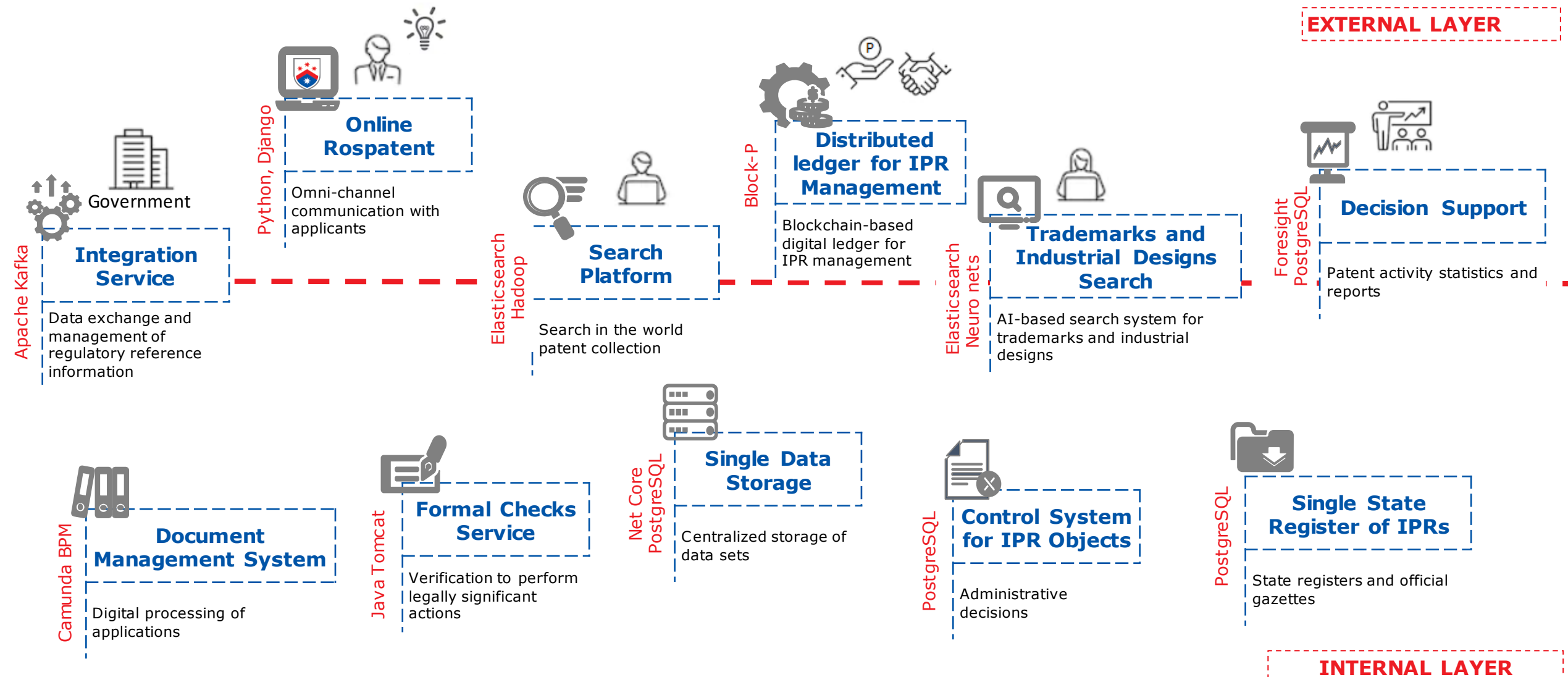ROSPATENT

Committee on WIPO Standards (CWS): Ninth Session.
1 – 5 November 2021

HOW DIGITAL TRANSFORMATION CHANGES BUSINESS PROCESSES FOR IP STAKEHOLDERS

IT ARCHITETCURE
DIGITAL TRANSFORMATION OF ROSPATENT

Online Rospatent

Python, Django

Omni-channel communication with applicants

Government

Integration Service

Apache Kafka

Data exchange and management of regulatory reference information

Search Platform

Elasticsearch Hadoop

Search in the world patent collection

Block-P

Distributed ledger for IPR Management

Blockchain-based digital ledger for IPR management

Trademarks and Industrial Designs Search

Elasticsearch Neuro nets

AI-based search system for trademarks and industrial designs

Decision Support

Foresight PostgreSQL

Patent activity statistics and reports

Document Management System

Camunda BPM

Digital processing of applications

Formal Checks Service

Java Tomcat

Verification to perform legally significant actions

Single Data Storage

Net Core PostgreSQL

Centralized storage of data sets

Control System for IPR Objects

PostgreSQL

Administrative decisions

Single State Register of IPRs

PostgreSQL

State registers and official gazettes

Putting the information systems into operation is scheduled for **2021 - 2022**

PATENT INFORMATION SEARCH PLATFORM

USERS AND STAKEHOLDERS

→ Business community
→ Inventors
→ Investors
→ Citizens
→ Legal entities
→ Associations
→ Accredited organizations

PLATFORM IS DESIGNED TO RESPOND TO THE CURRENT AND POTENTIAL CHALLENGES

PLATFORM FEATURES

→ Automated preliminary assessment of applications
→ Patent analytics
→ Patent statistics comparison in 35 WIPO technology fields for different countries
→ Expert consultations
