

Meeting of International Authorities under the Patent Cooperation Treaty (PCT)

Twenty-First Session
Tel Aviv, February 11 to 13, 2014

PRESENTATION OF PILOT PROJECT “E-PATENT EXAMINER”

Document submitted by the Federal Service for Intellectual Property (Rospatent)

1. System for automatic positioning of application materials to obtain a patent for an invention in the global patent space based on statistical and semantic approaches – is a system for expert decision-making when checking the inventive level, novelty and industrial applicability of the invention.
2. System implementation will shorten the substantive examination. All of the current software performs the search of relevant application documents according to the expert query. E-Patent Examiner automatically analyzes the original text of the application.
3. The main goals of E-Patent Examiner development are:
 - providing automatic positioning of application materials to obtain a patent for an invention in the global patent space based on statistical and semantic approaches,
 - technological processes of materials handling optimization related to the invention examination based on the results of the automatic positioning for the application materials to obtain a patent for an invention in the global patent space on the basis of statistical and semantic approaches.
4. To implement E-Patent Examiner there is a need to meet the following requirements:
 - 1) Distributed knowledge base of unified patent space should be created to overcome the problem of combining non-standardized database formats patents in different countries and regions.

- 2) The solution proposed should not be associated with reformatting data or any further processing of these data in existing databases.
 - 3) There is a need in creation of patent database, i.e., by processing the existing databases in different countries and regions to make a sources gallery, which contains patent, papers and other open sources profiles.
 - 4) The gallery should consist of the set of information sources portraits, as has been mentioned above, as a net and a statistical profile as n-dimensional vector for each document.
 - 5) Knowledge base should store a meta-dictionary of distributed patent database. The meta-dictionary is to provide references for specific document when needed and to show the full text of documents from these references when there's a need to justify the reasons for the application being made.
 - 6) During the examination, temporary expert tables should be filled in. An application that is not yet included in any patent database when considering is located in these temporary expert tables.
 - 7) Knowledge base to be implemented should be deployed in the server cluster of cloud architecture using the parallel algorithms.
5. Thus, the approach proposed allows avoiding very large volumes of patent databases reformatting and gaining access to these patents for examining and the search for new technical solutions in areas where there are no patents, or they are on the pioneer level.

6. The Meeting is invited to note the contents of this document and the presentation to be given during the session.

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