

(12) United States Patent
Iwamura

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- (54) **MUSIC SEARCH BY MELODY INPUT**
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- (73) Assignees: **Sony Corporation**, Tokyo (JP); **Sony Electronics, Inc.**, Park Ridge, NJ (US)
- (*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.
- (21) Appl. No.: **09/429,260**
- (22) Filed: **Oct. 29, 1999**
- (51) Int. Cl.⁷ **G09B 15/04; G10H 1/26**
- (52) U.S. Cl. **84/609; 84/477 R**
- (58) Field of Search 84/609-614, 634-638, 84/477 R, 478; 434/307 A

6,031,174 * 2/2000 Takabayashi 84/609

OTHER PUBLICATIONS

MIDISOFT Desktop Sheet Music 2.0 and MIDISOFT Studio 6.0 <http://www.midisoft.com/upgrade.htm> Apr. 10, 1999.

* cited by examiner

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(57) ABSTRACT

A method to enable one to search for a song title when only its melody is known. An interface is used which allows the user to enter the melody in an easy to understand manner. A remote music database with melody information is searched for the melody entered by the user. using, for example, a peak or differential matching algorithm. Upon receiving a search request, a database server, i.e., a remote computer, which can be accessed by the user via a client PC, sends a web page, for example, in HTML or Java containing the search results to the client PC. The client PC receives and displays the search results on the monitor and exchanges data with the server. Sound may also be played through the sound card to connected speakers.

