



ISSN 2047-3338

The Role of Computer Program in New Innovation

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Abstract— The Computer Program can playing a big roles in our lives, we only used the computer for Non-core like (Chat, game, music, etc). But it can be used for a lot of benefits work to controlling, Admin our Life and save money, by provision of the electronic chips by using the Computer Program.

Index Terms— Computer Programming, New Innovation and Control

I. INTRODUCTION

THE Computer Program can playing a big roles in our live, But we only used the computer for Non-core like (Chat, game, music, etc). And it is can used for a lot of benefits work to controlling, Admin our Life and save money by provision of the electronic chips and used the Computer Program (Because we have a lot of devices the Computer can controlling it without more expansive electronic chips led to increase devices price) also save us from fraud (by manual incorrect information or documents, drawings, etc).

Now I will explanation Two New Innovation to prove the roles for Computer Program in our live.

II. FIRST NEW INNOVATIONS

A. Title

“The Hot Drink Device from a distance (Remote control, Program Buttons & Voice)”, (Registered Patent No.: Ministry of Economy (U.A.E)).

B. Description: General idea of what the invention is about

Device for any hot drink in 2 minutes only, but within 4 Nos. of refill are fill it by anything powder like (tea-sugar- and any other components powder) and be controlled in this device from a distance by several ways: (Remote control), (Program prepared in the computer by buttons) & by (Voice Control it is controlled to program) and also there is (Electrical Arms) to change the cups positions, form fullness to empty cup.

C. Presentation: It describes how the invention works, looks like

Hot Drink Set from a distance (only in Two minutes), it is device for any hot drink, but within 4 nos. of refill are fill it by

anything powder like (tea, sugar, milk powder, Nescafe and any other components powder) can also be filled in these containers drinks powder ready like (tea with milk with sugar in refill - and other package it is Nescafe with milk and sugar - third package it is chocolate with milk & sugar - and other components ready powder) and be controlled in this device from a distance by several ways (see Fig. 1).

- *Remote control* to control working the hot drink device from a distance (Connect the Remote Control with the printer port (Parallel Port Interface) (see Fig. 1). For example, (When you request a light tea with milk & more sugar it requires to pressure the button once tea button, once milk button & twice time sugar button).
- *Program prepared in the computer by buttons* and the making hot drink by pressing single button in the computer program (see Fig. 2). For example, (When you request a light tea with milk and more sugar it requires pressure one button only within the computer program, it is button name a light milk and more sugar)
- *Voice Control* can be through voice commands and without touching anything making hot drink. For example, (when you request a light tea with milk and more sugar it requires only through (any Hand free Bluetooth connected into computer) to utter the word (Tea milk more sugar)) (see Fig. 2).



Fig. 1: Hot Drink Device

- Also there is *Electrical Arms* to change the cups positions, these arms are move automatically when fullness the cup to put the empty cup under down the device to be ready for full new hot drink again Can also increase number of arms thereby increase the number of cups (see Fig. 1).

D. Role of software: It is Describe how the software works

- *The Computer Program it is make the price for this device cheap and does not exceed 25\$, Why?* Because I used the computer as an intermediary to control the device and this led to provision of the Microcontroller & sound receivers and use only the *Computer Program* is intended to control the exits of the computer and then in the Hot Drink Device, by this is the reception and organization of commands and provisional schedule (Timers) from within the program into a PC rather than the expensive Microcontroller, not less than = 100 \$.
- *The Computer Program Controlled for the more important 2 ways from 3 ways to controlling for this device* is not only for Excess luxury, but to simulate this device at all levels in all class, it is can dispensable for the *remote* and through a laptop (by Bluetooth or Wireless) control directly in the device but we know that are some houses do not contain a computers or if there is Computers (without Bluetooth or Wireless) or the user this device an elderly person or a person who is not able to deal with computer about that cannot be dispensed never for the remote, and to increase the options by *Program in the computer* is automatically simply by pressing a command button (tea with milk and sugar average) it is Give the command respectively and regularly as it is stored in the command this button, also this program offers complexity more as may be requested (tea heavy, milk light & sugar a little) only through one button in this program, this mean there is no need to press the remote button several times and several buttons in the remote, and The third way to increase prosperity in by *Mike (Bluetooth or Wireless) voice control* through one or two words in the program, and then go to receive the hot drink (see Fig. 2).
- *The Computer Program Can help several people to order Hot drinks from one Device* by the priority as it is when several people on a single network and controlled for one device hot drink, the program is intended to receive the first user of the program and block all another users on this network after this user finished his order automatically the program it will unblock to enable other user to order for hot drink who wants it.

