CLAIMS

What is claimed is:

1. A breast pump comprising:

a contact housing comprising a protruding part configured to correspond to a mother's nipple and extend toward the front and a breast milk outlet formed at the protruding part;

a cap connector coupled to cover an end of the protruding part to form a first inner space between the end of the protruding part and itself and comprising a breast milk outlet tube linked with the breast milk outlet and the first inner space;

a funnel connector on the cap connector to form a second inner space;

a linking pathway between the funnel connector and the cap connector and configured to link the second inner space of the funnel connector with the first inner space of the cap connector;

a storage housing comprising a coupling hole to correspond to the second inner space of the funnel connector and detachably coupled with the contact housing;

a lid coupled to cover the second inner space of the funnel connector through the coupling hole of the storage housing;

a flow separation membrane configured to divide and separate the space between

the funnel connector and the lid; ~~and~~

an air pathway in the lid through which air flows into and out from the space between the lid and the flow separation membrane; and

an attachable pump module on the lid to suck air between the lid and the flow separation membrane through ~~an~~the air pathway ~~in the lid.~~,

wherein the attachable pump module is integrally coupled with the lid to be detachably coupled to the coupling hole.

~~2. The breast pump of claim 1, wherein the attachable pump module is integrally coupled with the lid to be detachably coupled to the coupling hole.~~

~~3.~~2. The breast pump of claim 1, wherein operating the attachable pump module allows the air between the lid and the flow separation membrane to be sucked in to the attachable pump module through the air pathway, the flow separation membrane to move upward, a space between the flow separation membrane and the funnel connector to be expanded to form a vacuum pressure, and the vacuum pressure to be transferred to the first inner space to act as a force for extracting breast milk from a mother's breast.

~~4.~~3. The breast pump of claim 1, further comprising

~~an air pathway in the lid through which air flows into and out from the space~~

~~between the lid and the flow separation membrane;~~

a stopper on the lid having an air pipe connector linked with the air pathway;

an air pipe detachably connected to the air pipe connector; and

an external electric pump configured to suck the air between the lid and the flow separation membrane through the air pipe.

~~5.~~4. The breast pump of claim 1, ~~further comprising a linking pathway between the funnel connector and the cap connector and configured to link the second inner space of the funnel connector with the first inner space of the cap connector,~~wherein the linking pathway ~~comprising~~comprises:

a space part in an inverted triangle (∇) shape;

a first cleaning hole in an elongated shape linking the space part with the second inner space of the funnel connector; and

a second cleaning hole located opposite the first cleaning hole and linking the space part with the first inner space of the cap connector.

~~6.~~5. The breast pump of claim 1, further comprising a silicone valve of which one end is coupled to an outlet of the breast milk outlet tube and the other pointed end is provided with a cut line.

~~7.~~6. The breast pump of claim 1, further comprising a zipper bag insertion hole formed through a lower portion of the storage housing; and a zipper bag fixation hook provided in the cap connector.

~~8.~~7. The breast pump of claim ~~7~~6, further comprising an anti-pressing plate formed to extend a surface of the storage housing downward from the zipper bag insertion hole to prevent a bra from compressing a breastmilk zipper bag.

~~9.~~8. The breast pump of claim ~~7~~6, further comprising a breastmilk zipper bag having a locking part to be hooked to the zipper bag fixation hook,

wherein the locking part comprises a first locking hole to be hooked to an end of the cap connector and a second locking hole formed on an inner periphery or inner peripheral surface of the first locking hole,

wherein a shape of the first locking hole corresponds to a shape of the end of the cap connector, and

wherein a shape of the second locking hole corresponds to a shape of the zipper bag fixation hook.

9. The breast pump of claim 1, wherein the storage housing is provided with a first breast milk outlet hole at an upper portion thereof, the first breast milk outlet hole being

configured for discharging breast milk stored in the storage housing to the outside,

wherein the contact housing is provided with a second breast milk outlet hole at an upper portion thereof, the second breast milk outlet hole being linked with the first breast milk outlet hole, and

wherein the first breast milk outlet hole and the second breast milk outlet hole are provided with a stopper for opening and closing.