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## Synchronized Music Ads

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## **SYNCHRONIZED MUSIC ADS**

### **ABSTRACT**

A method for transitioning from one audio music track to another is disclosed. The method uses characteristics of the audio such as beat, volume, or tone of a first audio and a second and transitions between the two audio streams by selecting an appropriate ad to play between them. The selected ad is synced by matching its beginning to the characteristics of the first audio. The audio stream transitions from the first audio to the ad, and near its end the ad is again synced with those of the second audio. The stream transitions from the ad to the second audio and continues on. The method can be used to smoothly sequence any kind of playlist and provides a way to achieve a smooth audio experience with ads, by selection, modification, or smoothing and transition effects.

### **BACKGROUND**

Audio ads may be jarring and interruptive while listening to music or radio. The ads are often at a different beat, amplitude and frequency than the music right before and after it. This may cause a decreased listening experience, adverse reactions, and criticism of ad supported radio/streaming. In addition, partnership with advertisers may be adversely affected by a negative recall.

### **DESCRIPTION**

A method for transitioning from an audio music track to another music track via an ad is disclosed. The audio music and ad may be part of any audio or video streams. The method as illustrated in FIG. 1 uses characteristics of the audio such as beat per minute (bpm), volume, or tone of song 1 (Audio 1) and song 2 (Audio 2) and matches or transitions the ad between the audio streams by synchronizing these characteristics. The method in step A involves analyzing

the characteristics of Audio 1 and Audio 2, and identifying the genre or context of the songs. The ad to transition between the songs is then selected in step B based on the song, playlist, or genre being played. The selection could even include key values / targeting data that considers the "type" of radio station, for example. The ads as loaded into the system are pre-categorized to enable selection of an appropriate ad that matches with the beat or characteristics of the songs. In the next step (C), the selected ad is synced or modified by matching its beginning to the bpm, amplitude, and tone of Audio 1. The audio in step D then transitions from Audio 1 to the ad, till near its end, after which it is again synced by matching its characteristics with those of Audio 2 (step E). In the final step F, the ad transitions to Audio 2 and continues with it thereafter. The method could also be used to select an ad as a first play preceding a list.

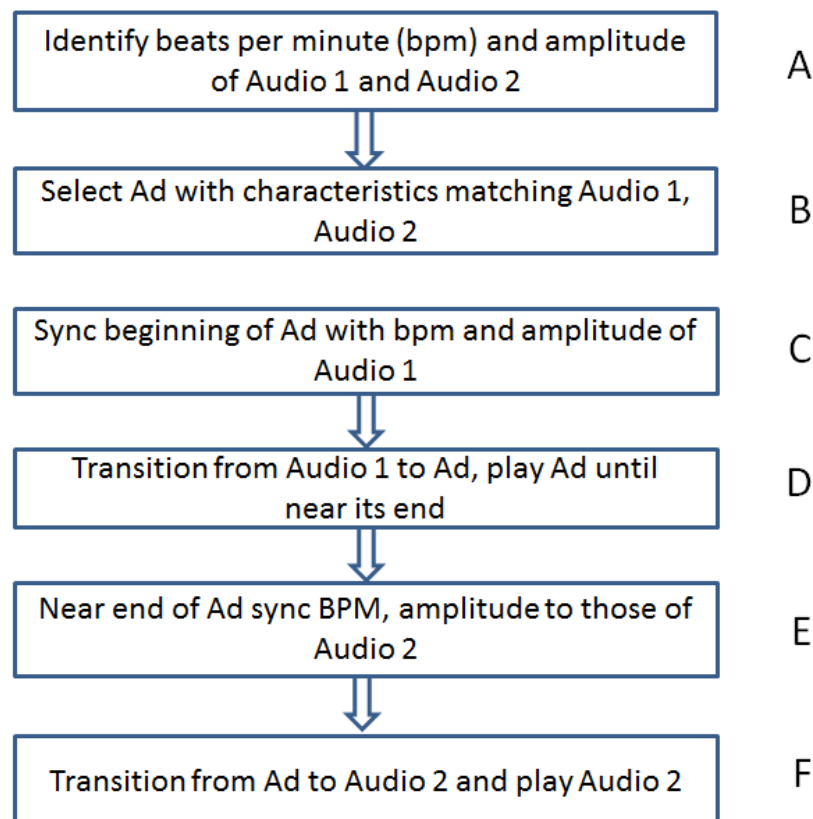


FIG. 1: Method of synchronizing ads between two audio streams

The method provides a way to achieve a smooth audio experience with ads that is supportive and not too interruptive, by selection, modification, or smoothing and transition effects. The techniques used for smoothing and syncing are standard music mixing methods for transitioning playback of any kind. While the method of transitioning has been illustrated for advertising, it could apply to selecting and playing any kind of sequential segments of playback such as an automatically selected audio or video playlist. Advantages of the invention include a better listening experience for the user. The method would also reduce the impact of variability in quality of the ad on the user experience.