E. The Problem the Innovation) wanted to solve:

- Saves time, effort, Reduce some of works and Excess luxury (the hot drink cup in 2 minutes) at a distance
- Computer with Programs can used for a lot of benefits work to controlling and Admin our Life for saving money and Time
- Define problem to be solved by project and obviously unsolved by existing counterparts (see Table 1).

Table 1: Comparison Analysis

Elements of comparison	Other devices that imitate the same idea (existing counterparts)	This Device for Hot Drink from a distance by (Remote control, Program buttons & Voice Control)
Price	Cheapest price up to 1000 \$ we note that this big price mean this device only provide in very special places	The price of this device (4 drinks) does not exceed 25 \$ Because I Used a Computer Program as a link and refill bottles & engines for gates smaller and medium-efficiency
Places of employment	Available only in (large companies and factories - villas, palaces, rest houses - offices of managers and meetings rooms - Universities, colleges and schools - medical centers - beauty salons, gyms - hotels and Parks)	Available in all homes and companies with all levels if small or large
Size	Large size and heavy, the dimensions of smallest one: 35 X 30 X 65 cm	A very small size and light can be placed anywhere the dimensions: 20 X 20 X 15 cm
Time	You must go to the device and chosen the drink and wait beside it for two minutes until processed the drink (If we assume that we have asked 8 drinks this mean must first go to the device and then request the drink from the button on this device and order drink one by one, and wait for each drink 2 minutes= 8 X 2 minutes = 14 minutes)	Only Chosen drink from a distance and during you going to the device drink will be ready this mean we save 2 minutes (If we assume that we have asked 8 drinks from a distance will give the orders and just go for the receipt of any drinks mean will provide 14 minutes
Control	Must be near from the device and order drink one by one because the control of these devices it is buttons on it and must be near by it	There are several ways to control this device and the whole by a distance to ensure comfort and save time: ⚡ By remote control it is control for 4 packages inside the device. ⚡ By buttons program prepared in the computer it is controls for the remote control and remote control from a distance control for the device options in the kitchen. ⚡ By voice control controls for the program in the computer then controls for the remote control and remote control from a distance control for the device options in the kitchen.
Diversity	There is No Option like that and if there is it will be useless because must be near the device and request the drink (one by one) because the control of these devices it is buttons on it and must be near by it	By (electrical arm to change the cups): this option from a distance (either by remote or program computer or by voice control) When the request several different types of hot drinks even if reach more than 8 drinks, only requested drink one by one and will automatically (e-arms) when a cup is full the arm replace it to empty cup and then go to receive all desired Hot drinks from the device

F. Advantages:

- Saves time and effort (the hot drink cup in two minutes) at a distance.
- Reduce some of works for the waiter in companies (the staff can do that them drinks through give order to this device on computers Office by Program without disrupting them work)
- Excess luxury and ease by mike or Hand free Bluetooth or Wireless (you can by voice control through a word or two words in the program, and then control to hot drink device.



