

Wearable Breast Pump and Milk Refrigeration

International Classification A4C3/00

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According to a 2018 survey:

6% of women have access to lactation rooms

Rest have breastfed in:

- Broom closet of airport
- Bench in a mall
- Common washrooms
- Trial rooms



Momprespresso. (2018, August 2)- *Momprespresso-Medela Survey.*

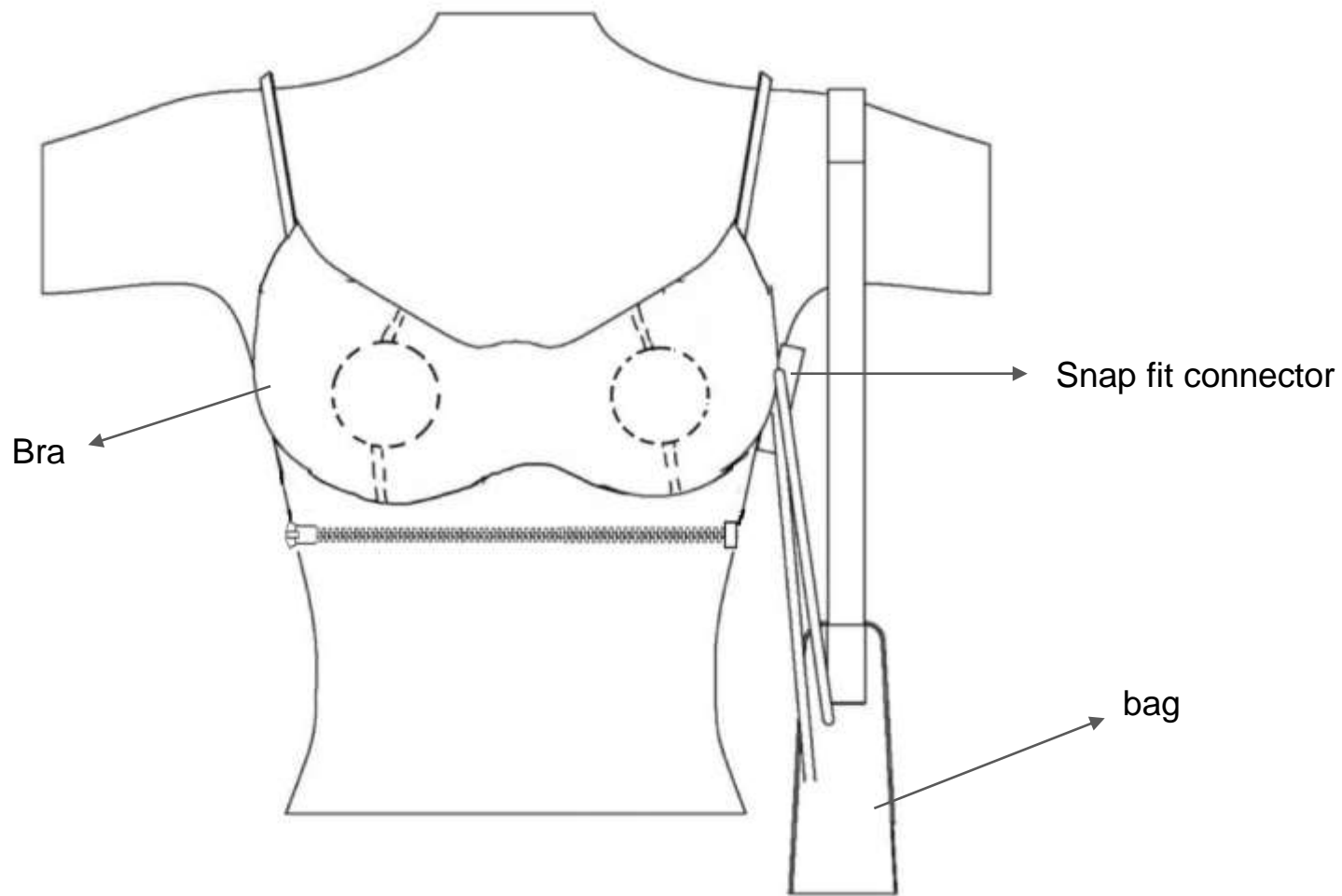
Deaths due to insufficient breastfeeding

