

Sample Mechanical/Electrical Invention Answers

These answers are for *educational purposes only* and are not suitable for any other use. They are meant solely to educate you as to some standard formatting and stylistic aspects of questionnaire answers. Do not use these answers as substitutes for your own.

QUESTION:

A Brief Description of Your Invention

Please provide a short description (15 words max) of your invention. Tell us what your invention is or what it does. This will be your invention's title.

Do not lead in with "It's a..." or "The invention is..." Just state what it is.

For example, if you had invented the light bulb, the title might be "A filament in a glass bulb for producing illumination." Other examples could be "A wind turbine that protects birds," "A sound-activated light switch" or "A means for determining a patient's appropriate dosage of medicine." This is not the place for your brand name--just a description of your invention.

ANSWER:

An electrically driven, wrist-worn mechanism for detecting germs on hands and sanitizing hands automatically.

QUESTION:

Purpose of Your Invention

What problem does your invention solve? Do not explain here HOW your invention solves the problem. Discuss ONLY the problem itself. Please answer in complete sentences.

ANSWER:

During the course of the day, one's hands encounter germs on a constant basis, though one is rarely aware of when. Therefore, one is often unaware of when sanitization is necessary, leaving unacceptable germs on hands.

QUESTION:

In a few sentences, please describe how your invention solves the problem described above.

ANSWER:

This battery-powered invention, attached discreetly to one's wrists detects germs on hands with replaceable, litmus-type indicators. When the indicators reach a certain level of saturation, hand sanitizer is dispensed automatically.

QUESTION:**How Your Invention is an Improvement**

In a sentence or two, please describe how your invention is different from and better than anything that exists in its field.

ANSWER:

There are no similar inventions to date. Previous means of keeping hands germ free rely on human detection and discretion, as well as on the ready availability of hand sanitizing methods. This invention removes any outside human component, solves the availability problem, and relies on direct, chemical stimulus.

QUESTION:**How Your Invention is an Improvement (Continued)**

In a sentence or two, explain the problems with the other devices or systems in the field of your invention.

ANSWER:

Human detection and discretion are unreliable. The random availability of sanitizing options is also unreliable, and maintaining constant availability can be inconvenient, uncomfortable, indiscreet and, as with random availability, unreliable because of the ever-presence of human error.

QUESTION:

In a sentence or two, explain why these devices or systems don't work well.

ANSWER:

Put simply, people are easily distracted and are often not as focused on the cleanliness of their hands as they should be. Further, germs lurk in surprising places. People are often either unaware or unprepared. Carrying hand sanitizer on one's person can be unwieldy and awkward.

QUESTION:

In a sentence or two, describe how your invention improves on them.

ANSWER:

This invention removes the human element from the detection of germs on hands altogether. It also removes any concern with unavailability of sanitizing means during the day's course, as well as the difficulties and discomforts attendant upon carrying sanitizer on one's person at all times.

QUESTION:**Items or Steps that Make Up Your Invention**

Please list the individual components or elements that make up the best version of your invention. For mechanical, electrical, and manufactured inventions, this includes all components, elements, and parts. For method, process, and software inventions, this includes all steps, decisions, and any necessary physical items.

Please be as detailed as necessary to convey an understanding of each element, but you do not need to describe each element's function here--we will ask for that information later. For example, what is done with a particular component is not required here--only the component itself should be listed.

Please number each item according to its number on any accompanying drawing(s).

ANSWER:

1. Two elastic bands, of sufficient length to encircle the wrists of any adult, and adjustable to size
2. Two semi-ovular, hollow rubber bracelets, of sufficient lateral size to encompass at least one half of an adult's wrists, of one half inch front-to-back, with lateral slots running from end-to-end to accept elastic bracelets; sufficient cavities at far left to hold standard size 10 batteries and fitted with battery terminals; one sagittal slot in each bracelet's center, closed

at the back and open to the front, measuring 3 millimeters; one sagital open circle, 2.1 millimeters in diameter

3. Disposable, litmus-type, germ-detecting strips, 3mm in width and less than one half inch in length, which strips release moisture upon germ detection
4. Two circular plastic or rubber tubes, measuring 2 millimeters in diameter and .75 inches in length, open at both ends
5. Two rubber or plastic receptacles, one inch square in measure, 2.1 millimeters in height, hollow, closed at all sides excepting one hole measuring 2.1 millimeters in diameter
6. Two moisture sensors
7. Two battery-operated pumps, set to deploy upon detection of moisture in excess of desired level, with measurements sufficient to fit within receptacle (5) and opening at one end measuring 2.1 millimeters in diameter
8. Liquid hand sanitizer
9. Two size 10 batteries
10. Copper wiring, insulated, of sufficient length to connect pumps to battery terminals
11. Four conjoinable metal snaps, measuring 2 millimeters in height and diameter

QUESTION:

Relationship Between the Components

Please describe the relationship between your invention's components, elements or steps. Please use the Item Numbers you assigned to each item on the previous page, when you listed all of them.

ANSWER:

Elastic bands (1) are threaded through bracelets (2), creating adjustable bracelets. Batteries (9) are placed in bracelet cavities and in contact with terminals. Detection strips (3) are placed in bracelets' sagital slots. One side of each metal snap (11) is attached to receptacles (5) at one lateral end and one on the other. Opposing end of each metal snap (11) is attached to bracelets (2) at corresponding width to opposing ends' placement on receptacles (5). Pumps (7) are placed inside receptacles (5). Moisture sensors (6) are placed in contact with detection strips (3) at one end and pumps (7) at other. Receptacles are filled with sanitizer (8). Snaps (11) are closed. Tubing is threaded from openings in pumps into sagital open circles in bracelets.

QUESTION:**How Does Your Invention Work?**

How do the components, steps or elements of your invention work individually and together to cause the whole invention to perform its desired function? This section is extremely important and should be completed carefully. See Help to learn more.

ANSWER:

Bracelets fit onto wrists, discreetly under shirt cuffs and adjust to fit any size. Batteries are inserted into cavities, strips into slots and sanitizer into pumps. When strips detect germs, moisture accumulates, and strips become saturated over time. When strips reach an excess level of saturation, they depress activation mechanisms of pumps, which are connected to batteries by copper wiring. When pumps, filled with sanitizer, are activated, sanitizer is sent through tubing onto user's hands. Snaps allow easy removal of receptacle when empty, for re-filling. Receptacles can then be easily re-attached with same snaps.

QUESTION:**How to Make the Invention**

How would a person make the invention? Answering this question is extremely important to enable your Provisional Application to function as it should. Please answer carefully and in as much detail as possible.

ANSWER:

Assemble bracelets as described above and fit as appropriate onto user's wrists. Fill slots with strips. Fill receptacles with sanitizer. Insert batteries. Snap snaps shut.

QUESTION:

Which elements are necessary? Which are optional? What elements could be added to make your invention work better? Please use complete sentences.

ANSWER:

All elements are necessary. An indication mechanism to alert users to empty receptacles would add functionality.

QUESTION:

How to Use the Invention

How would a person use the invention to solve the problem that your invention solves? This is another very important section: Please be specific about the steps involved.

ANSWER:

To use this invention, one need simply fit onto one's wrists and insert all required elements—batteries, strips, sanitizer.



SAMPLE