

Rospatent

Federal Service for Intellectual Property



IMPACT OF EMERGING TECHNOLOGIES ON IP ECOSYSTEMS

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THE MAIN TOPICS





Rospatent's involvement with the national program "Digital Economy of the Russian Federation"



Implementation of emerging technologies in the Rospatent's business processes



Changes in interactions with applicants related to digitalization



MAIN TASKS



Providing government agencies and businesses with global arrays of patent information, statistics and analytics in real time



Reducing the time frame for the provision of public services



Online registration of applications and disposal of rights



Access to digital interaction services for all categories of citizens



Information security and confidentiality of applicants' data



GENERAL ARCHITECTURE OF INFORMATION SYSTEMS

Consumers of Rospatent services



Federal executive authorities







Digital services

Artificial intelligence search

Client-centric public services

Registration and control of the turnover of rights to the result of intellectual activity

Processes

- flexibility
- customizability
- manageability



Public services



Government functions

Information systems for:



Supporting processes

Information systems

- modern technologies
- unified infrastructure

filing applications

- record keeping
- · digitization of documents

- search/retrieval systemsauxiliary systems
- analytical system

Data

- unified model of normative reference information and technological data
- international standards



the State register of Rospatent



Patent Fund of the Russian Federation



the world fund of patent information



normative reference information

Infrastructure

- efficiency
- safety
- import substitution



Support for AI solutions



Modern user computers



Domestic software



security



MAIN SYSTEMS FOR EXTERNAL USERS



The Search Platform



Online Rospatent



IPR Management System



Patent Analytics System



ROSPATENT'S PUBLIC SERVICES ON STATE PORTAL "GOSUSLUGI"

Interactive application forms

Format and logical control of filling in the application fields

The ability to sign an application with different types of electronic signature

Terms of service provision

The composition of information and documents







AREAS OF USING OF ARTIFICIAL INTELLIGENCE

- Patent Search
- ✓ Trademark Search
- ✓ Image Search
- ✓ 3D Models Search
- ✓ Genetic sequence Search
- Chemical Search (Including the Function of the Search by Reactions)
- ✓ Scanning and Recognition
- ✓ Translation

The use of artificial intelligence at all stages of application review

- ✓ Simplification of work with applications for the provision of Rospatent's public services
- ✓ Shortening the time for consideration of applications
- ✓ Simplification of the internal work of experts at Rospatent (routine work has been removed)
- ✓ Quality control



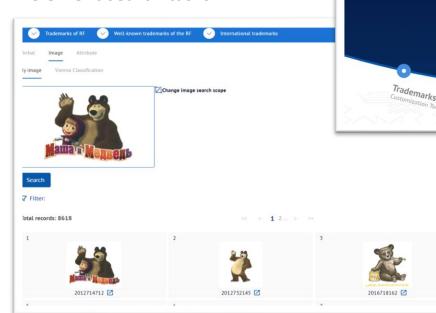
patents

CP DB ICT

PATENT AND IMAGE SEARCH

- Search for similar documents using artificial intelligence technologies: neural networks and distribution thesaurus
- Conducting cluster analysis by selecting entities that will allow the documents to be combined into homogeneous clusters, assigning a name to the resulting clusters and building a hierarchical structure
- Construction of semantic maps to find the most relevant patents to the application, as well as to dive into documents containing these topics and connections using either Russian or English languages

A module that provides the ability to configure and train a neural network for image element search tasks.

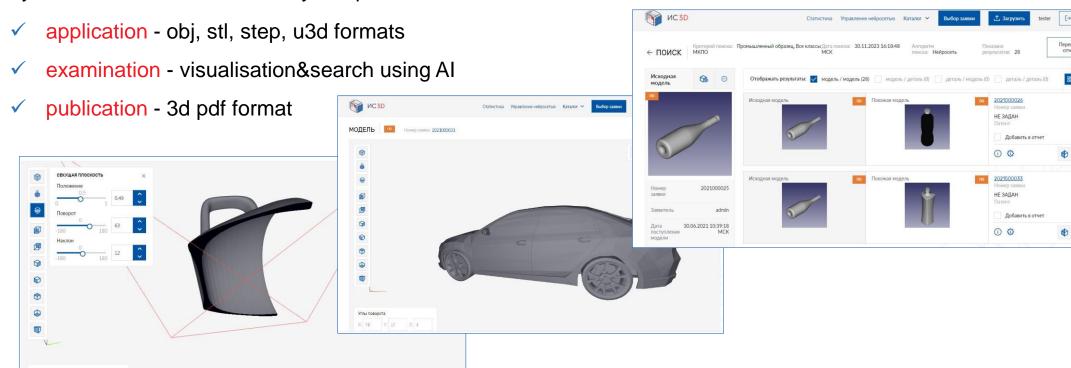




DIGITAL 3D MODELS

Since 17.02.2021 Rospatent accepts national applications for trademarks, industrial designs, inventions and utility models containing files in 3D formats.