→ Free public access to the worldwide patent information

01.08.2021 the Russian Federation adopted the Federal Law allowing certified scientific and educational organizations to carry out preliminary search and assessment of patentability for inventions and utility models.

→ **EXPERT MODES**
Search results: an object with tags and comments that corresponds to the results and can be forwarded

→ **INTERACTION WITH EXTERNAL RESOURCES**
A single window for searching in international patent databases and other sources

→ **SPECIALIZED SEARCHES**
Viewing 3D models, searching for chemical formulas and sequence listings, and based on classifications, etc.

→ **PROMISING DEVELOPMENTS**
Exploring analysis, multilingualism, distributive thesauruses, identification of links between objects and formation of patent graphs

→ **LARGE-SCALE DATABASE**
World Patent Collection, Russian and Soviet patent information, database of sequence listings, integration with STI, specific information

Rospatent

EN ∨   A−   A+   Золкин Д. С.

02 Similar documents

What are you looking for?   Patents ∨

A service for searching for similar documents using artificial intelligence technologies has been created, which allows the user to find semantically similar documents for a given passage or a whole document.
This service will allow the user to make a preliminary assessment of the scientific novelty of his invention and find registered patents analogs.

For Developers
SDK Library Package

Search Patents
Huge patent database

Related Documents
Assessment of Scientific Novelty

Trademarks
Customization Tools

The main principles:
Coverage extension and information accessibility

Verbal elements

PRO100
про сто

various search options:

