrest frame **110** and the front surface of the vibration apparatus **151**. The cover **155** may be configured at the protrusion portion **112** of the headrest frame **110** and the first vibration apparatus **151-1** and the second vibration apparatus **151-2** of the vibration apparatus **151**. For example, the cover **155** may be configured to cover the protrusion portion **112** of the headrest frame **110** and the first vibration apparatus **151-1** and the second vibration apparatus **151-2** of the vibration apparatus **151**.

[0118] Although it is described with reference to FIGS. **1-5** that the base frame **111** and the cover **155** are separated member, the present is not limited to it. For example, the base frame **111** and the cover **155** may be integrally formed as an enclosure. The enclosure may have the accommodating portion **113** and include an opening front portion.

[0119] The cover **155** according to an embodiment of the present disclosure may be between the headrest frame **110** and the cushion member **130**. For example, the cover **155** may be disposed or configured between the front surface of the headrest frame **110** and the cushion member **130** to cover the vibration apparatus **151**. For example, the cover **155** may be disposed or configured between the front surface of the headrest frame **110** and the cushion member **130** to cover the first vibration apparatus **151-1** and the second vibration apparatus **151-2** of the vibration apparatus **151**.

[0120] The cover **155** according to an embodiment of the present disclosure may be configured to have ae same size and shape as those of the headrest frame **110** and/or the cushion member **130**, but embodiments of the present disclosure are not limited thereto. For example, the cover **155**, the headrest frame **110**, and the cushion member **130** may be configured to have a same size and a same shape, but embodiments of the present disclosure are not limited thereto. For example, the cover **155** may include a material capable of absorbing an impact. For example, the cover **155** may include a foam material or a sponge material, but embodiments of the present disclosure are not limited thereto. For example, the cover **155** may be a cushion cover, a foam cover, a sponge cover, or a buffer cover, but embodiments of the present disclosure are not limited thereto.

[0121] The cover **155** according to an embodiment of the present disclosure may include a plate **155***a* and a sidewall **155***b*.

[0122] The plate **155***a* may be between the headrest frame **110** and the cushion member **130**.

[0123] The plate **155***a* may be configured at the front surface of the headrest frame **110**. For example, the plate **155***a* may be configured to cover the front surface of the headrest frame **110**. The plate **155***a* may be disposed or configured between the front surface of the headrest frame **110** and the cushion member **130**. For example, the plate **155***a* may be disposed or configured between the front surface of the headrest frame **110** and the cushion member **130** to cover the vibration apparatus **151**. For example, the plate **155***a* may be configured to have a same size and a same shape as those of the headrest frame **110** and/or the cushion member **130**, but embodiments of the present disclosure are not limited thereto. For example, the plate **155***a* may be a cushion plate, a foam plate, a sponge plate, or a buffer plate, but embodiments of the present disclosure are not limited thereto.

[0124] The sidewall **155***b* may be between the plate **155***a* and the headrest frame **110**. The sidewall **155***b* may be

connected to or configured at an edge portion of the plate **155***a* and an edge portion of the headrest frame **110**. The sidewall **155***b* may be configured to provide a space between the plate **155***a* and the headrest frame **110**. For example, the sidewall **155***b* may be a cover sidewall, a cushion sidewall, a foam sidewall, a sponge sidewall, or a buffer sidewall, but embodiments of the present disclosure are not limited thereto.

[0125] The cover **155** according to an embodiment of the present disclosure may include a sound emission portion **155***h*.

[0126] The sound emission portion **155***h* may be configured to overlap (or correspond to) the vibration apparatus **151**. For example, the sound emission portion **155***h* may be a path through which a sound generated (or output) by the sound generating apparatus **150** or the vibration apparatus **151** is output to the outside (or cushion member **130**). For example, the sound emission portion **155***h* may be configured to pass through the cover **155** along a thickness direction Z of the cover **155**. For example, the sound emission portion **155***h* may be configured to pass through the plate **155***a* along the thickness direction Z of the cover **155**.

[0127] The cover **155** according to an embodiment of the present disclosure may include a first sound emission portion **155***h***1** and a second sound emission portion **155***h***2**.

[0128] The first sound emission portion **155***h***1** may overlap (or correspond) the first vibration apparatus **151-1** or the vibration element **151***b* of the first vibration apparatus **151-1**. The first sound emission portion **155***h***1** may be a path through which a sound generated (or output) by the first vibration apparatus **151-1** is output to the outside (or cushion member **130**). For example, the first sound emission portion **155***h***1** may be configured to pass through (or vertically pass through) a first region of the cover **155** overlapping (or corresponding to) the first vibration apparatus **151-1** along the thickness direction Z of the cover **155**. For example, the first sound emission portion **155***h***1** may be configured to pass through (or vertically pass through) the first region of the plate **155***a* overlapping (or corresponding to) the first vibration apparatus **151-1** along the thickness direction Z of the cover **155**.

[0129] The second sound emission portion **155***h***2** may overlap (or correspond) the second vibration apparatus **151-2** or the vibration element **151***b* of the second vibration apparatus **151-2**. The second sound emission portion **155***h***2** may be a path through which a sound generated (or output) by the second vibration apparatus **151-2** is output to the outside (or cushion member **130**). For example, the second sound emission portion **155***h***2** may be configured to pass through (or vertically pass through) a second region of the cover **155** overlapping (or corresponding to) the second vibration apparatus **151-2** along the thickness direction Z of the cover **155**. For example, the second sound emission portion **155***h***1** may be configured to pass through (or vertically pass through) the second region of the plate **155***a* overlapping (or corresponding to) the second vibration apparatus **151-2** along the thickness direction Z of the cover **155**.

[0130] Each of the first sound emission portion **155***h***1** and the second sound emission portion **155***h***2** according to an embodiment of the present disclosure may be configured to include one or more holes (or sound holes or sound emission holes).

[0131] Each of the first sound emission portion **155***h***1** and the second sound emission portion **155***h***2** according to another embodiment of the present disclosure may be configured to include one or more holes (or sound holes or sound emission holes) based on a mesh structure **155***m*.

[0132] Referring to FIGS. **1** and **2**, the sheath member **190** may be an outermost member which is configured to surround the headrest **10**. The sheath member **190** may be configured at a rear surface **111***r* and a lateral surface of the headrest frame **110** and a front surface and a lateral surface of the cushion member **130**. For example, the sheath member **190** may be configured to cover a rear surface **111***r* and a lateral surface of the headrest frame **110** and a front surface and a lateral surface of the cushion member **130**. The sheath member **190** may be configured at the rear surface **111***r* and the lateral surface of the headrest frame **110**, a lateral surface of the sound generating apparatus **150**, and the front surface and the lateral surface of the cushion member **130**. For example, the sheath member **190** may be configured to cover the rear surface **111***r* and the lateral surface of the headrest frame **110**, the lateral surface of the sound generating apparatus **150**, and the front surface and the lateral surface of the cushion member **130**. The sheath member **190** may be configured at the rear surface **111***r* and the lateral surface of the headrest frame **110**, a lateral surface of the cover **155** of the sound generating apparatus **150**, and the front surface and the lateral surface of the cushion member **130**. For example, the sheath member **190** may be configured to cover the rear surface **111***r* and the lateral surface of the headrest frame **110**, the lateral surface of the cover **155** of the sound generating apparatus **150**, and the front surface and the lateral surface of the cushion member **130**.

[0133] The sheath member **190** may be a fiber material or a leather material, but embodiments of the present disclosure are not limited thereto. For example, the sheath member **190** of the fiber material may include at least one of a synthetic fiber, a carbon fiber (or an aramid fiber), and a natural fiber, but embodiments of the present disclosure are not limited thereto. For example, the sheath member **190** of the fiber material may be a textile sheet, a knit sheet, or a nonwoven fabric, but embodiments of the present disclosure are not limited thereto. For example, the sheath member **190** of the fiber material may be a fabric member, but embodiments of the present disclosure are not limited thereto.

[0134] The synthetic fiber may be a thermoplastic resin and may include a polyolefin-based fiber which is an eco-friendly material which does not relatively release a harmful substance. For example, the polyolefin-based fiber may include a polyethylene fiber, a polypropylene fiber, or a polyethylene terephthalate fiber, but embodiments of the present disclosure are not limited thereto. The polyolefin-based fiber may be a fiber of a single resin or a fiber of a core-shell structure, but embodiments of the present disclosure are not limited thereto. The natural fiber may be a composite fiber of one or two or more of a jute fiber, a kenaf fiber, an abaca fiber, a coconut fiber, and a wood fiber, but embodiments of the present disclosure are not limited thereto.

[0135] The sheath member **190** of the leather material may include natural leather or artificial leather, but embodiments of the present disclosure are not limited thereto.

[0136] Referring to FIGS. **2** to **5**, the headrest **10** according to an embodiment of the present disclosure may further include a cushion pad **170**.

[0137] The cushion pad **170** may be accommodated into the cushion member **130**. For example, the cushion pad **170** may be between the sheath member **190** and the cushion member **130**. For example, the cushion pad **170** may be between the hollow portion **131** of the cushion member **130** and the sheath member **190**. For example, the cushion pad **170** may be accommodated into the hollow portion **131** and may be covered by the sheath member **190**. For example, the cushion pad **170** may include a shape capable of being accommodated into the hollow portion **131**.

[0138] According to an embodiment of the present disclosure, the cushion pad **170** may be a path through which a sound generated (or output) by the vibration apparatus **151** is output. The cushion pad **170** may be accommodated into the hollow portion **131** of the cushion member **130** and may be configured (or disposed) to cover the sound emission portion **155***h* of the sound generating apparatus **150**. The cushion pad **170** may be accommodated into the hollow portion **131** of the cushion member **130** and may be supported by the cover **155** of the sound generating apparatus **150**. A rear surface of the cushion pad **170** may be supported by the mesh structure **155***m* in the sound emission portion **155***h*.

[0139] According to an embodiment of the present disclosure, a sound generated by the sound generating apparatus **150** or the vibration apparatus **151** may be output to the outside through the sound emission portion **155***h* of the cover **155** and the cushion pad **170**.

[0140] The cushion pad **170** according to an embodiment of the present disclosure may include a first cushion pad **171** and a second cushion pad **172**.

[0141] The first cushion pad **171** may be accommodated into the first hollow portion **131***a* of the cushion member **130**. For example, the first cushion pad **171** may be between the first hollow portion **131***a* and the sheath member **190**. For example, the first cushion pad **171** may be accommodated into the first hollow portion **131***a* and may be covered by the sheath member **190**. For example, the first cushion pad **171** may include a shape capable of being accommodated into the first hollow portion **131***a*.

[0142] According to an embodiment of the present disclosure, the first cushion pad **171** may be a path through which a sound generated (or output) by the first vibration apparatus **151-1** is output. The first cushion pad **171** may be accommodated into the first hollow portion **131***a* of the cushion member **130** and may be configured (or disposed) to cover the first sound emission portion **155***h***1** of the sound generating apparatus **150**. For example, the first cushion pad **171** may be accommodated into the first hollow portion **131***a* and may be configured (or disposed) to cover the first sound emission portion **155***h***1** of the cover **155** of the sound generating apparatus **150**. A rear surface of the first cushion pad **171** may be supported by the mesh structure **155***m* in the first sound emission portion **155***h***1**.

[0143] The second cushion pad **172** may be accommodated into the second hollow portion **131***b* of the cushion member **130**. For example, the second cushion pad **172** may be between the second hollow portion **131***b* and the sheath member **190**. For example, the second cushion pad **172** may be accommodated into the second hollow portion **131***b* and may be covered by the sheath member **190**. For example, the second cushion pad **172** may include a shape capable of being accommodated into the second hollow portion **131***b*.

[0144] According to an embodiment of the present disclosure, the second cushion pad **172** may be a path through which a sound generated (or output) by the second vibration apparatus **151-2** is output. The second cushion pad **172** may be accommodated into the second hollow portion **131***b* of the cushion member **130** and may be configured (or disposed) to cover the second sound emission portion **155***h***2** of the sound generating apparatus **150**. For example, the second cushion pad **172** may be accommodated into the second hollow portion **131***b* and may be configured (or disposed) to cover the second sound emission portion **155***h***2** of the cover **155** of the sound generating apparatus **150**. A rear surface of the second cushion pad **172** may be supported by the mesh structure **155***m* in the second sound emission portion **155***h***2**.

[0145] The cushion pad **170** (or first cushion pad **171** or second cushion pad **172**) may include a material which may output a sound and may absorb an impact. For example, the cushion pad **170** (or first cushion pad **171** or second cushion pad **172**) may include a foam material or a sponge material, but embodiments of the present disclosure are not limited thereto.

[0146] The cushion pad **170** (or first cushion pad **171** or second cushion pad **172**) according to another embodiment of the present disclosure may include a porous material, but embodiments of the present disclosure are not limited thereto. For example, the cushion pad **170** (or first cushion pad **171** or second cushion pad **172**) may include a porous material including a plurality of porous holes **170***h*. For example, the plurality of porous holes **170***h* may be configured regularly or irregularly. For example, the cushion pad **170** may include an air mesh material. For example, the cushion pad **170** may include the plurality of porous holes (or sound through hole) **170***h* and a cushion layer having a mesh material.

[0147] Referring to FIGS. **3** to **5**, the headrest **10** according to an embodiment of the present disclosure may further include a sound blocking member **180**.

[0148] The sound blocking member **180** may be configured to block a sound which is output in a rearward direction of the headrest frame **110**. For example, the sound blocking member **180** may be between the headrest frame **110** and the sheath member **190**. For example, the sound blocking member **180** may be between the rear surface **111***r* of the headrest frame **110** and the sheath member **190**. The sound blocking member **180** may be disposed (or configured) at or connected (or coupled) to the rear surface **111***r* of the headrest frame **110** and may be covered by the sheath member **190**. For example, the sound blocking member **180** may be connected (or coupled) or attached to the rear surface **111***r* of the headrest frame **110** and may be covered by the sheath member **190**.

[0149] The sound blocking member **180** may include a material for blocking or absorbing a sound. For example, the sound blocking member **180** may include rubber, but embodiments of the present disclosure are not limited thereto. For example, the sound blocking member **180** may be ethylene propylene rubber or urethane rubber, but embodiments of the present disclosure are not limited thereto. For example, the ethylene propylene rubber may be ethylene propylene diene monomer (EPDM), but embodiments of the present disclosure are not limited thereto.

[0150] The headrest **10** according to an embodiment of the present disclosure may include the sound generating apparatus **150** or the vibration apparatus **151**, and thus, may

output a sound which is generated based on a vibration (or displacement or driving) of the sound generating apparatus **150** or the vibration apparatus **151**. For example, the headrest **10** may output a 2-channel stereo sound including a left channel sound and a right channel sound generated based on a vibration (or displacement or driving) of the first vibration apparatus **151-1** and the second vibration apparatus **151-2** of the vibration apparatus **151**. For example, the headrest **10** according to an embodiment of the present disclosure may output a sound which is generated based on a vibration (or displacement or driving) of the sound generating apparatus **150** or the vibration apparatus **151** which includes the piezoelectric material, and thus, may output a sound of a clear middle-high pitched sound band. For example, the headrest **10** according to an embodiment of the present disclosure may be configured to output a sound of about 200 Hz to about 20 kHz.

[0151] FIG. **6** is a perspective view illustrating a headrest according to another embodiment of the present disclosure. FIG. **7** is a perspective view illustrating an embodiment where the sheath member on the headrest illustrated in FIG. **6** has been removed. FIG. **8** is a plan view illustrating a headrest according to another embodiment of the present disclosure.

[0152] Referring to FIGS. **6** and **7**, the headrest **20** according to another embodiment of the present disclosure may be configured to output a sound. For example, the headrest **20** may be configured to output a left channel sound and a right channel sound. For example, the headrest **20** may be configured to output a 2-channel stereo sound including the left channel sound and the right channel sound. For example, the headrest **20** may be a headrest apparatus, a headrest speaker, a headrest speaker apparatus, a headrest for chair, a headrest speaker for chair, a headrest speaker apparatus for chair, a headrest for vehicular apparatus, a headrest speaker for vehicular apparatus, or a headrest speaker apparatus for vehicular apparatus, but embodiments of the present disclosure are not limited thereto.

[0153] The headrest **20** according to another embodiment of the present disclosure may include a first sound generating apparatus **300-1**, a second sound generating apparatuses **300-2**, and a sheath member **290**.

[0154] The headrest part **200** may be configured to absorb an impact. For example, the headrest part **200** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto. For example, the headrest part **200** may be configured to accommodate a driving circuit part for driving the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2**.