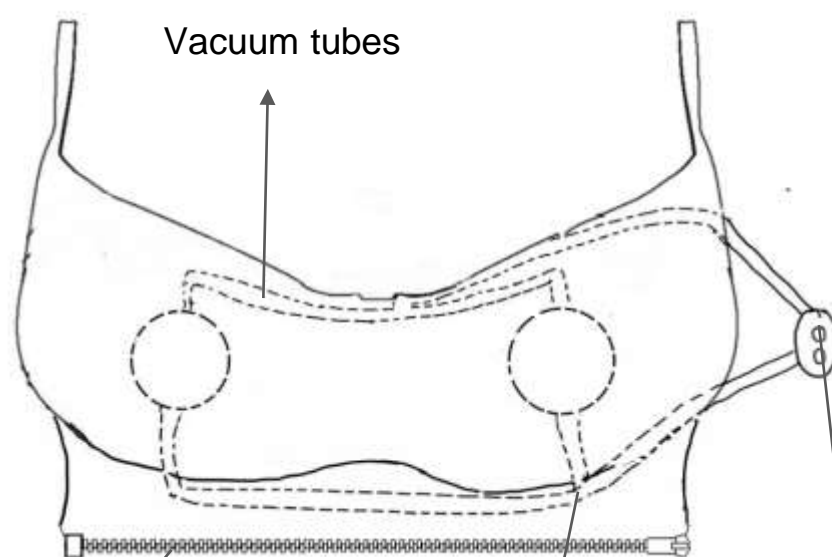
Infant-5,95,379

Women- 98,243



D. D. Walters, L. T. H. Phan, and R. Mathisen, “The cost of not breastfeeding: global results from a new tool,” *Health Policy Plan.*, vol. 34, no. 6, pp. 407–417, 2019.





