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(54) **METHOD AND APPARATUS FOR MUSIC SUMMARIZATION AND CREATION OF AUDIO SUMMARIES**

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(58) **Field of Search** 84/609, 634, 645; 700/94; 704/300, 503

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(57) **ABSTRACT**

A method and system for generating audio summaries of musical pieces receives computer readable data representing the musical piece and generates therefrom an audio summary including the main melody of the musical piece. A component builder generates a plurality of composite and primitive components representing the structural elements of the musical piece and creates a hierarchical representation of the components. The most primitive components, representing notes within the composition, are examined to determine repetitive patterns within the composite components. A melody detector examines the hierarchical representation of the components and uses algorithms to detect which of the repetitive patterns is the main melody of the composition. Once the main melody is detected, the segment of the musical data containing the main melody is provided in one or more formats. Musical knowledge rules representing specific genres of musical styles may be used to assist the component builder and melody detector in determining which primitive component patterns are the most likely candidates for the main melody.

30 Claims, 5 Drawing Sheets