Fragrance Message Service (FMS) on Mobile

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Abstract

Mobile phones finds wide application in audio video and image communication .We can easily transfer multimedia data from one mobile phone to another in few seconds. The present work highlights an innovative approach of FMS to transfer fragrance from one mobile to another. The proposed system will be having a fragrance assembly in mobile with a control and transfer signal method from sender to receiver.

Keywords

Symbions, (FGA), API

Introduction

Primitive perfumery began with burning of gems and Egypt. The use of scented plants vegetables oils incorporated into animals to anoint the body for ceremonies by 3000 BC [Table 1.1]. Egypt and Greece were the pioneers to work on perfumes and aromatic medicines. The first alcoholic perfume Hungary water was originally invented in 1370 for Elizabeth of Hungary up to 19th century. The use of perfume was only confided with royalty [1]. The present era of 21st century marks its progress with a foundation of comfort to people from al walks of life whether its with task or technology.

PRESENT WORK

The present paper is intended to facilitate the mobile users with real life experiences when they use their mobile. Hitherto only voice and image can be transmitted through mobile but we present our idea by which smell can also be acquired from one mobile to another.

In table1.1 chief constituents are given. These constituents are mixed together to form a particular fragrance. How these constituents are collected are given in Table 1.1.

Table1.1

SNO	CHIEF CONSTITUENTS	PART OF PLANT USED	METHOD OF PRODUCTION	NAME OF OIL
1	Santalol 90% + esters3% +solvent	wood	steam	Sandal wood
2	Geranial & citronellal 75%+solvent	flower	Steam solvent	rose
3	d-Limonene 90%,citral 3.5-5%+solvent	peel	Expression distillation	lemon
4	Benzyl acetate ,linalool & Esters+solvent	flowers	Cold pomade	jasmine
5	Engenol 85-95%+solvent	buds	steam	clove
6	Linalool+solvent	flowers	distillation	lavender
7	d-Limonene 90%+solvent	peel	Expression distillation	orange
8	Menthol 45-90% & Esters+solvent	leaves	steam	peppermint
9	Methyl salicylate 99%+solvent	leave	steam	Winter green

METHODOLOGY

MOBILE HARDWARE SPECIFICATION:-
Fragrance enabled mobile hardware would be designed as shown in Fig1.1

Here Device API (Application programming interface) is nothing but a collection of functions to control Fragrance Generation Assembly (FGA). Device API is also a collection of code. Code is actually a digital signal to FGA to generate particular fragrance.

Existence of Device API is there to support various latest programming interfaces like KVM (kilo virtual machine) and symbions .Device driver act as a bridge between Device API and device controller. Key role played by device driver is to make device API hardware independent.

Codebook is memory (ROM) mounted on the both ends sending end and receiving end. Code is arranged in code memory as given in table 1.2.

In code memory codes specify a signal to hardware which is recognized by device controller .For example code 0000 would deliver fragrance of sandal wood. To implement it, liquid - 1 container having 90% santanol and 10% ester would be sprayed together .If code is 0001 then fragrance

of rose would be delivered .To implement it Geranio25% & citronellal 75% would be sprayed together.

Liquid container 1,2,3…n are having required chemicals at high pressure , dissolved in suitable solvent or essential oil may be defined as volatile odoriferous oils of vegetable origin. A clear distinction should be made, however, between natural flower oils obtained from effleurages or solvent extraction and essential oils recovered by distillation. We have used rose water and orange flower water because they are volatile enough to pistil unchanged in most instances, and are also volatile with steam [1]. The use of these formulations can be utilized with a proper volatile solvent system containing toxin free synthetic chips or containers to perform the work of natural odors emitting devices by use of temperature and pressure treatment.

SPRAYING TECHNIQUE

To spray the chemicals we use piezo electric method of inkjet printer technology in this method piezo electric head uses liquid ink from liquid container having required chemical and solvent, there are numbers of channels on nozzle which are mounted on head. A nozzle is microscopic hole build into metal plate. A small piezoelectric crystal in

each channel acts as an "ink pump. A high energy pulse from device controller circuit vibrates the crystals which eject or sprays droplet of liquid from specified area.