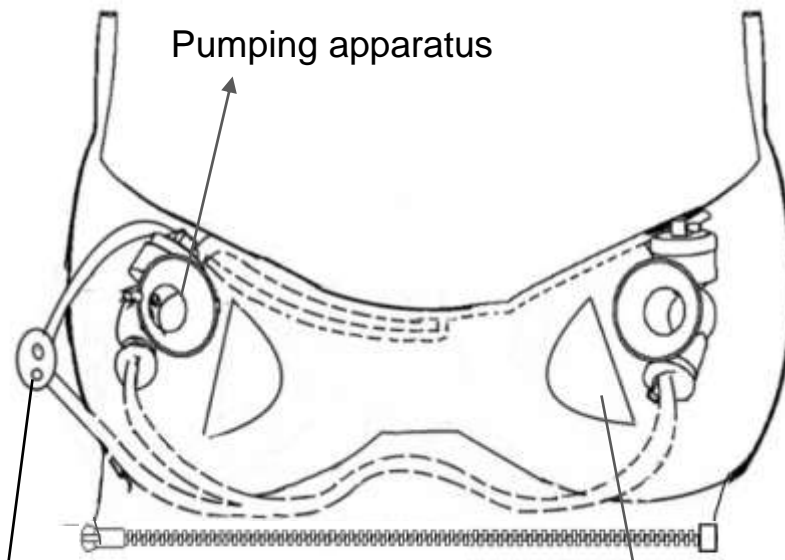
Vacuum tubes

zip

Front view

Milk tubes

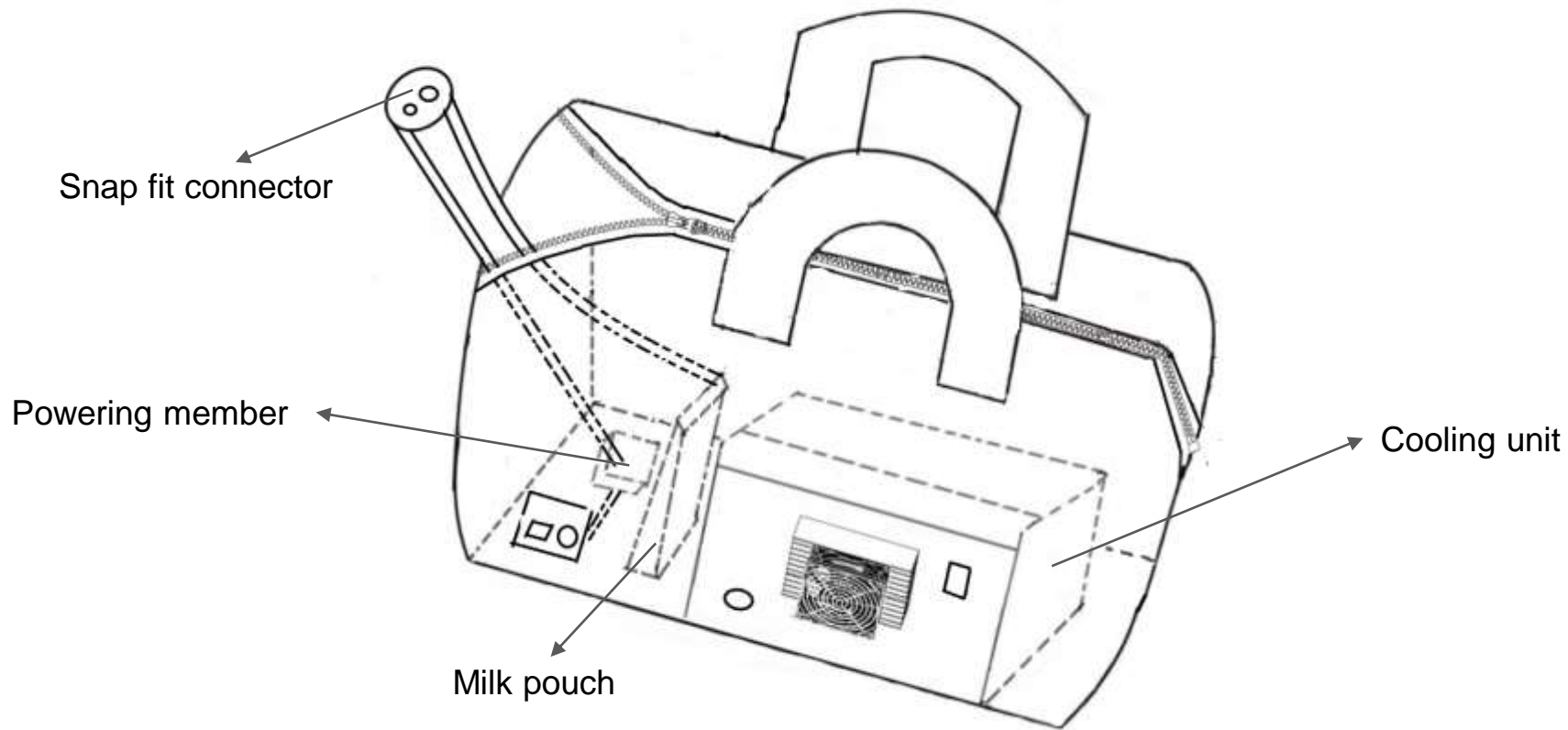
Snap fit connector

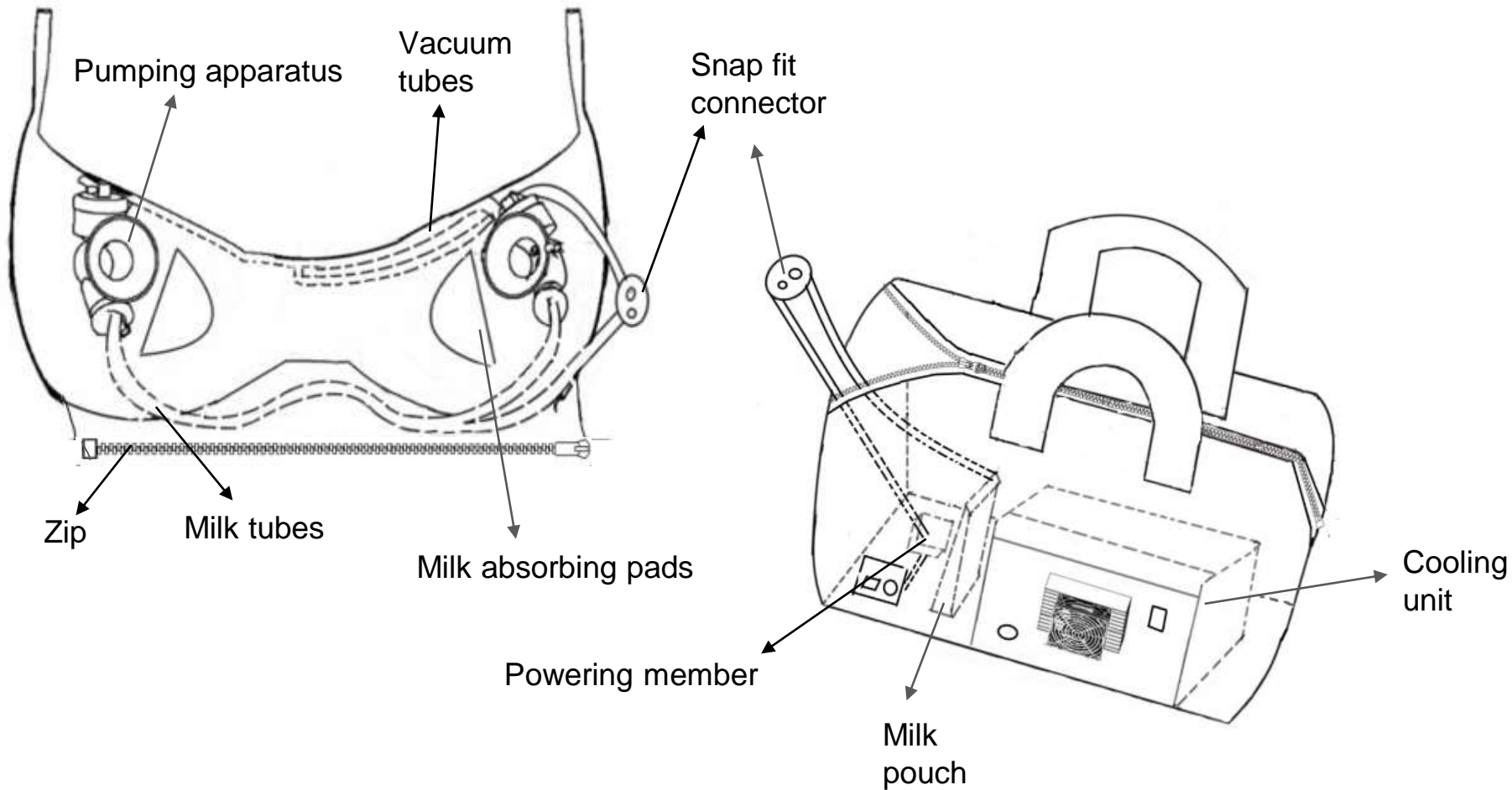