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40 Claims, 8 Drawing Sheets

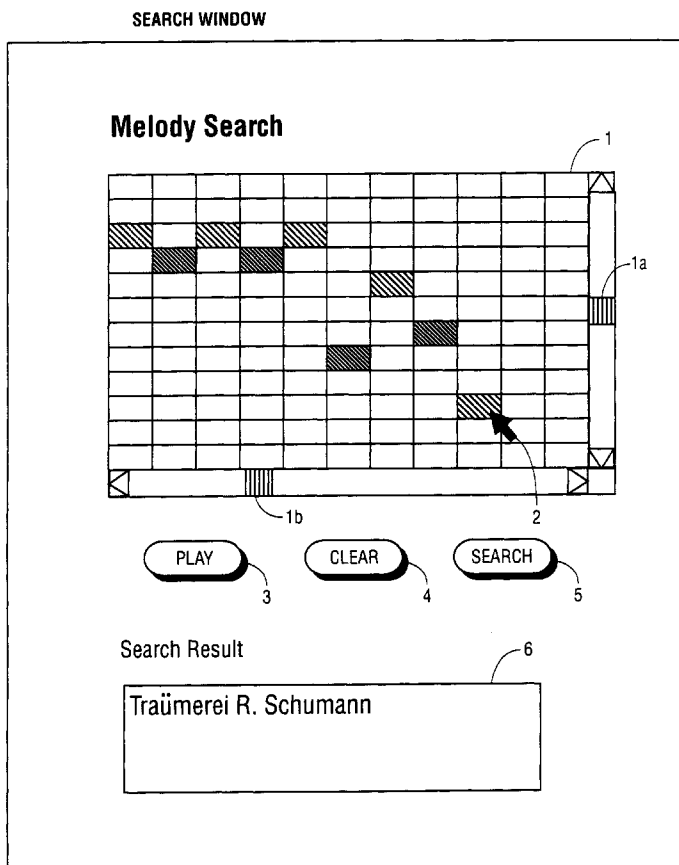


FIG. 1 SEARCH WINDOW

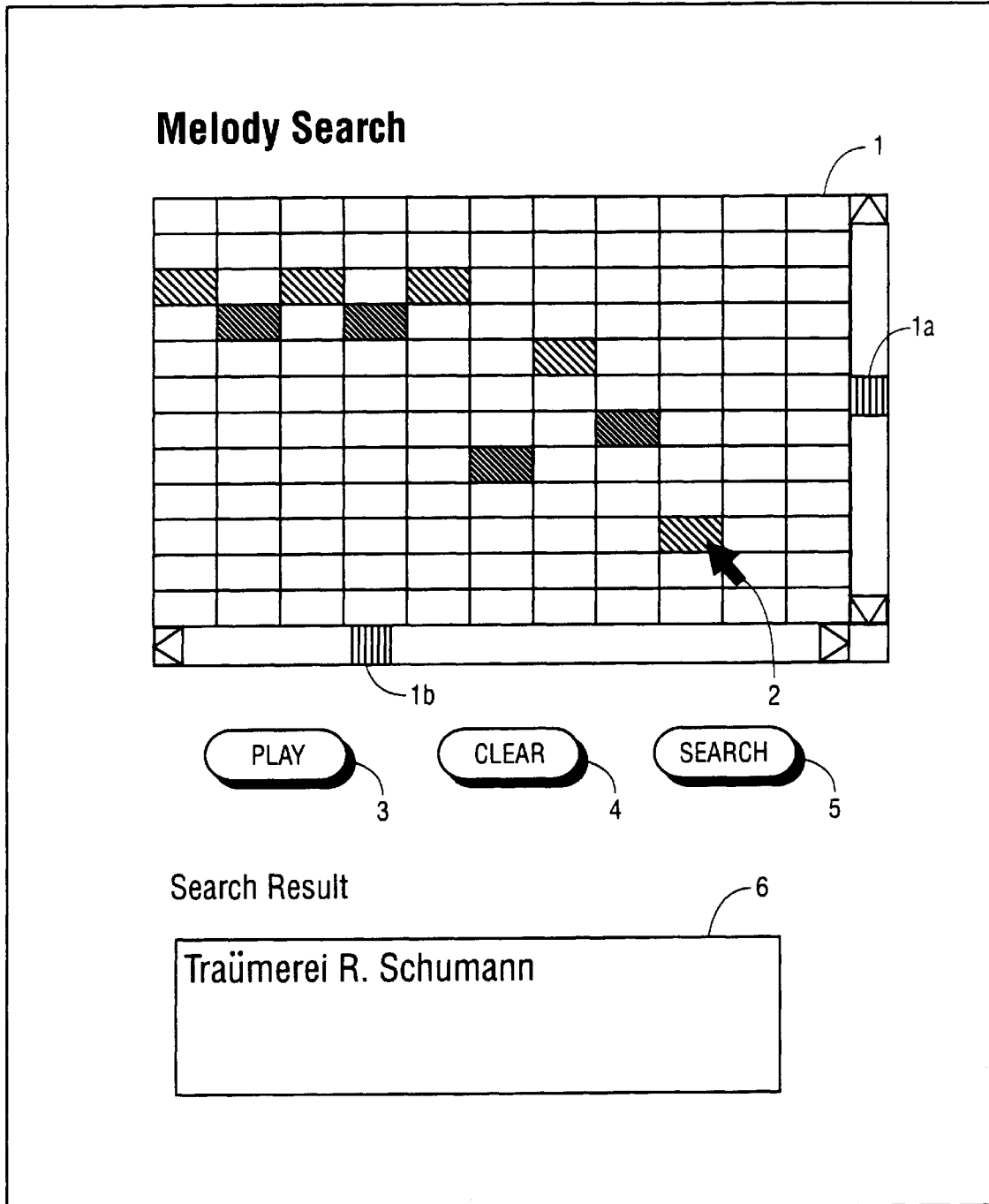


FIG. 2

Für Elise

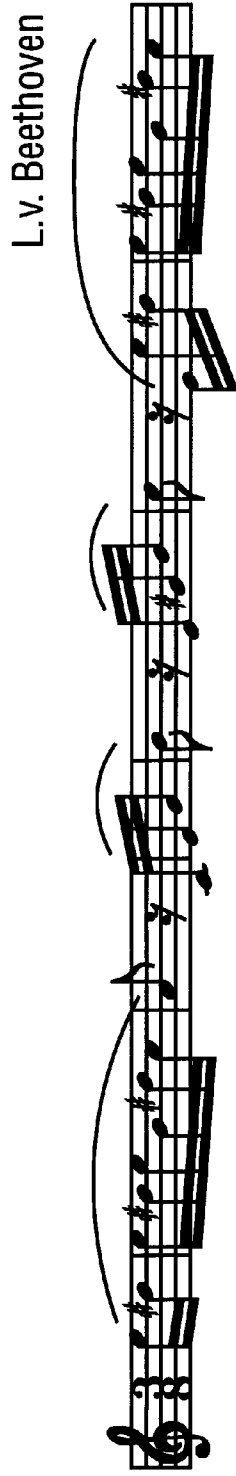
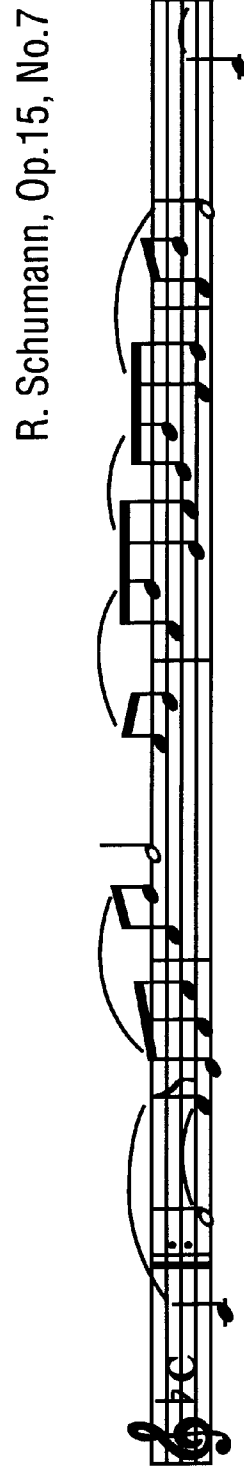


