



Rospatent

Federal Service
for Intellectual Property

IMPACT OF EMERGING TECHNOLOGIES ON IP ECOSYSTEMS

ILYA KONONENKO

Deputy Director, Federal Institute of Industrial Property

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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



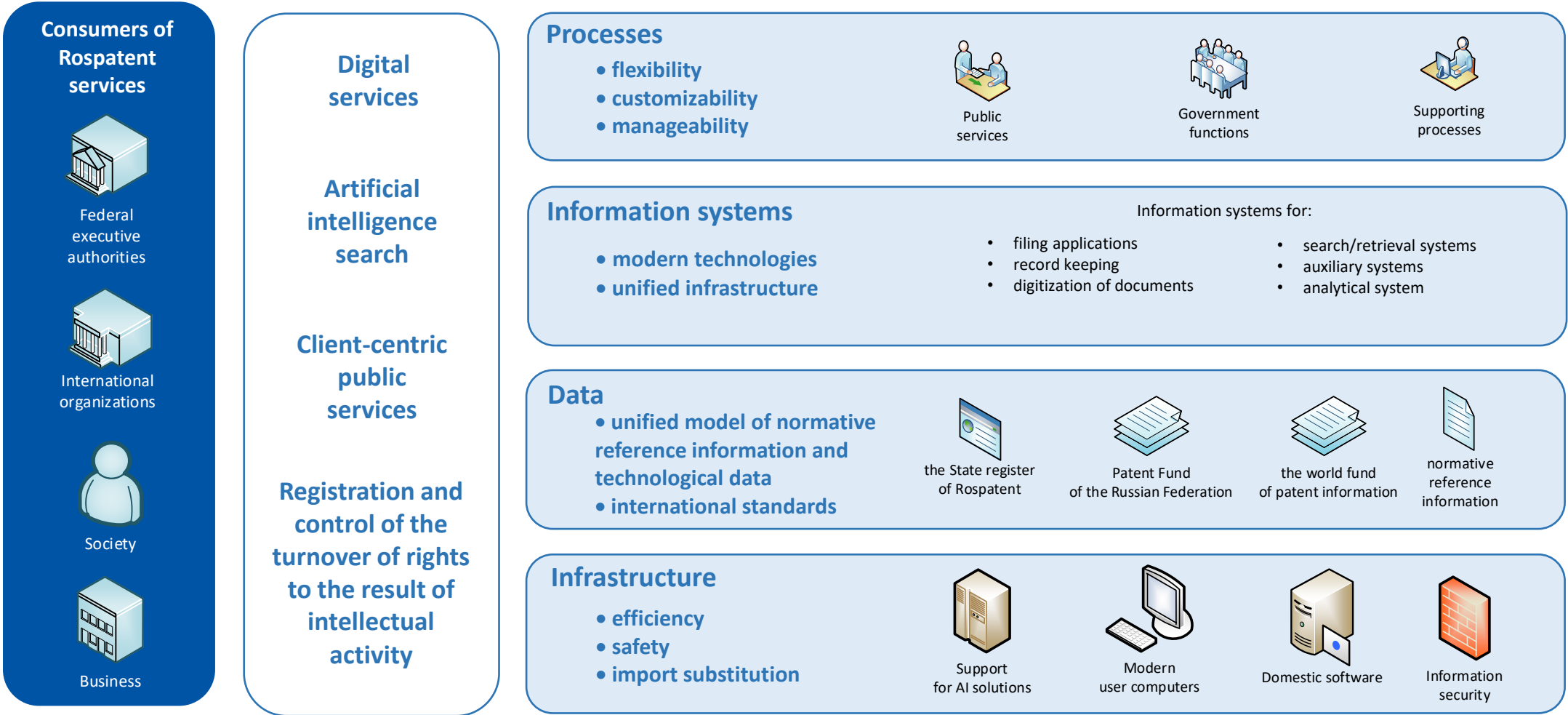
Access to digital interaction services for all categories of citizens