Fig. 2: Description

G. This Invention Device proved its worth by won a lot of Awards:

- Win Silver Medal on 9th of November 2010 in The 3rd International Inventions Exhibition (Kuwait City) <http://www.bananaq8.com/?p=9188>
- Win Silver Medal on December 2010 in the International Cyber Genius Inventor Fair (CIGIF2010) (Korea)
- Selected among the Top 20 from 7000 Arabic inventions from all Arabic Country Stars of since Program (Qatar Foundation) on Jan 2010
- One of Some News Paper Write about my device: http://www.gulf-times.com/site/topics/article.asp?cu_no=2&item_no=390736&version=1&template_id=36&parent_id=16
- Got Evaluation Certificate with industrial plan on 3rd innovation and invention exhibition "Future Scientists", 20 December 2010 (Egypt)
- One of Some Web Sites Write about my device: <http://elyoum7.com/News.asp?NewsID=390444&SecID=89&IssueID=163>

III. SECOND NEW INNOVATIONS

A. Title:

“Automatically Gates for Storm water Inlets with E-Maintenance”, (Registered Patent No.:2011/ 514 (Egyptian Patent Office)).

B. Description: General idea of what the invention is about

It is automatically Gates for Storm water Inlets (Open & Close) on rain time by (Water sensor) to Prevent the entry

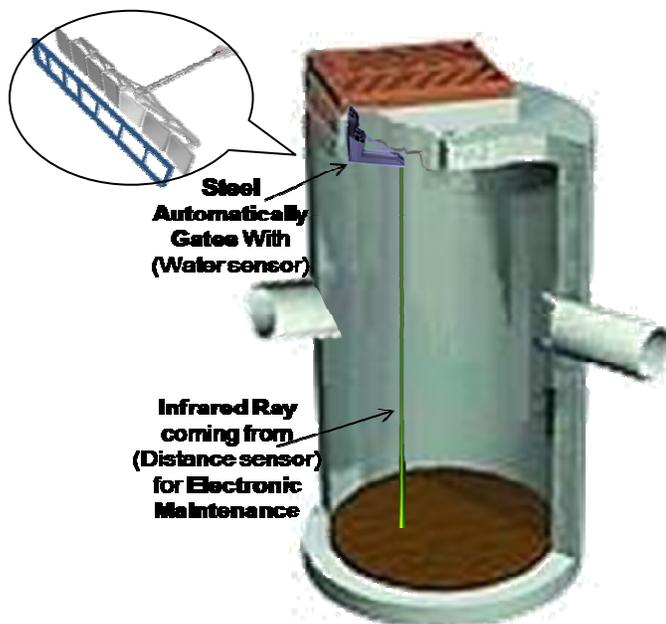


Fig. 3: Device Structure

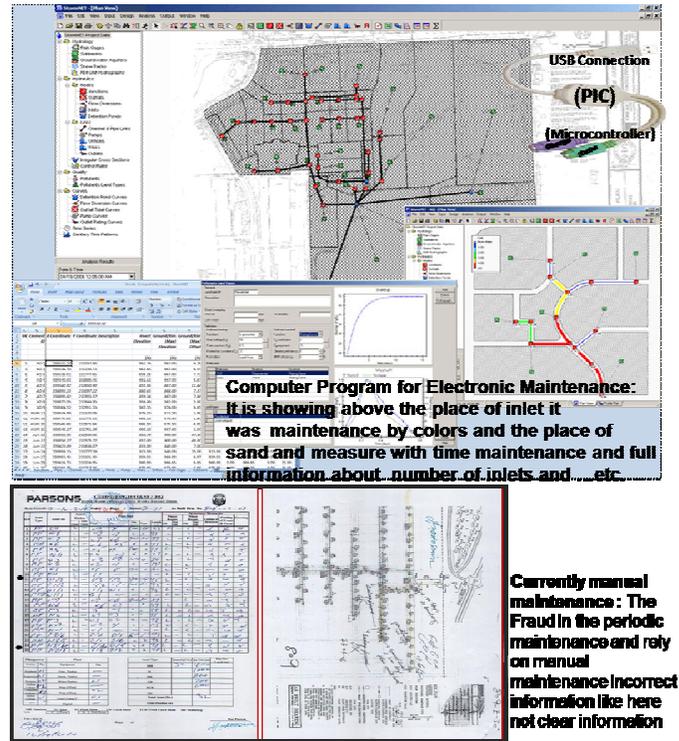


Fig. 4: Statistics

of sand in the drainage of rain or filled in it, leading to the accumulation of rainwater in the street outside the storm water Inlet (see Fig. 3).