- Spelling
- Phonetics
- Semantic

Figurative elements

image search using a neural network

Attributes

Field search for trademarks and industrial designs, as well as notifications
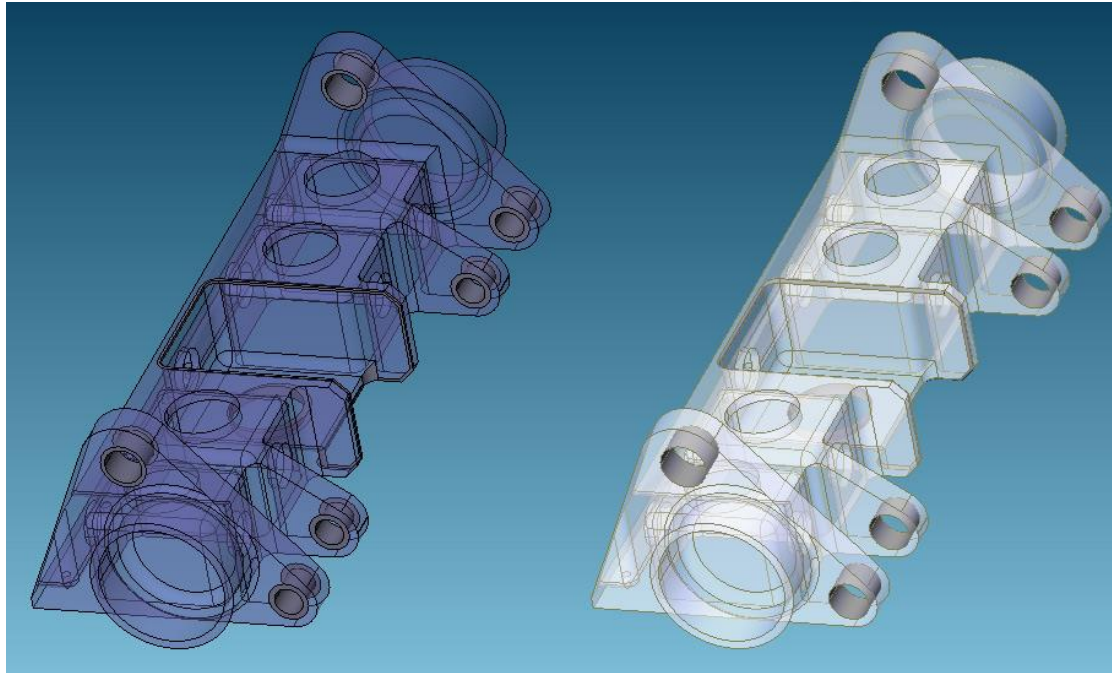
AI technologies:
- Machine learning
- construction of descriptors-histograms
- siamese networks

Generation of innovative engineering solutions based on comparison with proven 3D models

Development of technology for three-dimensional printing of objects

Improving the quality of protection of intellectual property rights - reducing litigation in terms of growing volumes of industrial designs

A **Business Intelligence** system ensuring all aspects of management based on statistical data

➢ identification of trends and anomalies, preparation of raw data for patent analytics

➢ formation of pre-configured panels that meet various users` demands

➢ conducting flexible exploratory analysis

➢ **Flexible on-line reports instead of a single annual report with a fixed structure**

✓ **Wide set of Real-time indicators reflecting the activity of Rospatent and IP ecosystem in the Russian Federation**