Information security and confidentiality of applicants' data



GENERAL ARCHITECTURE OF INFORMATION SYSTEMS





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

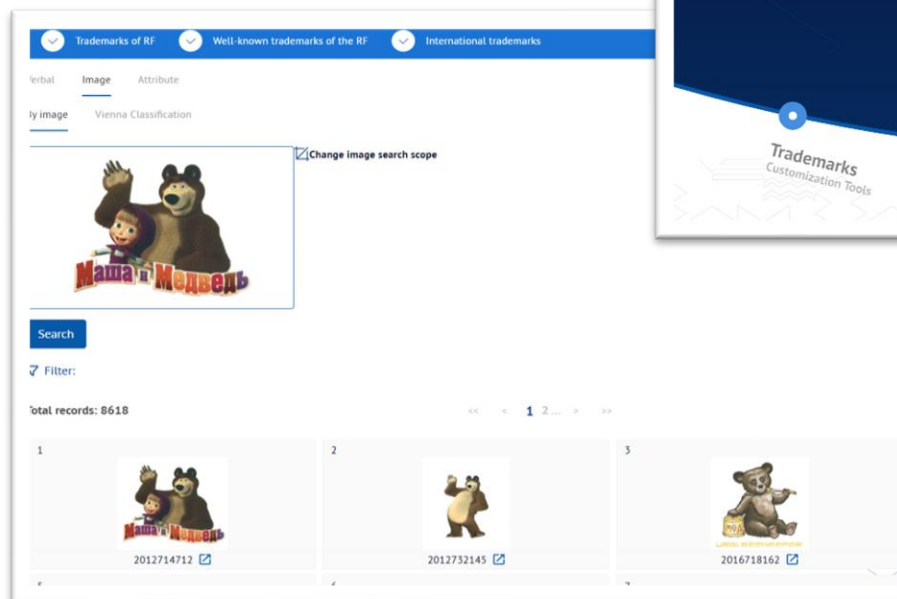
- ✓ Simplification of work with applications for the provision of Rospatent's public services
- ✓ Shortening the time for consideration of applications
- ✓ Simplification of the internal work of experts at Rospatent (routine work has been removed)
- ✓ Quality control



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**.



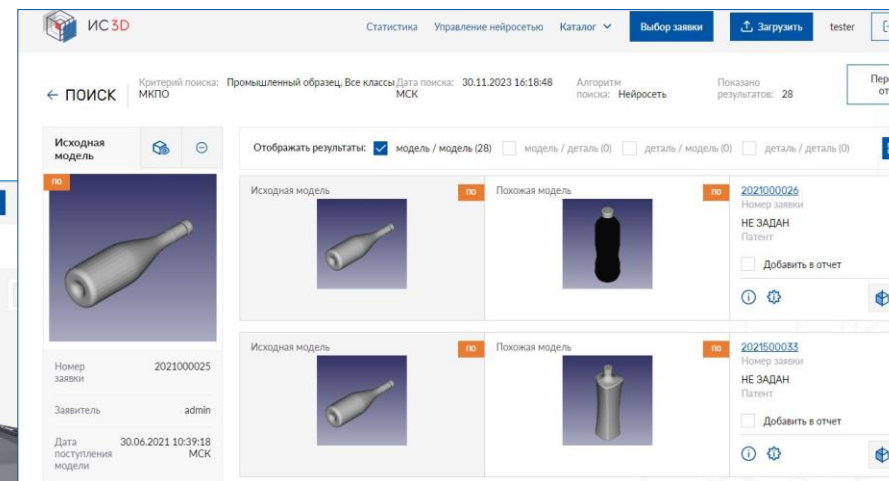
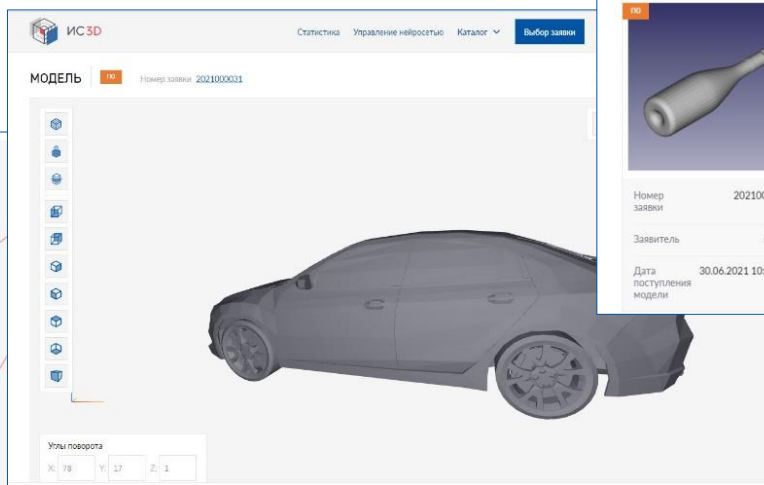
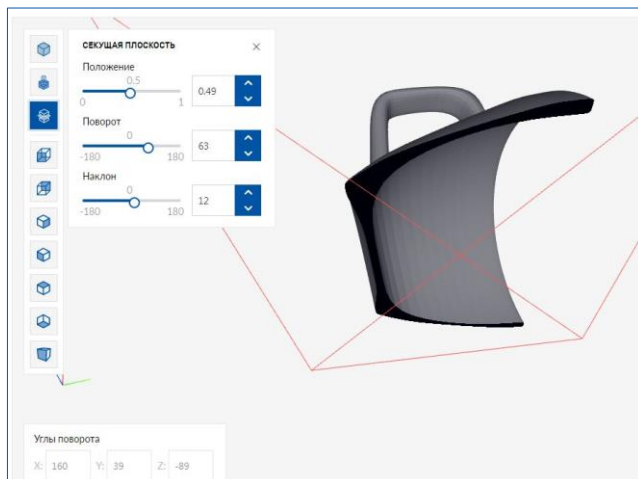


