EURASIAN PATENT ORGANIZATION EURASIAN PATENT OFFICE

Patent information search in EAPATIS

User's Manual

MOSCOW 2020

Table of contents

BEFORE YOU START	4
1. LOGIN, AUTHORIZATION	5
2. USER INTERFACE	7
3. CARRYING OUT PATENT INFORMATION SEARCH	8
3.1. Bibliographic data elements and search criteria	8
3.2. Patent Documentation Collections Selection	11
3.3. Use of the "Query Builder" to Generate a Query	12
3.3.1. Validate Query Function	13
3.4. Compiling a Search Query in the Search Tab	14
3.4.1. Phrase Search	15
3.4.2. Search in Ranges	15
3.4.3. Specification of search criteria	16
3.4.4. Stemming and Wildcard Searching	16
3.5. Search in the International Patent Classification	17
3.6. Quick Search "By Number"	19
3.7. Using the Built-in Dictionaries	21
3.7.1. Using the Dictionary of Synonyms	21
3.7.2. Translation of Query Terms into Other Languages	22
4. FUNCTIONS RELATED TO SEARCH RESULTS	23
4.1. Search History	23
4.1.1. Additional Search	24
4.1.2. Removing a Query from Search History	24
4.1.3. Clearing Search History	25
4.1.4. Viewing Statistics on Demand	25
4.2. Viewing Search Results	25
4.2.1. Grouping Documents Based on Sorting Mode	26
4.2.2. Hide/Show Document	28
4.2.3. Inclusion of Documents in the Selected Documents	29
4.3. Machine Translation of Abstract or Claims	31
5. FUNCTIONS RELATED TO DOCUMENTS VIEWING	32
5.1. Viewing Bibliographic Data of the Document	32
5.2. Display of Description in a New Window	34
5.3. Viewing Full Description	35
6. SELECTED DOCUMENTS SET	

EAPATIS user's manual

6.1. Operations with Selected Documents Set	37
6.2. Saving Selected Documents Set to a File on the User's Computer	39
6.3. Sharing Selected Documents Between Sessions and Users	39
6.4. Generating a Search Report According to Russian State Standard (GOST R15.011-96 (RUS))	40
6.5. Data Extraction for Patent Analysis	41
7. METASEARCH	43
7.1. Metasearch. General information	43
7.2. Carrying Out a Metasearch in ESPACENET system	44
7.3. Carrying Out a Metasearch in the USPTO system Database (patents)	45
7.4. Carrying Out a Metasearch in the USPTO system Database (applications)	46
7.5. Carrying Out a Metasearch in PATENTSCOPE system	47
8. RECOMMENDATIONS FOR CARRYING OUT PATENT SEARCH	49
8.1. General Recommendations for the Search. Choosing a Search Strategy	49
8.2. Stemming and Truncation	49
8.3. Proximity Search	50
8.4. An Example of Proximity Search in Collection, Containing Data in English	51
8.5. Examples of Search Using the Exact Term	52
8.6. Using Transliteration Table	52
8.7. Finding Patent Family Equivalents	53
9. REFERENCE MATERIALS	54

BEFORE YOU START

The Eurasian Patent Information System (EAPATIS) was developed by the Eurasian Patent Office and is an information retrieval system designed to conduct patent search, analysis and saving of research results.

EAPATIS provides access to global, regional and national patent documentation collections.

The English-language EAPATIS collections coverage patent documentation of the Eurasian Patent Office (EAPO), Russia (including patent documentation of the Soviet Union), national patent offices, and countries of the Eurasian region (including documentation of the Eurasian Patent Convention Contracting States).

The system provides for various types of patent searches.

Work with the system is carried out online, the following browsers are supported: Internet Explorer version 9 and higher, Google Chrome, Safari, Mozilla Firefox.

The system operates provided that the user allows pop-up windows for EAPATIS in browser. Popup settings are usually located in the security policy management section of a browser, similar restrictions may also be set and managed in additional service panels (such as Yandex-bar or Google Toolbar).

It is recommended to include the www.eapatis.com URL into the zone of trusted sites.

1. LOGIN, AUTHORIZATION

Условия доступа к системе

EAPATIS URL: -http://www.eapatis.com

To access EAPATIS from the EAPO web portal (www.eapo.org), you can use the EAPATIS banner on the main page or a menu link INFORMATION RESOURCES / EAPATIS.

The home page contains brief information about the system, access terms, switching between English and Russian versions, fields for entering user credentials (username and password), guest entry, links to EAPATIS information and reference materials (Fig. 1).