Pumping apparatus

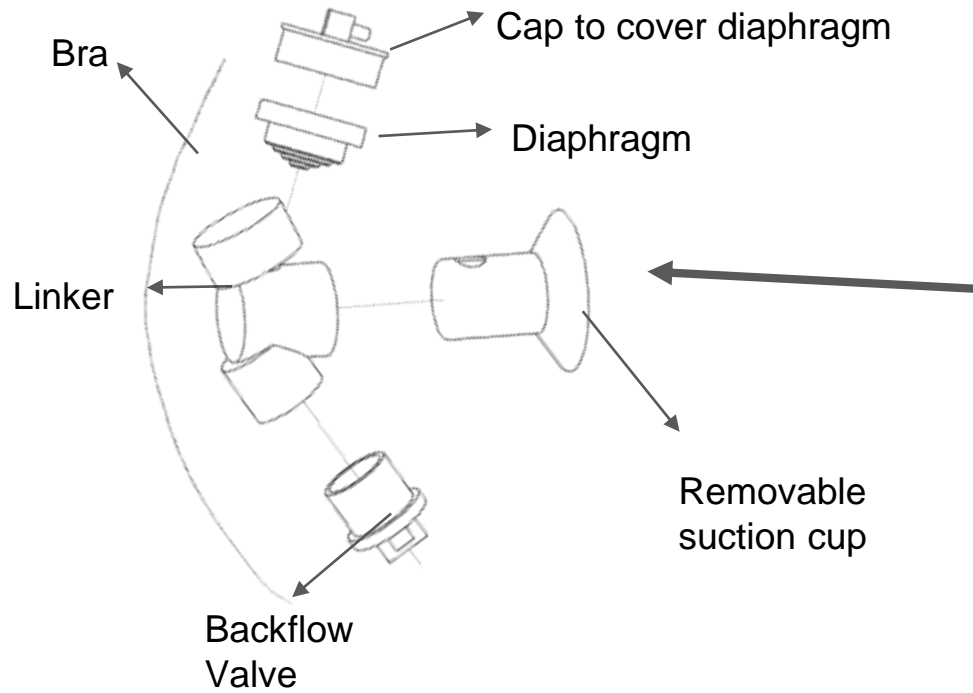
Back view

Milk absorbing pads

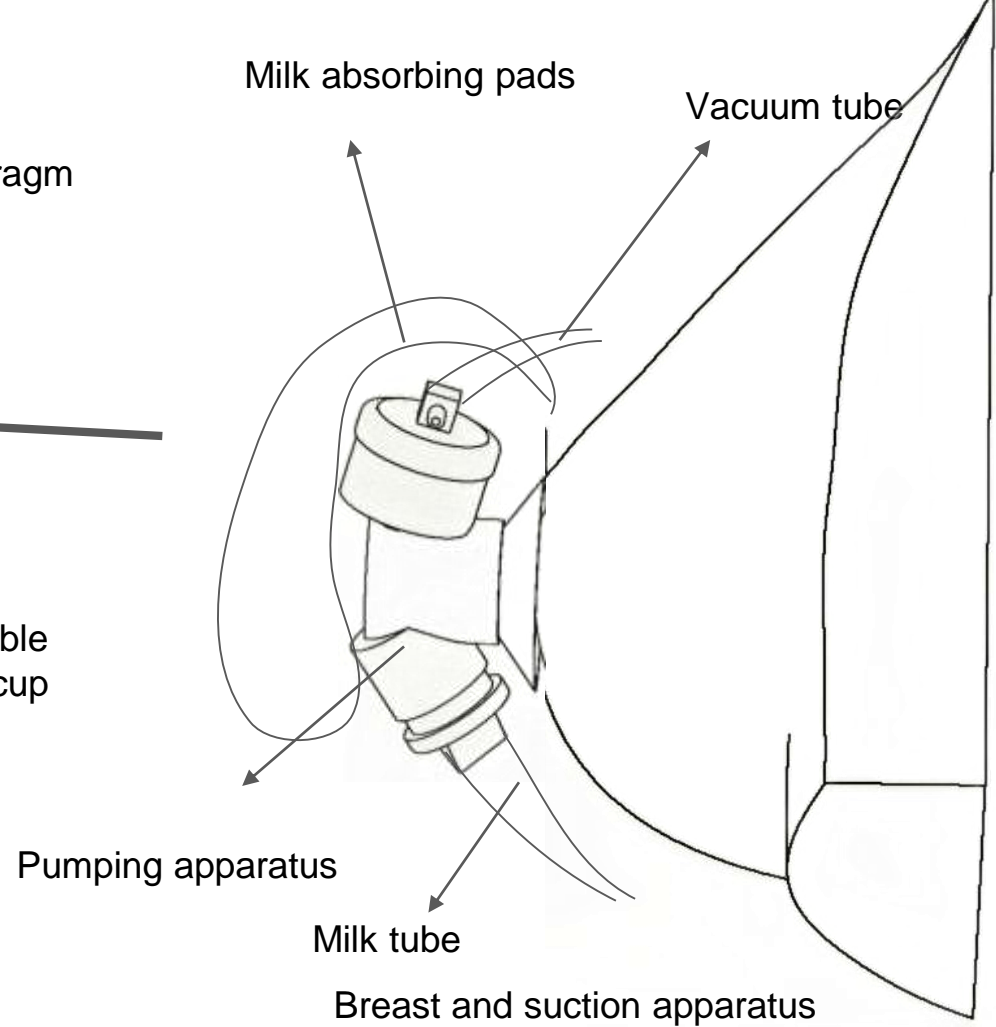


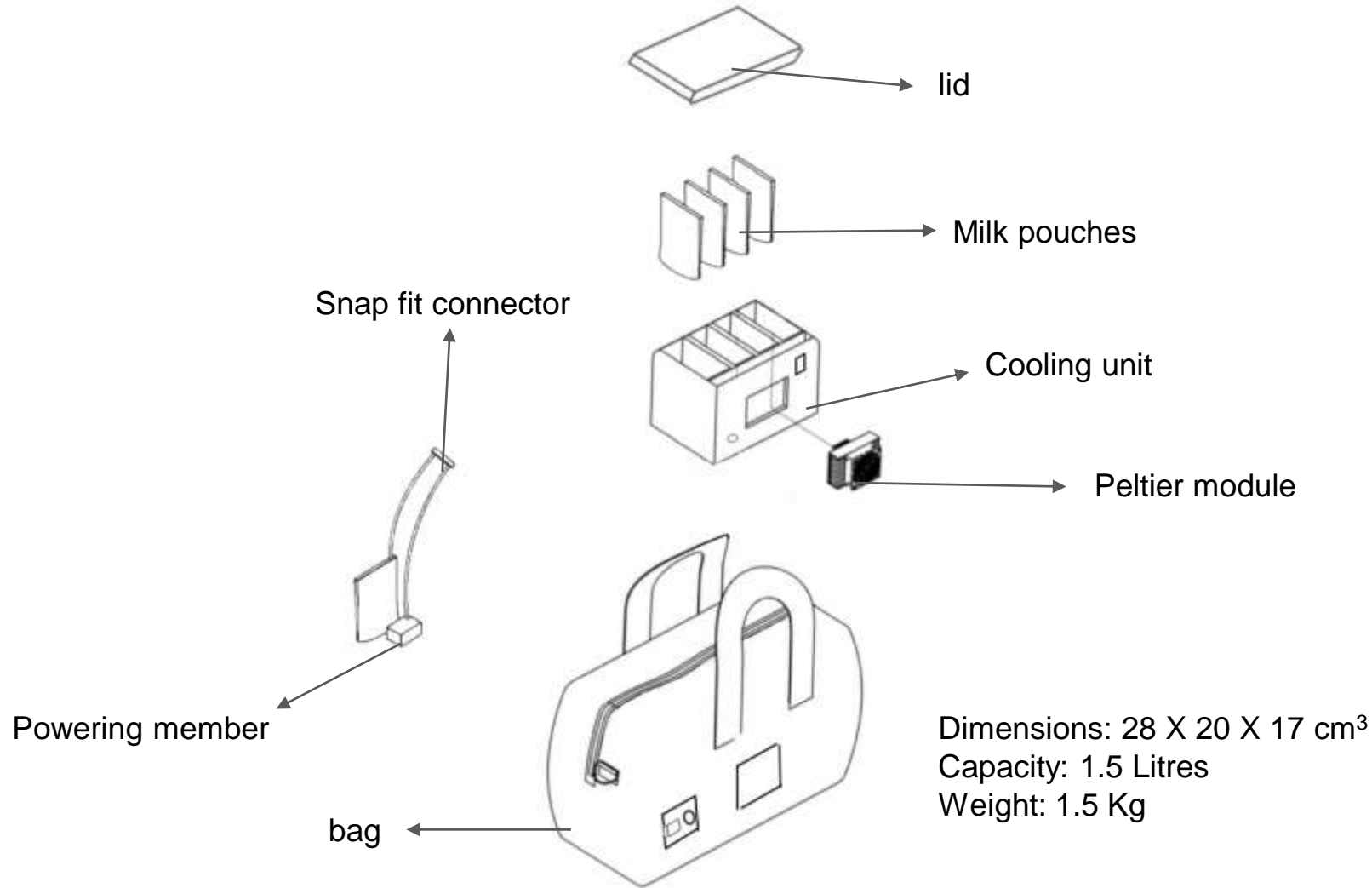






