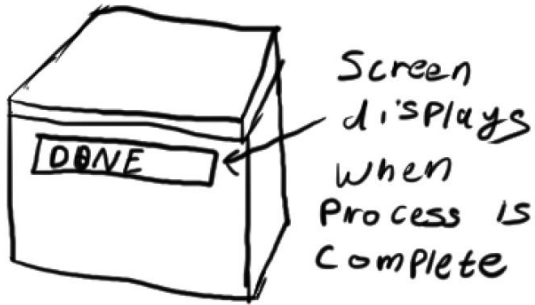
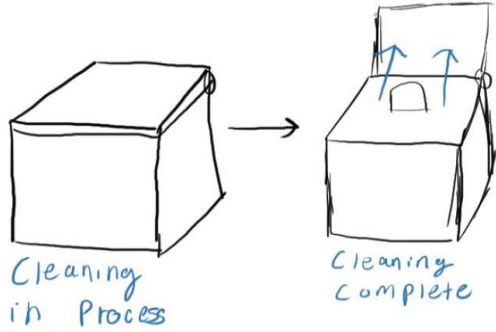
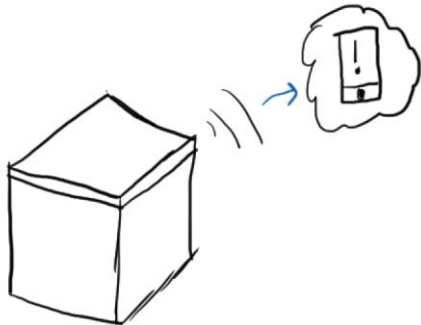


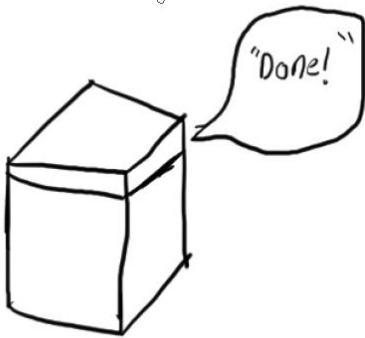
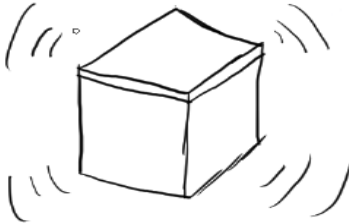



Cesar Felipe



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Initial Concept Generation

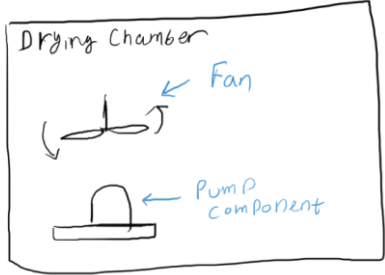
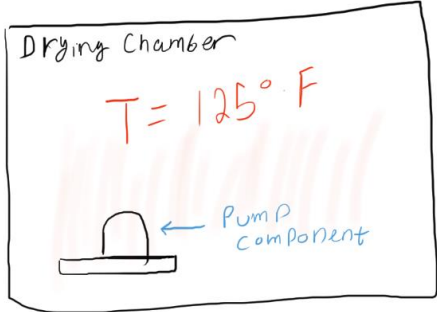
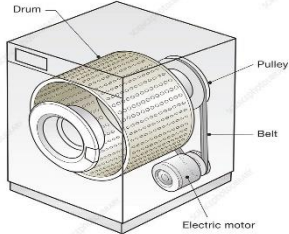
Function 1: Notify user that cleaning process is complete

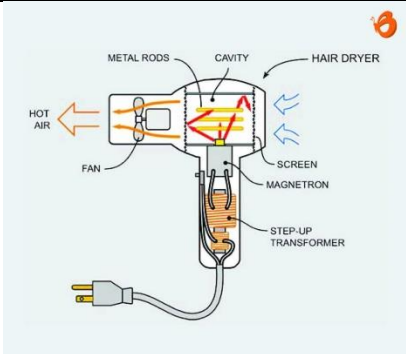
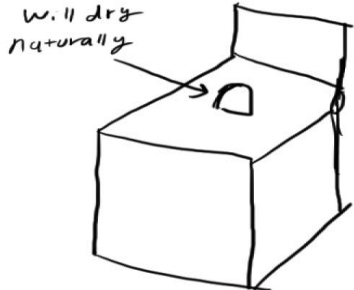

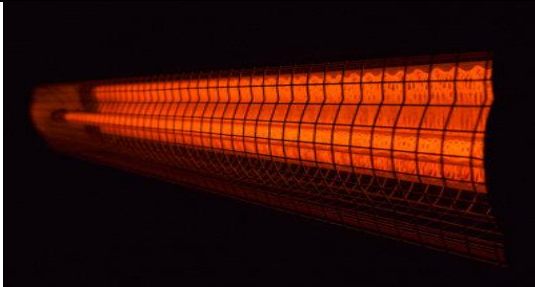

Idea 1	Display "DONE" on a screen when the process is complete	
Idea 2	Pop breast pump components out when cleaning is complete (similar to toast coming out of a toaster when ready)	
Idea 3	Send "cleaning process complete" notification to user's phone	

