[CLAIMS]

[Claim 1]

A liquid cartridge comprising:

a housing defining a liquid storage chamber therein;

a circuit board including an electrode; and

a liquid supply portion including a liquid passage that is open frontward and configured to supply liquid in the liquid storage chamber to an outside through the liquid passage,

wherein the housing comprises:

a top wall positioned upward of the liquid supply portion;

a first protrusion positioned rearward of the circuit board and protruding upward from the top wall; and

a second protrusion positioned frontward of the circuit board and protruding upward from the top wall, and extending in a front-rear direction,

wherein an upper surface of the first protrusion is positioned upward of an upper edge of a front end of the second protrusion,

wherein the front end of the second protrusion is positioned frontward of an opening of the liquid supply portion, and

wherein an outer surface of the liquid cartridge is positioned below an imaginary plane between the upper surface of the first protrusion and the upper edge of the front end of the second protrusion, the imaginary plane being in contact with each of the upper surface of the first protrusion and the upper edge of the front end of the second protrusion and extending in a left-right direction.

[Claim 2]

The liquid cartridge according to claim 1, wherein a front end of the top wall is positioned below the imaginary plane.

[Claim 3]

The liquid cartridge according to claim 1 or 2, wherein the upper surface of the first protrusion is positioned further rearward than a center of the housing in the front-rear direction, and

wherein the upper edge of the front end of the second protrusion is positioned

further frontward than the center of the housing in the front-rear direction.

[Claim 4]

The liquid cartridge according to any one of claims 1 to 3, wherein the top wall supports the circuit board directly or indirectly.

[Claim 5]

The liquid cartridge according to any one of claims 1 to 4, wherein the first protrusion comprises:

a first protruding portion;

a second protruding portion positioned to be spaced away from the first protruding portion in the left-right direction; and

a third protruding portion connecting a rear end of the first protruding portion to a rear end of the second protruding portion, and extending in the left-right direction,

wherein the second protrusion has a dimension in the front-rear direction that is longer than dimensions in a vertical direction and the left-right direction.

[Claim 6]

The liquid cartridge according to claim 5, wherein the third protruding portion has an engaging surface configured to engage a part of a cartridge case in a state where the liquid cartridge is attached to the cartridge case.

[Claim 7]

The liquid cartridge according to any one of claims 1 to 6, wherein the top wall of the housing has a first upper surface and a second upper surface positioned lower than the first upper surface,

wherein the first protrusion is positioned at the first upper surface, and

wherein the front end of the second protrusion is positioned on the second upper surface.

[Claim 8]

The liquid cartridge according to claim 7, wherein the first upper surface is a flat plane,

wherein the second upper surface is a flat plane extending from the first upper surface and sloping downward and frontward, and

wherein the second protrusion extends across the first upper surface and the second upper surface.

[Claim 9]

The liquid cartridge according to claim 8, wherein a boundary between the first upper surface and the second upper surface is positioned below the imaginary plane.

[Claim 10]

The liquid cartridge according to any one of claims 1 to 9, wherein an entirety of the circuit board is positioned below the imaginary plane.

[Claim 11]

The liquid cartridge according to any one of claims 1 to 10, wherein the housing comprises: a base defining the liquid storage chamber; and a cover engaged with an upper end portion of the base, and

wherein the cover includes the first protrusion and the second protrusion, and supports the circuit board directly or indirectly.

[Claim 12]

The liquid cartridge according to claim 11, wherein the base comprises a plurality of engaging pawls for engagement with the cover,

wherein the cover includes the top wall and a peripheral wall extending downward from a periphery of the top wall, the cover comprises a plurality of engaging holes formed in the peripheral wall for receiving the engaging pawls,

wherein the front end of the second protrusion is positioned further frontward than any one of the engaging holes in engagement with the engaging pawls.

[Claim 13]

The liquid cartridge according to claim 12, wherein a rear end of the second protrusion is positioned further rearward than one of the engaging holes that is positioned frontmost thereamong.

[Claim 14]

The liquid cartridge according to any one of claims 1 to 13, wherein the second protrusion is plate-shaped and has: a front surface extending from the top wall; a main upper surface facing upward; and a sub upper surface sloping downward relative to the main upper surface, and

wherein the upper edge of the front end of the second protrusion is defined by the front surface and the sub upper surface.

[Claim 15]

The liquid cartridge according to any one of claims 1 to 14, wherein a front edge of the electrode is positioned further rearward than a center in the front-rear direction between a boundary of the upper surface of the first protrusion and the upper edge of the front end of the second protrusion each of which is in contact with the imaginary plane.

[Claim 16]

A cartridge set comprising a plurality of the liquid cartridges according to any one of claims 1 to 15,

wherein the plurality of the liquid cartridges is configured to be accommodated in positions different from one another in a cartridge case, and the second protrusions of the plurality of the liquid cartridges are at positions different from one another in the left-right direction.