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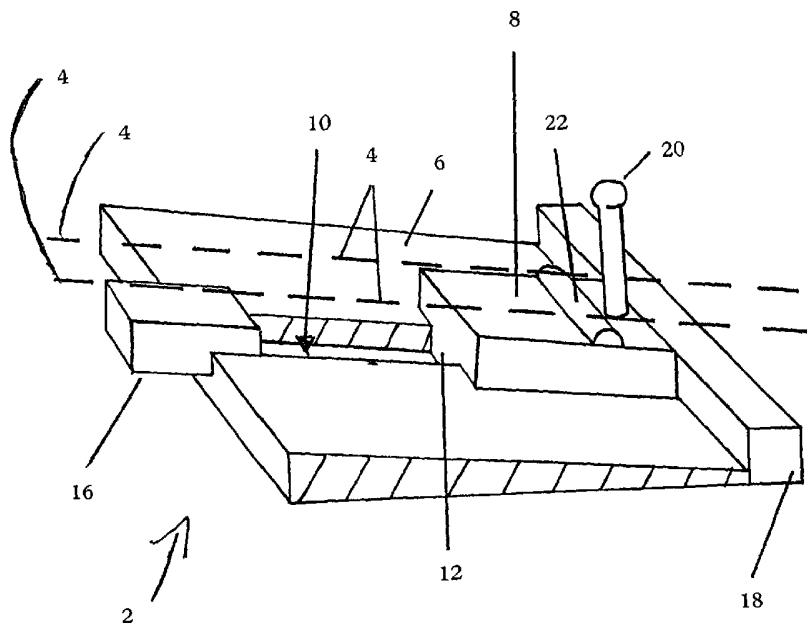
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25 March 2004

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ADDITIONAL TUNING MECHANISM FOR STRINGED MUSICAL INSTRUMENTS



(57) Abstract: A tuning mechanism for altering the tuning of the strings (4) of a stringed instrument such as piano or hammered dulcimer comprises a plurality of sliding bridges (8; 36) mounted for sliding relative to the strings (4) over a predetermined travel. The bridges (8; 36) are in contact with the strings during at least a part of their travel, thereby allowing micro-tonal and semi-tonal interval changes in tuning to be effected. The predetermined travels of the sliding bridges are different to one another. Also disclosed is an instrument incorporating such a tuning mechanism and a mechanism which may be retro-fitted to an existing instrument.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/00121

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G10D3/04 G10C3/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G10D G10C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 479 323 A (BAGDASARIAN I.D.) 19 July 1892 (1892-07-19)	1,2,7,8, 12,14-17
Y	page 2, line 6 - line 15; figures 1-4 -----	3-6,13
Y	US 3 780 612 A (ROBINSON A) 25 December 1973 (1973-12-25)	3,13
A	column 2, line 3 - line 10; claim 3; figures 1-4 column 2, line 14 - line 20 -----	1,2
X	DE 602 203 C (GUSTAF BERNHARD NYGREN) 3 September 1934 (1934-09-03)	1
Y	sentence 1 - sentence 27; claim 1; figures 1,2	4-6,13
A	-----	3,8

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

8 July 2003

Date of mailing of the international search report

05.09.03

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 03/00121

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-8, 12-17

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8,12-17

tuning mechanism for altering the tuning of the strings of a stringed instrument using sliding bridges characterised by specifications on the length of the travels of these bridges to achieve desired tonal requirements.

2. claims: 9-11,18-21

tuning mechanism for altering the tuning of the strings of a stringed instrument using sliding bridges characterised by channels or grooves to achieve desired sideway-stability of the bridges.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/00121

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 479323	A	NONE	
US 3780612	A	25-12-1973	NONE
DE 602203	C	03-09-1934	NONE