

Abstract**NON-SUPERVISED SYSTEM AND METHOD FOR MULTIREOLUTION
THEMATIC ANALYSIS AND STRUCTURING OF AUDIO STREAMS**

Non-supervised method and system for thematic analysis and structuring of an audio stream, said audio stream comprising a set of documents each consisting of several segments, said audio stream comprising one or more patterns or themes repeated over time, said system being adapted for implementing the method according to the invention, characterized in that it comprises at least the following elements:

- A database (11) comprising a pre-established dictionary of audio words, and statistical models,
- One or more acoustic sensors (2, 20) linked to an analysis module comprising a first module (22) for extracting the acoustic parameters of said audio stream, said first module being linked to a buffer memory (23), the output of the buffer memory being linked to a module for fuzzy classification (24) of said segments arising from the buffer memory (23), a module for constructing cooccurrence matrices and for adapting the models (25), a module (26) adapted for determining the likelihood of the models and an optimal segmentation search module executing an algorithm of dynamic programming type applied to the likelihood measurements.

Figure 1 to be published