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**Gharaat et al.**

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(54) **MEDIA CONTENT FINGERPRINTING SYSTEM**(71) Applicant: **TiVo Inc.**, Alviso, CA (US)(72) Inventors: **Amir H. Gharaat**, Menlo Park, CA (US); **James M. Barton**, Alviso, CA (US); **Mukesh K. Patel**, Fremont, CA (US)(73) Assignee: **TiVo Inc.**, San Jose, CA (US)

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US 2016/0353181 A9 Dec. 1, 2016**Related U.S. Application Data**(63) Continuation of application No. 12/631,783, filed on Dec. 4, 2009, now Pat. No. 8,510,769.  
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(Continued)(58) **Field of Classification Search**

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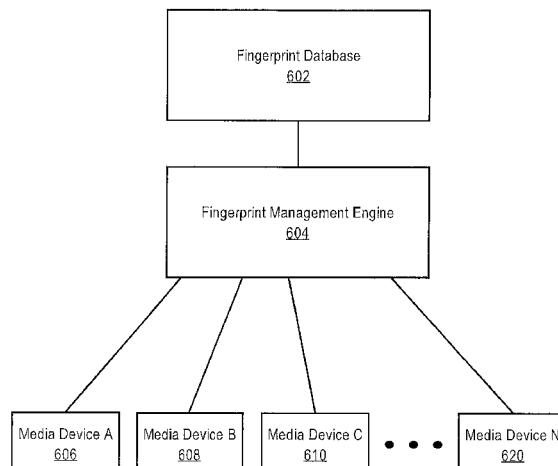
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*Primary Examiner* — David Harvey(74) *Attorney, Agent, or Firm* — Wong & Rees LLP(57) **ABSTRACT**

A method of deriving fingerprints for media content that is being watched by a user is described. For example, a user may select a particular show on an electronic programming guide displayed by a media device. The media device may then request the content stream, from the content source, that includes the particular show. The source may indicate whether a fingerprint is needed for the particular show requested by the media device. The indication may be a flag in the data received by the media device. If the particular show needs to be fingerprinted as indicated by the flag, the media device may decompress the corresponding video frames, load the decompressed video frames into memory and analyze the video frames to derive a fingerprint from the video frames.

**21 Claims, 12 Drawing Sheets**

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