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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 : musicalinstrument, stringed musical

insrument, 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 : Music

Title of Invention : Stringed instrument with active string termination

Patent No. motion contro
US 8450593 B2

Application No. : US 12/772,440

Date of Filing/Application : 03/05/2010

Priority Date : 09/06/2003

Publication/Journal Number - (Issue No. of Journal

in which Patent is published)

Publication Date : 21/05/2013

First Filled Country :

Also Published as

Country	Patent No

Applicant for Patent is : Individual



- INVENTOR DETAIL

Name of Inventor	Address/City/Country of Inventor
Ierymenko Paul F	Raleigh, NC
Berdahl Edgar Joseph	San Francisco, CA

- APPLICANT/ASSIGNEE DETAIL

Name of Applicant/Assignee	Address/City/Country of Applicant
Ierymenko Paul F	Raleigh NC



Part - III: TECHNICAL PART OF PATENTED INVENTION

Limitation of Prior Technology/Art:

In some embodiments according to the present invention, a system for controlling for at least one string of a musical instrument by selectively exciting or damping vibration of the string is provided. The system includes at least one transducer configured to sense a lateral vibration of the string and/or to apply an actuating force to the string. A controller is configured to determine an actuating signal for driving the actuator to apply a longitudinal actuating force to the string at a termination point of the string. The longitudinal actuating force is operable to modulate a tension of the string that increases (excites) and/or damps the lateral vibration and/or selected harmonics thereof.

Specific Problem Solved/Objective of Invention:

The present invention relates to the field of stringed musical instruments, and in particular to interfaces between players and instruments.

Brief about Invention:

A system for controlling for at least one string of a musical instrument by selectively exciting or damping vibration of the string is provided. The system includes at least one transducer configured to sense a lateral vibration of the string and/or to apply an actuating force to the string. A controller is configured to determine an actuating signal for driving the actuator to apply a longitudinal actuating force to the string at a termination point of the string. The longitudinal actuating force are operable to modulate a tension of the string that increases and/or damps the lateral vibration and/or selected harmonics thereof.

Key Learning Points:

Generation of sound

Summary of Invention:

In some embodiments according to the present invention, a system for controlling for at least one string of a musical instrument by selectively exciting or damping vibration of the string is provided. The system includes at least one transducer configured to sense a lateral vibration of the string and/or to apply an actuating force to the string. A controller is configured to determine an actuating signal for driving the actuator to apply a longitudinal actuating force to the string at a termination point of the string. The longitudinal actuating force is operable to modulate a tension of the string that increases (excites) and/or damps the lateral vibration and/or selected harmonics thereof.

Number of Claims : 7

Patent Status : Published Application

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? :

just using the concept of this invention.