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Patent Search & Analysis Report (PSAR)

Team Id : 2153

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Part - I : PATENT SEARCH TECHNIQUE USED

Patent Search Database Used : Google Patents

Keywords Used for Search : Ultrasonic sensor,distance measurement,ultrasonic distance measurement

Search String Used : ultrasonic distance measurement sensor

Number of Results/Hits getting : 3

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

Category/Field of Invention : ELECTRONICS & COMM

Invention is Related to/Class of Invention : Ultrasonic distance measurement

Title of Invention : Ultrasonic distance measurement controller

Patent No. : US 8665668 B2

Application No. : US 13/231,159

Date of Filing/Application : 13/09/2011

Priority Date : 17/09/2010

Publication/Journal Number - (Issue No. of Journal in which Patent is published) : US 20120069712

Publication Date : 04/03/2014

First Filled Country : United States

Also Published as

Country	Patent No

Applicant for Patent is : Company

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- INVENTOR DETAIL

Name of Inventor	Address/City/Country of Inventor
Potanin	United states

- APPLICANT/ASSIGNEE DETAIL

Name of Applicant/Assignee	Address/City/Country of Applicant
Potanin Vladislav	United states of America
Burinskiy Alexander	United states of America
Potanina Elena	United states of America

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Part - III : TECHNICAL PART OF PATENTED INVENTION

Limitation of Prior Technology/Art :

Ultrasonic sensor was prior used as a distance measurement tool but the problem was to control this distance measured by ultrasonic sensor.

Specific Problem Solved/Objective of Invention :

This problem was specifically solved using ultrasonic sensor controller provided by a control unit by the inventors.

Brief about Invention :

Ultrasonic distance measurement systems are widely used in industry and other areas such as automobiles, construction industry, surveying applications, and comparable ones. Such systems typically include electronic components to excite the piezoelectric transducer and to sense reflected signal. High-end systems may employ complex and expensive integrated circuits to perform the tasks, while less expensive solutions that are built on general purpose discrete components may not provide satisfactory performance regarding performance, price, and/or size.

Ultrasonic Sound Navigation and Ranging (SONAR) systems may typically include a central controller module and one or more sensors. The central module usually incorporates a micro-controller that excites and polls the sensors, receives and analyzes SONAR echoes, and produces visual or audio cues that indicate the presence or absence of objects, and in some cases the distance to the objects.

Key Learning Points :

The technique of echo sensing and providing a control for how to generate distance was studied.
Secondly, how to control this distance was the main focus of the inventor.

Summary of Invention :

The technique of measuring the distance via ultrasonic sensor was made absolutely clear and a total idea was displayed throug

Number of Claims : 20

Patent Status : Granted Patent

How much this invention is related with your IDP/UDP? : 71 to 90%

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

The patent in itself is a detailed disruptive technology so wouldn't like to add anything to it