



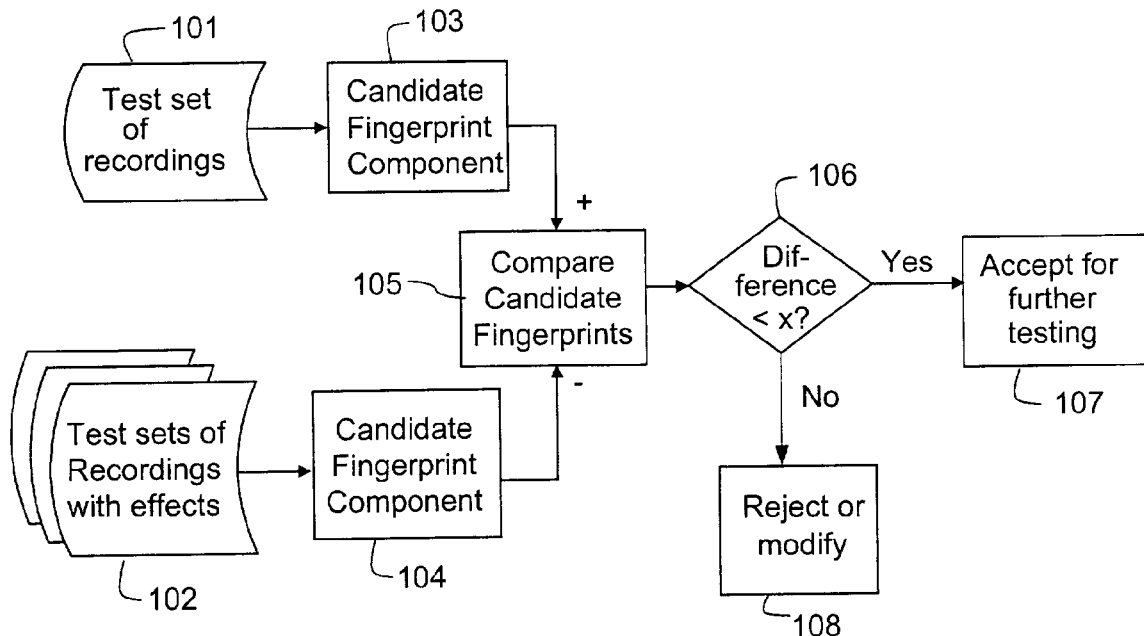
US 20030086341A1

(19) **United States**(12) **Patent Application Publication**
Wells et al.(10) **Pub. No.: US 2003/0086341 A1**(43) **Pub. Date: May 8, 2003**(54) **AUTOMATIC IDENTIFICATION OF SOUND RECORDINGS****Related U.S. Application Data**

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WASHINGTON, DC 20001 (US)(73) Assignee: **GRACENOTE, INC.**, Berkeley, CA(21) Appl. No.: **10/200,034**(22) Filed: **Jul. 22, 2002**(57) **ABSTRACT**

Copies of original sound recordings are identified by extracting features from the copy, creating a vector of those features, and comparing that vector against a database of vectors. Identification can be performed for copies of sound recordings that have been subjected to compression and other manipulation such that they are not exact replicas of the original. Computational efficiency permits many hundreds of queries to be serviced at the same time. The vectors may be less than 100 bytes, so that many millions of vectors can be stored on a portable device.



