Global multilingual semantic patent database
Objective:
automatic preliminary patent application examination.

Means:
semantic analysis of unstructured texts.
Technology

- Creation of semantic version of patent database.
- Formation of semantic image of patent application.
- Matching of semantics between the application and database of semantic images of patents.
Formation of semantic image of the document

Source text

Semantic analyzer

Text in Interlingua
Formation of the multilingual patent database

English  German  French

Interlingua

Chinese  Japanese  Korean  Other
Search in the multilingual patent database

Request

English

German

French

Interlingua

Chinese

Japanese

Korean

Other
Levels of automatic preliminary examination

**Good**
- surface semantics

**Best**
- lexical semantics

**Super**
- pragmatics
Advantages of the new technology

- High quality preliminary examination.
- Objective quantitative assessment of the relevance of search results.
- Ability to search for analogues in the multilingual database without the translation of patents’ texts.
- High productivity of operation of patent office: to find analogues only one resort to the database is required; resort is done using semantic image of an application.
- Unified technology of maintenance and use of the global patent database.
- Automatic search for duplicate patents.
- Automatic search for plagiarism.
- Simplification of the procedure of application processing: there is no need for classifier.