[0155] The first sound generating apparatus **300-1** may be at a first side **200***a* of the headrest part **200**. The first sound generating apparatus **300-1** may be configured to be connected (or supported) or fixed (or coupled) to the first side **200***a* of the headrest part **200**. For example, the first sound generating apparatus **300-1** may be configured to be connected (or supported) or fixed (or coupled) to the first side **200***a* of the headrest part **200** by one or more first connection members **215***a*. For example, the first side **200***a* of the headrest part **200** may be a first lateral surface, a first sidewall, a first short side, a left surface, a left sidewall, or a left short side, but embodiments of the present disclosure are not limited thereto.

[0156] The first sound generating apparatus **300-1** according to an embodiment of the present disclosure may be configured to tilt (or rotate) from the first side **200***a* of the headrest part **200**. For example, the first sound generating apparatus **300-1** may be configured to tilt (or rotate) at a predetermined first angle (**01**) from the first side **200***a* of the headrest part **200**. For example, a length direction of the headrest part **200** may intersect with a length direction of the first sound generating apparatus **300-1**. For example, when the length direction of the headrest part **200** is parallel to a first direction X or an X-axis direction X, the length direction of the first sound generating apparatus **300-1** may intersect with the first direction X or the X-axis direction X. For example, as illustrated in FIG. **8**, with respect to the length direction of the headrest part **200** and the length direction of the first sound generating apparatus **300-1**, the first angle (**01**) between the headrest part **200** and the first sound generating apparatus **300-1** may be an acute angle, and for example, may be 30 degrees, but embodiments of the present disclosure are not limited thereto.

[0157] The first sound generating apparatus **300-1** may be configured to include a piezoelectric material. The first sound generating apparatus **300-1** may vibrate (or displace) based on a piezoelectric effect based on a driving signal to output (or generate) a sound (or a sound wave).

[0158] The second sound generating apparatus **300-2** may be at the second surface **200***b*, which is opposite to the first side **200***a* of the headrest part **200**. The second sound generating apparatus **300-2** may be configured to be connected (or supported) or fixed (or coupled) to the second side **200***b* of the headrest part **200**. For example, the second sound generating apparatus **300-2** may be configured to be connected (or supported) or fixed (or coupled) to the second side **200***b* of the headrest part **200** by one or more second connection members **215***b*. For example, the second side **200***b* of the headrest part **200** may be a second lateral surface, a second sidewall, a second short side, a right surface, a right sidewall, or a right short side, but embodiments of the present disclosure are not limited thereto.

[0159] The second sound generating apparatus **300-2** according to an embodiment of the present disclosure may be configured to tilt (or rotate) from the second side **200***b* of the headrest part **200**. For example, the second sound generating apparatus **300-2** may be configured to tilt (or rotate) at a predetermined second angle (θ**2**) from the second side **200***b* of the headrest part **200**. For example, a length direction of the headrest part **200** may intersect with a length direction of the second sound generating apparatus **300-2**. For example, when the length direction of the headrest part **200** is parallel to the first direction X or the X-axis direction X, the length direction of the first sound generating apparatus **300-1** may intersect with the first direction X or the X-axis direction X. For example, as illustrated in FIG. **8**, with respect to the length direction of the headrest part **200** and the length direction of the second sound generating apparatus **300-2**, the second angle (θ**2**) between the headrest part **200** and the second sound generating apparatus **300-2** may be an acute angle. For example, the second angle (θ**2**) between the headrest part **200** and the second sound generating apparatus **300-2** may be a same as or different from the first angle (θ**1**) between the headrest part **200** and the first sound generating apparatus **300-1**. For example, the second angle (θ**2**) between the headrest part **200** and the second

sound generating apparatus **300-2** may be 30 degrees, but embodiments of the present disclosure are not limited thereto.

[0160] According to an embodiment of the present disclosure, the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2** may be disposed in different directions with the headrest part **200** therebetween. For example, each of the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2** may be disposed to face an arbitrary virtual point in a forward direction of the headrest part **200**. For example, a distance (or shortest distance) between the arbitrary virtual point and the first sound generating apparatus **300-1** may be equal to a distance (or shortest distance) between the arbitrary virtual point and the second sound generating apparatus **300-2**, but embodiments of the present disclosure are not limited thereto. For example, each of the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2** may have a symmetric structure with respect to the headrest part **200**, but embodiments of the present disclosure are not limited thereto.

[0161] According to another embodiment of the present disclosure, each of the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2** may have an asymmetric structure with respect to the headrest part **200**. For example, the first angle (θ**1**) between the headrest part **200** and the first sound generating apparatus **300-1** may be different from the second angle (θ**2**) between the headrest part **200** and the second sound generating apparatus **300-2**. For example, the distance (or shortest distance) between the arbitrary virtual point and the first sound generating apparatus **300-1** may be different from the distance (or shortest distance) between the arbitrary virtual point and the second sound generating apparatus **300-2**.

[0162] The second sound generating apparatus **300-2** may be configured to include a piezoelectric material. The second sound generating apparatus **300-2** may vibrate (or displace) based on a piezoelectric effect based on a driving signal to output (or generate) a sound (or a sound wave).

[0163] According to an embodiment of the present disclosure, the first sound generating apparatus **300-1** may be configured to output the first sound (or right channel sound). The second sound generating apparatus **300-2** may be configured to output the second sound (or left channel sound). Therefore, the headrest **20** according to another embodiment of the present disclosure may generate (or output) a 2-channel stereo sound which includes a first sound based on the first sound generating apparatus **300-1** and a second sound based on the second sound generating apparatus **300-2**.

[0164] The sheath member **190** may be an outermost member which is configured to surround the headrest **20**. For example, the sheath member **190** may be configured to surround the headrest part **200**, the first sound generating apparatus **300-1**, and the second sound generating apparatus **300-2**. For example, the sheath member **190** may be a fiber material or a leather material. For example, the sheath member **190** may be a same or substantially a same as that of the sheath member **190** described above with reference to FIG. **1**, and thus, repeated descriptions thereof are omitted.

[0165] The headrest **20** according to another embodiment of the present disclosure may include the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2**, and thus, may output the first sound based on the first sound generating apparatus **300-1** and the second sound based on the second sound generating apparatus **300-2**. For example, the headrest **20** may output a 2-channel stereo sound which includes the right channel sound and the left channel sound based on a vibration (or displacement or driving) of the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2**. For example, the headrest **20** according to another embodiment of the present disclosure may output the first sound (or right channel sound) and the second sound (or left channel sound) of a clear middle-high pitched sound band generated based on a vibration (or displacement or driving) of the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2** including a piezoelectric material. For example, the headrest **10** according to another embodiment of the present disclosure may output the first sound and the second sound of about 200 Hz to about 20 KHz.

[0166] FIG. **9** is an exploded perspective view illustrating the headrest part illustrated in FIGS. **6** to **8** according to an embodiment of the present disclosure.

[0167] Referring to FIGS. **8** and **9**, the headrest part **200** according to an embodiment of the present disclosure may include a headrest frame **210** and a cushion member **230**.

[0168] The headrest part **200** or the headrest frame **210** may be a body of the headrest **10**, a main structure, a housing, or an enclosure, but embodiments of the present disclosure are not limited thereto. For example, the headrest part **200** or the headrest frame **210** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto.

[0169] The headrest part **200** or the headrest frame **210** according to an embodiment of the present disclosure may be configured in a plastic material such as plastic or styrene material, but embodiments of the present disclosure are not limited thereto. For example, a material of the headrest part **200** or the headrest frame **210** may be the same or substantially the same as that of the headrest part **100** or the headrest frame **110** described above with reference to FIGS. **1** to **5**, and thus, its repeated descriptions are omitted.

[0170] The headrest frame **210** according to an embodiment of the present disclosure may be configured to accommodate a driving circuit part for driving the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2**.

[0171] The cushion member **230** may be at a front surface **211***f* of the headrest frame **210**. For example, the cushion member **230** may be configured to cover the front surface **211***f* of the headrest frame **210**. For example, the cushion member **230** may be configured to have ae same size and shape as those of the headrest frame **210**, but embodiments of the present disclosure are not limited thereto. For example, the cushion member **230** may include a material which absorbs an impact.

[0172] The cushion member **230** according to an embodiment of the present disclosure may include a foam material or a sponge material, but embodiments of the present disclosure are not limited thereto.

[0173] The cushion member **230** according to another embodiment of the present disclosure may include a porous material, but embodiments of the present disclosure are not limited thereto. For example, the cushion member **230** may include a porous material including a plurality of porous holes. For example, the plurality of porous holes may be configured regularly or irregularly. For example, the cushion

member **230** may include an air mesh material, but embodiments of the present disclosure are not limited thereto. For example, the cushion member **230** may include the plurality of porous holes (or sound through hole) and a cushion layer having a mesh material.

[0174] The headrest part **200** according to an embodiment of the present disclosure may further include a support rod part **240**.

[0175] The support rod part **240** according to an embodiment of the present disclosure may be configured to be connected (or coupled) to a lower surface of the headrest part **200** or the headrest frame **210**, or may be configured to support the lower surface of the headrest part **200** or the headrest frame **210**. For example, the support rod part **240** may include one or more support rods **242**.

[0176] The one or more support rods **242** may be configured to be connected to the lower surface of the headrest part **200** or the headrest frame **210**. For example, the support rod part **240** may include a pair of support rods **242**. For example, the one or more support rods **242** may be connected to an upper portion of a seatback of a seat for vehicle or a backrest frame of a chair.

[0177] The support rod part **240** according to another embodiment of the present disclosure may be configured to be connected (or coupled) to a rear surface of the headrest part **200** or the headrest frame **210**, or may be configured to support the rear surface of the headrest part **200** or the headrest frame **210**.

[0178] The support rod part **240** according to another embodiment of the present disclosure may include a support frame **241** and one or more support rods **242**.

[0179] The support frame **241** may be configured to be connected (or coupled) to the rear surface of the headrest part **200** or the headrest frame **210**, or may be configured to support the rear surface of the headrest part **200** or the headrest frame **210**. The support frame **241** may be configured to cover the rear surface of the headrest part **200** or the headrest frame **210**.

[0180] The one or more support rods **242** may be configured to be connected to a lower surface and a rear surface of the headrest frame **210**. For example, the support rod part **240** may include a pair of support rods **242**, but embodiments of the present disclosure are not limited thereto. For example, the one or more (or a pair of) support rods **242** may be connected to an upper portion of a seatback of a seat for vehicle or a backrest frame of a chair.

[0181] The support rod part **240** according to another embodiment of the present disclosure may further include a first support plate **243** and a second support plate **244**.

[0182] The first support plate **243** may be connected to the support frame **241** and may be configured to support the one or more (or pair of) support rods **242**. For example, the first support plate **243** may be connected (or coupled) to the lower surface of the support frame **241** and may be configured to support the one or more (or a pair of) support rods **242** in common.

[0183] According to an embodiment of the present disclosure, the one or more (or pair of) support rods **242** may be connected (or coupled) to the first support plate **243** by a first fastening member. For example, the first fastening member may be fastened to an upper surface of each of the one or more (or pair of) support rods **242** through the first support plate **243**. For example, each of a plurality of first fastening members may be a screw or a bolt, but embodiments of the present disclosure are not limited thereto.

[0184] According to an embodiment of the present disclosure, the first support plate **243** may be connected (or coupled) to a lower surface of the support frame **241** by a plurality of second fastening members. For example, the plurality of second fastening members may be fastened to the lower surface of support frame **241** through the first support plate **243**. For example, each of the plurality of second fastening members may be a screw or a bolt, but embodiments of the present disclosure are not limited thereto.

[0185] The second support plate **244** may be connected (or coupled) to the rear surface of the support frame **241**. For example, the second support plate **244** may be connected (or coupled) to one side of the first support plate **243** and may be connected (or coupled) to the rear surface of the support frame **241**. For example, the second support plate **244** may protrude or vertically protrude from one side of the first support plate **243**, but embodiments of the present disclosure are not limited thereto. For example, the second support plate **244** may be provided (or integrated) as one body with the first support plate **243**.

[0186] According to an embodiment of the present disclosure, the second support plate **244** may be connected (or coupled) to the rear surface of the support frame **241** by a plurality of third fastening members. For example, the plurality of third fastening members may be fastened to the rear surface of support frame **241** through the second support plate **244**. For example, each of the plurality of third fastening members may be a screw or a bolt, but embodiments of the present disclosure are not limited thereto.

[0187] The headrest part **200** according to an embodiment of the present disclosure may further include one or more first connection members **215***a* and one or more second connection members **215***b*.

[0188] The one or more first connection members **215***a* may protrude to have a predetermined length from a first side **200***a* of the headrest frame **210** or the headrest part **200**. The one or more first connection members **215***a* may be configured to tilt (or rotate) at a predetermined first angle (θ**1**) from the first side **200***a* of the headrest frame **210** or the headrest part **200**. The one or more first connection members **215***a* may be connected to one surface of the first sound generating apparatus **300-1**. For example, an end portion of each of the one or more first connection members **215***a* may be inserted into the one surface of the first sound generating apparatus **300-1**.

[0189] The one or more second connection members **215***b* may protrude to have a predetermined length from a second side **200***b* of the headrest frame **210** or the headrest part **200**. The one or more second connection members **215***b* may be configured to tilt (or rotate) at a predetermined second angle (θ**2**) from the second side **200***b* of the headrest frame **210** or the headrest part **200**. The one or more second connection members **215***b* may be connected to one surface of the second sound generating apparatus **300-2**. For example, an end portion (or one side) of each of the one or more second connection members **215***b* may be inserted into the one surface of the second sound generating apparatus **300-2**.

[0190] FIG. **10** is an exploded perspective view illustrating a first sound generating apparatus illustrated in FIGS. **6**

to **8** according to an embodiment of the present disclosure. FIG. **11** is a cross-sectional view taken along line III-III' illustrated in FIG. **10**.

[0191] Referring to FIGS. **8**, **10**, and **11**, a first sound generating apparatus **300-1** according to an embodiment of the present disclosure may include an enclosure **310**, a vibration apparatus **351**, and a cushion member **370**.

[0192] The enclosure **310** may be at the first side **200***a* of the headrest part **200**. The first sound generating apparatus **300-1** may be configured to be connected (or supported) or fixed (or coupled) to the first side **200***a* of the headrest part **200**. For example, the enclosure **310** may be configured to support the vibration apparatus **351** and surround the vibration apparatus **351**. The enclosure **310** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto.

[0193] The enclosure **310** may be at the vibration apparatus **351**. The enclosure **310** may be configured to support the vibration apparatus **351**. For example, the enclosure **310** may be configured to support the vibration apparatus **351** and surround the vibration apparatus **351**. For example, the enclosure **310** may be configured to accommodate (or receive) the vibration apparatus **351**. For example, the enclosure **310** may be a housing, a case, a case member, a housing member, a cabinet, a sound box, or the like, but embodiments of the present disclosure are not limited thereto.

[0194] The enclosure **310** according to an embodiment of the present disclosure may be configured in a plastic material such as plastic or styrene material, but embodiments of the present disclosure are not limited thereto. For example, a material of the enclosure **310** may be the same or substantially the same as that of the headrest part **100** or the headrest frame **110** described above with reference to FIGS. **1** to **5**, and thus, its repeated descriptions are omitted.

[0195] The enclosure **310** according to an embodiment of the present disclosure may include a base plate **311**, a sidewall frame **312**, and an accommodating portion **313**.

[0196] The base plate **311** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto. The base plate **311** may include a first surface (or front surface) **311***a* and a second surface (or rear surface) **311***r*.

[0197] The sidewall frame **312** may be formed or configured along an edge portion of the base plate **311**. The sidewall frame **312** may protrude from an edge portion of the first surface **311***a* of the base plate **311**. For example, the sidewall frame **312** may be connected or vertically connected to the edge portion of the first surface **311***a* of the base plate **311**.

[0198] The accommodating portion **313** may be configured to accommodate or support the vibration apparatus **351**. For example, the accommodating portion **313** may be formed or configured on the first surface **311***a* of the base plate **311** surrounded by the sidewall frame **312**. For example, the accommodating portion **313** may be an accommodating space, a groove, an accommodating groove, or a supporting groove, but embodiments of the present disclosure are not limited thereto.

[0199] The enclosure **310** according to an embodiment of the present disclosure may further include one or more connection portions (or coupling portions) **315**.