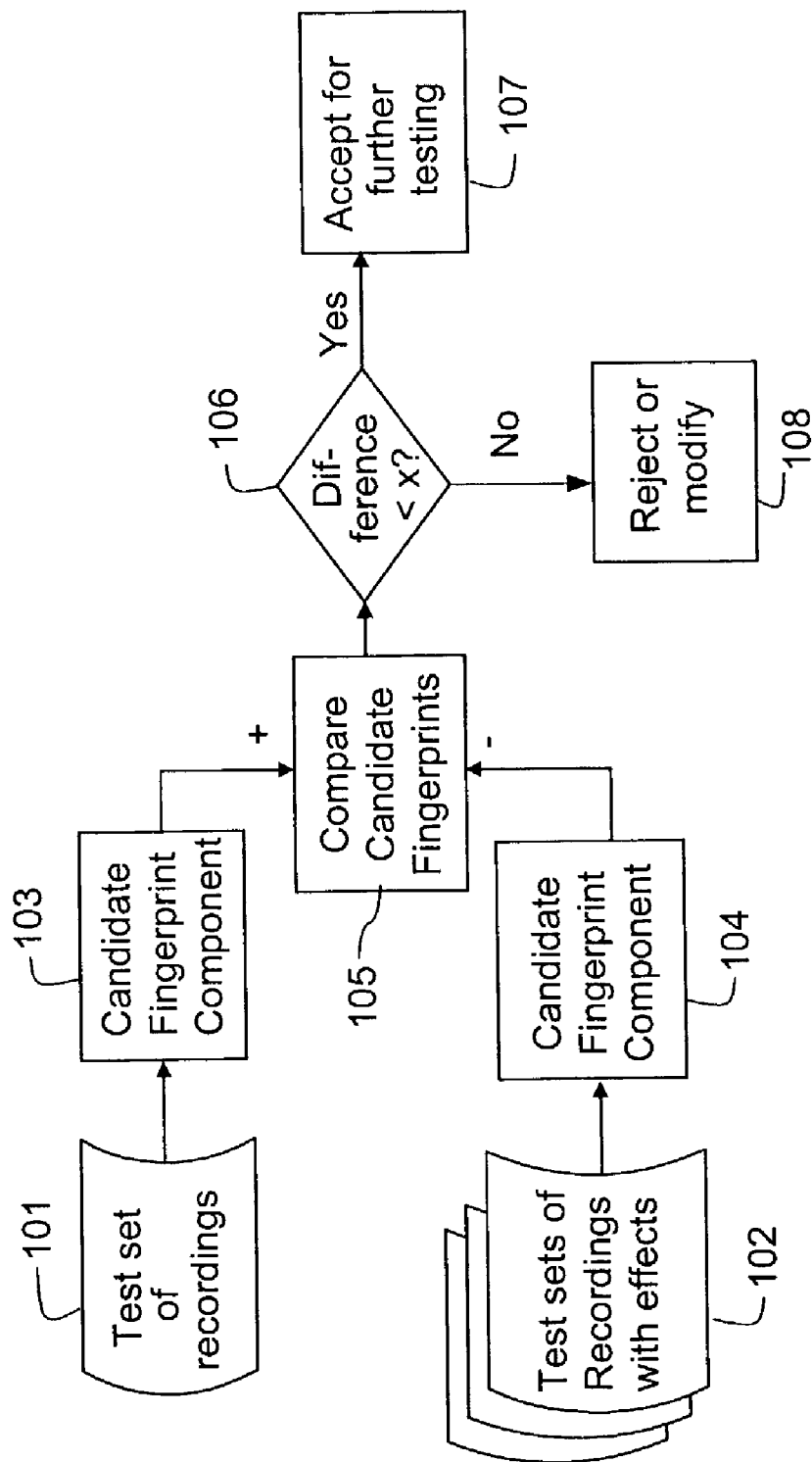


FIG. 1A

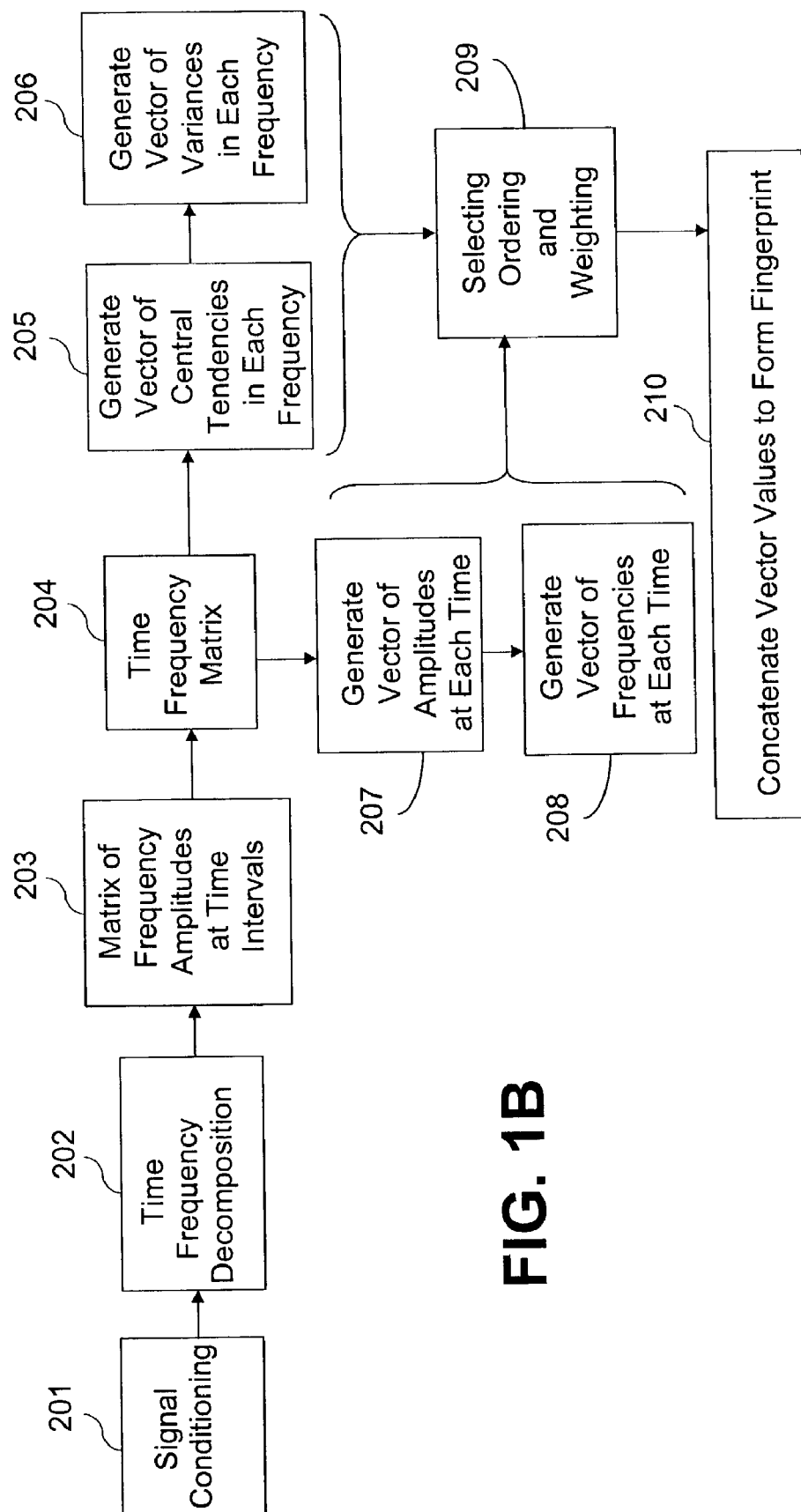
