CLAIMS

[Claim 1]

A speaker unit, at least comprising:

a first diaphragm in a cone shape;

a second diaphragm having one end side, another end side, and side edge portions to provide the second diaphragm with a sheet shape having a width defined between the side edge portions that extends along a direction from the one end side towards said another end side, the second diaphragm including a single rounded surface

portion that is curved between the one end side and said another end side; and

a driver unit that drives the first diaphragm and the second diaphragm together, wherein

the driver unit is connected to a small diameter side of the first diaphragm and one end side of the second diaphragm.

[Claim 2]

The speaker unit according to claim 1, further comprising:

a support member (51) on which the first diaphragm (1), the second diaphragm (2), and the driver unit (3) are mounted, wherein:

a support member on which the first diaphragm, the second diaphragm, and the driver unit are mounted, wherein

the support member (51) includes a support plate (511) in a flat plate shape, a protrusion portion (512) that protrudes from one surface of the support plate (511), and a support leg (513) in a wide-width eave shape that is provided on the protrusion portion (512), wherein

a large diameter side (1b) of the first diaphragm (1) is connected to the support plate (511) of the support member (51), and

the other end side (2b) of the second diaphragm (2) is connected to the support leg (513) of the support member (51).

[Claim 3]

The speaker unit according to claim 1 or 2, wherein

in the second diaphragm, the one end side is connected to a notch provided in a tip end of a coil bobbin of the driver unit.

[Claim 4]

The speaker unit according to claim 1 or 2, wherein

in the second diaphragm, the one end side is connected to a center cap attached to a tip end of a coil bobbin of the driver unit.

[Claim 5]

The speaker unit according to claim 4, wherein

in the second diaphragm, the one end side is connected to a notch provided in the center cap.

[Claim 6]

The speaker unit according to claim 1 or 2, wherein

in the second diaphragm, the one end side is connected to a sub cone attached to a tip end of a coil bobbin of the driver unit.

[Claim 7]

The speaker unit according to any one of claims 1 to 6, wherein

in the second diaphragm, a reinforcing plate is attached to one surface of the one end side.

[Claim 8]

The speaker unit according to claim 7, wherein

in the second diaphragm, the one end side is further connected to the first diaphragm via a side edge portion of the reinforcing plate.

[Claim 9]

The speaker unit according to any one of claims 1 to 8, wherein

the second diaphragm includes a constricted portion or a notch portion.

[Claim 10]

A speaker, at least comprising:

a first diaphragm in a cone shape;

a second diaphragm having one end side, another end side, and side edge portions to provide the second diaphragm with a curved sheet shape having a width defined between the side edge portions that extends along a direction from the one end side towards said another end side, the second diaphragm including a single rounder surface portion that is curved between the one end side and said another end side;

a driver unit that drives the first diaphragm and the second diaphragm together; and

a housing that stores the first diaphragm, the second diaphragm, and the driver unit, wherein

the housing includes a support member on which the first diaphragm, the second diaphragm, and the driver unit are mounted,

the support member includes a support plate in a flat plate shape, a protrusion portion that protrudes from one surface of the support plate, and a support leg in a wide-width eave shape that is provided on the protrusion portion,

a small diameter side of the first diaphragm and one end side of the second diaphragm are connected to the driver unit,

a large diameter side of the first diaphragm is connected to the support plate of the support member forming a part of the housing, and

the other end side of the second diaphragm is connected to the support leg of the support member forming a part of the housing.

[Claim 11]

The speaker according to claim 10, wherein

the protrusion portion is provided in a vertical direction in a width direction-center portion of the support plate.

[Claim 12]

The speaker according to claim 11, wherein

in the protrusion portion, a protruding front surface is in an arc shape equal to the curve of the second diaphragm.

[Claim 13]

The speaker according to claim 11 or 12, wherein

the protrusion portion includes a clearance on a back surface that is not put in contact with the large diameter side of the first diaphragm.

[Claim 14]

The speaker according to any one of claims 10 to 13, wherein

the housing is a hollow structure in a box shape including six surfaces, which are a front plate, a back plate, a right side plate, a left side plate, a top plate, and a bottom plate, and

the front plate is the support plate of the support member.

[Claim 15]

The speaker according to claim 14, wherein

the housing is a skeleton structure in which a frontward region of the front plate includes an open portion formed by a frame body.