National regulations are aligned with the recommendations of WIPO Standard ST.91, which was developed by CWS 3D Task Force, lead by Rospatent as Task Force Leader.





BLOCKCHAIN

Rospatent has been using elements of blockchain technologies for more than 10 years, and Rospatent's registries based on them have been operating since 2009.



Rospatent, on behalf of the Russian Federation, directs the work of the Standards Committee of the World Intellectual Property Organization (WIPO) within the framework of the Blockchain Technology Task Force created in 2018 on the initiative of the Russian side.

Rospatent has already use blockchain technologies as part of the IPR management system. Information about agreements concerning IP rights is stored in the blockchain network.



IPR MANAGEMENT SYSTEM

Business logic of relational databases (blockchainsolution)

> **Storage of** relational database (blockchainsolution)

Solution, based on "Block-P" product, for working with relational database component "Blockchain"

data in relational database component "Blockchain"

Subsystem for **Subsystem** of a IPR registration of unified platform management applications and of IPO subsystem petitions Work with deals Work with Work with lots and contracts applications Work with fees

Solution for storing

 Applications, Deals and additional files contracts to applications

about IPOs Assignments for patent

Information

Rights

management

subsystem

Work of patent

Catalog of IPOs

notifications of

changes in IPOs

documents for the

Preparation of

attorney

Processing

IPO

attorney Office notifications Data integrity monitoring

Information

security

subsystem

Fees

Lots



OMNICHANNEL



Online registration of submitted applications



Fee calculation service and control of funds receipt



Visualization of statuses of the applications



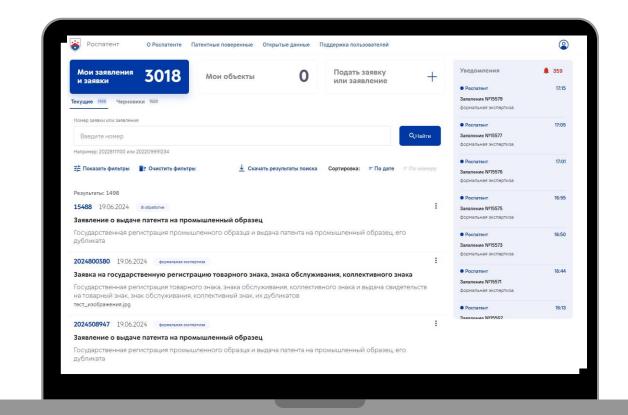
Communication with the experts in electronic form



Patent Attorney Search Service



Control of payment deadlines



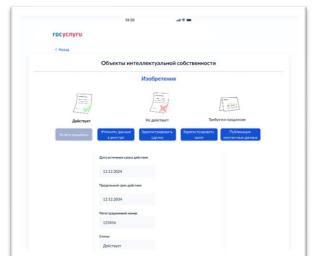


PROACTIVE PROVIDING OF PUBLIC SERVICES

Purpose

The "My IP Rights" service is designed:

- to display the list and statuses of intellectual property objects belonging to the user of the portal "Gosuslugi"
- manage and control intellectual property rigths
- ✓ and provide automated notifications to right holders of IPRs registered on them to the user's personal account on the portal "Gosuslugi"



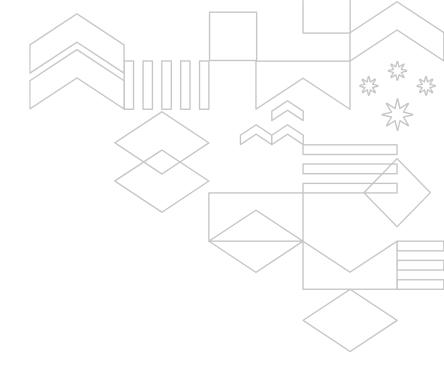
The **main areas of interaction** between right holders – owners of personal accounts on the portal "Gosuslugi" and Rospatent within the "My IP Rights" service:

- ✓ Formation of the list of IPRs in the personal account (received from Rospatent's databases of the National Data Management System)
- Request for updating the list of IPRs
- Information about the stage of the object's life cycle and possible actions with the object
- ✓ Sending notifications to the personal account on the portal "Gosuslugi" with a reminder of the need to take legally significant actions, including the notifications about extension of the validity period of the IPR, and notifications of the need to pay a fee for maintaining patents in force, etc.



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THANKS FOR YOUR ATTENTION

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