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# Patent Search & Analysis Report (PSAR)

**Team Id** : 2153

Name : MALAVIYA MIHIR NILESHKUMAR

# Part - I : PATENT SEARCH TECHNIQUE USED

Patent Search Database Used : Google Patents

**Keywords Used for Search** : ultrasonic ,sound generation,sensor

Search String Used : Number of Results/Hits getting : 7

## Part - II: BASIC DATA OF PATENTED INVENTION/BIBLIOGRAPHIC DATA

Category/Field of Invention : ELECTRONICS ENGINE

Invention is Related to/Class of Invention : Ultrasonic sensing

**Title of Invention** : Ultrasonic signal detector

 Patent No.
 : US 5432755 A

 Application No.
 : US 08/208,536

 Date of Filing/Application
 : 08/03/1994

**Priority Date** : 08/03/1994

Publication/Journal Number - (Issue No. of Journal

in which Patent is published)

Publication Date : -

First Filled Country :

Also Published as

| Country | Patent No |
|---------|-----------|
|         |           |

Applicant for Patent is : Individual



# - INVENTOR DETAIL

| Name of Inventor    | Address/City/Country of Inventor |
|---------------------|----------------------------------|
| Komninos Nikolaos I | Littleton CO                     |

# - APPLICANT/ASSIGNEE DETAIL

| Name of Applicant/Assignee | Address/City/Country of Applicant |
|----------------------------|-----------------------------------|
| Komninos Nikolaos I        | Littleton CO                      |



#### Part - III: TECHNICAL PART OF PATENTED INVENTION

#### Limitation of Prior Technology/Art:

. The desirability of ultrasonic detectors has recently increased due to the recognition that ultrasonic detectors may readily be implemented as leak detectors to detect ultrasonic signals.In the last few years, two types of ultrasonic detectors were prevalent. A first type employs a crystal system to mechanically couple an ultrasonic signal to a local oscillator in order to convert the frequency of the input ultrasonic signal to a resultant signal that has a frequency within the audible range. A second system commonly used employs signal mixers that heterodyne a local oscillator with the input signal to generate a composite signal within an audible range

#### Specific Problem Solved/Objective of Invention:

It is an object of the present invention to provide a new and useful ultrasonic signal detector which is relatively inexpensive to produce and which is lightweight, compact, and portable.

#### **Brief about Invention:**

An ultrasonic detector for monitoring ultrasonic signals which have a selected ultrasonic frequency range and for producing an audible signal in response to the ultrasonic signals. The ultrasonic detector employs a sensor element which produces electrical signals in response to ultrasonic signals.

### **Key Learning Points:**

Information regarding Ultrasonic Sensor.

### **Summary of Invention:**

The present invention, is directed to an ultrasonic detector for monitoring ultrasonic signals which have a selected ultrasonic frequency range and for producing an audible signal in response to such ultrasonic signals. Here, the ultrasonic detector employs a sensor element which is operative in response to ultrasonic signals to produce an electrical signal.

Number of Claims : 8

Patent Status : Granted Patent

How much this invention is related with your IDP/UDP? : Other

Do you have any idea to do anything around the said invention to improve it?:

We are just usig its concept in our own project.