Whoopy Wipes: Sterilized Towelette Hygiene Device

Create a working prototype of a personal care device that intakes a blister cartridge, dispenses 2 towelettes into an ejection tray, and then sprays either a heated cleaning solution or hot water onto the towelettes before ejecting them for personal hygiene use.

Expected Market
- Personal care wipe market size was $15.8 B in 2018 with an upward trend and a large
- US has the largest market (61%) with growing demand for wipes used for hygiene and household work
- COVID-19 pandemic in 2020 has caused unprecedented demand for personal hygiene products

Cycle Process
- User Initiates Cycle
- Water is pumped into heating element
- Water is heated to 200 F
- Water is pumped into ejection tray for hydration cycle
- Water is pumped into ejection tray for hydration cycle
- Two towelettes are dispensed into chute
- Two towelettes are dispensed into chute
- Ejection Tray receives towlettes
- Ejection Tray receives towlettes
- User loads blister pack into cartridge tray
- User loads blister pack into cartridge tray
- LCD Display
- Cartridge Loading and Wipe Dispenser
- Water and Bleach Reservoir
- Heating Element
- Ejection Tray

Phase IV Design

CONTACT INFORMATION: Team Lead: Bryan Mercado: (bamercad@uci.edu)

Project Timeline: Winter 2021

Prototype Budget (Dollars)

Company Sponsors

Whoopy Wipes Team

Team Structure

Advisors: Dr. Farzad Ahmadkhanlou, Dr. Vince McDonell

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