

ABSTRACT

A melody detection method for an audio signal, a device, and an electronic apparatus. The method comprises: dividing an audio signal into multiple audio segments according to a beat, detecting a fundamental frequency of each audio signal subframe in each of the multiple audio segments, and estimating a pitch value of each of the audio segments according to the fundamental frequency thereof (S1); determining a pitch name corresponding to each of the audio segments according to the frequency range to which the pitch value thereof belongs (S2); estimating a mode of the audio signal by using the pitch name of each of the audio segments, and acquiring a scale of the audio signal (S3); and determining, according to the frequency intervals of the pitch values of each of the audio segments in the scale, a melody of the audio signal (S4). The melody detection method for an audio signal enables melody detection of an audio signal sung by an amateur singer, and accurately estimates a melody hummed by a user even when the user sings out of tune.

FIG. 1