FIG. 3

Träumerei



PIANO ROLL WINDOW (FUR ELISE)

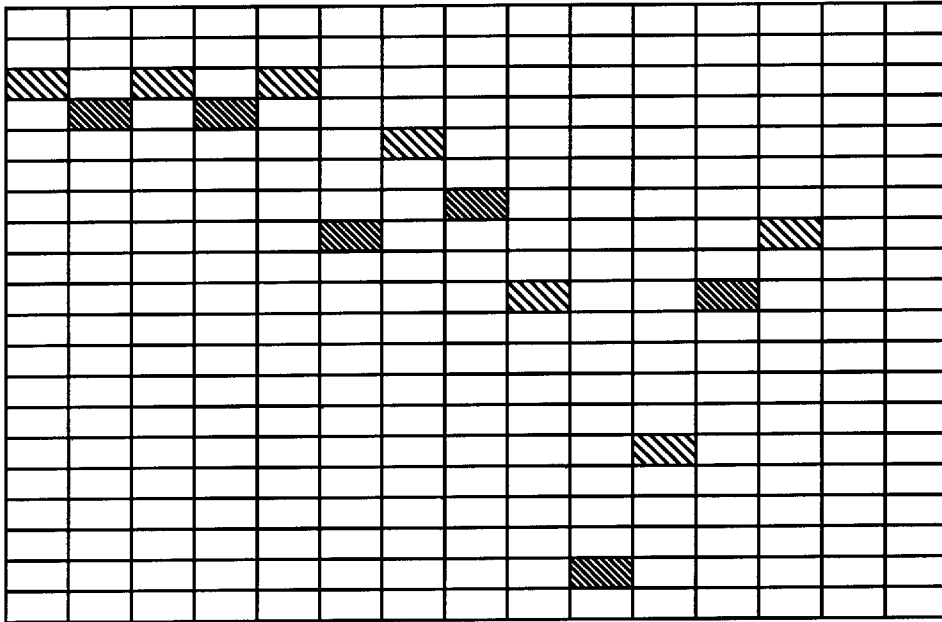


FIG. 4

PIANO ROLL WINDOW (TRAUMEREI)