With Electronic Maintenance by (Distance sensor) to clarify the proportion of the amount of sand inside the inlets without (remove cover for inlet or check it or more labors, etc.) Or any difficulties work (see Fig. 4).

C. Presentation: It is Describe how the invention works, looks like

- *General:* It is Gates with Sensors fixed inside storm water inlet on entrance water and there is small place for socket to fix the USB Connection with the computer when they do the Electronic Maintenance (see Fig. 3).
- *Steel Automatically Gates* for Storm water Inlets (Open & Close) on rain time by (Water sensor) to Prevent the entry of sand in the drainage of rain or filled in it, leading to the accumulation of rainwater in the street outside the storm water Inlet (see Fig. 3).
- *Electronic Maintenance* by (Distance sensor) to clarify the proportion of the amount of sand inside the inlets without (remove cover for inlet or check it or more labors, etc.) Or any difficulties work with showing the percentage of sand in the number and place of inlet with time maintenance check in the storm water Inlet electronically on (Electronic drawing print end of the work day) from the computer program
- *USB Connection (PIC):* it is responsible for recharging the small battery for motor with giving order to working

and connecting between (Computer program) and (Distance sensor) because inside this USB Connection (Microcontroller) and it responsible to take order from program to distance sensor to working after that take the data information from Distance sensor and transfer it to program to showing the percentage of sand inside inlet (see Fig. 4).

- *Computer Program for Electronic Maintenance:* It is program for process the data information and showing it in preset drawings and data information inlets (see Fig. 4).

D. Role of Software: It is Describe how the software works

- It is checking and trying the automatically Gates with sensors it are working and recharging the small battery for motor (Electronic Maintenance).
- It is giving order for the (Distance sensor) to working and clarify the proportion of the amount of sand inside the inlets with showing the percentage of sand in the number and place of inlet with time maintenance check in the storm water Inlet electronically on drawing program (Without any manual deception using drawing) (see Fig. 4).
- It is repeating automatically alarm if after checked the inlet and found more sand and haven't maintenance it, this alarm only it is can stopping after the program again checking by (Distance sensor) that no more sand inside the inlet.

E. The problem the Innovation) wanted to solve:

- The sand entry in the drainage of rain or filled in it, leading to the accumulation of rainwater in the street outside the storm water Inlet.
- The Fraud in periodic maintenance and rely on manual maintenance incorrect information (incorrect drawing with showing the incorrect number and place of inlet in the storm water Inlet leading to the accumulation of rainwater in the street after that leading to flood .
- It can solve by electronically maintenance work by measuring the percentage of sand in the storm water Inlet inside (electronically).

F. Advantages:

- Prevent the entry of sand in the drainage of rain or filled in it, leading to the accumulation of rainwater in the street outside the storm water Inlet.
- Save time and effort for the workers by (Electronically Maintenance work) by measuring the percentages of sand in the storm water Inlet inside without (remove cover for inlet or check it or more labors, etc) (electronically).
- Electronic drawing print end of the work day with showing the percentage of sand in the number and place of inlet with time maintenance check in the storm water Inlet without fraud in the periodic maintenance and rely on manual maintenance incorrect information.

- Safety from Terrorist Operations or missing anything into these gates because it is opening all the time.

IV. CONCLUSION

We can explanation this Two New Innovation with more details and more complication with arithmetical complication, but only we need send message for all class it is (The Computer double-edged sword and better for us to use the good face for Computer & Programs in our live and new innovation.



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He invented many of the inventions with patent in a lot of fields for (Sustainability, Clean energy, Preserve Water &

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