High level entity-relationship indexing method for multimedia digital information signals

Technology #m00-001

MPEG-7 is a multimedia content description standard in which audio visual schemes are used to describe relationships between content elements. However, the usefulness of these features and relationships is diminished due to their broad range of values. This technology addresses these shortcomings by generating standard description records from multimedia information. This technology accurately indexes a plurality of digital information signals from one multimedia information input by utilizing fundamental entity-relationship models to classify the entities, the entity attributes, and their relationships in relevant types to describe visual data.

Flexible and comprehensive framework to describe and index multimedia archive content

This technology provides a standardized multimedia content description scheme for generic multimedia information. A computer processor defines multiple indexing levels for content of the signals and the extracted features and relationships are organized into higher level description structures. With this organization and classification, users may be able to perform enhanced content-sensitive general multimedia searches on the Internet, or on regional and local networks.

Lead Inventor:

Dr. Shih-Fu Chang, PhD.

Applications:

- A system for indexing digital information signals
- A method for classifying digital information signals
- Use in meta search engines and multimedia search engines
- Can be applied for use as a filtering agent
• Potential for use in multimedia data exchange

**Advantages:**

• Uses entity-relationship models to index digital information
• Flexible and comprehensive framework to index visual information
• Useful relationship between video content elements
• Allows for the classification of entity relationships by syntactic and semantic categories.
• Enables the organization of multimedia information based on syntactic and semantic attributes.

**Patent information:**


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**Inventors**

Shih-fu Chang