



**ROSPATENT**  
FEDERAL SERVICE FOR INTELLECTUAL PROPERTY

# ROSPATENT'S ARTIFICIAL INTELLIGENCE INITIATIVES

**ALEXANDER GORBUNOV**

Deputy Director  
Federal Institute of Industrial Property



1

## Automatic search quality criteria

- **Top-20** documents are found by the system are the same the examiners have chosen as the reasons of refusal
- **Top-20** documents which are presented in list of prior art documents (field (56))

2

## Similarity search stages

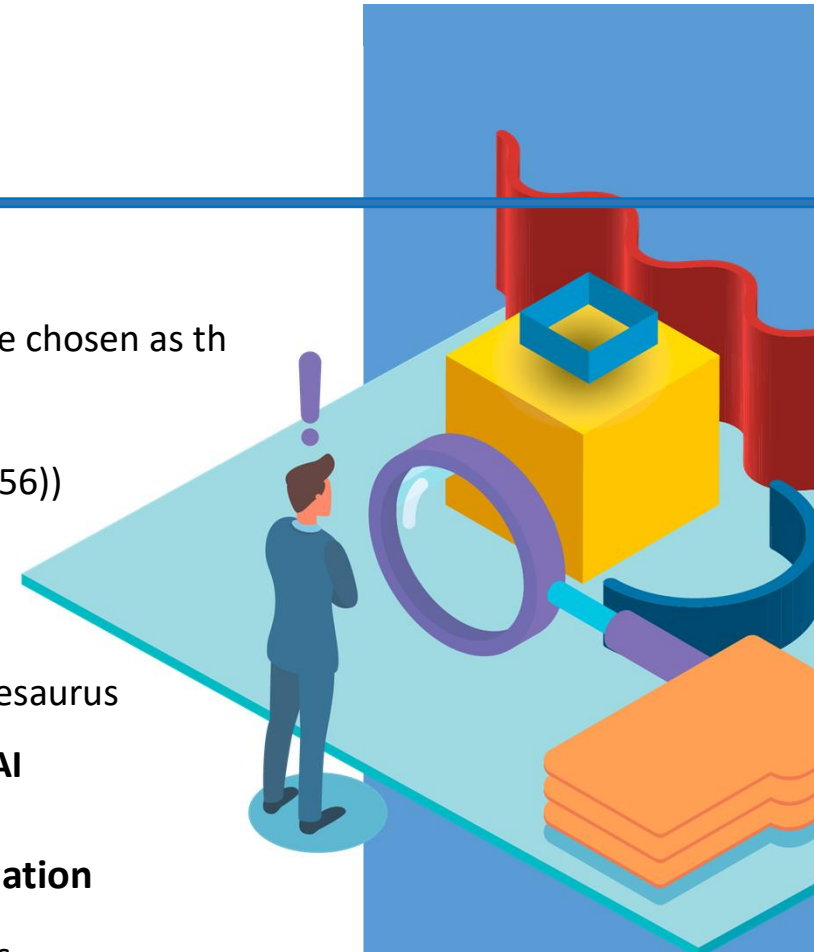
→ **BUILDING A DISTRIBUTIVE THESAURUS (special terms) using AI**

- Create a search query → Extend the search query with the distributive thesaurus
- Extract ranked list of results → Rearrange the obtained list **using AI**

## Future: Decision support system for inventions and utility models examination

3

- Additional experiments on the Russian-language array on the technical areas
- Perform a similar range of work for English-language arrays
- Build a multilingual distributive thesaurus
- Use structured search reports to learn the system