[0200] The one or more connection portions **315** may be formed or configured at a first side **311***s* of the enclosure **310**. The one or more connection portions **315** may be connected or coupled to the one or more first connection members **215***a* of the headrest part **200** described above with reference to FIGS. **8** and **9**. Accordingly, the first sound generating apparatus **300-1** or the enclosure **310** may tilt (or rotate) at a predetermined first angle (θ1) from the first side **200***a* of the headrest part **200**.

[0201] The vibration apparatus **351** may be between the enclosure **310** and the cushion member **370** and may be configured to output a first sound (or right channel sound). The vibration apparatus **351** may be accommodated into or supported by the accommodating portion **313** of the enclosure **310** to output the first sound. For example, the vibration apparatus **351** may be configured to be supported by a first supporting portion **314***a* of the enclosure **310**. For example, an edge portion of the vibration apparatus **351** may be configured to be supported by the first supporting portion **314***a*.

[0202] The first supporting portion **314***a* of the enclosure **310** may be configured along an edge portion of the accommodating portion **313**. The first supporting portion **314***a* of the enclosure **310** may be configured to support an edge portion of the vibration apparatus **351**. For example, the first supporting portion **314***a* may protrude from an inner surface of the accommodating portion **313** to a center portion of the accommodating portion **313**. For example, an upper surface (or supporting surface) of the first supporting portion **314***a* may be between a bottom surface of the accommodating portion **313** and an upper surface of the sidewall frame **312**. For example, the vibration apparatus **351** may be supported by the upper surface of the first supporting portion **314***a*, and thus, the vibration apparatus **351** may be accommodated into the accommodating portion **313** and may be surrounded by the sidewall frame **312**.

[0203] The vibration apparatus **351** according to an embodiment of the present disclosure may be configured to include a piezoelectric material. The vibration apparatus **351** may vibrate (or displace) based on a piezoelectric effect based on the driving signal (or vibration driving signal or voice signal) to output (or generate) a sound (or a sound wave). For example, the vibration apparatus **351** may be a piezoelectric type vibration apparatus which includes the piezoelectric material. For example, the vibration apparatus **351** may include a piezoelectric material, and thus, may output a sound of a clear middle-high pitched sound band. For example, the vibration apparatus **351** may be configured to output a sound of about 200 Hz to about 20 kHz.

[0204] The vibration apparatus **351** according to an embodiment of the present disclosure may include a vibration member **351***a* and a vibration element **351***b*.

[0205] The vibration member **351***a* may output a first sound based on a vibration (or displacement) of the vibration element **351***b*. For example, the vibration member **351***a* may be a diaphragm, a vibration plate, a vibration substrate, a vibration panel, a sound plate, a sound panel, a passive vibration plate, a passive vibration member, a passive vibration panel, a sound output plate, or a sound vibration plate, but embodiments of the present disclosure are not limited thereto.

[0206] The vibration member **351***a* may include a single nonmetal material or a composite nonmetal material, but embodiments of the present disclosure are not limited

thereto. For example, a material of the vibration member **351***a* may be the same or substantially the same as that of the headrest part **200** or the vibration member **151***a* described above with reference to FIGS. **4** and **5**, and thus, its repeated descriptions are omitted.

[0207] The vibration member **351***a* may be accommodated into the accommodating portion **313** of the enclosure **310** and may be connected or coupled to the first supporting portion **314***a* of the enclosure **310** by using the coupling member **353**. For example, the vibration member **351***a* may be spaced apart from a bottom surface of the accommodating portion **313**. For example, a center portion, except an edge portion, of the vibration member **351***a* may be spaced apart from the bottom surface of the accommodating portion **313**. The vibration member **351***a* may be configured at the accommodating portion **113**. For example, the vibration member **351***a* may be configured to cover the accommodating portion **313**. For example, the vibration member **351***a* may have a same shape as that of the accommodating portion **313** and may have a size which is greater than that of the accommodating portion **313**, so as to cover the accommodating portion **313**, but embodiments of the present disclosure are not limited thereto.

[0208] The coupling member **353** may be disposed (or interposed) between the enclosure **310** and the vibration member **351***a*. For example, the coupling member **353** may be disposed (or interposed) between the first supporting portion **314***a* of the enclosure **310** and the vibration member **351***a*. For example, the coupling member **353** may be disposed (or interposed) between the first supporting portion **314***a* and a rear edge portion of the vibration member **351***a*.

[0209] The vibration element **351***b* may be configured to vibrate (or displace) the vibration member **351***a*. For example, the vibration element **351***b* may be configured to vibrate (or displace or driven) the vibration member **351***a* by a vibration (or displacement or driving) based on the driving signal (or vibration driving signal or voice signal). For example, the vibration element **351***b* may output (or generate) the first sound by using the vibration member **351***a* as a vibration plate. For example, the vibration element **351***b* may include a piezoelectric type vibration element which include a piezoelectric effect. For example, the vibration element **351***b* may be a vibration generating device, a vibration film, a vibration generating film, a vibrator, an active vibrator, an active vibration generator, an actuator, an exciter, a film actuator, a film exciter, an ultrasonic actuator, or an active vibration member, or the like, but embodiments of the present disclosure are not limited thereto.

[0210] The vibration element **351***b* may be disposed (or connected to) or configured at the accommodating portion **313** of the enclosure **310** to vibrate (or displace) the vibration member **351***a*. The vibration element **351***b* may be disposed (or connected to) or configured at the vibration member **351***a*. For example, the vibration element **351***b* may be disposed (or connected to) or configured at one or more of a first surface and a second surface, which is opposite to the first surface, of the vibration member **351***a*. As an embodiment of the present disclosure, the vibration element **351***b* may be disposed (or connected to) or configured at the first surface of the vibration member **351***a*. As another embodiment of the present disclosure, the vibration element **351***b* may be disposed (or connected to) or configured at the second surface of the vibration member **351***a*. As another embodiment of the present disclosure, the vibration element **351***b* may be disposed (or connected to) or configured at each of the first surface and the second surface of the vibration member **351***a*. For example, the vibration element **351***b* may have a bimorph structure disposed with the vibration member **351***a* therebetween.

[0211] The vibration apparatus **251** according to an embodiment of the present disclosure may further include an adhesive member **351***c*. For example, the vibration element **351***b* may be connected or coupled to the vibration member **351***a* by using the adhesive member **351***c*.

[0212] The vibration element **351***b* may be connected or coupled to one or more of a first surface and a second surface, which is opposite to the first surface, of the vibration member **351***a* by using the adhesive member **351***c*. For example, the vibration element **351***b* may be connected (or coupled) to a rear surface of the vibration member **351***a* by using the adhesive member **351***c* and may be spaced apart from a bottom surface of the accommodating portion **313** of the enclosure **310**.

[0213] The first sound generating apparatus **300-1** according to an embodiment of the present disclosure may further include a cover **355**.

[0214] The cover **355** may be configured to absorb an impact applied to the enclosure **310** and/or the vibration apparatus **351**. The cover **355** may be configured at the vibration apparatus **351**. For example, the cover **355** may be configured to cover the vibration apparatus **351**. For example, the cover **355** may be between the enclosure **310** and the cushion member **370**. For example, the cover **355** may be disposed or configured between the enclosure **310** and the cushion member **370** to cover the vibration apparatus **351**. For example, the cover **355** may be disposed or configured between the vibration apparatus **351** and the cushion member **370**.

[0215] The cover **355** according to an embodiment of the present disclosure may be accommodated into or supported by the accommodating portion **313** of the enclosure **310**. For example, the cover **355** may be configured to be supported by a second supporting portion **314***b* of the enclosure **310**. For example, an edge portion of the cover **355** may be configured to be supported by the second supporting portion **314***b* to cover the accommodating portion **313**.

[0216] The second supporting portion **314***b* of the enclosure **310** may be configured along an edge portion of the accommodating portion **313**. The second supporting portion **314***b* of the enclosure **310** may be configured to support an edge portion of the cover **355**. For example, the second supporting portion **314***b* may protrude from an inner surface of an upper side of the accommodating portion **313** to a center portion of the accommodating portion **313**. For example, an upper surface (or supporting surface) of the second supporting portion **314***b* may be between the first supporting portion **314***a* and an upper surface of the sidewall frame **312**. For example, a portion of the cover **355** may be supported by the upper surface of the second supporting portion **314***b*, and thus, the portion of the cover **355** may be accommodated into the accommodating portion **313** and may be surrounded by the sidewall frame **312**.

[0217] The cover **355** according to an embodiment of the present disclosure may be connected (or coupled) to the enclosure **310** by a plurality of fastening members. For example, the plurality of fastening members may be fastened to the second supporting portion **314***b* of the enclosure **310** through the cover **355**. For example, each of the

plurality of fastening members may be a screw or a bolt, but embodiments of the present disclosure are not limited thereto.

[0218] The cover **355** according to an embodiment of the present disclosure may be configured to have ae same size and shape as those of the accommodating portion **313** of the enclosure **310**, but embodiments of the present disclosure are not limited thereto. For example, the cover **355** may include a material which absorbs an impact. For example, the cover **355** may include a foam material or a sponge material, but embodiments of the present disclosure are not limited thereto. For example, the cover **355** may be a cushion cover, a foam cover, a sponge cover, or a buffer cover, but embodiments of the present disclosure are not limited thereto.

[0219] The cover **155** according to an embodiment of the present disclosure may include a sound emission portion **355***h*.

[0220] The sound emission portion **355***h* may be configured to overlap (or correspond to) the vibration apparatus **351**. For example, the sound emission portion **355***h* may be a path through which a first sound generated (or output) by the vibration apparatus **351** is output to the outside (or cushion member **370**). For example, the sound emission portion **355***h* may be configured to pass through the cover **355** along a thickness direction Z of the cover **355**.

[0221] The sound emission portion **355***h* according to an embodiment of the present disclosure may be configured to include one or more holes (or sound holes or sound emission holes).

[0222] The sound emission portion **355***h* according to another embodiment of the present disclosure may be configured to include one or more holes (or sound holes or sound emission holes) based on a mesh structure **355***m*.

[0223] Referring to FIGS. **6**, **10**, and **11**, the cushion member **370** may be configured to overlap (or correspond to) the vibration apparatus **351**. For example, the cushion member **370** may be between the sheath member **290** and the vibration apparatus **351**. For example, the cushion member **370** may be between the cover **355** and the sheath member **290**. For example, the cushion member **370** may be a cushion pad, but embodiments of the present disclosure are not limited thereto.

[0224] According to an embodiment of the present disclosure, the cushion member **370** may be a path through which the first sound generated (or output) by the vibration apparatus **351** is output. The cushion member **370** may be configured (or disposed) to cover the sound emission portion **355***h*. For example, the cushion member **370** may be supported by the cover **355**. A rear surface of the cushion member **370** may be supported by the mesh structure **355***m* in the sound emission portion **355***h* of the cover **355**.

[0225] The cushion member **370** according to an embodiment of the present disclosure may include a material which may output a sound and may absorb an impact. For example, the cushion member **370** may include a foam material or a sponge material, but embodiments of the present disclosure are not limited thereto.

[0226] The cushion member **370** according to another embodiment of the present disclosure may include a porous material, but embodiments of the present disclosure are not limited thereto. For example, the cushion member **370** may include a porous material including a plurality of porous holes **370***h*. For example, the plurality of porous holes **370***h* may be configured regularly or irregularly. For example, the cushion member **370** may include an air mesh material. For example, the cushion member **370** may include the plurality of porous holes (or sound through hole) **370***h* and a cushion layer having a mesh material.

[0227] According to an embodiment of the present disclosure, in the first sound generating apparatus **300-1**, the first sound generated by the vibration apparatus **351** may be output to the outside through the sound emission portion **355***h* of the cover **355** and the cushion member **370**.

[0228] Referring to FIGS. **8**, **10**, and **11**, the first sound generating apparatus **300-1** according to an embodiment of the present disclosure may further include a sound blocking member **380**.

[0229] The sound blocking member **380** may be configured to block the first sound which is output in a rearward direction of the enclosure **310**. For example, the sound blocking member **380** may be between the enclosure **310** and the sheath member **290**. For example, the sound blocking member **380** may be between the rear surface **311***r* of the enclosure **310** and the sheath member **290**. The sound blocking member **380** may be disposed (or configured) at or connected (or coupled) to the rear surface **311***r* of the enclosure **310** and may be covered by the sheath member **290**. For example, the sound blocking member **380** may be connected (or coupled) or attached to the rear surface **311***r* of the enclosure **310** and may be covered by the sheath member **290**.

[0230] The sound blocking member **380** may include a material for blocking or absorbing a sound. For example, the sound blocking member **380** may include rubber, but embodiments of the present disclosure are not limited thereto. For example, the sound blocking member **380** may be ethylene propylene rubber or urethane rubber, but embodiments of the present disclosure are not limited thereto. For example, the ethylene propylene rubber may be ethylene propylene diene monomer (EPDM), but embodiments of the present disclosure are not limited thereto.

[0231] The first sound generating apparatus **300-1** according to an embodiment of the present disclosure may be connected (or coupled) to the first side **200***a* of the headrest part **200** and may output the first sound. For example, the first sound generating apparatus **300-1** may output the first sound which is generated based on a vibration (or displacement or driving) of the vibration apparatus **351** which includes the piezoelectric material, and thus, may output the first sound of a clear middle-high pitched sound band. For example, the first sound generating apparatus **300-1** according to an embodiment of the present disclosure may be configured to output the first sound of about 200 Hz to about 20 kHz.

[0232] FIG. **12** is an exploded perspective view illustrating a second sound generating apparatus illustrated in FIGS. **6** to **8** according to an embodiment of the present disclosure. FIG. **13** is a cross-sectional view taken along line IV-IV' illustrated in FIG. **12**.

[0233] Referring to FIGS. **8**, **12**, and **13**, a second sound generating apparatus **300-2** according to an embodiment of the present disclosure may include an enclosure **310**, a vibration apparatus **351**, and a cushion member **370**.

[0234] The enclosure **310** may be at the second side **200***b* of the headrest part **200**. The second sound generating apparatus **300-2** may be configured to be connected (or supported) or fixed (or coupled) to the second side **200***b* of

the headrest part **200**. The enclosure **310** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto.

[0235] The enclosure **310** may include a base plate **311**, a sidewall frame **312**, and an accommodating portion **313**. For example, the base plate **311**, the sidewall frame **312**, and the accommodating portion **313** may be the same or substantially the same as that of the base plate **311**, the sidewall frame **312**, and the accommodating portion **313** of the first sound generating apparatus **300-1** described above with reference to FIGS. **10** and **11**, and thus, like reference numerals refer to like elements and its repeated descriptions are omitted.

[0236] The enclosure **310** according to an embodiment of the present disclosure may further include one or more connection portions (or coupling portions) **315**. The one or more connection portions **315** may be connected or coupled to the one or more second connection members **215***b* of the headrest part **200** described above with reference to FIGS. **8** and **9**. Accordingly, the second sound generating apparatus **300-2** or the enclosure **310** may tilt (or rotate) at a predetermined second angle (θ**2**) from the second side **200***b* of the headrest part **200**.

[0237] The vibration apparatus **351** may be between the enclosure **310** and the cushion member **370** and may be configured to output a second sound (or left channel sound). The vibration apparatus **351** may be accommodated into or supported by the accommodating portion **313** of the enclosure **310** to output the second sound. For example, the vibration apparatus **351** may be configured to be supported by a first supporting portion **314***a* of the enclosure **310**. For example, the vibration apparatus **351** may be the same or substantially the same as that of the vibration apparatus **351** described above with reference to FIGS. **10** and **11**, and thus, like reference numerals refer to like elements and its repeated descriptions are omitted.

[0238] The second sound generating apparatus **300-2** according to an embodiment of the present disclosure may further include a cover **355**.

[0239] The cover **355** may be configured to absorb an impact applied to the enclosure **310** and/or the vibration apparatus **351**. The cover **355** may be configured at the vibration apparatus **351**. For example, the cover **355** may be configured to cover the vibration apparatus **351**. For example, the cover **355** may be between the enclosure **310** and the cushion member **370**. For example, the cover **355** may be disposed or configured between the enclosure **310** and the cushion member **370** to cover the vibration apparatus **351**. For example, the cover **355** may be the same or substantially the same as that of the cover **355** described above with reference to FIGS. **10** and **11**, and thus, like reference numerals refer to like elements and its repeated descriptions are omitted.

[0240] The cushion member **370** may be configured to overlap (or correspond to) the vibration apparatus **351**. For example, the cushion member **370** may be between the vibration apparatus **351** and the sheath member **290**. For example, the cushion member **370** may be between the cover **355** and the sheath member **290**. For example, the cushion member **370** may be a path through which the second sound generated (or output) by the vibration apparatus **351** is output. For example, the cushion member **370** may be the same or substantially the same as that of the cushion member **370** described above with reference to FIGS. **10** and **11**, and thus, like reference numerals refer to like elements and its repeated descriptions are omitted.