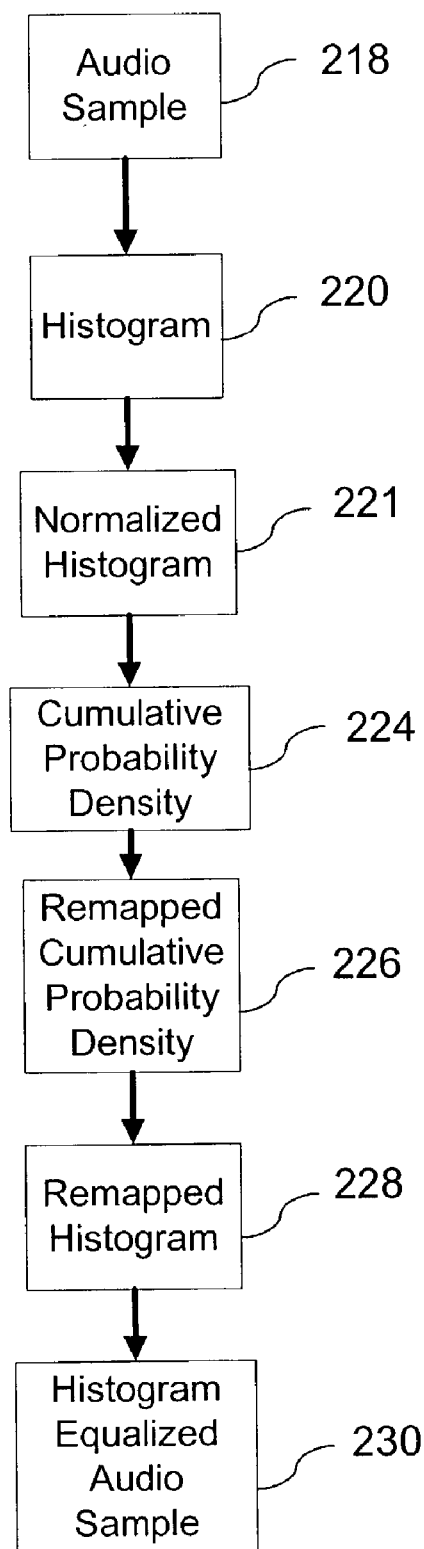
**FIG. 1B**