# IMPACT OF AI TOOLS ON EXAMINATION PROCEDURES

## Determination of prior art

**TODAY MOSTLY NATIONAL PATENTS!**

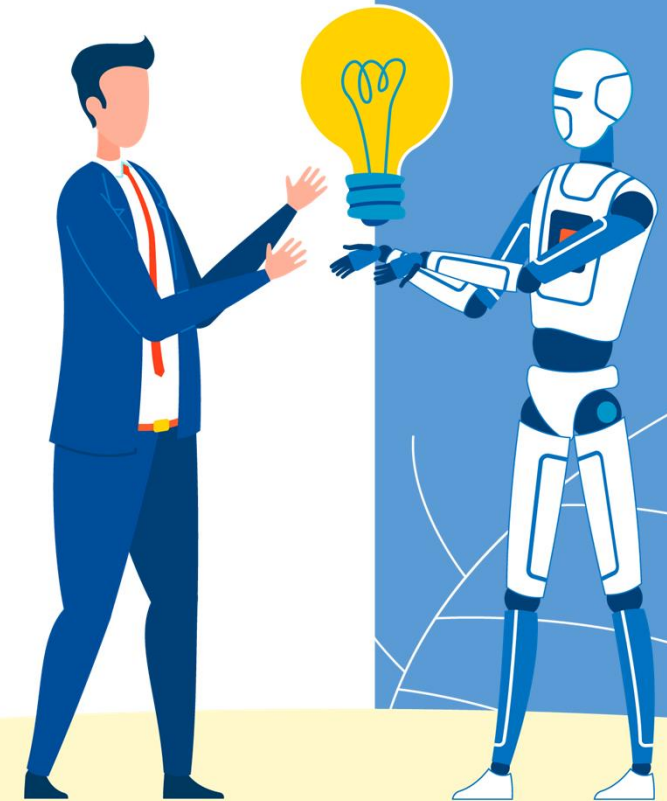


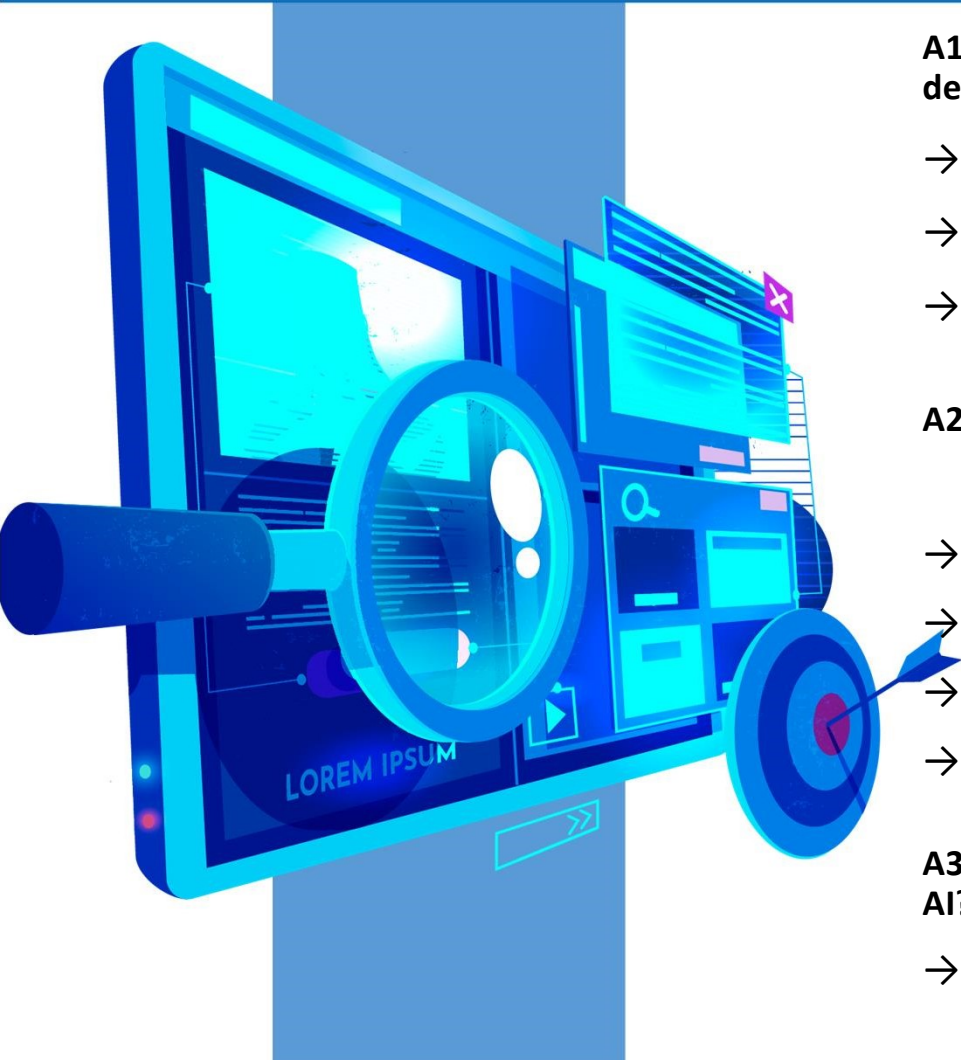
AI tools (multilingual distributive thesaurus) will provide objective characterization regardless of language and/or country



## Impact of the search quality on the quality of substantive examination

- Improvement of the automatic search quality up to 80% according to chosen criteria will allow the examiner to focus on the analysis of the invention's essence
- Unpredictable changes in the technology of search and examination are possible





**A1. Will AI tools change examination criteria of inventions, or similarity determination of trademarks or designs?**

- Novelty - **will remain**
- Inventive step - **will remain**
- Industrial applicability - **will remain**

**A2. What impact will AI tools have on IPO administration?**

**“AI era”:**

- Full automation of the stage of formal examination
- The better quality of the application the less the correspondence time
- Decrease of the examination time
- AI will affect the commercial and IPO services market

**A3. What international cooperation is necessary for IPOs to undertake in response to AI?**

- Create multilingual distributive thesaurus by the national IPOs collaboration

**THANK YOU**

**Alexander Gorbunov**  
Deputy Director  
Federal Institute of Industrial Property  
[gorbunov@rupto.ru](mailto:gorbunov@rupto.ru)