Approximate weight : 100 grams
Forward protrusion: 2.5 cm
Sound : 40 Decibels

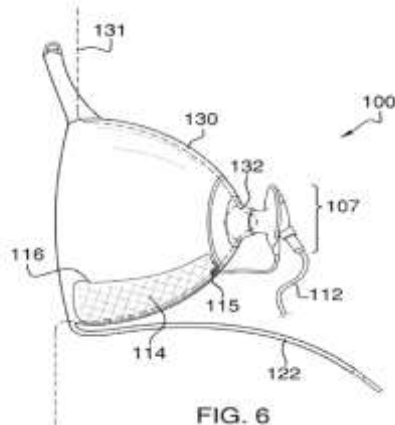
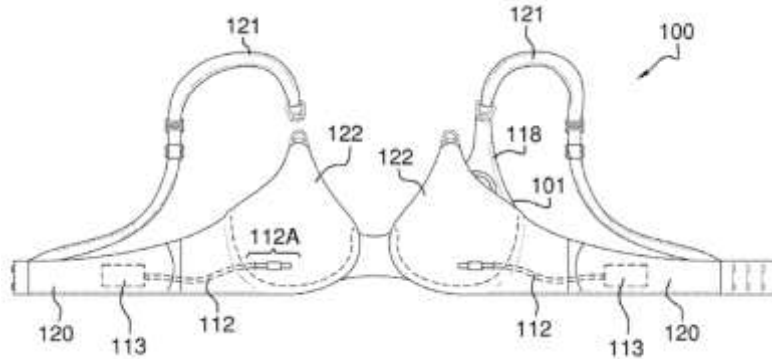








(54) **BRA WITH BREAST PUMPING APPARATUS
INTEGRATED THEREIN**



Differences:

- Cooling storage attached
- Easy detachment of milk tubes
- Milk pads for leakage prevention

(12) **United States Patent**
O'Toole et al.

