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# (12) United States Patent

### Shapiro

#### (54) SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR REMOTELY DETERMINING THE CONFIGURATION OF A MULTI-MEDIA CONTENT USER

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- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 499 days.

This patent is subject to a terminal disclaimer.

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- (22) Filed: Nov. 3, 2003

#### **Related U.S. Application Data**

- (63) Continuation-in-part of application No. 09/986,683, filed on Nov. 9, 2001.
- (60) Provisional application No. 60/516,017, filed on Oct. 31, 2003.
- (51) Int. Cl. *G06F 13/00* (2006.01)
- (52) U.S. Cl. ..... 709/220
- (58) **Field of Classification Search** ...... None See application file for complete search history.

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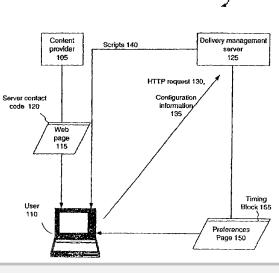
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#### (57) **ABSTRACT**

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A method for remotely determining the configuration of a computer of a multimedia content user includes sending player detection code to the user's computer and receiving configuration information regarding the user's computer. A method of determining a connection speed of a computer includes determining a size of a timing block based on an estimated bandwidth and retrieving the timing block. The connection speed is determined based on the timing block size and the times at which transfer begins and ends.

#### 18 Claims, 17 Drawing Sheets



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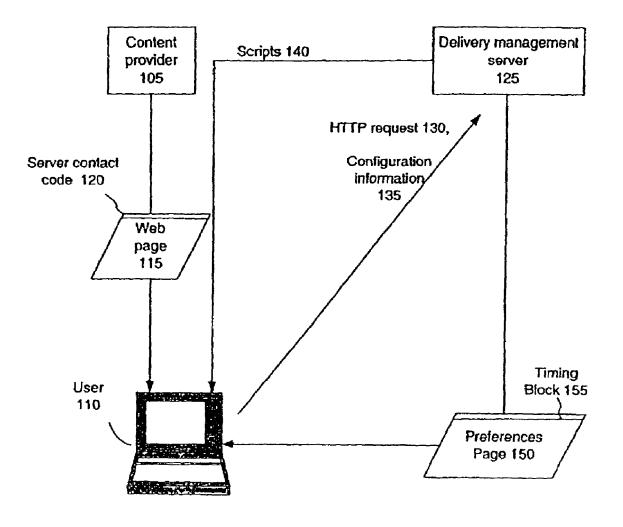


FIG. 1

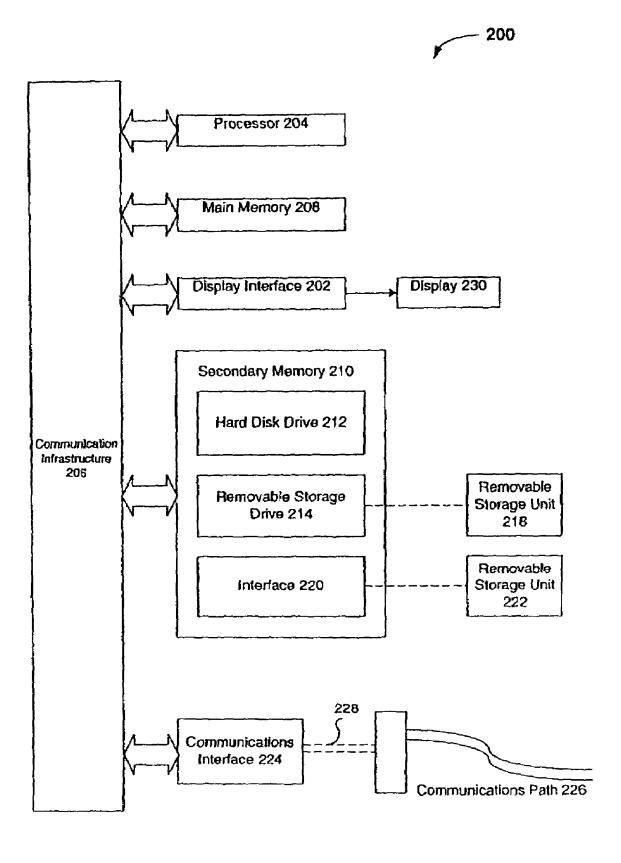
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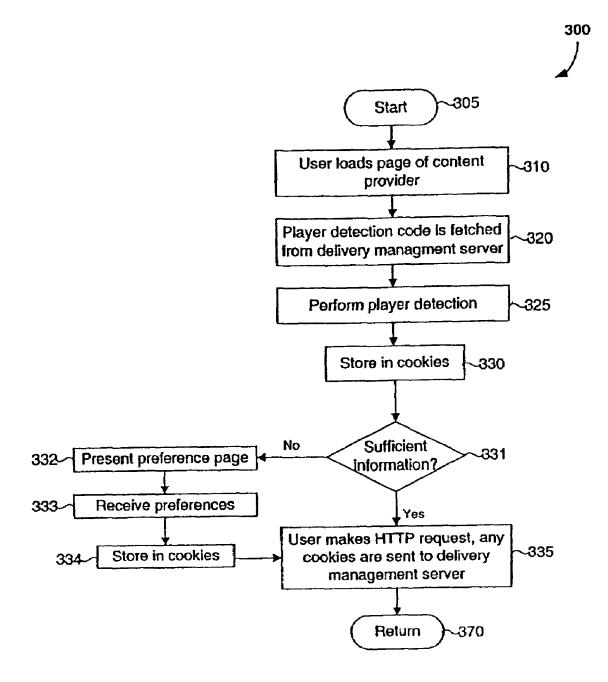


FIG. 3A

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