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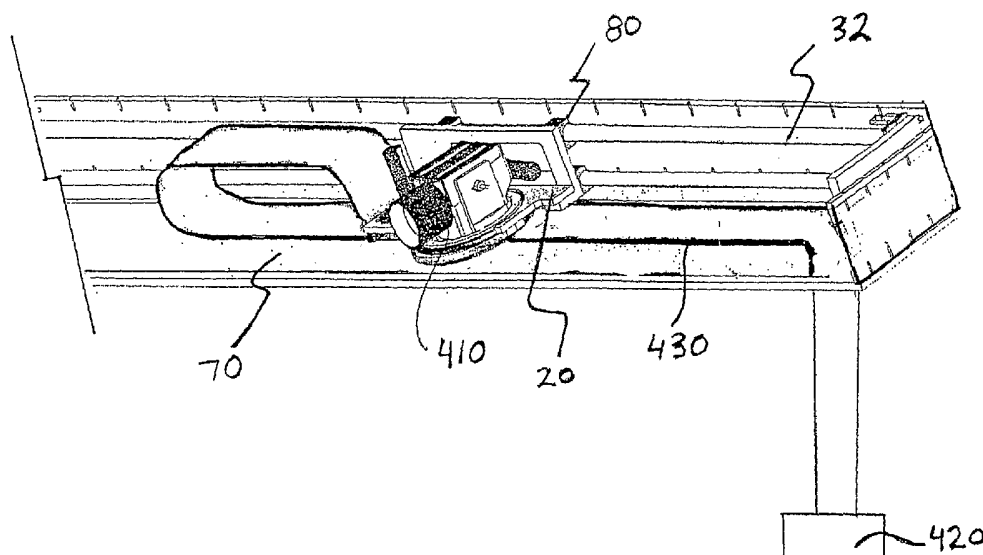
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(54) Title: CAMERA ASSEMBLY FOR FINGER BOARD INSTRUMENTS



(57) Abstract: A camera assembly for filming the hands of a musician playing a finger board instrument includes a guiding device mounted to the finger board instrument. A stage movably engages the guiding device. A camera is mounted on the stage for filming the hands of the fingerboard user as the hands travel along the finger board. A driving device, such as a linear motor, is connected to the stage for moving the stage along the guiding device. A means for controlling the camera is also provided, either manually from a remote location or by visual tracking. A sensor senses the velocity and position of the stage and outputs a detection signal to the control means. The control means transmits command signals to the driving device for actuating movement of the camera along the guiding device.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/23201

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: G10F 1/02( 2006.01)

USPC: 84/47

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)

U.S. : 84/47, 477R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0005111 A1 (LUGWIG) 17 January 2002 (17.01.2002), paragraphs 0303, 0311, 0312.	1-28
Y	US 5,526,041 A (GLATT) 11 June 1996 (11.06.1996), Figure 1; abstract; column 2, lines 14-17; column 3, lines 44, 50-63; column 4, lines 17-24, 29-36.	1-28
Y	US 6,191,507 B1 (PELTIER et al) 20 February 2001 (20.02.2001), Figures 1-3; column 1, lines 65-67; column 2, lines 26-28; column 3, lines 8-24; column 4, line 48 - column 5, line 26; column 6, lines 57-59; column 7, lines 6-24.	4-8, 12, 23, 28
Y	US 5,946,449 A (DICKERSON et al) 31 August 1999 (31.08.1999), column 6, lines 29-35.	6
Y	US 6,329,582 B1 (CATALANO, JR) 11 December 2001 (11.12.2001), Figure 3; column 2, lines 48-60.	10, 11
Y	US 4,027,329 A (COUTTA) 31 May 1977 (31.05.1977), column 2, lines 54-55.	14



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:		"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
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"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		

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International application No.  
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## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,241,380 A (BENSON et al) 31 August 1983 (31.08.1983), column 2, lines 33-49; column 5, lines 30-39.	22
Y,P	US 6,903,772 B1 (SHINOHARA) 07 June 2005 (07.06.2005), column 1, line 13-22.	25
A	US 5,767,842 A (KORTH) 16 June 1998 (16.06.1998), see entire document.	1-28
A	US 6,245,982 B1 (SUZUKI et al) 12 June 2001 (12.06.2001), see entire document.	1-28
A,E	US 6,982,375 B2 (MCGREGOR) 03 January 2006 (03.01.2006), see entire document.	1-28
A	US 2001/00298929 A1 (MOE) 18 October 2001 (18.10.2001), see entire document.	1-28

## INTERNATIONAL SEARCH REPORT

International application No.  
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Continuation of B. FIELDS SEARCHED Item 3:

EAST: USPAT; USOCR; US-PGPUB

search terms: (camera and music\$2 and mov\$3).clm.; (camera and music\$2 and mov\$3) and servomotor; piano same hand same camera same (film or video); camera same (follow or track) same hands; camera same (follow or track) same hands same control\$3 and ("finger board" or keyboard) and instrument; "musical instrument" and (piano or keyboard or "finger board") and guid\$3; air near3 bearings and camera and music; air same bearing same conveyor and cart; (linear same motor) and "air bearing"; rail and transport and end and sensor; video same camera same change same coupled; (video same camera same ccd) and (surveillance or security) and (rail or track); ccd same advantage same video same camera