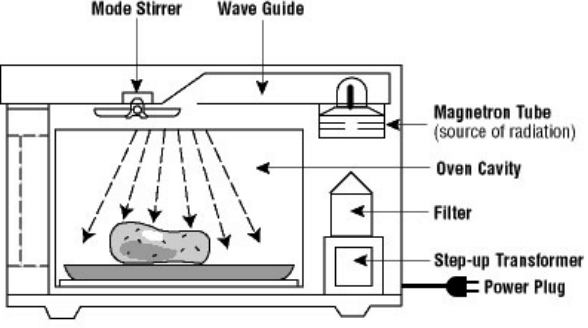
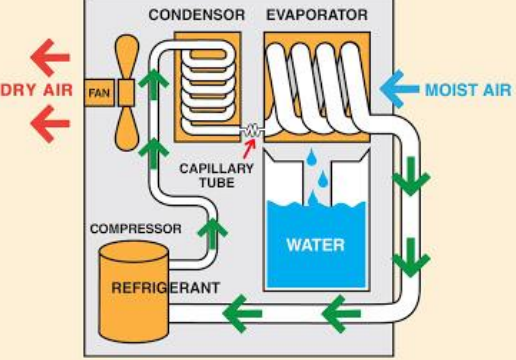
Idea 4	Have the device play an automated message through a speaker so user can hear that the cleaning process is complete.	
Idea 5	When cleaning process is complete, cleaning device will vibrate.	
Idea 6	Use a blinking light to notify the user that the cleaning process is complete	
Idea 7	Release fumes into the air to notify user that cleaning process is complete	
Idea 8	Cleaning device will automatically turn off so user knows the process is complete	

Idea 9	Incorporate a siren that will beep when cleaning process is complete	 <p>"beep beep"</p>
Idea 10	Device will self-destruct in order to alert user that the pump part has been cleaned. (Of course, it will also eject the pump parts prior to explosion)	

Function 2: Dry the breast pump components

Idea 1	Use a fan to circulate air and dry pump components	
Idea 2	Use heat to dry off the pump components	
Idea 3	Tumble dry the parts by spinning the chamber in which the pump components will be in	

Idea 4	User a blow drying mechanism to dry the parts	 A schematic diagram of a device for drying pump parts. It features a vertical cylindrical chamber. Inside, there are horizontal metal rods and a central cavity. A fan at the bottom draws air upwards, which is then heated by a magnetron (labeled 'HAIR DRYER' in the diagram) and exits through a screen at the top. A step-up transformer is connected to the magnetron. A power cord with a two-prong plug is shown at the bottom left. Labels include: METAL RODS, CAVITY, HAIR DRYER, HOT AIR, FAN, SCREEN, MAGNETRON, and STEP-UP TRANSFORMER.
Idea 5	Cleaning device will pop out the pump component and allow it to dry off naturally.	 A hand-drawn sketch of a rectangular box with a lid. A small semi-circular component is shown popping out of the top surface of the box. Handwritten text above the box says "will dry naturally" with an arrow pointing to the popped-out component.
Idea 6	Freeze dry the pump parts (similar to freeze drying food)	 An infographic titled "THE FREEZE DRYING PROCESS" showing four stages: 1. COOKING: A pot of ingredients and water. 2. FREEZING: The mixture is frozen into ice. 3. DRYING: The frozen mixture is placed in a container where water vapor is removed. 4. REHYDRATING: The dried mixture is rehydrated with water. Labels include: Ingredients, Water, Ice, Water Vapor, and Readdition of Water.
Idea 7	Use infrared lighting to dry pump parts	 A photograph of a long, conical infrared heat lamp. The interior of the lamp is lined with a grid of glowing orange-red infrared heating elements. The lamp is shown from a perspective view, highlighting its elongated shape.
Idea 8	Use UV lights to dry the pump parts	 A photograph of a UV curing lamp. The lamp is a vertical, cylindrical unit with a bright purple glow emanating from it. It is positioned above a white surface, likely a table or workbench, in a laboratory or workshop setting.

Idea 9	Microwave the pump components in order to dry them.	 <p>The diagram illustrates the internal components of a microwave oven. At the top, a Mode Stirrer is connected to a Wave Guide. The Magnetron Tube, labeled as the source of radiation, is positioned on the right side. Below it is the Oven Cavity, which contains a Filter. A Step-up Transformer is located at the bottom right, connected to a Power Plug. Dashed lines indicate the radiation being directed towards a potato on a turntable inside the oven cavity.</p>
Idea 10	Use a dehumidifier remove the moisture within the cleaning device.	 <p>The diagram shows the refrigeration cycle of a dehumidifier. Moist Air enters from the right and passes over the Evaporator coils, where moisture is removed and collected in a water reservoir. The air then passes through a Capillary Tube and a Compressor, which circulates the Refrigerant. The air then passes over the Condenser coils and is exhausted as Dry Air on the left, aided by a Fan. The cycle is completed by the refrigerant returning to the evaporator.</p>