



UNIVERSITI TEKNOLOGI MARA
ENT 600
TECHNOLOGY ENTREPRENEURSHIP

TECHNOLOGY BLUEPRINTS

EASY SCRUB BRUSH ROBOT (ESBR)

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DATE SUBMITTED : 15TH JUNE 2016

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CHAPTER 1

1.0 PRODUCT DESCRIPTION

1.1 Introduction

- The product is a robotic brush named “Easy Scrub Brush Robot” (ESBR).
- The main function of the ESBR is to clean in a hygienic way.
- It can be used by anyone that needs to complete chores especially in cleaning the bathroom and toilet. ESBR can help to do a few chores at once.
- By introducing this product, people can do their chores easily and can save time for other jobs.

1.2 Purpose of development

- To introduce a cleaning robot that makes cleaning work easier.
- To reduce the time consumed to do housework – many different jobs can be completed at once.
- To increase the effectiveness of cleaning process by using high-tech instrument

1.3 Product concept

- An automated brush cleaner product that can be used for cleaning toilets and bathroom.

1.4 Functions

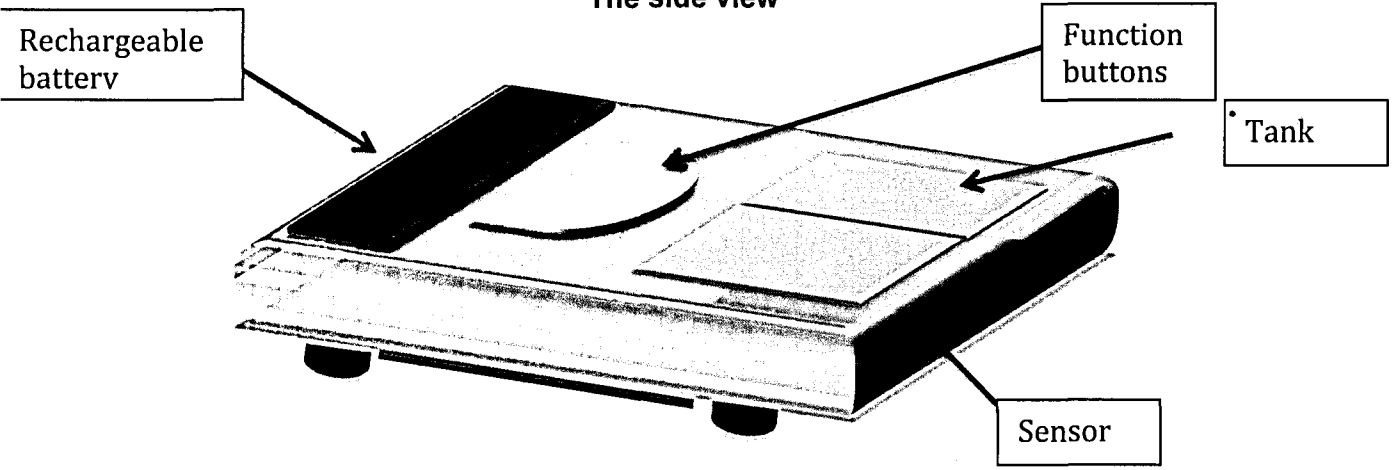
- Rotating brush - the brush spin/rotate around an axis to clean dirt on bathroom/toilet floor.