[0241] The second sound generating apparatus **300-2** according to an embodiment of the present disclosure may further include a sound blocking member **380**.

[0242] The sound blocking member **380** may be configured to block the second sound which is output in a rearward direction of the enclosure **310**. For example, the sound blocking member **380** may be between the enclosure **310** and the sheath member **290**. For example, the sound blocking member **380** may be between the rear surface **311***r* of the enclosure **310** and the sheath member **290**. The sound blocking member **380** may be the same or substantially the same as that of the sound blocking member **380** described above with reference to FIGS. **10** and **11**, and thus, like reference numerals refer to like elements and its repeated descriptions are omitted.

[0243] The second sound generating apparatus **300-2** according to an embodiment of the present disclosure may be connected (or coupled) to the second side **200***b* of the headrest part **200** and may output the second sound. For example, the second sound generating apparatus **300-2** may output the second sound which is generated based on a vibration (or displacement or driving) of the vibration apparatus **351** which includes the piezoelectric material, and thus, may output the second sound of a clear middle-high pitched sound band. For example, the second sound generating apparatus **300-2** according to an embodiment of the present disclosure may be configured to output the second sound of about 200 Hz to about 20 kHz.

[0244] FIG. **14** is a rear view illustrating a headrest according to another embodiment of the present disclosure. FIG. **15** is a perspective view illustrating a headrest according to another embodiment of the present disclosure. FIG. **16** is a cross-sectional view taken along line V-V' illustrated in FIG. **14**. FIGS. **14** to **16** illustrate an embodiment where a third sound generating apparatus is additionally configured on the headrest part of the headrest described above with reference to FIGS. **6** to **13**. In the following description, therefore, a third sound generating apparatus and relevant elements will be described in detail, the other elements may be a same or substantially a same as that of descriptions described above with reference to FIGS. **6** to **13**, and thus, like reference numerals refer to like elements and its repeated descriptions may be omitted or will be briefly given below. Therefore, descriptions above with reference to FIGS. **6** to **13** may be included in descriptions of FIGS. **14** to **16**.

[0245] Referring to FIGS. **14** to **16**, a headrest **20** according to another embodiment of the present disclosure may further include a third sound generating apparatus **250** which is on a headrest part **200**.

[0246] The headrest part **200** according to another embodiment of the present disclosure may include a headrest frame **210**, the third sound generating apparatus **250**, and a cushion member **230**.

[0247] The headrest frame **210** may include an accommodating portion **213**. The accommodating portion **213** may be configured to accommodate (or receive) the third sound generating apparatus **250**.

[0248] The headrest frame **210** may include a base frame **211**, a sidewall frame **212**, and an accommodating portion **213**.

[0249] The base frame **211** may include a tetragonal shape or a tetragonal shape including a curved portion, but embodiments of the present disclosure are not limited thereto. The base frame **211** may include a first surface (or front surface) and a second surface (or rear surface) **211***r*.

[0250] The sidewall frame **212** may be formed or configured along an edge portion of the base frame **211**. The sidewall frame **212** may protrude from an edge portion of the first surface of the base frame **211**. For example, the sidewall frame **212** may be connected or vertically connected to the edge portion of the first surface of the base frame **211**.

[0251] The accommodating portion **213** may be formed or configured in the base frame **211**. For example, the accommodating portion **213** may be formed or configured in the base frame **211** to accommodate or support the third sound generating apparatus **250**. For example, the accommodating portion **213** may be formed or configured in the base frame **111** by the sidewall frame **212** protruding from the first surface of the base frame **211**. For example, the accommodating portion **213** may be an accommodating space, a groove, an accommodating groove, or a supporting groove, but embodiments of the present disclosure are not limited thereto.

[0252] The headrest part **200** according to an embodiment of the present disclosure may further include one or more first connection members **215***a* and one or more second connection members **215***b*.

[0253] The one or more first connection members **215***a* may protrude to have a predetermined length from a first side **200***a* of the headrest frame **210**. The one or more first connection members **215***a* may be configured to tilt (or rotate) at a predetermined first angle (θ**1**) from the first side **200***a* of the headrest frame **210**. The one or more first connection members **215***a* may be connected to one surface of the first sound generating apparatus **300-1**. For example, end portions of the one or more first connection members **215***a* may be accommodated into the one or more connection portions **315** in the enclosure **310** of the first sound generating apparatus **300-1** illustrated in FIGS. **10** and **11**.

[0254] The one or more second connection members **215***b* may protrude to have a predetermined length from a second side **200***b* of the headrest frame **210**. The one or more second connection members **215***b* may be configured to tilt (or rotate) at a predetermined second angle (θ**2**) from the second side **200***b* of the headrest frame **210**. The one or more second connection members **215***b* may be connected to one surface of the second sound generating apparatus **300-2**. For example, end portions of the one or more second connection members **215***b* may be accommodated into the one or more connection portions **315** in the enclosure **310** of the second sound generating apparatus **300-2** illustrated in FIG. **13**.

[0255] The headrest part **200** according to an embodiment of the present disclosure may further include a first sound emission port **20001** and a second sound emission port **20002**.

[0256] The first sound emission port (or first sound emission hole) **20001** may be configured in a lower portion of the headrest frame **210**, or may be connected to the accommodating portion **213**. For example, the first sound emission port **20001** may be configured (or formed) in a portion of a sidewall frame, corresponding to a lower portion of the headrest frame **210**, of the sidewall frame **212** of the headrest frame **210**. For example, the first sound emission port **20001** may be configured (or formed) to pass through a portion of the sidewall frame **212** and may be connected to the accommodating portion **213**. For example, the first sound emission port **20001** may be disposed (or configured) in a lower surface of the headrest part **200** and may face the ground.

[0257] The second sound emission port (or second sound emission hole) **20002** may be configured in the lower portion of the headrest frame **210** in parallel with the first sound emission port **20001** and may be connected to the accommodating portion **213**. For example, the second sound emission port **20002** may be configured (or formed) in a portion of the sidewall frame **212** so as to be adjacent to the first side **200***a* in the sidewall frame **212** of the headrest frame **210**. For example, the second sound emission port **20002** may be configured (or formed) to pass through a portion of the sidewall frame **212** and may be connected to the accommodating portion **213**. For example, the second sound emission port **20002** may be disposed (or configured) in the lower surface of the headrest part **200** and may face the ground.

[0258] The third sound generating apparatus **250** may be disposed (or configured) in the headrest frame **210** to output a third sound. The third sound generating apparatus **250** may be accommodated (or received) into the accommodating portion **213** of the headrest frame **210** and may be configured to output the third sound. For example, the third sound output from the third sound generating apparatus **250** may differ from each of the first sound output from the first sound generating apparatus **300-1** and the second sound output from the second sound generating apparatus **300-2**. For example, the third sound output from the third sound generating apparatus **250** may include a low-pitched sound band.

[0259] The third sound generating apparatus **250** according to an embodiment of the present disclosure may be a woofer speaker, but embodiments of the present disclosure are not limited thereto. For example, the third sound generating apparatus **250** may be one or more of a woofer, a mid-woofer, and a sub-woofer, but embodiments of the present disclosure are not limited thereto. For example, the third sound generating apparatus **250** may be a speaker which outputs the third sound of 30 Hz to 200 Hz or 300 Hz or less, but embodiments of the present disclosure are not limited thereto. Accordingly, the third sound generating apparatus **250** may output the third sound of 30 Hz to 200 Hz or 300 Hz or less, and thus, may enhance a sound characteristic of a low-pitched sound band of a sound output from the headrest **20**.

[0260] The third sound generating apparatus **250** according to an embodiment of the present disclosure may be a coil-type vibration apparatus or a coil-type actuator. For example, the third sound generating apparatus **250** may vibrate (or driven) based on a driving signal (or vibration driving signal or voice signal) to output (or generate) the third sound (or sound wave or low sound), based on Fleming's left hand rule.

[0261] The third sound generating apparatus **250** according to an embodiment of the present disclosure may include a first enclosure **251**, a second enclosure **253**, an actuator **255**, and a cover plate **257**.

[0262] The first enclosure **251** may be configured at the second enclosure **253** and the actuator **255**. The first enclosure **251** may be configured to support the second enclosure **253** and the actuator **255**. The first enclosure **251** may be

configured to include a sound space **250***s* and a sound emission path **250***p*. The sound emission path **250***p* may be configured to be connected to (or communicated with) the second sound emission port **20002** in the headrest frame **210**.

[0263] The first enclosure **251** according to an embodiment of the present disclosure may include a base plate (or a first base plate) **251***a*, a sidewall (or a first sidewall) **251***b*, a sound space **250***s*, an opening portion (or a first opening portion) **2510**, a partition **251***f*, and the sound emission path **250***p*.

[0264] The base plate **251***a* may be configured to have a shape and a size corresponding to the accommodating portion **213** of the headrest frame **210**. A rear surface of the base plate **251***a* may be supported by a bottom surface of the accommodating portion **213** of the headrest frame **210**.

[0265] The sidewall **251***b* may be formed or configured along an edge portion of the base plate **251***a*. The sidewall **251***b* may protrude from an edge portion of a front surface of the base plate **251***a*. For example, the sidewall **251***b* may be connected or vertically connected to the edge portion of the front surface of the base plate **251***a*. For example, the sidewall **251***b* may form (or configure) a sound space **250***s* on a front surface of the base plate **251***a*. For example, the sound space **250***s* may be surrounded by the sidewall **251***b*.

[0266] The sidewall **251***b* according to an embodiment of the present disclosure may include first to fourth sidewalls corresponding to an edge portion of the base plate **251***a*. For example, the sidewall **251***b* may include a first sidewall parallel to a first long side of the base plate **251***a*, a second sidewall parallel to a second long side of the base plate **251***a*, a third sidewall parallel to a first short side of the base plate **251***a*, and a fourth sidewall parallel to a second short side of the base plate **251***a*.

[0267] The opening portion **2510** may be formed (or configured) in a portion of the sidewall **251***b* so as to be connected to (or communicated with) the second sound emission port **20002** which is in the headrest frame **210**. For example, the opening portion **2510** may be formed (or configured) in a portion of a first sidewall, corresponding to (or overlapping) the second sound emission port **20002** in the headrest frame **210**, of the sidewall **251***b*. Accordingly, the second sound emission port **20002** may be connected to (or communicated with) the sound space **250***s* of the first enclosure **251** through the first opening portion **2510**.

[0268] The partition **251***f* may be disposed in a partial region of the first sound space **250***s*. For example, the partition **251***f* may be disposed in a partial region of the first sound space **250***s* and may form (or configure) the second sound emission path **250***p* separated from the first sound space **250***s*. For example, the partition **251***f* may include a first partition which is connected to the first sidewall, which is adjacent to the opening portion **2510**, of the sidewall **251***b* and spaced apart from a third side wall of the sidewall **251***b*, a second partition spaced apart from a portion of the first sidewall of the sidewall **251***b*, and a third partition having a curved shape between the first partition and the second partition, but embodiments of the present disclosure are not limited thereto. For example, the partition **251***f* may be disposed in a partial region of the first sound space **250***s* spaces apart from the sidewall **251***b* to have an "L"-shape, but embodiments of the present disclosure are not limited thereto.

[0269] The second sound emission path **250***p* may be formed (or configured) in a region between the sidewall **251***b* and the partition **251***f*. For example, one side of the second sound emission path **250***p* may be connected to (or communicated with) the sound space **250***s* in a region adjacent to a fourth sidewall of the sidewall **251***b*. For example, the other side of the second sound emission path **250***p* may be the opening portion **2510**, or may be connected to (or communicated with) the opening portion **2510**.

[0270] The first enclosure **251** according to an embodiment of the present disclosure may include a supporting portion **251***c*. The supporting portion **251***c* may be configured to support the actuator **255**. For example, the supporting portion **251***c* may be configured to support a rear surface of the actuator **255**. For example, the supporting portion **251***c* may be configured or protrude from the base plate **251** to support a rear edge portion of the actuator **255**. For example, the supporting portion **251***c* may include a circular shape, but embodiments of the present disclosure are not limited thereto. For example, the supporting portion **251***c* may be a protrusion supporting portion, a circular supporting portion, an actuator supporting portion, a rear supporting portion, or a supporting member, but embodiments of the present disclosure are not limited thereto.

[0271] The first enclosure **251** or the supporting portion **251***c* according to an embodiment of the present disclosure may further include an accommodating hole (or first accommodating hole) **251***h*.

[0272] The accommodating hole **251***h* may accommodate a portion of the actuator **255**. The accommodating hole **251***h* may be formed (or configured) in a region surrounded by the supporting portion **251***c*. The accommodating hole **251***h* may have a smaller size than the supporting portion **251***c*, but embodiments of the present disclosure are not limited thereto. The supporting portion **251***c* may be formed (or configured) to pass through the base plate **251***a*. For example, at least a portion of a rear surface of the actuator **255** may be accommodated into the accommodating hole **251***h*.

[0273] The first enclosure **251** according to an embodiment of the present disclosure may further include a plurality of supporting projections (or a plurality of first supporting projections) **251***d*.

[0274] The plurality of supporting projections **251***d* may be at a periphery of the supporting portion **251***c*. For example, the supporting portion **251***c* may be between the plurality of supporting projections **251***d*. The plurality of supporting projections **251***d* may protrude to have a predetermined height from the base plate **251***a*. The plurality of supporting projections **251***d* may face each other with the supporting portion **251***c* therebetween.

[0275] The second enclosure **253** may be configured on the first enclosure **251**. The second enclosure **253** may be configured to support the actuator **255** and cover the first enclosure **251**. The second enclosure **253** may be configured in the sound space **250***s* and the sound emission path **250***p*. The second enclosure **253** may be configured to support the actuator **255** and cover the sound space **250***s* and the sound emission path **250***p* of the first enclosure **251**. For example, the second enclosure **253** may be connected (or coupled) to the sidewall frame **212** of the headrest frame **210** to cover the sound space **250***s* and the sound emission path **250***p* of the first enclosure **251**. For example, the second enclosure **253** may be connected (or coupled) to the headrest frame

210 by a plurality of fastening members. The plurality of fastening members may be fastened to the sidewall frame **212** of the headrest frame **210** through the second enclosure **253**. For example, each of the plurality of fastening members may be a screw or a bolt, but embodiments of the present disclosure are not limited thereto.

[0276] The headrest frame **210** may further include a supporting surface **214**. The supporting surface **214** may support the second enclosure **253**. The supporting surface **214** may be formed (or configured) to be concave from an upper surface of the sidewall frame **212**. The supporting surface **214** may be formed (or configured) to be concave from the upper surface of the sidewall frame **212** so as to support an edge portion of the second enclosure **253**.

[0277] The second enclosure **253** according to an embodiment of the present disclosure may include a base plate (or a second base plate) **253***a*, a sidewall (or a second sidewall) **253***b*, a supporting portion (or a second supporting portion) **253***c*, an accommodating hole (or a first accommodating hole) **253***h*, and an opening portion (a second opening portion) **2530**.

[0278] The base plate **253***a* may be configured on the first enclosure **251**. The base plate **253***a* may be configured to support the actuator **255** and cover the first enclosure **251**. The second enclosure **253** may be configured in the sound space **250***s* and the sound emission path **250***p* of the first enclosure **251**. The second enclosure **253** may be configured to support the actuator **255** and cover the sound space **250***s* and the sound emission path **250***p* of the first enclosure **251**.

[0279] The sidewall **253***b* may be formed or configured along an edge portion of the base plate **253***a*. The sidewall **253***b* may protrude from an edge portion of a front surface of the base plate **253***a*. For example, the sidewall frame **253***b* may be connected or vertically connected to the edge portion of the front surface of the base plate **253***a*. For example, the sidewall **253***b* may be formed (or configured) to be supported by the sidewall frame **212** and the partition **251***f* of the first enclosure **251**.

[0280] The supporting portion **253***c* may protrude from the base plate **253***a* to support the actuator **255**. The supporting portion **253***c* may be formed to be concave from the front surface of the base plate **253***a* so as to accommodate the actuator **255**.

[0281] The accommodating hole **253***h* may be formed (or configured) in the supporting portion **253***c*. The accommodating hole **253***h* may be formed (or configured) in the supporting portion **253***c* to accommodate the actuator **255**. For example, the accommodating hole **253***h* may pass through the supporting portion **253***c* to accommodate a portion of the actuator **255**.

