



## Patent Search & Analysis Report (PSAR)

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### Part - I : PATENT SEARCH TECHNIQUE USED

**Patent Search Database Used** : Google Patents  
**Keywords Used for Search** : Air ,Music,Instrument  
**Search String Used** : Air musical instrument  
**Number of Results/Hits getting** : 4

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

**Category/Field of Invention** : ELECTRONICS & COMM  
**Invention is Related to/Class of Invention** : Virtualizing a system  
**Title of Invention** : Air musical instrument toy and use method thereof  
**Patent No.** : CN 103405919 A  
**Application No.** : CN 201310189354  
**Date of Filing/Application** : 21/05/2013  
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**Publication Date** : 27/11/2013  
**First Filled Country** :  
**Also Published as**

Country	Patent No

**Applicant for Patent is** : University



# GTU - Prior Art Search

## - INVENTOR DETAIL

<b>Name of Inventor</b>	<b>Address/City/Country of Inventor</b>
Wang Ying	China
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## - APPLICANT/ASSIGNEE DETAIL

<b>Name of Applicant/Assignee</b>	<b>Address/City/Country of Applicant</b>
Zhejiang University of Technology	China



## Part - III : TECHNICAL PART OF PATENTED INVENTION

### Limitation of Prior Technology/Art :

The infrared and ultrasonic sensors were used to measure distance, positioning and many other applications but still were not able to make up to the level of the gesture control required.

### Specific Problem Solved/Objective of Invention :

To combine the principles on ultrasonic and infrared sensing and provide a different aspect of control and thus provides a large variety of toys.

### Brief about Invention :

With the development of society, the species has a wide variety of toys, musical instruments, toys category also gradually spread. However, existing instruments toys, due to cost constraints, the reduction of the instrument is not high, interest reduced, and easily damaged, once damaged it is difficult to fix.

The present invention relates to a musical toy, in particular, refers to a musical toy using air instead of infrared rays and methods of use of the strings.

### Key Learning Points :

Combining the principle of ultrasonic and infrared sensing.  
Generating sounds corresponding to the distance and position.

### Summary of Invention :

This invention was able to bring a technological development in the field of entertainment.

**Number of Claims** : 7

**Patent Status** : Published Application

**How much this invention is related with your IDP/UDP?** : > 91 %

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

Yes. If only ultrasonic sensors would have been used instead of infrared sensors it would have been able to give high accuracy.