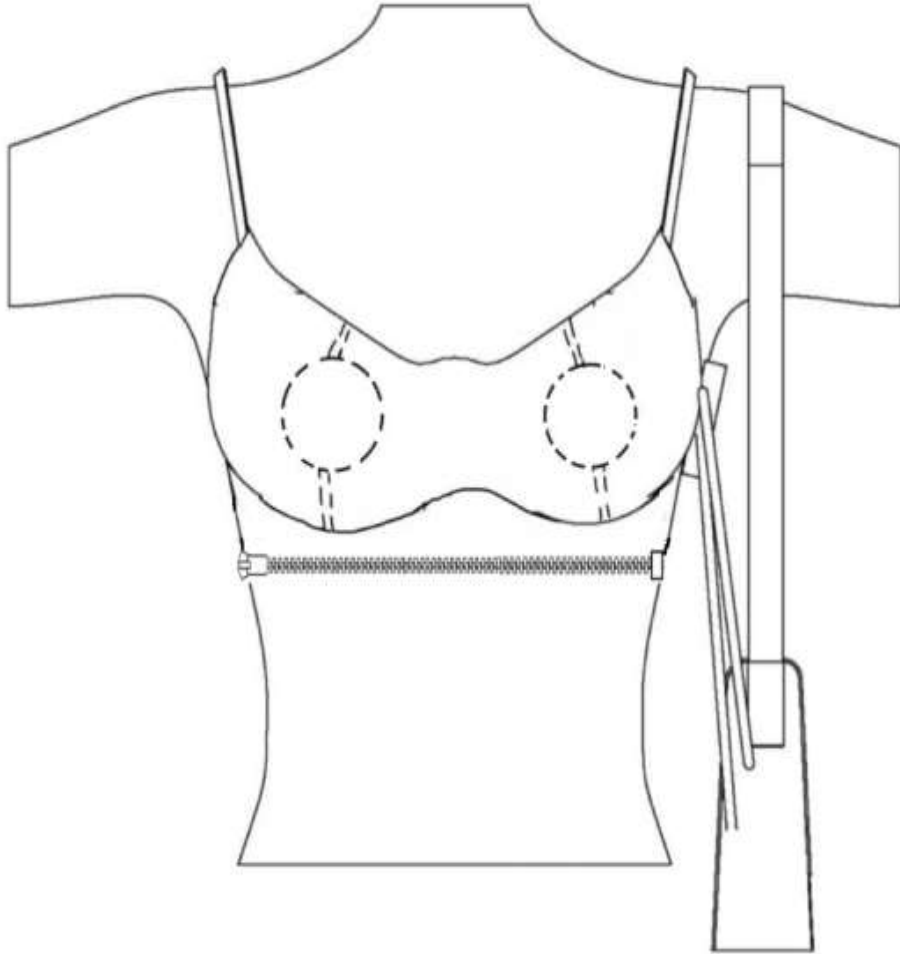
(10) **Patent No.:** **US 11,376,352 B2**
(45) **Date of Patent:** **Jul. 5, 2022**

(54) **BREAST PUMP SYSTEM**



Differences:

- Cold storage
- Light and not bulky
- Replaceable spare parts



Key Features

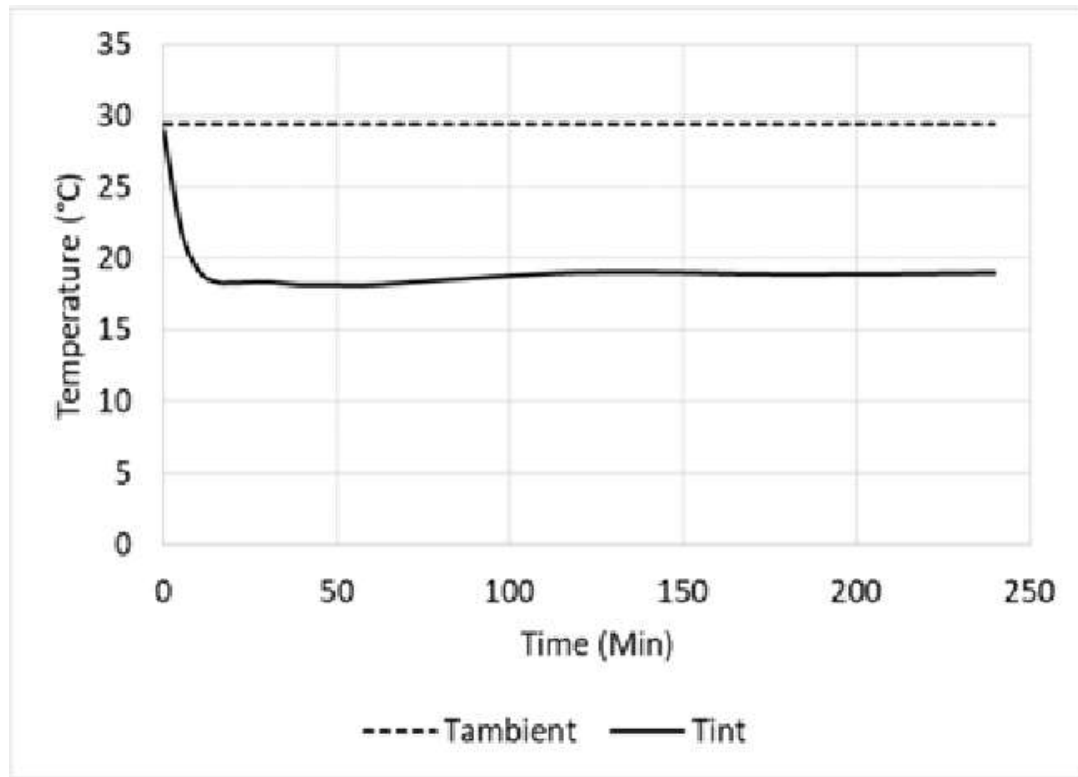
- Privacy
- Compact
- Detachable parts for cleaning
- Portable Cooling container

