Title: SOURCE SEGMENTATION USING Q-CLUSTERING

Abstract: A system and method that facilitates and effectuates accurate source segmentation of multi-dimensional signals in a computationally efficient manner. By employing Queynanne's algorithm along with a model for combining adjacent multidimensional elements of signals into locally consistent regions, significant improvement in time to identify an optimal segmentation can be achieved. Additional, by saving values computed when executing the algorithm and recalling the values when needed during subsequent iterations of the algorithm provides an additional in algorithm execution speed.
### INTERNATIONAL SEARCH REPORT

#### A. CLASSIFICATION OF SUBJECT MATTER

**H04N 5/919(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

- **Minimum documentation searched (classification system followed by classification symbols)**
  
  IPC 8 H04N

- **Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched**
  
  Korean utility models and applications for utility models since 1975
  
  Japanese utility models and applications for utility models since 1975

- **Electronic database consulted during the international search (name of database and, where practicable, search terms used)**
  
  eKIPASS(KIPO internal) & Keyword: clustering, Queyranne, audio, video, multimedia, etc.

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>&quot;Q-CLUSTERING&quot;, MUKUND, etc., ADVANCES IN NEURAL INFORMATION PROCESSING SYSTEMS, 2006</td>
<td>1, 11, 17</td>
</tr>
<tr>
<td>Y</td>
<td>see Abstract, Introduction, Background and Notation.</td>
<td>2, 8, 9, 12</td>
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<td>A</td>
<td></td>
<td>3-7, 10, 13-16, 18-20</td>
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<td>Y</td>
<td>&quot;FUZZY CLUSTERING AND BAYESIAN INFORMATION CRITERION BASED THRESHOLD ESTIMATION FOR ROBUST VOICE ACTIVITY DETECTION&quot;, YE TIAN, etc., IEEE International Conference on, 6-10 April 2003</td>
<td>2, 8, 12</td>
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<td>see Abstract, Introduction</td>
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<td>1, 3-8, 10, 11, 13-20</td>
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</table>

* Further documents are listed in the continuation of Box C.

* See patent family annex.

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**Date of the actual completion of the international search**


**Date of mailing of the international search report**


**Name and mailing address of the ISA/KR**

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