[0282] The opening portion **2530** may be formed (or configured) in one side of the supporting portion **253***c* so as to be connected to (or communicated with) the first sound emission port **20001** which is in the headrest frame **210**. For example, the opening portion **2530** may be formed (or configured) in the supporting portion corresponding to (or overlapping) the first sound emission port **20001** which is in the headrest frame **210**. Accordingly, the first sound emission port **20001** may be connected to (or communicated with) the opening portion **2530**.

[0283] The second enclosure **253** according to an embodiment of the present disclosure may further include a plurality of supporting projections (or a plurality of second supporting projections) **253***f* which are at a periphery of the supporting portion **253***c*.

[0284] The plurality of supporting projections **253***f* may be configured to be connected (or coupled) to the plurality of supporting projections **251***d* which are at the first enclosure **251**. The plurality of supporting projections **253***f* may protrude from a rear surface of the base plate **253***a* corresponding to (overlapping) the plurality of supporting projections **251***d* of the first enclosure **251**.

[0285] The actuator **255** may be accommodated into the second enclosure **253** and may be configured to output the third sound. For example, the actuator **255** may be supported by or accommodated into the supporting portion **253***c* of the second enclosure **253**. For example, a portion of the actuator **255** may be accommodated into the accommodating hole **253***h* which is in the supporting portion **253***c* of the second enclosure **253**.

[0286] The actuator **255** according to an embodiment of the present disclosure may be supported by or accommodated into the second enclosure **253** or the supporting portion **253***c* of the second enclosure **253** by a plurality of fastening members. For example, the plurality of fastening members may be fastened to the plurality of supporting projections **251***d* of the first enclosure **251** through an edge portion of the actuator **255**, the supporting portion **253***c* of the second enclosure **253**, and the plurality of supporting projections **253***d*. For example, each of the plurality of fastening members may be a screw or a bolt, but embodiments of the present disclosure are not limited thereto.

[0287] The actuator **255** according to an embodiment of the present disclosure may include a magnet and a coil. For example, the actuator **255** may be one or more of a woofer, a mid-woofer, and a sub-woofer, but embodiments of the present disclosure are not limited thereto. For example, the actuator **255** may be a speaker which outputs the third sound of 30 Hz to 200 Hz or 300 Hz or less, but embodiments of the present disclosure are not limited thereto.

[0288] The cover plate **257** may be connected (or coupled) to the second enclosure **253**. The cover plate **257** may be connected (or coupled) to the second enclosure **253** to cover the actuator **255**. The cover plate **257** may be connected (or coupled) to the second enclosure **253** so as to be spaced apart from the actuator **255**. The cover plate **257** may be connected (or coupled) to the second enclosure **253** to cover the actuator **255** with a gap space **253***s* therebetween. For example, the cover plate **257** may be connected (or coupled) to the supporting portion **253***c* of the second enclosure **253** to cover the actuator **255**. For example, the cover plate **257** may be connected (or coupled) to the supporting portion **253***c* of the second enclosure **253** to cover the actuator **255** with a gap space **253***s* therebetween.

[0289] The cover plate **257** may be configured to have a shape and a size corresponding to the supporting portion **253***c* of the second enclosure **253**, but embodiments of the present disclosure are not limited thereto. For example, the cover plate **257** may be supported by or attached to a supporting surface **253***e* which is in the supporting portion **253***c* of the second enclosure **253**. For example, the supporting surface **253***e* of the second enclosure **253** may be formed (or configured) to be concave along a periphery of the supporting portion **253***c*, but embodiments of the present disclosure are not limited thereto.

[0290] The gap space **253***s* may be between the cover plate **257** and the actuator **255** and may be connected to (or communicated with) the opening portion **2530**. For example, the third sound generated based on driving (or vibration) of the actuator **255** may be output in a lower-surface direction of the headrest **20** through the gap space **253***s*, the opening portion **2530**, and the first sound emission port **20001**.

[0291] In the third sound generating apparatus **250** according to an embodiment of the present disclosure, the sound space **250***s* and the sound emission path **250***p* provided (or configured) by the first enclosure **251** and the second enclosure **253** may configure a Helmholtz resonator.

[0292] According to an embodiment of the present disclosure, the sound space **250***s* may be a volume of the Helmholtz resonator, but embodiments of the present disclosure are not limited thereto. The sound emission path **250***p* may be a sound guide pipe or a sound pipe, but embodiments of the present disclosure are not limited thereto. For example, the sound emission path **250***p* may extend to the opening portion **2510**, and thus, a total length of the sound emission path **250***p* may be an opening portion length of the Helmholtz resonator, but embodiments of the present disclosure are not limited thereto. In addition, a cross-sectional area of the opening portion **2510** may be a hole area of the Helmholtz resonator, but embodiments of the present disclosure are not limited thereto.

[0293] The sound emission path **250***p* according to an embodiment of the present disclosure may amplify the third sound generated by the third sound generating apparatus **250** by using a resonance of a pipe, and thus, may reinforce a frequency characteristic of a low-pitched sound band of the third sound. For example, the third sound generated by the third sound generating apparatus **250** may be amplified based on a pipe vibration of the sound emission path **250***p* and may thus be output in the lower-surface direction of the headrest **20** through the opening portion **251***o* and the second sound emission hole **21002**.

[0294] The headrest part **200** according to an embodiment of the present disclosure may further include a support rod part **240**.

[0295] The support rod part **240** according to an embodiment of the present disclosure may be connected (or coupled) to the headrest frame **210**. The support rod part **240** according to an embodiment of the present disclosure may be connected (or coupled) to the headrest frame **210** to cover the third sound generating apparatus **250**. The support rod part **240** may be configured to be connected (or coupled) to a lower surface of the headrest frame **210**, or may be configured to support the lower surface of the headrest frame **210**. For example, the support rod part **240** may include one or more support rods **242**.

[0296] The one or more support rods **242** may be configured to be connected to the lower surface of the headrest frame **210**. For example, the support rod part **240** may include a pair of support rods **242**, but embodiments of the present disclosure are not limited thereto. For example, the one or more (or a pair of) support rods **242** may be connected to an upper portion of a seatback of a seat for vehicle or a backrest frame of a chair.

[0297] The support rod part **240** according to another embodiment of the present disclosure may be configured to be connected (or coupled) to a rear surface of the headrest part **200** or the headrest frame **210**, or may be configured to support the rear surface of the headrest part **200** or the headrest frame **210**.

[0298] The support rod part **240** according to another embodiment of the present disclosure may include a support frame **241** and one or more support rods **242**.

[0299] The support frame **241** may be configured to be connected (or coupled) to the rear surface of the headrest frame **210**, or may be configured to support the rear surface of the headrest frame **210** to cover the third sound generating apparatus **250**.

[0300] The one or more support rods **242** may be configured to be connected to a lower surface and a rear surface of the support frame **241**. For example, the support rod part **240** may include a pair of support rods **242**, but embodiments of the present disclosure are not limited thereto. For example, the one or more (or a pair of) support rods **242** may be connected to an upper portion of a seatback of a seat for vehicle or a backrest frame of a chair.

[0301] The support rod part **240** according to another embodiment of the present disclosure may further include a first support plate **243** and a second support plate **244**.

[0302] The first support plate **243** may be connected (or coupled) to the lower surface of the support frame **241** by a plurality of second fastening members. The second support plate **244** may be connected (or coupled) to the rear surface of the support frame **241**. For example, the second support plate **244** may be connected (or coupled) to one side of the first support plate **243** and may be connected (or coupled) to the rear surface of the support frame **241**. For example, the first support plate **243** and the second support plate **244** may be the same or substantially the same as that of the first support plate **243** and the second support plate **244** of the support rod part **240** described above with reference to FIG. **9**, and thus, its repeated descriptions are omitted.

[0303] The cushion member **230** may be at a front surface **211***f* of the headrest frame **210**. For example, the cushion member **230** may be configured to cover the front surface **211***f* of the headrest frame **210**. For example, the cushion member **230** may include a material which absorbs an impact. For example, the cushion member **230** may be the same or substantially the same as that of the cushion member **230** described above with reference to FIG. **9**, and thus, its repeated descriptions are omitted.

[0304] The headrest **20** according to another embodiment of the present disclosure may further include the third sound generating apparatus **250**, and thus, may additionally output the third sound generated based on a vibration (or driving) of the third sound generating apparatus **250**. For example, the headrest **20** according to another embodiment of the present disclosure may output a 3-channel stereo sound or stereophonic sound which includes the first sound (or the right channel sound) based on the first sound generating apparatus **300-1**, the second sound (or the left channel sound) based on the second sound generating apparatus **300-2**, and the third sound based on the third sound generating apparatus **250**. For example, the headrest **20** according to another embodiment of the present disclosure may respectively output the first sound and the second sound of a middle-high pitched sound band through the first sound generating apparatus **300-1** and the second sound generating apparatus **300-2** and may output the third sound of a

low-pitched sound band through the third sound generating apparatus **250**, and thus, may reproduce (or output) a sound of a full pitched sound band.

[0305] FIG. **17** is a perspective view illustrating a vibration element according to an embodiment of the present disclosure. FIG. **18** is a cross-sectional view taken along line VI-VI' illustrated in FIG. **17**. FIG. **19** is a cross-sectional view taken along line VII-VII' illustrated in FIG. **17**. For example, FIGS. **17** to **19** illustrate the vibration element of the vibration apparatus described above with reference to FIGS. **1** to **13**.

[0306] Referring to FIGS. **17** to **19**, the vibration element **151***b* and **351***b* according to an embodiment of the present disclosure may include a piezoelectric material having a piezoelectric characteristic.

[0307] The vibration element **151***b* and **351***b* may be configured as a ceramic-based piezoelectric material for implementing a relatively strong vibration, or may be configured as a piezoelectric ceramic having a perovskite-based crystal structure.

[0308] The vibration element **151***b* and **351***b* according to an embodiment of the present disclosure may include a vibration part **411**.

[0309] The vibration part **411** may be configured to vibrate by a piezoelectric effect based on a piezoelectric driving signal. The vibration part **411** may include at least one of a piezoelectric inorganic material and a piezoelectric organic material. For example, the vibration part **411** may be a vibration element, a piezoelectric element layer, a piezoelectric structure, a piezoelectric vibration part, or a piezoelectric vibration layer, or the like, but embodiments of the present disclosure are not limited thereto.

[0310] The vibration part **411** according to an embodiment of the present disclosure may include a vibration layer **411***a*, a first electrode layer **411***b*, and a second electrode layer **411***c*.

[0311] The vibration layer **411***a* may include a piezoelectric material or an electroactive material which has a piezoelectric effect. For example, the piezoelectric material may have a characteristic in which, when pressure or twisting phenomenon is applied to a crystalline structure by an external force, a potential difference occurs due to dielectric polarization caused by a relative position change of a positive (+) ion and a negative (−) ion, and a vibration is generated by an electric field based on a reverse voltage applied thereto. For example, the vibration layer **411***a* may be a piezoelectric layer, a piezoelectric material layer, an electroactive layer, a piezoelectric composite layer, a piezoelectric composite, or a piezoelectric ceramic composite, or the like, but embodiments of the present disclosure are not limited thereto.

[0312] The vibration layer **411***a* may be configured as a ceramic-based material for implementing a relatively strong vibration, or may be configured as a piezoelectric ceramic having a perovskite-based crystalline structure. The perovskite crystalline structure may have a piezoelectric effect and/or an inverse piezoelectric effect and may be a plate-shaped structure having orientation.

[0313] The piezoelectric ceramic may be configured as a single crystalline ceramic having a single crystalline structure, or may be configured as a ceramic material or polycrystalline ceramic having a polycrystalline structure. A piezoelectric material including the single crystalline ceramic may include α-$AlPO_4$, α-SiO_2, $LiNbO_3$, $Tb_2(MoO_4)_3$, $Li_2B_4O_7$, or ZnO, but embodiments of the present disclosure are not limited thereto. A piezoelectric material including the polycrystalline ceramic may include a lead zirconate titanate (PZT)-based material, including lead (Pb), zirconium (Zr), and titanium (Ti), or may include a lead zirconate nickel niobate (PZNN)-based material, including lead (Pb), zirconium (Zr), nickel (Ni), and niobium (Nb), but embodiments of the present disclosure are not limited thereto. For example, the vibration layer **411***a* may include at least one of calcium titanate ($CaTiO_3$), barium titanate ($BaTiO_3$), and strontium titanate ($SrTiO_3$), without lead (Pb), but embodiments of the present disclosure are not limited thereto.

[0314] The first electrode layer **411***b* may be disposed at a first surface (or an upper surface or a front surface) **411***s***1** of the vibration layer **411***a*. The first electrode layer **411***b* may have a same size as that of the vibration layer **411***a*, or may have a size which is smaller than that of the vibration layer **411***a*.

[0315] The second electrode layer **411***c* may be disposed at a second surface (or a lower surface or a rear surface) **411***s***2** which is opposite to or different from the first surface **11***s***1** of the vibration layer **411***a*. The second electrode layer **411***c* may have a same size as that of the vibration layer **411***a*, or may have a size which is smaller than that of the vibration layer **411***a*. For example, the second electrode layer **411***c* may have a same shape as that of the vibration layer **411***a*, but embodiments of the present disclosure are not limited thereto.

[0316] According to an embodiment of the present disclosure, one or more of the first electrode layer **411***b* and the second electrode layer **411***c* may be formed of a transparent conductive material, a semitransparent conductive material, or an opaque conductive material. For example, the transparent conductive material or the semitransparent conductive material may include indium tin oxide (ITO) or indium zinc oxide (IZO), but embodiments of the present disclosure are not limited thereto. The opaque conductive material may include gold (Au), silver (Ag), platinum (Pt), palladium (Pd), molybdenum (Mo), magnesium (Mg), carbon, or silver (Ag) including glass frit, or the like, or may be formed of an alloy thereof, but embodiments of the present disclosure are not limited thereto. For example, to enhance an electrical characteristic and/or a vibration characteristic of the vibration layer **411***a*, each of the first electrode layer **411***b* and the second electrode layer **411***c* may include silver (Ag) having a low resistivity. For example, carbon may be carbon black, ketjen black, carbon nanotube, and a carbon material including graphite, but embodiments of the present disclosure are not limited thereto.

[0317] The vibration layer **411***a* may be polarized by a certain voltage applied to the first electrode layer **411***b* and the second electrode layer **411***c* in a certain temperature atmosphere, or a temperature atmosphere that may be changed from a high temperature to a room temperature, but embodiments of the present disclosure are not limited thereto. For example, a polarization direction of the vibration layer **411***a* may be formed to be or aligned (or arranged) from the first electrode layer **411***b* to the second electrode layer **411***c*, but is not limited thereto, and a polarization direction of the vibration layer **411***a* may be formed to be or aligned (or arranged) from the second electrode layer **411***c* to the first electrode layer **411***b*.

[0318] The vibration layer **411***a* may alternately and repeatedly contract and/or expand based on an inverse

piezoelectric effect according to a piezoelectric driving signal applied to the first electrode layer **411***b* and the second electrode layer **411***c* from an outside to vibrate. For example, the vibration layer **411***a* may vibrate in a vertical direction (or a thickness direction) and in a planar direction by signals applied to the first electrode layer **411***b* and the second electrode layer **411***c*. The vibration layer **411***a* may be displaced (or vibrated or driven) by contraction and/or expansion of the planar direction, thereby improving a sound characteristic and/or a sound pressure level characteristic of the vibration element **151***b* and **351***b*.

[0319] The vibration element **151***b* and **351***b* according to an embodiment of the present disclosure may further include a cover member **413**.

[0320] The cover member **413** may be configured to cover at least one of a first surface and a second surface of the vibration part **411**. The cover member **413** may be configured to protect at least one of the first surface and the second surface of the vibration part **411**. For example, the first surface of the vibration part **411** may be a front surface or an upper surface. For example, the second surface of the vibration part **411** may be a rear surface or a lower surface which are opposite to the first surface.

[0321] The cover member **413** according to an embodiment of the present disclosure may include a first cover member **413***a*.

[0322] The first cover member **413***a* may be disposed at the first surface of the vibration part **411**. For example, the first cover member **413***a* may be configured to cover the first electrode layer **411***b* of the vibration part **411**. For example, the first cover member **413***a* may be configured to have a larger size than the vibration part **411**, but embodiments of the present disclosure are not limited thereto. The first cover member **413***a* may be configured to protect the first surface of the vibration part **411** and the first electrode layer **411***b*.