Table1.2

CODE	FRAGRANCE
0000	Sandal wood
0001	Rose
0010	Lemon
0011	Jasmine
0100	Lavender
0101	orange
0110	Peppermint

DEVICE API
DEVICE DRIVER
DEVICE CONTROLLER

PIEZO ELECTRIC HEAD
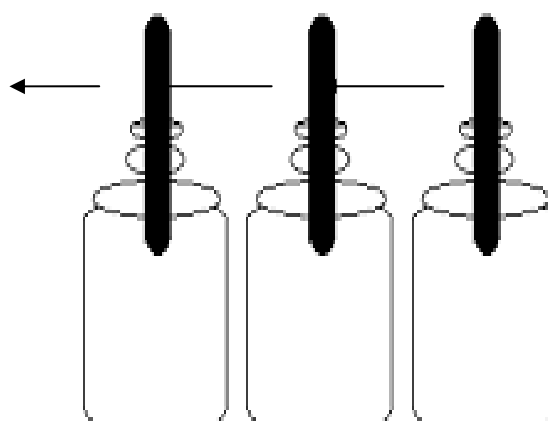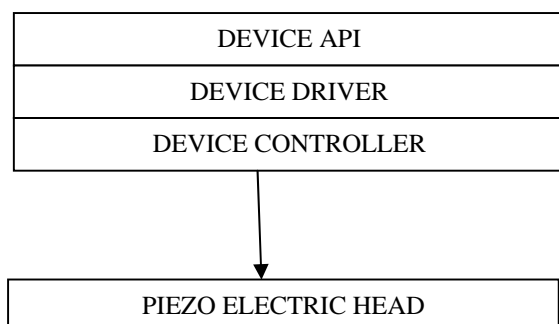
LIQUID 1   LIQUID 2   LIQUID n
CONTAINER   CONTAINER   CONTAINER

Fig 1.1 FRAGRANCE GENERATOR ASSEMBLY (FGA)

FRAGRANCE MESSAGE TRANSMISSSION

To transfer fragrance firstly your mobile should be fragrance enabled it means it should have fragrance generator assembly (FGA).

Now to send message, go to your mobile create message section. After writing message there will be an option of "add fragrance" then you will get list of supported fragrance. Selected fragrance code will be added to message just like audio or video is added. Then message with fragrance code is transmitted.

For example fig1.2 at Device –A fragrance of lemon is selected. Its associated code [0010] is transmitted on air with message.

At receiving end Device – B when message is received its associated code is used to find out related fragrance using code memory mounted in FGA of mobile. And it will activate FGA to spray the corresponding fragrance.

CODE	FRAGRANCE
0000	Sandal wood
0001	Rose
0010	Lemon

Code book (Device-A)

Message code
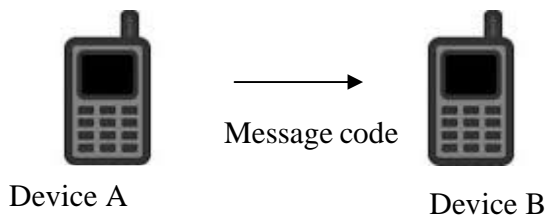
Device A

Device B

CODE	FRAGRANCE
0000	Sandal wood
0001	Rose
0010	Lemon

Code book (Device-b)Fig 1.2

CONCLUSION

This paper presents an idea to transfer fragrance through mobile. So now we can smell different objects that we want, or even send FMS that can include smell. The customers can find themselves just a click away from the odorous of perfumes, deodorant and edibles of their choices from a small gadget in their pockets "The NEW AROMA MOBILE PHONES", with FMS technology.

Our future work includes detecting the smell of any object and producing the same so that user needs not to specify which smell to send but the mobile can itself.

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