✓ **More information in contrast to the annual report**
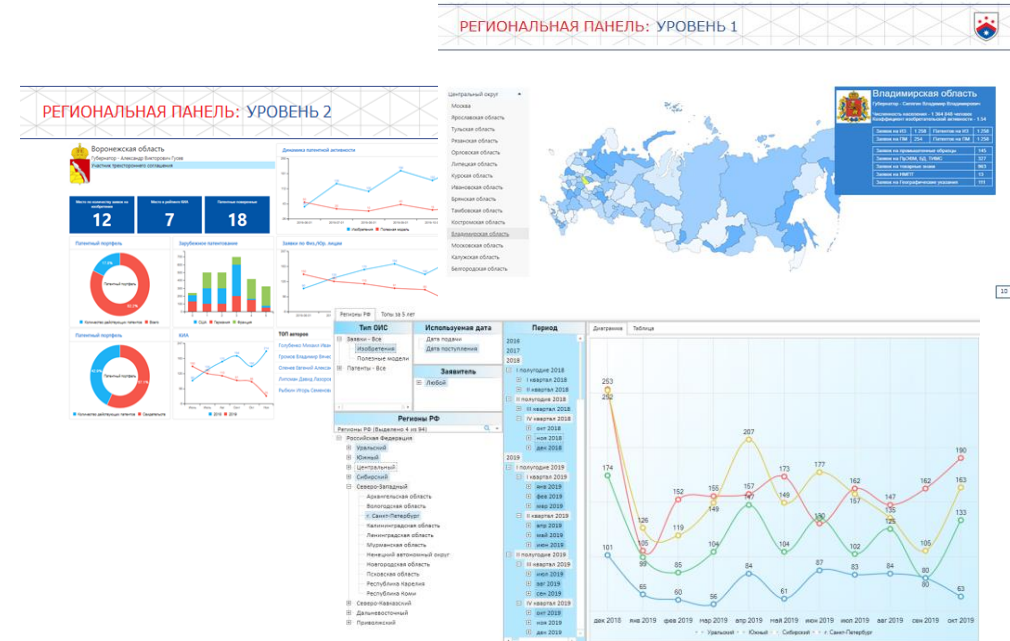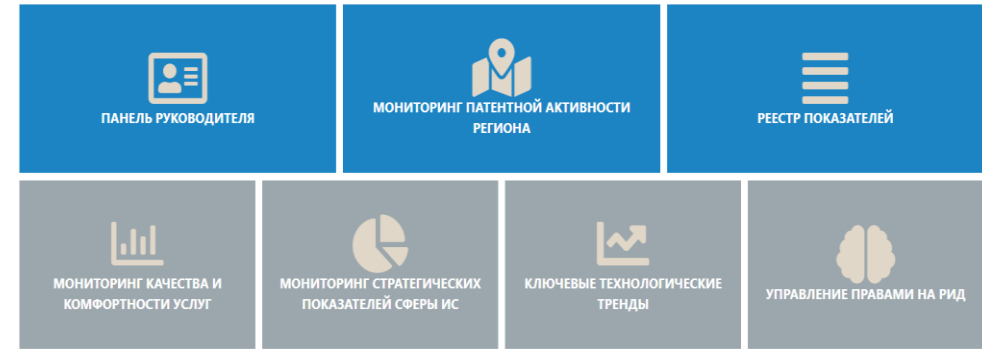
INTERNATIONAL GATEWAY SERVICES

→ Single point of Rospatent's interaction with international organizations and foreign IPOs

→ Secure gateway for interaction of Rospatent's internal information systems and databases with information systems of international organizations and foreign IPOs

→ Data conversion into ST.96 and other formats, used by different IPOs

CISPATENT Project

Data exchange with international organizations and more than 50 foreign IPOs

ONLINE ROSPATENT

User support throughout the entire service delivery cycle

30 services

via the **Government portal of Public Services**

via the **personal account in the "Online Rospatent"**

4 ways to file application

Via **Russian Post Office**

Personal paper filing **to Rospatent**

ONLINE ROSPATENT

- Online application filing and processing
- Tracking the status of all applications
- Providing online assistance with previously filed application
- Searching for information on all IPR objects
- Searching for patent attorneys
- Fee calculation

IMPLEMENTATION IMPACT

Reducing the time and improving the quality of the public services

The application program interface (API) will allow to **send requests** for the public services, as well as to check the status of previously sent requests and **receive information from external information systems** automatically

Core technologies: Django, Celery, PostgreSQL
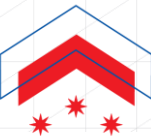
DISTRIBUTED LEDGER FOR INTELLECTUAL PROPERTY RIGHTS MANAGEMENT WITHIN THE STATE INFORMATION SYSTEM FOR THE IP MARKET

identification of counterparties and certification of their IPRs

access to database of IPR objects with full required information

convenient smart search for interested IP users

digital implementation of the IPRs management with contract conclusion and countersinging, as well as online registration of the transaction by Rospatent

IMPLEMENTATION IMPACT

- Increasing the transparency of transactions
- Facilitating the entry into the market of patent holders and owners of other IPRs
- Elimination of data distortion
- Further integration of various counterparties to the network

Core technologies: Block-P, Symfony, Node.Js, PostgreSql, Apache Kafka

ROSPATENT

Thank you for your attention!