FIG. 2



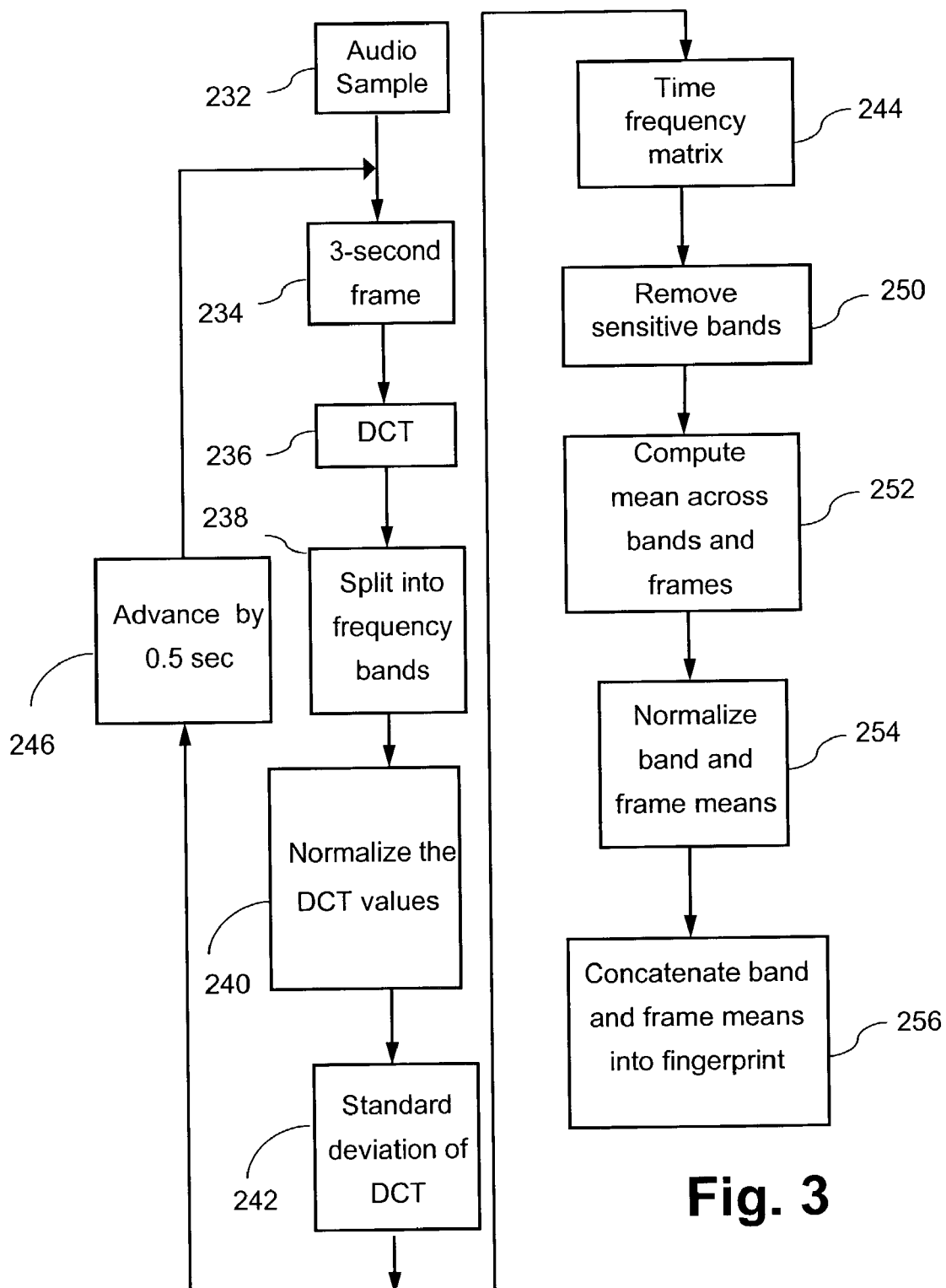


Fig. 3

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