[0323] The first cover member **413***a* according to an embodiment of the present disclosure may include an adhesive layer. For example, the first cover member **413***a* may include a base film, and an adhesive layer which is in the base film and is connected or coupled to the first surface of the vibration part **411**. For example, the adhesive layer may include an electrical insulating material which has adhesive properties and is capable of compression and decompression, but embodiments of the present disclosure are not limited thereto.

[0324] The first cover member **413***a* according to another embodiment of the present disclosure may be connected or coupled to the first surface of the vibration part **411** by a first adhesive layer **413***b*. For example, the first cover member **413***a* may be connected or coupled to the first surface or the first electrode layer **411***b* of the vibration part **411** by the first adhesive layer **413***b*. For example, the first cover member **413***a* may be connected or coupled to the first surface or the first electrode layer **411***b* of the vibration part **411** by a film laminating process by the first adhesive layer **13***b*. The first adhesive layer **413***b* may be configured to surround an entire first surface or a portion of a lateral surface of the vibration part **411**.

[0325] The cover member **413** according to an embodiment of the present disclosure may include a second adhesive layer **413***c*.

[0326] The second adhesive layer **413***c* may be disposed at the second surface of the vibration part **411**. For example, the second adhesive layer **413***c* may be configured to cover the second electrode layer **411***c* of the vibration part **411**. The second adhesive layer **413***c* may be configured to protect the second surface and the second electrode layer **411***c* of the vibration part **411**. The second adhesive layer **413***c* may be configured to surround an entire second surface or a portion of a lateral surface of the vibration part **411**. For example, the second adhesive layer **413***c* may be a protection layer or a protection member, but embodiments of the present disclosure are not limited thereto.

[0327] The second adhesive layer **413***c* may be connected or coupled to the first adhesive layer **413***b* in the lateral surface of the vibration part **411** or a periphery portion of the first cover member **413***a*. Thus, the first adhesive layer **413***b* and the second adhesive layer **413***c* may be configured to surround or completely surround the vibration part **411**. The first adhesive layer **413***b* and the second adhesive layer **413***c* may be configured to cover or surround all surfaces of the vibration part **411**. For example, the vibration part **411** may be inserted (or accommodated) or embedded (or built-in) at an inner portion of the adhesive layer including the first adhesive layer **413***b* and the second adhesive layer **413***c*.

[0328] The cover member **413** according to an embodiment of the present disclosure may further include a second cover member **413***d*, but embodiments of the present disclosure are not limited thereto. The second cover member **413***d* may be disposed at the second surface of the vibration part **411**. For example, the second cover member **413***d* may be configured to cover the second electrode layer **411***c* of the vibration part **411**. For example, the second cover member **413***d* may be configured to have a larger size than the vibration part **411** and may be configured to have a same size as the first cover member **413***a*, but embodiments of the present disclosure are not limited thereto. The second cover member **413***d* may be configured to protect the second surface and the second electrode layer **411***c* of the vibration part **411**.

[0329] The first cover member **413***a* and the second cover member **413***d* according to an embodiment of the present disclosure may include a same material or a different material. For example, each of the first cover member **413***a* and the second cover member **413***d* may be a polyimide film, a polyethylene naphthalate film, or a polyethylene terephthalate film, but embodiments of the present disclosure are not limited thereto.

[0330] The second cover member **413***d* may be connected or coupled to the second surface or the second electrode layer **411***c* of the vibration part **411** by using the second adhesive layer **413***c*. For example, the second cover member **413***d* may be connected or coupled to the second surface or the second electrode layer **411***c* of the vibration part **411** by a film laminating process by the second adhesive layer **413***c*.

[0331] The vibration part **411** may be disposed or inserted (or accommodated) between the first cover member **413***a* and the second cover member **413***d*. For example, the vibration part **411** may be inserted (or accommodated) or embedded (or built-in) at an inner portion of the adhesive layer including the first adhesive layer **413***b* and the second adhesive layer **413***c*, but embodiments of the present disclosure are not limited thereto.

[0332] Each of the first adhesive layer **413***b* and the second adhesive layer **413***c* according to an embodiment of the present disclosure may include an electrical insulating material which has adhesive properties and is capable of compression and decompression. For example, each of the

first adhesive layer **413***b* and the second adhesive layer **413***c* may include epoxy resin, acrylic resin, silicone resin, urethane resin, a pressure sensitive adhesive (PSA), an optically cleared adhesive (OCA), or an optically cleared resin (OCR), or the like, but embodiments of the present disclosure are not limited thereto.

[0333] The first adhesive layer **413***b* and the second adhesive layer **413***c* may be configured between the first cover member **413***a* and the second cover member **413***d* to surround the vibration part **411**. For example, one or more of the first adhesive layer **413***b* and the second adhesive layer **413***c* may be configured to surround the vibration part **411**.

[0334] The vibration element **151***b* and **351***b* according to an embodiment of the present disclosure may further include a signal supply member **417**.

[0335] The signal supply member **417** may be configured to supply a driving signal supplied from a driving circuit part to the vibration part **411**. The signal supply member **417** may be configured to be electrically connected to the vibration part **411**. The signal supply member **417** may be configured to be electrically connected to the first electrode layer **411***b* and the second electrode layer **411***c* of the vibration part **411**.

[0336] A portion of the signal supply member **417** may be accommodated (or inserted) between the cover member **413** and the vibration part **411**. For example, the portion of the signal supply member **417** may be accommodated (or inserted) between the first surface of the vibration part **411** and the first cover member **413***a*. For example, the portion of the signal supply member **417** may be accommodated (or inserted) between the first cover member **413***a* and the second cover member **413***d*, but embodiments of the present disclosure are not limited thereto.

[0337] According to an embodiment of the present disclosure, an end portion (or a distal end portion or one side) of the signal supply member **417** may be disposed or inserted (or accommodated) between one periphery portion of the cover member **413** and the vibration part **411**. For example, the end portion of the signal supply member **417** may be disposed or inserted (or accommodated) between one periphery portion of the first cover member **413***a* and the first surface of the vibration part **411**. For example, the signal supply member **417** may be configured as a signal cable, a flexible cable, a flexible printed circuit cable, a flexible flat cable, a single-sided flexible printed circuit, a single-sided flexible printed circuit board, a flexible multilayer printed circuit, or a flexible multilayer printed circuit board, but embodiments of the present disclosure are not limited thereto.

[0338] The signal supply member **417** according to an embodiment of the present disclosure may include a base member **417***a* and a plurality of signal lines **417***b* and **417***c*. For example, the signal supply member **417** may include a base member **417***a*, a first signal line **417***b*, and a second signal line **417***c*.

[0339] The base member **417***a* may include a transparent or opaque plastic material, but embodiments of the present disclosure are not limited thereto.

[0340] The first and second signal lines **417***b* and **417***c* may be disposed at a first surface of the base member **417***a* and may be spaced apart from each other or electrically separated from each other. The first and second signal lines **417***b* and **417***c* may be disposed in parallel to each other at the first surface of the base member **417***a*. For example, the first and second signal lines **417***b* and **417***c* may be implemented in a line shape by patterning of a metal layer (or a conductive layer) formed or deposited at the first surface of the base member **417***a*.

[0341] End portions (or distal end portions or one sides) of the first and second signal lines **417***b* and **417***c* may be separated from each other, and thus, may be individually curved or bent.

[0342] The end portion of the first signal line **417***b* may be electrically connected to the first electrode layer **411***b* of the vibration part **411**. For example, the end portion of the first signal line **417***b* may be electrically connected to at least a portion of the first electrode layer **411***b* of the vibration part **411** in the one periphery portion of the first cover member **413***a*. For example, the end portion of the first signal line **417***b* may be electrically and directly connected to at least a portion of the first electrode layer **411***b* of the vibration part **411**. For example, the end portion of the first signal line **417***b* may be electrically connected to or directly contact the first electrode layer **411***b* of the vibration part **411**. For example, the end portion of the first signal line **417***b* may be electrically connected to the first electrode layer **411***b* through a conductive double-sided tape. Accordingly, the first signal line **417***b* may be configured to supply a first driving signal, supplied from the driving circuit part, to the first electrode layer **411***b* of the vibration part **411**.

[0343] The end portion of the second signal line **417***c* may be electrically connected to the second electrode layer **411***c* of the vibration part **411**. For example, the end portion of the second signal line **417***c* may be electrically connected to at least a portion of the second electrode layer **411***c* of the vibration part **411** in one periphery portion of the second cover member **413***d*. For example, the end portion of the second signal line **417***c* may be electrically and directly connected to at least a portion of the second electrode layer **411***c* of the vibration part **411**. For example, the end portion of the second signal line **417***c* may be electrically connected to or directly contact the second electrode layer **411***c* of the vibration part **411**. For example, the end portion of the second signal line **417***c* may be electrically connected to the second electrode layer **411***c* through a conductive double-sided tape. Accordingly, the second signal line **417***c* may be configured to supply a second driving signal, supplied from the driving circuit part, to the second electrode layer **411***c* of the vibration part **411**.

[0344] The signal supply member **417** according to an embodiment of the present disclosure may further include an insulation layer **417***d*.

[0345] The insulation layer **417***d* may be disposed at the first surface of the base member **417***a* to cover each of the first signal line **417***b* and the second signal line **417***c* other than the end portion (or one side) of the signal supply member **417**.

[0346] According to an embodiment of the present disclosure, an end portion (or one side) of the signal supply member **417** including an end portion (or one side) of the base member **417***a* and an end portion (or one side) of the insulation layer **417***d* may be inserted (or accommodated) between the cover member **413** and the vibration part **411** and may be fixed between the cover member **413** (or first cover member **413***a*) and the vibration part **411** by the first adhesive layer **413***b* and the second adhesive layer **413***c*.

[0347] According to another embodiment of the present disclosure, an end portion (or one side) of the signal supply member **417** including an end portion of the base member

417*a* and an end portion of the insulation layer **417***d* may be inserted (or accommodated) between the first cover member **413***a* and the second cover member **413***d* and may be fixed between the first cover member **413***a* and the second cover member **413***d* by the first adhesive layer **413***b* and the second adhesive layer **413***c*. Accordingly, the end portion of the first signal line **417***b* may be maintained with being electrically connected to the first electrode layer **411***b* of the vibration part **411**, and the end portion of the second signal line **417***c* may be maintained with being electrically connected to the second electrode layer **411***c* of the vibration part **411**. In addition, the end portion of the signal supply member **417** may be inserted (or accommodated) and fixed between the vibration part **411** and the first cover member **413***a*, and thus, a contact defect between the vibration element **151***b* and **351***b* and the signal supply member **417** caused by the movement of the signal supply member **417** may be prevented.

[0348] In the signal supply member **417** according to an embodiment of the present disclosure, each of the end portion of the base member **417***a* and the end portion **417***da* of the insulation layer **417***d* may be removed. For example, each of the end portion of the first signal line **417***b* and the end portion of the second signal line **417***c* may be exposed at the outside without being supported or covered by each of the end portion of the base member **417***a* and the end portion **417***da* of the insulation layer **417***d*, respectively. For example, the end portion of each of the first signal line **417***b* and the second signal line **417***c* may protrude (or extend) to have a certain length from an end of the base member **417***a* or an end of the insulation layer **417***d*. Accordingly, each of the end portion of each of the first signal line **417***b* and the second signal line **417***c* may be individually or independently bent.

[0349] The end portion of the first signal line **417***b*, which is not supported by the end portion of the base member **417***a* and the end portion of the insulation layer **417***d*, may be directly connected to or directly contact the first electrode layer **411***b* of the vibration part **411**. The end portion of the second signal line **417***c*, which is not supported by the end portion of the base member **417***a* and the end portion of the insulation layer **417***d*, may be directly connected to or directly contact the second electrode layer **411***c* of the vibration part **411**.

[0350] According to an embodiment of the present disclosure, a portion of the signal supply member **417** or a portion of the base member **417***a* may be disposed or inserted (or accommodated) between the cover member **413** and the vibration part **411**, and thus, the signal supply member **417** may be integrated as one body with the vibration part **411**. Further, a portion of the signal supply member **417** or a portion of the base member **417***a* may be disposed or inserted (or accommodated) between the first cover member **413***a* and the second cover member **413***d*, and thus, the signal supply member **417** may be integrated as one body with the vibration element **151***b* and **351***b*. Accordingly, the vibration element **151***b* and **351***b* and the signal supply member **417** may be configured as one part (or one element or one component), and thus, an effect of uni-materialization may be obtained.

[0351] According to an embodiment of the present disclosure, the first signal line **417***b* and the second signal line **417***c* of the signal supply member **417** may be integrated as one body with the vibration element **151***b* and **351***b*, and thus, a soldering process for an electrical connection between the vibration element **151***b* and **351***b* and the signal supply member **417** is not be needed. Accordingly, a manufacturing process and a structure of the vibration element **151***b* and **351***b* may be simplified, and hazards associated with the soldering process may be reduced.

[0352] FIG. **20** is a perspective view illustrating a vibration layer according to another embodiment of the present disclosure. For example, FIG. **20** illustrates another embodiment of the vibration layer described above with reference to FIGS. **17** to **19**.

[0353] Referring to FIGS. **18** and **20**, the vibration layer **411***a* according to another embodiment of the present disclosure may include a plurality of first portions **411***a***1** and a plurality of second portions **411***a***2**. For example, the plurality of first portions **411***a***1** and the plurality of second portions **411***a***2** may be alternately and repeatedly disposed along a first direction X (or second direction Y).

[0354] Each of the plurality of first portions **411***a***1** may include an inorganic material portion having a piezoelectric effect (or a piezoelectric characteristic). For example, each of the plurality of first portions **411***a***1** may include at least one of a piezoelectric inorganic material and a piezoelectric organic material. For example, each of the plurality of first portions **411***a***1** may be an inorganic portion, an inorganic material portion, a piezoelectric portion, a piezoelectric material portion, or an electroactive portion, but embodiments of the present disclosure are not limited thereto.

[0355] According to an embodiment of the present disclosure, each of the plurality of first portions **411***a***1** may have a first width W**1** parallel to the first direction X (or the second direction Y) and may be extended along the second direction Y (or the first direction X). Each of the plurality of first portions **411***a***1** may be substantially a same as the vibration layer **411***a* described above with reference to FIGS. **17** to **19**, and thus, its repeated descriptions are omitted.

[0356] Each of the plurality of second portions **411***a***2** may be disposed between the plurality of first portions **411***a***1**. For example, each of the plurality of first portions **411***a***1** may be disposed between two adjacent second portions **411***a***2** of the plurality of second portions **411***a***2**. Each of the plurality of second portions **411***a***2** may have a second width W**2** parallel to the first direction X (or the second direction Y) and may be extended along the second direction Y (or the first direction X). The first width W**1** may be a same as or different from the second width W**2**. For example, the first width W**1** may be greater than the second width W**2**. For example, the first portion **411***a***1** and the second portion **411***a***2** may include a line shape or a stripe shape which has a same size or different sizes, but embodiments of the present disclosure are not limited thereto.

[0357] Each of the plurality of second portions **411***a***2** may be configured to fill a gap between two adjacent first portions of the plurality of first portions **411***al*. Each of the plurality of second portions **411***a***2** may be configured to fill a gap between two adjacent first portions of the plurality of first portions **411***al*, and thus, may be connected to or attached at lateral surfaces of the first portion **411***a***1** adjacent thereto. According to an embodiment of the present disclosure, each of the plurality of first portions **411***a***1** and the plurality of second portions **411***a***2** may be disposed (or arranged) at a same plane (or a same layer) in parallel with each other. Therefore, the vibration layer **411***a* may be expanded to a

desired size or length by a lateral coupling (or connection) of the first portions **411***a***1** and the second portions **411***a***2**.

[0358] According to an embodiment of the present disclosure, each of the plurality of second portions **411***a***2** may absorb an impact applied to the first portions **411***al*, and thus, may enhance the total durability of the first portions **411***a***1** and provide flexibility to the vibration layer **411***a*. Each of the plurality of second portions **411***a***2** may include an organic material having a ductile characteristic. For example, each of the plurality of second portions **411***a***2** may include one or more of an epoxy-based polymer, an acrylic-based polymer, and a silicone-based polymer, but embodiments of the present disclosure are not limited thereto. For example, each of the plurality of second portions **411***a***2** may be an organic portion, an organic material portion, an adhesive portion, a stretch portion, a bending portion, a damping portion, or a ductile portion, but embodiments of the present disclosure are not limited thereto.

[0359] A first surface of each of the plurality of first portions **411***a***1** and the plurality of second portions **411***a***2** may be connected to the first electrode layer **411***b* in common. A second surface of each of the plurality of first portions **411***a***1** and the plurality of second portions **411***a***2** may be connected to the second electrode layer **411***c* in common.

