

Title (en)  
Signal comparison method and apparatus

Title (de)  
Signalvergleichsverfahren und -vorrichtung

Title (fr)  
Procédé et dispositif de comparaison de signaux

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Application  
**EP 03254607 A 20030724**

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GB 0217772 A 20020731

Abstract (en)  
The invention provides a method and apparatus for determining the relative time difference or delay between first and second audio signals that represent substantially the same audio content. The invention also provides a method and an apparatus for determining whether two audio signals contain the same audio content. A comparison of the two audio signals is carried out using a low-bit representation of each signal that is generated using the dominant frequency within successive portions or frames of the signal. This audio representation can also be used as a means of comparing two video programmes of which the audio signal is a part. As the analysis is based on the frequencies present within the audio signal, it can for example, be performed more quickly than an analysis based on the energy of the audio signal. As a result, the determination can be made in real time, allowing it to be advantageously used in the field of broadcasting to confirm that a signal being transmitted by a regional broadcasting centre is in accordance with the master signal being sent to it by a programme originator. The invention may also be used to synchronise two like signals with each other.

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