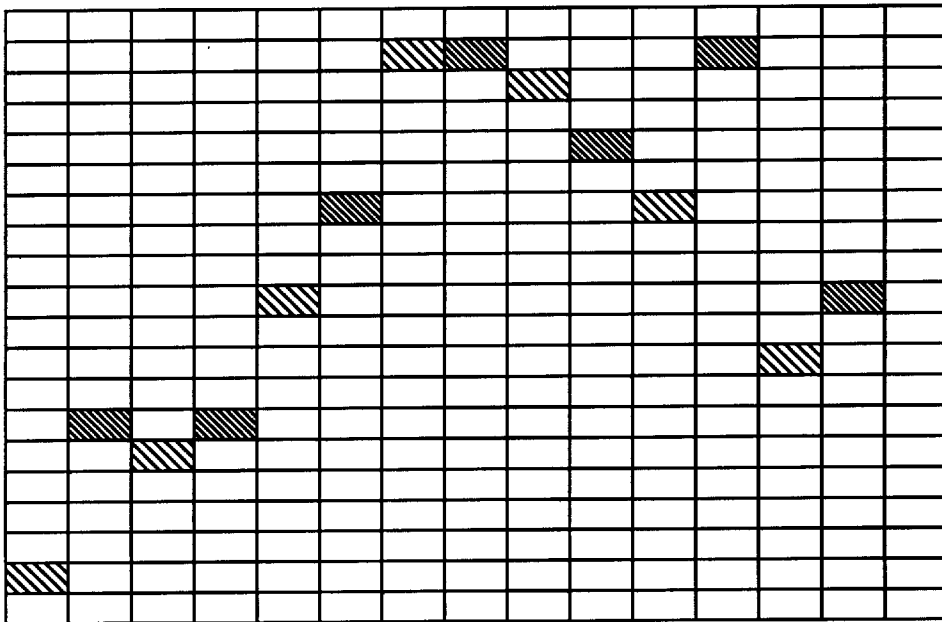
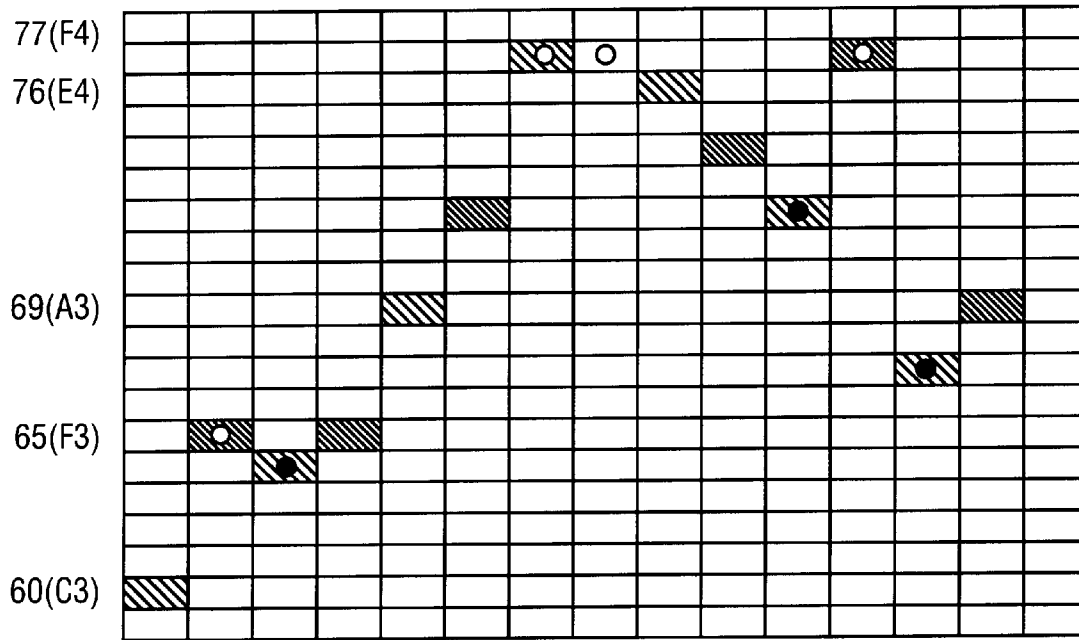


FIG. 5

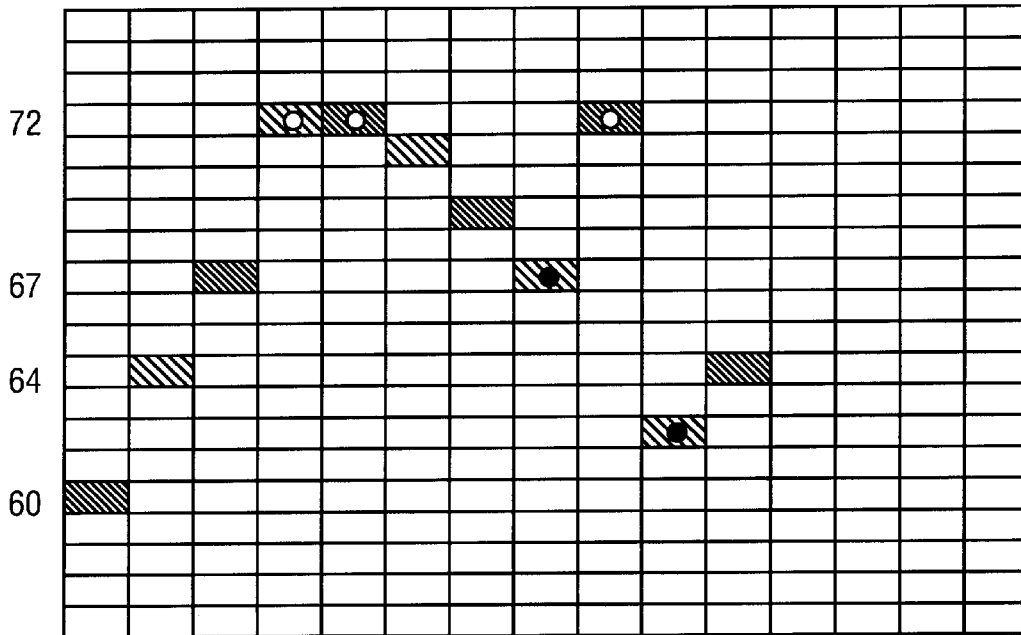
TRAUMEREI IN PIANO ROLL NOTATION



○ PEAK ● DIP

FIG. 6

USER INPUT (TRAUMEREI)



○ PEAK ● DIP

FIG. 7

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