Preface: Second International Workshop on Patent Mining and its Applications (IPaMin 2015)

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1. MOTIVATION

The importance of exploiting knowledge in patents is constantly increasing. A large percentage of the most recent technical knowledge is only available in patent documents. Patent mining and the automatic analysis of large numbers of patents are necessary to identify trends in research and development. Applications include the identification of potential areas of investment, avoiding duplicating efforts, competitor analysis, patent landscape mapping, intellectual property (IP) risk management, and so on.

Advanced methods in information technology bear much potential for improving access to patents and to gain knowledge form patents.

This workshop wants to identify current innovative research in patent mining and build a map of research and needs. Another topic will be the discussion about evaluation approaches to patent mining. Several important initiatives have dealt with information retrieval from patents (NTCIR, CLEF-IP, TREC Chem). However, there are few benchmarks for evaluating applications with vaguely defined goals as involved in patent mining.

Some of the basic assumptions for information retrieval and text mining need to be revisited for patent mining. Due to the nature of patent documents, innovative approaches need to be taken for automatic analysis of patents and in general for big data analytics of scientific content.

2. WORKSHOP SCOPE

Topics include but are not limited to:

- Patent Analytics
- Information extraction from patent documents
- Modelling and representation of patent documents
- Temporal modelling based on patents

- Trend mining
- Prescriptive Analytics
- Approaches to deal with patent terminology
- Visualization to support human mining tasks
- User interfaces for patent mining
- Issues on developing benchmarks for patent mining
- Lifecycle models of technology applied to mining approaches
- Advanced Information Retrieval Approaches using Patent Analytics
- Large scale big data analytics on scientific texts which could be applied to patents
- Innovative products for patent mining
- Complex event processing
- Data management for patent mining
- Automatic construction of technical function matrix
- Competitor analysis
- Applications based on data mining and analytics

3. ORGANISATION

The Second International Workshop on Patent Mining and its Applications is held in Yulong International Hotel, Beijing, China. The workshop provides a forum for scientific discussion and the exchange of ideas. The workshop wants to attract both practitioners from industry as well as academic researchers. A practical track for the presentation of innovative products, structured information needs or best practice in patent mining are also welcome.

The next IPaMin workshop will take place in Korea in 2016. Further events are planned.

4. ACKNOWLEDGMENTS

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