DIGITAL 3D MODELS

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.

- ✓ application - obj, stl, step, u3d formats
- ✓ examination - visualisation&search using AI
- ✓ publication - 3d pdf format





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**.

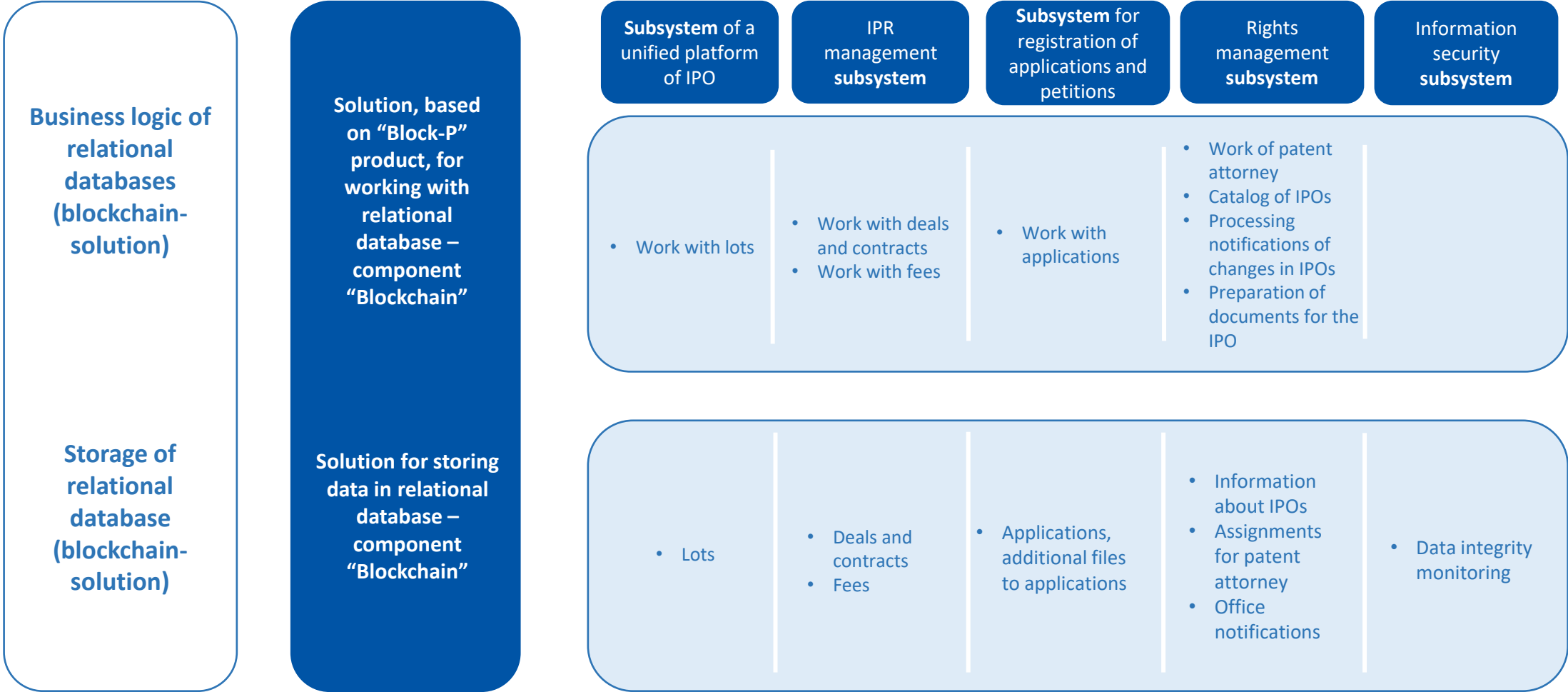


Rospatent, on behalf of the Russian Federation, directs the work of the Standards Committee of the World Intellectual Property Organization (WIPO) within the framework of the **Blockchain Technology Task Force** created in 2018 on the initiative of the Russian side.

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





OMNICHANNEL



Online registration of submitted applications



Fee calculation service and control of funds receipt



Visualization of statuses of the applications



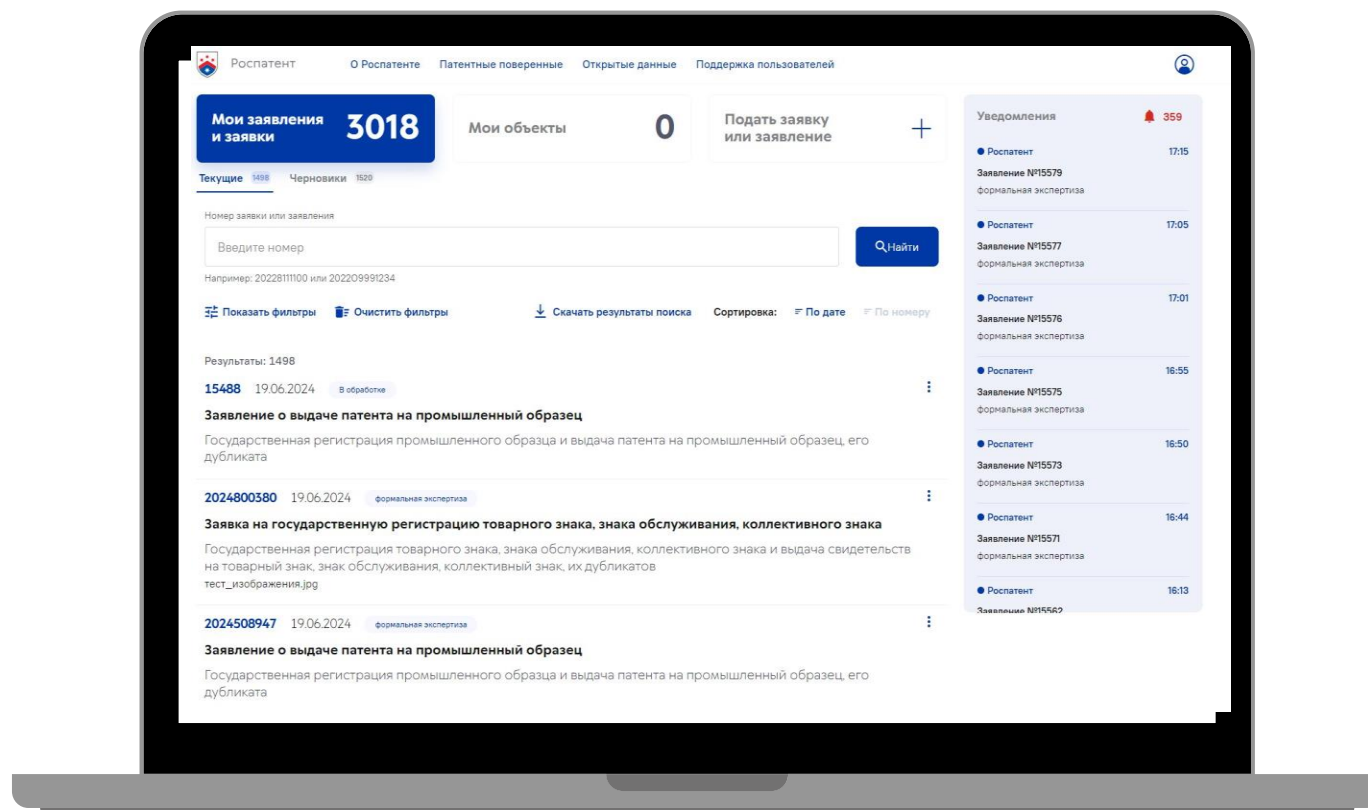
Communication with the experts in electronic form