1.5 Unique features

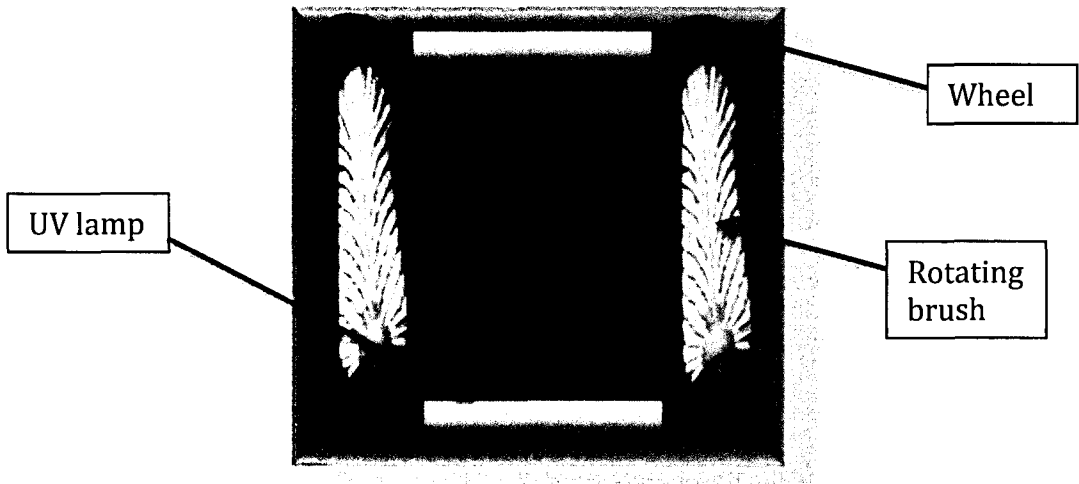
- UV ray lamp - to kill microorganisms while cleaning