[0360] The plurality of first portions **411***a***1** and the plurality of second portion **411***a***2** may be disposed (or connected) at a same plane, and thus, the vibration part **411***a* according to another embodiment of the present disclosure may have a single thin film-type. Accordingly, the vibration layer **411** or the vibration element **151***b* and **351***b* including the vibration layer **411***a* according to another embodiment of the present disclosure may vibrate by the first portion **411***a***1** having a vibration characteristic and may be bent in a curved shape by the second portion **411***a***2** having flexibility.

[0361] FIG. **21** is a perspective view illustrating a vibration layer according to another embodiment of the present disclosure. For example, FIG. **21** illustrates another embodiment of the vibration layer described above with reference to FIGS. **17** to **19**.

[0362] Referring to FIGS. **18** and **21**, the vibration layer **411***a* according to another embodiment of the present disclosure may include a plurality of first portions **411***a***3** and a second portion **411***a***4** disposed between the plurality of first portions **411***a***3**.

[0363] Each of the plurality of first portions **411***a***3** may be disposed to be spaced apart from one another along each of the first direction X and the second direction Y. For example, each of the plurality of first portions **411***a***3** may have a hexahedral shape having a same size and may be disposed in a lattice shape, but embodiments of the present disclosure are not limited thereto. For example, each of the plurality of first portions **411***a***3** may have a circular shape plate, an oval shape plate, or a polygonal shape plate, which has a same size as each other, but embodiments of the present disclosure are not limited thereto.

[0364] Each of the plurality of first portions **411***a***3** may be substantially a same as the first portion **411***a***1** described above with reference to FIG. **20**, and thus, its repeated descriptions are omitted.

[0365] The second portion **411***a***4** may be disposed between the plurality of first portions **411***a***3** along each of the first direction X and the second direction Y. The second portion **411***a***4** may be configured to fill a gap between two adjacent first portions **411***a***3**, or to be adjacent to each of the plurality of first portions **411***a***3** or to surround each of the plurality of first portions **411***a***3**, and thus, the second portion **411***a***4** may be connected to or attached at the first portion **411***a***3** adjacent thereto. The second portion **411***a***4** may be substantially a same as the second portion **411***a***2** described above with reference to FIG. **20**, and thus, its repeated descriptions are omitted.

[0366] A first surface of each of the plurality of first portions **411***a***3** and the second portion **411***a***4** may be connected to the first electrode layer **411***b* in common. A second surface of each of the plurality of first portions **411***a***3** and the second portion **411***a***4** may be connected to the second electrode layer **411***c* in common.

[0367] The plurality of first portions **411***a***3** and the second portion **11***a***4** may be disposed (or connected) at a same plane, and thus, the vibration layer **411***a* according to another embodiment of the present disclosure may have a single thin film-type, but embodiments of the present disclosure are not limited thereto. Accordingly, the vibration part **411** of the vibration element **151***b* and **351***b* including the vibration layer **411***a* according to another embodiment of the present disclosure may vibrate by the first portions **411***a***3** having a vibration characteristic and may be bent in a curved shape by the second portion **411***a***4** having flexibility.

[0368] FIG. **22** is a perspective view illustrating a vibration apparatus according to another embodiment of the present disclosure. For example, FIG. **22** illustrates the vibration element of the vibration apparatus described above with reference to FIGS. **1** to **13**.

[0369] Referring to FIG. **22**, the vibration element **151***b* and **351***b* according to another embodiment of the present disclosure may include two or more vibration generating parts **410-1** and **410-2**. For example, the vibration element **151***b* and **351***b* may include a first vibration generating part **410-1** and a second vibration generating part **410-2**.

[0370] The first vibration generating part **410-1** and the second vibration generating part **410-2** may overlap or be stacked with each other to be displaced (or driven or vibrated) in a same direction to maximize an amplitude displacement of the vibration apparatus **10** or an amplitude displacement of the vibration member. For example, the first vibration generating part **410-1** and the second vibration generating part **410-2** may have substantially a same size, but embodiments of the present disclosure are not limited thereto. For example, the first vibration generating part **410-1** and the second vibration generating part **410-2** may have substantially a same size within an error range of a manufacturing process. Therefore, the first vibration generating part **410-1** and the second vibration generating part **410-2** may maximize the amplitude displacement of the vibration element **151***b* and **351***b* and/or the amplitude displacement of the vibration member.

[0371] Each of the first vibration generating part **410-1** and the second vibration generating part **410-2** may be a same as or substantially a same as the vibration element **151***b* and **351***b* described above with reference to FIGS. **17** to **21**, and thus, like reference numeral refer to like element and its repeated descriptions are omitted.

[0372] The vibration element **151***b* and **351***b* according to another embodiment of the present disclosure may further include an intermediate member **410**M.

[0373] The intermediate member **410**M may be disposed or connected between the first vibration generating part

410-1 and the second vibration generating part **410-2**. As an embodiment of the present disclosure, the intermediate member **410**M may be disposed or connected between the second adhesive layer **413***c* of the first vibration generating part **410-1** and the first cover member **413***a* of the second vibration generating part **410-2**. As another embodiment of the present disclosure, the intermediate member **410**M may be disposed or connected between the second cover member **413***d* of the first vibration generating part **410-1** and the first cover member **413***a* of the second vibration generating part **410-2**. For example, the intermediate member **410**M may be an intermediate adhesive member, an adhesive member, or a connection member, but embodiments of the present disclosure are not limited thereto.

[0374] The intermediate member **410**M according to an embodiment of the present disclosure may be configured in a material including an adhesive layer which is good in adhesive force or attaching force with respect to each of the first vibration generating part **410-1** and the second vibration generating part **410-2**, but embodiments of the present disclosure are not limited thereto. For example, the intermediate member **410**M may include a foam pad, a double-sided tape, a double-sided foam tape, a double-sided foam pad, a double-sided adhesive tape, or an adhesive, or the like, but embodiments of the present disclosure are not limited thereto. For example, an adhesive layer of the intermediate member **410**M may include epoxy, acrylic, silicone, or urethane, but embodiments of the present disclosure are not limited thereto. For example, the adhesive layer of the intermediate member **410**M may include a urethane-based material (or substance) having relatively ductile characteristic. Accordingly, the vibration loss caused by displacement interference between the first vibration generating part **410-1** and the second vibration generating part **410-2** may be reduced or minimized, or each of the first vibration generating part **410-1** and the second vibration generating part **410-2** may be freely displaced (or vibrated or driven).

[0375] The vibration element **151***b* and **351***b* according to another embodiment of the present disclosure may include the first vibration generating part **410-1** and the second vibration generating part **410-2** which are stacked (or piled or overlap) to vibrate (or displace or drive) in a same direction, and thus, the amount of displacement or an amplitude displacement may be maximized or increase. Accordingly, the amount of displacement (or a bending force or a driving force) or an amplitude displacement of the vibration member may be more maximized or more increased, thereby more enhancing a sound characteristic and/or a sound pressure level characteristic of a low-pitched sound band.

[0376] FIG. **23** is a perspective view illustrating a chair according to an embodiment of the present disclosure.

[0377] Referring to FIG. **23**, the chair **500** according to an embodiment of the present disclosure may be a studying chair, an office chair, or a gaming chair, but embodiments of the present disclosure are not limited thereto.

[0378] The chair **500** according to an embodiment of the present disclosure may include a seat part **510**, a backseat part **530**, and a headrest **550**.

[0379] The seat part **510** may be configured to enable a user to sit down. The seat part **510** may include a seat frame and a cushion seat supported by the seat frame.

[0380] The backseat part **530** may be configured to be connected (or coupled) to one side of the seat part **510**. For example, the backseat part **530** may include a backseat frame connected to one side of the seat part **510** and a backseat cushion configured at a front surface of the backseat frame. For example, the backseat part **530** may be configured to rotate (or tilt) with respect to one side of the seat part **510**.

[0381] The headrest **550** may be configured to be connected to (or supported by) an upper portion of the backseat part **530**. The headrest **550** may be configured to output a sound to a user who sits on the seat part **510**. The headrest **550** according to an embodiment of the present disclosure may be configured to include the headrest **10** described above with reference to FIGS. **1** to **13** and **17** to **22**, and thus, its repeated descriptions are omitted. The headrest **550** according to another embodiment of the present disclosure may be configured to include the headrest **20** described above with reference to FIGS. **14** to **22**, and thus, its repeated descriptions are omitted.

[0382] The chair **500** according to an embodiment of the present disclosure may further include a seat supporting portion **530**. The seat supporting portion **530** may include a vertical supporting portion **521** and a plurality of horizontal supporting portions **523**.

[0383] The vertical supporting portion **521** may be vertically connected (or coupled) to the seat frame of the seat part **510**. For example, the vertical supporting portion **521** may be configured to adjust a height of the seat part **510**.

[0384] The plurality of horizontal supporting portions **523** may be supported by the ground and may be connected (or coupled) to the vertical supporting portion **521** in common. For example, the plurality of horizontal supporting portions **523** may be connected (or coupled) to the vertical supporting portion **521** to have a radial shape with respect to the vertical supporting portion **521**, so as to stably maintain a vertical state of the vertical supporting portion **521**.

[0385] The seat supporting portion **530** may further include a plurality of roller portions **525**. The plurality of roller portions **525** may be respectively connected (or coupled) to the plurality of horizontal supporting portions **523**. The plurality of roller portions **525** may rotate based on the movement of the chair **500** with contacting the ground. The movement of the chair **500** may be easy, based on rotations of the plurality of roller portions **525**.

[0386] The chair **500** according to an embodiment of the present disclosure may further include a pair of armrests **540**.

[0387] The pair of armrests **540** may be configured to support an arm of a user who sits on the seat part **510**. For example, the pair of armrests **540** may be disposed (or configured) at one side (or left side) and the other side (or right side) of the seat part **510**.

[0388] The chair **500** according to an embodiment of the present disclosure may provide, through the headrest **550**, a sound to a user who sits on the seat part **510**. For example, the chair **500** may provide, through the headrest **550**, a 2-channel stereo sound including a left channel sound and a right channel sound or a 3-channel stereo sound or stereophonic sound to the user who sits on the seat part **510**.

[0389] FIG. **24** is a perspective view illustrating a seat for vehicular apparatus according to an embodiment of the present disclosure.

[0390] Referring to FIG. **24**, the seat **600** for vehicular apparatus according to an embodiment of the present disclosure may be a driver seat, a passenger seat, a back seat, or a buggy seat, but embodiments of the present disclosure are not limited thereto.

[0391] The seat **600** for vehicular apparatus according to an embodiment of the present disclosure may include a seat cushion **610**, a seat back **630**, and a headrest **650**.

[0392] The seat cushion **610** be configured to enable a passenger in a vehicular apparatus to sit down. The seat cushion **610** may include a seat frame and a seat cushion supported by the seat frame.

[0393] The seat back **630** may be configured to be connected (or coupled) to one side of the seat cushion **610**. For example, the seat back **630** may include a seat back frame connected (or coupled) to one side of the seat cushion **610** and a seat back cushion configured at a front surface of the seat back frame. For example, the seat back **630** may be configured to rotate (or tilt) with respect to one side of the seat cushion **610**.

[0394] The headrest **650** may be configured to be connected to (or supported by) an upper portion of the seat cushion **630**. The headrest **550** may be configured to output a sound to a passenger who sits on the seat cushion **630**. The headrest **650** according to an embodiment of the present disclosure may be configured to include the headrest **10** described above with reference to FIGS. **1** to **13** and **17** to **22**, and thus, its repeated descriptions are omitted. The headrest **650** according to another embodiment of the present disclosure may be configured to include the headrest **20** described above with reference to FIGS. **14** to **22**, and thus, its repeated descriptions are omitted.

[0395] The seat **600** for vehicular apparatus according to an embodiment of the present disclosure may provide, through the headrest **650**, a sound to a passenger who sits on the seat cushion **610**. For example, the seat **600** for vehicular apparatus may provide, through the headrest **650**, a 2-channel stereo sound including a left channel sound and a right channel sound or a 3-channel stereo sound or stereophonic sound to the passenger who sits on the seat cushion **610**.

[0396] FIG. **25** is a plan view illustrating a vehicular apparatus **700** according to an embodiment of the present disclosure.

[0397] The vehicular apparatus **700** according to an embodiment of the present disclosure may include a driver seat DS, a front passenger seat FPS, and a plurality of rear passenger seats RPS**1**, RPS**2**, and RPS**3**.

[0398] The driver seat DS and the front passenger seat FPS may each be a front seat. Each of the driver seat DS and the front passenger seat FPS may include a headrest **750**.

[0399] The headrest **750** of each of the driver seat DS and the front passenger seat FPS according to an embodiment of the present disclosure may be configured to include the headrest **10** described above with reference to FIGS. **1** to **13** and **17** to **22**, and thus, their repeated descriptions are omitted.

[0400] The headrest **750** of each of the driver seat DS and the front passenger seat FPS according to another embodiment of the present disclosure may be configured to include the headrest **20** described above with reference to FIGS. **14** to **22**, and thus, their repeated descriptions are omitted.

[0401] The headrest **750** of the driver seat DS may provide a driver with a 2-channel stereo sound including a left channel sound and a right channel sound or a 3-channel stereo sound or stereophonic sound.

[0402] The headrest **750** of the front passenger seat FPS may provide a 2-channel stereo sound including a left channel sound and a right channel sound or a 3-channel stereo sound or stereophonic sound to a passenger sitting on a front passenger seat.

[0403] Each of the plurality of rear passenger seats RPS**1**, RPS**2**, and RPS**3** may include the headrest **770**.

[0404] The headrest **770** of each of the plurality of rear passenger seats RPS**1**, RPS**2**, and RPS**3** according to an embodiment of the present disclosure may be configured to include the headrest **10** described above with reference to FIGS. **1** to **13** and **17** to **22**, and thus, their repeated descriptions are omitted.

[0405] The headrest **770** of each of the driver seat DS and the front passenger seat FPS according to another embodiment of the present disclosure may be configured to include the headrest **20** described above with reference to FIGS. **14** to **22**, and thus, their repeated descriptions are omitted.

[0406] The headrest **770** of each of the plurality of rear passenger seats RPS**1**, RPS**2**, and RPS**3** may provide a 2-channel stereo sound including a left channel sound and a right channel sound or a 3-channel stereo sound or stereophonic sound to a passenger sitting on each of a plurality of rear passenger seats.

[0407] According to another embodiment of the present disclosure, the vehicular apparatus **700** may be configured to include the seat **600** for vehicular apparatus described above with reference to FIG. **24**. For example, one or more of the driver seat DS, the front passenger seat FPS, and the plurality of rear passenger seats RPS**1**, RPS**2**, and RPS**3** may be configured to include the seat **600** for vehicular apparatus described above with reference to FIG. **24**, and thus, their repeated descriptions are omitted.

[0408] The vehicular apparatus **700** according to an embodiment of the present disclosure may provide a 2-channel stereo sound including a left channel sound and a right channel sound or a 3-channel stereo sound or stereophonic sound to a passenger sitting on a corresponding seat through the headrests **750** and **770** which are in one or more of the driver seat DS, the front passenger seat FPS, and the plurality of rear passenger seats RPS**1**, RPS**2**, and RPS**3**.

[0409] A headrest, and a chair and a vehicular apparatus including the same according to an embodiment of the present disclosure will be described below.

[0410] A headrest according to one or more embodiments of the present disclosure may comprise a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0411] According to one or more embodiments of the present disclosure, the sound generating apparatus may comprise a piezoelectric material.

[0412] According to one or more embodiments of the present disclosure, the headrest frame may comprise an accommodating portion accommodating the sound generating apparatus.

[0413] According to one or more embodiments of the present disclosure, the cushion member may comprise a hollow portion corresponding to the accommodating portion.

[0414] According to one or more embodiments of the present disclosure, the headrest may further comprise a cushion pad accommodated into the hollow portion of the cushion member.

[0415] According to one or more embodiments of the present disclosure, the headrest may further comprise a sound blocking member between a rear surface of the headrest frame and the sheath member.

[0416] According to one or more embodiments of the present disclosure, the sound generating apparatus may comprise a vibration member in the headrest frame, and a vibration element connected to the vibration member and configured to vibrate the vibration member.

[0417] According to one or more embodiments of the present disclosure, the sound generating apparatus may further comprise a cover disposed on the vibration element and configured to include a sound emission portion corresponding to the vibration element.