Patent Attorney Search Service



Control of payment deadlines





PROACTIVE PROVIDING OF PUBLIC SERVICES

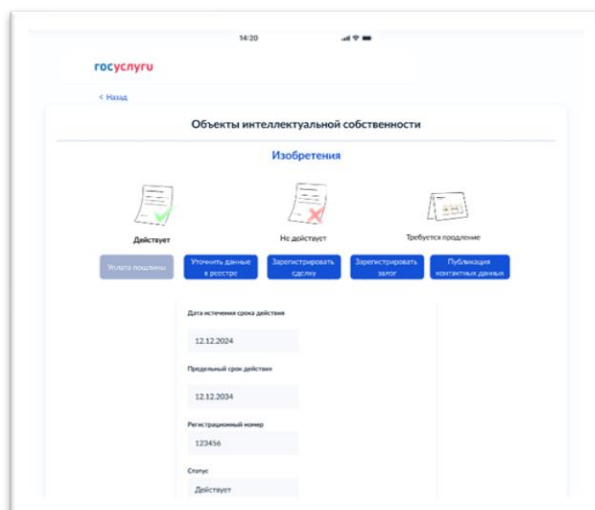
Purpose

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 rights
- ✓ 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:

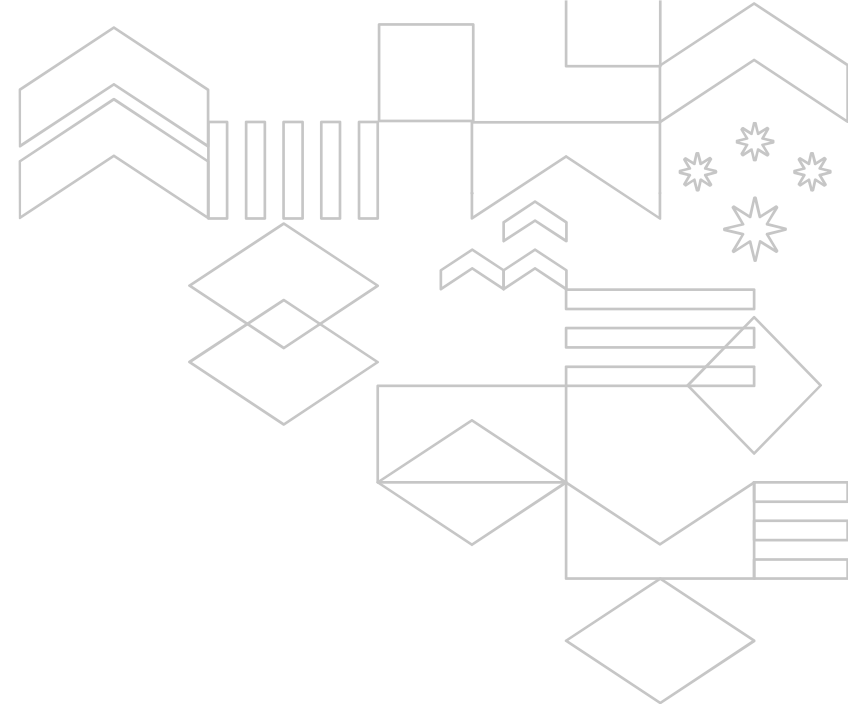
- ✓ Formation of the list of IPRs in the personal account (received from Rospatent’s databases of the National Data Management System)
- ✓ Request for updating the list of IPRs
- ✓ Information about the stage of the object's life cycle and possible actions with the object
- ✓ Sending notifications to 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

Ilya Kononenko
e-mail: ikononenko@rupto.ru