1.5.1 Picture description

The side view

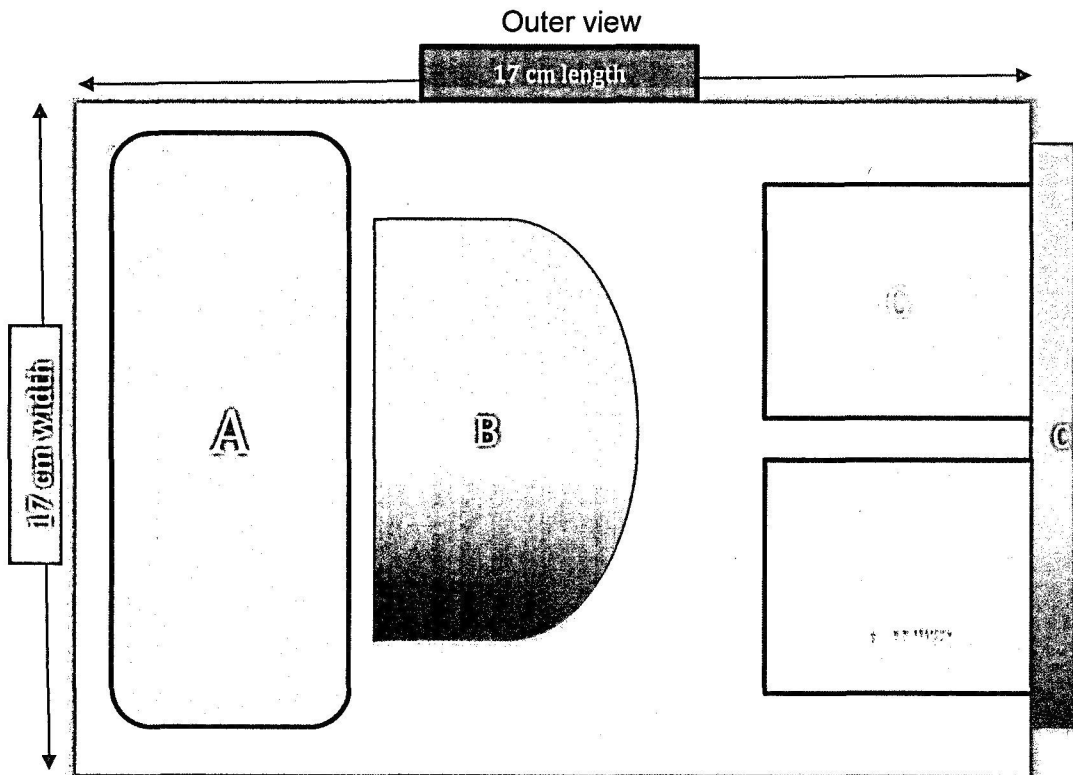


The back view

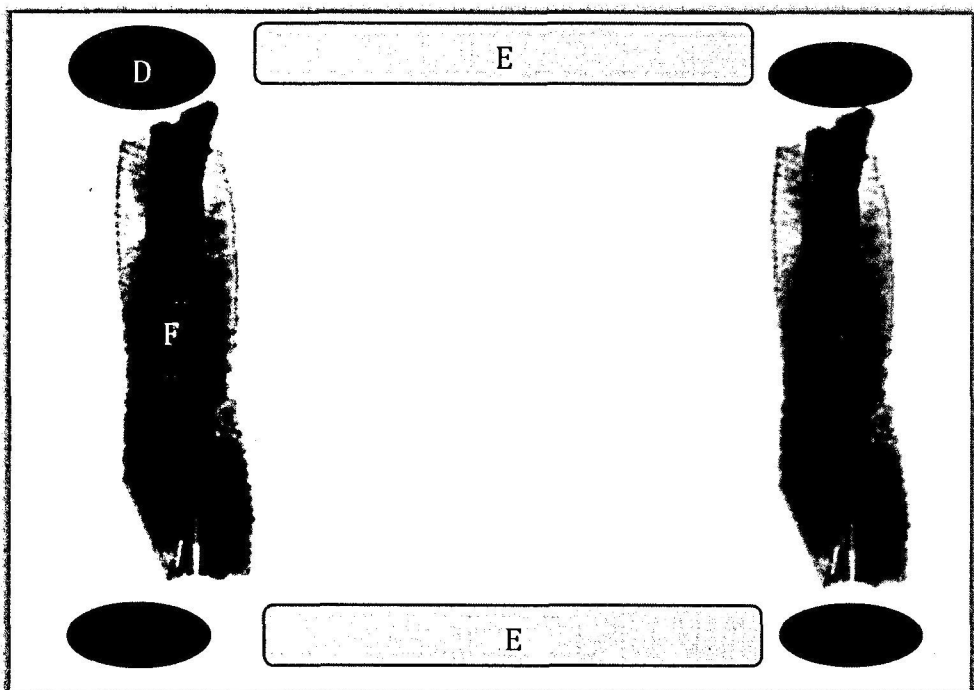


CHAPTER 2
2.0 TECHNOLOGY DESCRIPTION

2.1 Overview of the product prototype



Inner view



Body's description:

- Body made up from harden plastic
- Size : 17cm x 17 cm x 6 cm
- Water proof

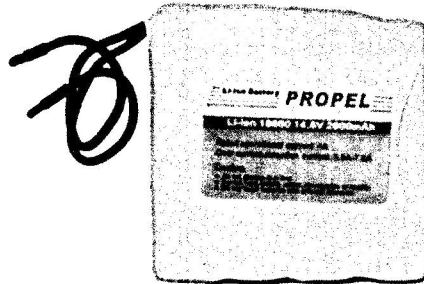
Components' description:

Label	Components
A	Rechargeable battery
B	Function buttons
C	Sensor
D	Wheels
E	UV ray lamps
F	Brush
G	Tank

A) Rechargeable battery

Description:

- Rechargeable battery is a battery that can be recharged and it can operate approximately for 12 hours after fully recharged.
- It can be charged and discharge numerous times.



Specification:

- Voltage: 18 V
- Current: 2200mAh
- Capacity: 6 hours to fully charge
- Material: Lithium ion

Target supplier:

- http://www.megabatteries.com/cat_featured_items.asp?cat1=24&cat=2&id=519&uid=1793

B) Function buttons

Description:

- Has on-off button to power up or power off the ESBR.
- Have others functions buttons (mode, timer, etc) that can be monitored through on-screen display

Specification:

- Touchscreen

Target supplier:

- <http://www.celadon.com/Profile/Profile.html>