[0418] According to one or more embodiments of the present disclosure, the headrest may further comprise a cushion pad in the cushion member. The cushion member may comprise a hollow portion corresponding to the sound emission portion of the cover. The cushion pad may be between the sheath member and the cover and may be accommodated into the hollow portion.

[0419] According to one or more embodiments of the present disclosure, the headrest frame may comprise a base frame connected to the support rod part and including a first region, a second region parallel to the first region, and a third region surrounding the first region and the second region; a first accommodating portion in the first region of the base frame; and a second accommodating portion in the second region of the base frame.

[0420] According to one or more embodiments of the present disclosure, the sound generating apparatus may comprise a first vibration apparatus in the first accommodating portion of the headrest frame, and a second vibration apparatus in the second accommodating portion of the headrest frame.

[0421] According to one or more embodiments of the present disclosure, the first vibration apparatus and the second vibration apparatus may be configured to output different sounds.

[0422] According to one or more embodiments of the present disclosure, the first vibration apparatus may comprise a vibration member accommodated into the first accommodating portion of the headrest frame and connected to the headrest frame, and a vibration element connected to the vibration member and configured to vibrate the vibration member. The second vibration apparatus may comprise a vibration member accommodated into the second accommodating portion of the headrest frame and connected to the headrest frame, and a vibration element connected to the vibration member and configured to vibrate the vibration member.

[0423] According to one or more embodiments of the present disclosure, the vibration member may comprise one or more materials of metal, wood, rubber, plastic, carbon, glass, fiber, cloth, paper, a mirror, and leather.

[0424] According to one or more embodiments of the present disclosure, the vibration element may comprise a vibration part including a piezoelectric material, a cover member on at least one of a first surface of the vibration part and a second surface which is opposite to the first surface of the vibration part, and a signal supply member electrically connected to the vibration part.

[0425] According to one or more embodiments of the present disclosure, a portion of the signal supply member may be accommodated between the cover member and the vibration part.

[0426] According to one or more embodiments of the present disclosure, the sound generating apparatus may further comprise a cover configured to cover the first vibration apparatus and the second vibration apparatus. The cover may comprise a first sound emission portion having one or more holes overlapping the first vibration apparatus, and a second sound emission portion having one or more holes overlapping the second vibration apparatus.

[0427] According to one or more embodiments of the present disclosure, the cushion member may comprise a first hollow portion overlapping the first sound emission portion, and a second hollow portion overlapping the second sound emission portion.

[0428] According to one or more embodiments of the present disclosure, the headrest may further comprise a cushion pad in the cushion member. The cushion pad may comprise a first cushion pad accommodated into the first hollow portion, and a second cushion pad accommodated into the second hollow portion.

[0429] A headrest according to one or more embodiments of the present disclosure may comprise a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus may comprise an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0430] According to one or more embodiments of the present disclosure, the first sound generating apparatus and the second sound generating apparatus may be configured to output different sounds.

[0431] According to one or more embodiments of the present disclosure, the first sound generating apparatus may tilt at a first angle from the first lateral surface of the headrest part. The second sound generating apparatus may tilt at a second angle from the second lateral surface of the headrest part.

[0432] According to one or more embodiments of the present disclosure, the vibration apparatus may comprise a piezoelectric material.

[0433] According to one or more embodiments of the present disclosure, the headrest part may comprise a headrest frame, a cushion member at a front surface of the headrest frame, and a support rod part connected to the headrest frame.

[0434] According to one or more embodiments of the present disclosure, the enclosure may comprise an accommodating portion. The vibration apparatus may comprise a

vibration member in the accommodating portion, and a vibration element connected to the vibration member and configured to vibrate the vibration member.

[0435] According to one or more embodiments of the present disclosure, the vibration member may comprise one or more materials of metal, wood, rubber, plastic, carbon, glass, fiber, cloth, paper, a mirror, and leather.

[0436] According to one or more embodiments of the present disclosure, the vibration element may comprise a vibration part including a piezoelectric material, a cover member on at least one of a first surface of the vibration part and a second surface which is opposite to the first surface of the vibration part, and a signal supply member electrically connected to the vibration part.

[0437] According to one or more embodiments of the present disclosure, a portion of the signal supply member may be accommodated between the cover member and the vibration part.

[0438] According to one or more embodiments of the present disclosure, each of the first sound generating apparatus and the second sound generating apparatus may further comprise a cover provided between the vibration apparatus and the cushion member and including a sound emission portion overlapping the vibration apparatus.

[0439] According to one or more embodiments of the present disclosure, each of the first sound generating apparatus and the second sound generating apparatus may further comprise a sound blocking member between the enclosure and the sheath member.

[0440] According to one or more embodiments of the present disclosure, the headrest may further comprise a third sound generating apparatus on the headrest part. The third sound generating apparatus may output a sound which differs from one or more the first sound generating apparatus and the second sound generating apparatus.

[0441] According to one or more embodiments of the present disclosure, the third sound generating apparatus may comprise any one or more of a woofer speaker, a mid-woofer speaker, and a sub-woofer speaker.

[0442] According to one or more embodiments of the present disclosure, the headrest may comprise a headrest frame configured to accommodate the third sound generating apparatus, a cushion member at a front surface of the headrest frame, and a support rod part connected to the headrest frame.

[0443] According to one or more embodiments of the present disclosure, the headrest frame may comprise a sound emission port outputting a sound generated by the third sound generating apparatus.

[0444] According to one or more embodiments of the present disclosure, the third sound generating apparatus may comprise a first enclosure accommodated into the headrest frame and including a sound space and a sound emission path, a second enclosure on the first enclosure, an actuator accommodated into the second enclosure and including a magnet and a coil, and a cover plate disposed on the actuator and connected to the second enclosure.

[0445] According to one or more embodiments of the present disclosure, the headrest frame may comprise an accommodating portion accommodating the third sound generating apparatus, a first sound emission port connected to the sound space of the third sound generating apparatus, and a second sound emission port connected to the sound emission path of the third sound generating apparatus.

[0446] According to one or more embodiments of the present disclosure, the headrest may further comprise a sound blocking member between the headrest frame and the sheath member.

[0447] A chair according to one or more embodiments of the present disclosure may comprise a seat part, a backseat part connected to the seat part, and a headrest connected to an upper portion of the backseat part. The headrest may comprise a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0448] A chair according to one or more embodiments of the present disclosure may comprise a seat part, a backseat part connected to the seat part, and a headrest connected to an upper portion of the backseat part. The headrest may comprise a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus may comprise an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0449] The seat for vehicular apparatus according to one or more embodiments of the present disclosure may comprise a seat cushion, a seat back connected to the seat cushion, and a headrest connected to an upper portion of the seat back. The headrest may comprise a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0450] The seat for vehicular apparatus according to one or more embodiments of the present disclosure may comprise a seat cushion, a seat back connected to the seat cushion, and a headrest connected to an upper portion of the seat back. The headrest may comprise a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus may comprise an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0451] A vehicular apparatus according to one or more embodiments of the present disclosure may comprise a seat for vehicular apparatus. The seat for vehicular apparatus may comprise a seat cushion, a seat back connected to the seat cushion, and a headrest connected to an upper portion

of the seat back. The headrest may comprise a headrest frame, a support rod part connected to a lower surface of the headrest frame, a cushion member at a front surface of the headrest frame, a sound generating apparatus configured between the headrest frame and the cushion member to output a sound, and a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion pad.

[0452] A vehicular apparatus according to one or more embodiments of the present disclosure may comprise a seat for vehicular apparatus. The seat for vehicular apparatus may comprise a seat cushion, a seat back connected to the seat cushion, and a headrest connected to an upper portion of the seat back. The headrest may comprise a headrest part, a first sound generating apparatus connected to a first lateral surface of the headrest part, a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part, and a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus. Each of the first sound generating apparatus and the second sound generating apparatus may comprise an enclosure connected to the headrest part, a cushion member at a front surface of the enclosure, and a vibration apparatus configured between the enclosure and the cushion member to output a sound.

[0453] It will be apparent to those skilled in the art that various modifications and variations can be made in the to the headrest and chair, the seat for a vehicular apparatus, and the vehicular apparatus including the same of the present disclosure without departing from the technical idea or scope of the disclosure. Thus, it is intended that the present disclosure cover the modifications and variations of this disclosure provided they come within the scope of the appended claims and their equivalents.

What is claimed is:

1. A headrest, comprising:
- a headrest frame;
- a support rod part connected to a lower surface of the headrest frame;
- a cushion member at a front surface of the headrest frame;
- a sound generating apparatus configured between the headrest frame and the cushion member to output a sound; and
- a sheath member on a rear surface and a lateral surface of the headrest frame and at a front surface and a lateral surface of the cushion member.

2. The headrest of claim **1**, wherein the sound generating apparatus comprises a piezoelectric material.

3. The headrest of claim **1**, wherein the headrest frame comprises an accommodating portion accommodating the sound generating apparatus.

4. The headrest of claim **3**, wherein the cushion member comprises a hollow portion corresponding to the accommodating portion.

5. The headrest of claim **4**, further comprising a cushion pad accommodated into the hollow portion of the cushion member.

6. The headrest of claim **1**, further comprising a sound blocking member between the rear surface of the headrest frame and the sheath member.

7. The headrest of claim **1**, wherein the sound generating apparatus comprises:
- a vibration member in the headrest frame; and
- a vibration element connected to the vibration member and configured to vibrate the vibration member.

8. The headrest of claim **7**, wherein the sound generating apparatus further comprises a cover disposed on the vibration element and configured to include a sound emission portion corresponding to the vibration element.

9. The headrest of claim **8**, further comprising a cushion pad in the cushion member,
- wherein the cushion member comprises a hollow portion corresponding to the sound emission portion of the cover, and
- wherein the cushion pad is between the sheath member and the cover and is accommodated into the hollow portion.

10. The headrest of claim **1**, wherein the headrest frame comprises:
- a base frame connected to the support rod part and including a first region, a second region parallel to the first region, and a third region surrounding the first region and the second region;
- a first accommodating portion in the first region of the base frame; and
- a second accommodating portion in the second region of the base frame.

11. The headrest of claim **10**, wherein the sound generating apparatus comprises:
- a first vibration apparatus in the first accommodating portion of the headrest frame; and
- a second vibration apparatus in the second accommodating portion of the headrest frame.

12. The headrest of claim **11**, wherein the first vibration apparatus and the second vibration apparatus are configured to output different sounds.

13. The headrest of claim **11**,
- wherein the first vibration apparatus comprises:
- a first vibration member accommodated into the first accommodating portion of the headrest frame and connected to the headrest frame; and
- a first vibration element connected to the first vibration member and configured to vibrate the first vibration member, and
- wherein the second vibration apparatus comprises:
- a second vibration member accommodated into the second accommodating portion of the headrest frame and connected to the headrest frame; and
- a second vibration element connected to the second vibration member and configured to vibrate the second vibration member.

14. The headrest of claim **13**, wherein each of the first and second vibration members comprises one or more materials of metal, wood, rubber, plastic, carbon, glass, fiber, cloth, paper, a mirror, and leather.

15. The headrest of claim **13**, wherein each of the first and second vibration elements comprises:
- a vibration part including a piezoelectric material;
- a cover member on at least one of a first surface of the vibration part and a second surface which is opposite to the first surface of the vibration part; and
- a signal supply member electrically connected to the vibration part.

16. The headrest of claim **15**, wherein a portion of the signal supply member is accommodated between the cover member and the vibration part.

17. The headrest of claim 11,
wherein the sound generating apparatus further comprises a cover configured to cover the first vibration apparatus and the second vibration apparatus, and
wherein the cover comprises:
a first sound emission portion having one or more holes overlapping the first vibration apparatus; and
a second sound emission portion having one or more holes overlapping the second vibration apparatus.

18. The headrest of claim 17, wherein the cushion member comprises:
a first hollow portion overlapping the first sound emission portion; and
a second hollow portion overlapping the second sound emission portion.

19. The headrest of claim 18, further comprising a cushion pad in the cushion member,
wherein the cushion pad comprises:
a first cushion pad accommodated into the first hollow portion; and
a second cushion pad accommodated into the second hollow portion.

20. A headrest, comprising:
a headrest part;
a first sound generating apparatus connected to a first lateral surface of the headrest part;
a second sound generating apparatus connected to a second lateral surface which is opposite to the first lateral surface of the headrest part; and
a sheath member on the headrest part, the first sound generating apparatus, and the second sound generating apparatus,
wherein each of the first sound generating apparatus and the second sound generating apparatus comprises:
an enclosure connected to the headrest part;
a cushion member at a front surface of the enclosure; and
a vibration apparatus configured between the enclosure and the cushion member to output a sound.

21. The headrest of claim 20, wherein the first sound generating apparatus and the second sound generating apparatus are configured to output different sounds.

22. The headrest of claim 20,
wherein the first sound generating apparatus tilts at a first angle from the first lateral surface of the headrest part, and
wherein the second sound generating apparatus tilts at a second angle from the second lateral surface of the headrest part.

23. The headrest of claim 20, wherein the vibration apparatus comprises a piezoelectric material.

24. The headrest of claim 20, wherein the headrest part comprises:
a headrest frame;
a cushion member at a front surface of the headrest frame; and
a support rod part connected to the headrest frame.

25. The headrest of claim 20,
wherein the enclosure comprises an accommodating portion; and
wherein the vibration apparatus comprises:
a vibration member in the accommodating portion; and
a vibration element connected to the vibration member and configured to vibrate the vibration member.

26. The headrest of claim 25, wherein the vibration member comprises one or more materials of metal, wood, rubber, plastic, carbon, glass, fiber, cloth, paper, a mirror, and leather.

27. The headrest of claim 25, wherein the vibration element comprises:
a vibration part including a piezoelectric material;
a cover member on at least one of a first surface of the vibration part and a second surface which is opposite to the first surface of the vibration part; and
a signal supply member electrically connected to the vibration part.

28. The headrest of claim 27, wherein a portion of the signal supply member is accommodated between the cover member and the vibration part.

29. The headrest of claim 20, wherein each of the first sound generating apparatus and the second sound generating apparatus further comprises a cover provided between the vibration apparatus and the cushion member and including a sound emission portion overlapping the vibration apparatus.

30. The headrest of claim 20, wherein each of the first sound generating apparatus and the second sound generating apparatus further comprises a sound blocking member between the enclosure and the sheath member.

31. The headrest of claim 20, further comprising a third sound generating apparatus on the headrest part,
wherein the third sound generating apparatus outputs a sound which differs from one or more the first sound generating apparatus and the second sound generating apparatus.

32. The headrest of claim 31, wherein the third sound generating apparatus comprises any one or more of a woofer speaker, a mid-woofer speaker, and a sub-woofer speaker.

33. The headrest of claim 31, wherein the headrest comprises:
a headrest frame configured to accommodate the third sound generating apparatus;
a cushion member at a front surface of the headrest frame; and
a support rod part connected to the headrest frame.

34. The headrest of claim 33, wherein the headrest frame comprises a sound emission port outputting a sound generated by the third sound generating apparatus.

35. The headrest of claim 33, wherein the third sound generating apparatus comprises:
a first enclosure accommodated into the headrest frame and including a sound space and a sound emission path;
a second enclosure on the first enclosure;
an actuator accommodated into the second enclosure and including a magnet and a coil; and
a cover plate disposed on the actuator and connected to the second enclosure.

36. The headrest of claim 35, wherein the headrest frame comprises:
an accommodating portion accommodating the third sound generating apparatus;
a first sound emission port connected to the sound space of the third sound generating apparatus; and
a second sound emission port connected to the sound emission path of the third sound generating apparatus.

37. The headrest of claim 20, further comprises a sound blocking member between the headrest part and the sheath member.

38. A headrest, comprising:
an enclosure including an accommodating portion and an opening front portion;
a sound generating apparatus accommodated in the accommodating portion;
a cushion member covering the opening front portion of the enclosure and including a hollow portion; and
a cushion pad disposed in the hollow portion of cushion member,
wherein the cushion pad includes a porous material.

39. The headrest of claim **38**, wherein the sound generating apparatus comprises:
a vibration member coupled to the enclosure therein; and
a vibration element disposed on the vibration member and configured to vibrate the vibration member.

40. A chair, comprising:
a seat part;
a backseat part connected to the seat part; and
the headrest of claim **1** connected to an upper portion of the backseat part.

41. A seat for vehicular apparatus, comprising:
a seat cushion;
a seat back connected to the seat cushion; and
the headrest of claim **1** connected to an upper portion of the seat back.

42. A vehicular apparatus comprising the seat for vehicular apparatus of claim **41**.

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