Backup Slides

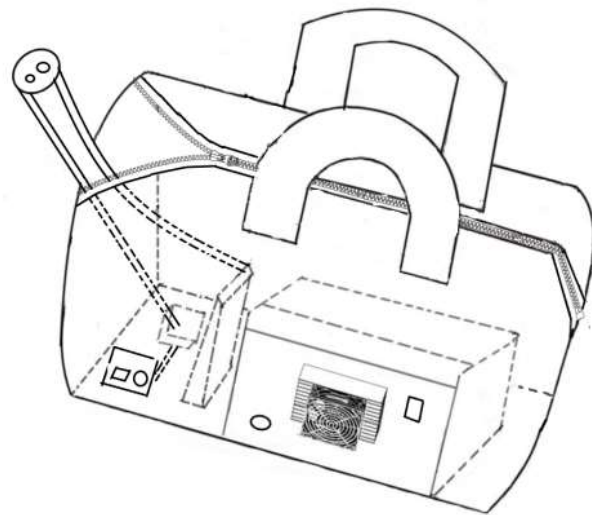
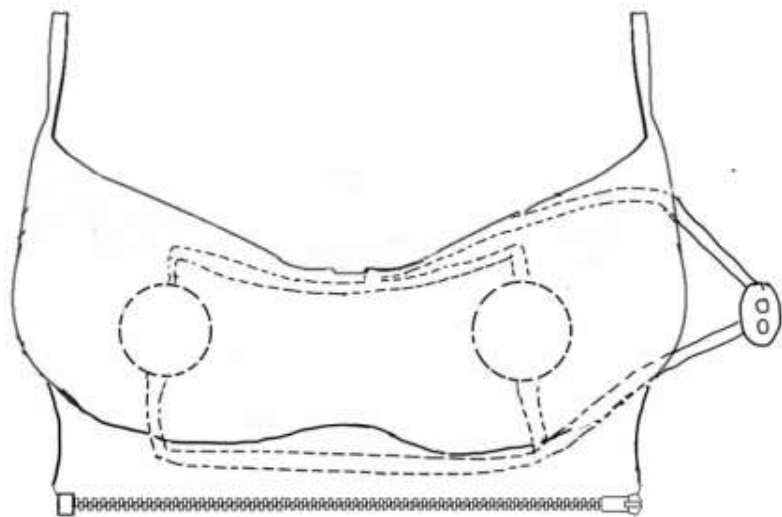
Breastfeeding

The act of feeding breast milk to an infant. Babies can be fed directly from the mother's breast, or breast milk can be pumped and then fed to the baby from a bottle.

“NCI dictionary of Cancer Terms,” *National Cancer Institute*, 02-Feb-2011. [Online]. Available: <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/breastfeeding>. [Accessed: 13-Jul-2023].



https://www.researchgate.net/figure/Ambient-and-ambient-temperature-versus-time_fig3_341979421



The list also includes places like a **broom closet room in an airport**, **under a tree**, the waiting room of the passport office, **bank queues**, **washrooms**, a **bench** in a mall, **bus stop** and more.



able	1.0%
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A pie chart illustrating the reasons for not using the toilet. The chart is divided into two segments: a larger light gray segment representing 'Lack of Hygiene' at 53.0%, and a smaller dark gray segment representing 'Lack of Privacy' at 47.0%.

Reason	Percentage
Lack of Hygiene	53.0%
Lack of Privacy	47.0%

The list also includes places like a **broom closet room in an airport**, **under a tree**, the waiting room of the passport office, **bank queues**, **washrooms**, a **bench** in a mall, **bus stop** and more.

New Mothers in workplaces face:

1. Lack of privacy

1. Wastage of pumped milk

1. Lack of refrigeration



Introduction of nutritionally-adequate and safe complementary (solid) foods at 6 months together with continued breastfeeding up to 2 years of age or beyond