ЕВРАЗИЙСКАЯ ПАТЕНТНАЯ ОРГАНИЗАЦИЯ	1		ΠΑΤΙ	ЕВРАЗИЙСКАЯ НТНО-ИНФОРМАЦИОННАЯ СИСТЕМА '2020
Вход	Новости и	сообще	ия	
Введите имя пользователя: Пароль: Вход! Очистить Гостевой вход	Евразийская Евразийском системой, обо национальны представлен национальны документации Предусмотре	патентно патентно еспечива им фонда в ЕАПАТ их патент ю стран- ны разли	-информационная система (Е ом ведомстве и является инф ющей доступ к мировым, рег м патентной документации. Р ИС патентной документацией ных ведомств стран евразийс участниц Евразийской патент чные виды патентных поиско	АПАТИС) разработана в ормационно-поисковой иональным и усскоязычный фонд ЕАПВ, России, кого региона, включая ной конвенции. в.
English version	23 01 2020		о пользователей ЕАПАТИСІ	
Условия доступа к системе	23.01.2020 В И И	системе нформаци одсказки	СПАТИС появились новые функц и используйте ссылку "Новости по функциям системы 0	ии. Для получения подробной ЕАПАТИС" и контекстные
eapatis@eapo.org - Служба поддержки EAPATIS	24.01.2019 K E	оличесті АПАТИС,	ю документов, загруженных в превысило 80 миллионов!	поисковые массивы
телефон: +7(495)623-35-90	16.04.2018 B	ниманию сновные и встроенн английск улучшен просмотр улучшен вывод ос отображе многоцве сохранен	пользователей ЕАПАТИС! Вышла ізменения: ый словарь синонимов руского яз ий язык чый поиск по МПК и всплывающи е документов быстрый поиск документов по но новных чертежей в списке и упра ния списка тная подсветка терминов с вывод ие сессий пользователя	новая версия системы, ныка и перевод запроса на е описания рубрик МПК при меру ивление режимами цом статистики и навигацией
	C 	собновлён инструкц	юй документацией можно онаком ия пользователя"	иться по ссылке
	25.11.2016 У В н и	важаемые системе I айденных оследован	пользователи ЕАПАТИС! ЕАПАТИС появилась возможность документах для формирования о ииях. <u>Инструкция.</u>	выгрузки информации о тчётов о патентных
Работа с ЕАПАТИС при Заполнени проведении прое патентно-информационных Пример поисков	е поисковой фо зедение поиска ры по заполнен	ормы и ию	Рекомендации по проведении патентного поиска (Список стоп-слов)	о Справка о состоянии поисковых БД
		DLI		

Fig. 1

непатентной документации

Authorized users of the system use their own login and password to enter the system.

патентной документации

Unauthorized users of the system are provided with limited guest access to EAPATIS. For a guest login, enter "guest" as a username and "guest" as a password, or click the "Guest entrance" link.

After login the system, the tab "Query Builder" is displayed (Fig. 2, paragraph 3.3 "Use the "Query Builder" to Generate a Query", 3.5 "Search in the International Patent Classification").

организации

EAPATIS supports several operating modes; each corresponds to a tab in the user's interface:

- The query builder mode "Query Builder" tab,
- Patent Documentation Collections Selection and query editing mode "Search query" "Search" tab,
- Search mode "By Number" tab,
- The mode of viewing the results and search history "Search History" tab,
- The mode of viewing lists of found documents "Search Results" tab,
- Document viewing mode "Documents" tab,
- The mode of viewing and editing a selection of documents "Selected Documents" tab.

Note: To switch between the EAPATIS modes corresponding tabs should be selected. The "Back" button in the browser is locked.

		SIAN T ORGANIZATIO	N	all.	-	PATE	EURASIAN INFORMATION SYSTEM
User: engu Query	est , Session: Nev y Builder	v session at 2020.05.22 Search	2 16:47 By Number	Search History	Search Results	Documents	Selected Documents
				Search Criteria			
 () <	[DP] Publication	date number Patent Owners/Invento ation/Publication num		Use "AND" for terms	in each search field 40 years interval [1980*-20 7/28 Evans\\IN D28427 EP96/02419* + acetic" rrch Clear	200522]	
			Searc	h in Patent Classific	ation		
vi (1) q	ew Internationa Query	al Patent Classificati	on (IPC) scheme		View Cooperative Page 5	atent Classificatio	on (CPC) scheme nr
_	EAPATIS Use Search Ess	er Guide sentials	EAPATIS	Overview th Tips	EAPAT	TIS Access Terms	age
+7 (495)	411-61-61 © C	Copyright EAPO 199	8-2020.				

Fig. 2

2. USER INTERFACE

The EAPATIS screen has several functional sections (Fig. 3):

- User sessions management (available for registered users only);
- Search (tabs "Search", "Query Builder", "By number");
- Presentation and processing of search results (tabs "Search History", "Search Results", "Documents", "Selected Documents");
- Information and reference materials (available at the bottom of the window).

Tips on system functions are opened by the button ⁽¹⁾ and are located next to many elements of the EAPATIS interface.

User, session date	Se	arch	Presentatio	on and process	ing of search res	sults
	SIAN IT ORGANIZ	ATION	-			EURASIAN PATENT INFORMATION SYSTEM
User: enguest , Session: Ne	w session at 202	0.05.28 11:44				
Query Builder	Search	By Num	ber Search Histor	y Search	Results Doci	uments Selected Documents
Eurasian Region P Collect	atent Docum ions (rus)	ientation	Global Patent Docu	mentation Colle	ections	External IPDBs (Metasearch)
Armenia Azerbaijan	Russia full tex	USSR (with I t) a	EPO (patents & [applications) EAPO (patent abstracts	Japan (PAJ) Korea (KPA)	ions)	USPTO USPTO (applications)
Belarus Kyrgyzstan	Turkme Ukrain	enistan 🔤	eng) CIS documents (eng) GLOBALPAT	USA (CASSIS:E Australia , UK,	BIB) Canada ny Switzerland	Clear all
Moldova	Uzbeki	stan		(deu)	ny, Switzenand	
			Search Query			
(phenyl\KW ANI pyrazolyl\KW i isothiazolyl\	D pyrrolyl AND pyridyl KW AND iso	KW AND thien KW AND pyla: azolyl KW 7NI	/l/KW AND furyl/KW zinyl/KW AND pyrimi D and/KW AND oxazol	AND thiazoly dinyl\KW AND yl\KW)	l\KW AND imid pyridazinyl\	azolyl\KW AND KW AND
	Query exan Full text qu	ple: (laser\KW) ANI ery:"ГИДРОКСИ ++	D (c03b033/09\IC OR b23k*\ + ПИПЕРИДИН"	IC) AND (cutting\K	W OR processing\KW)
			() Search C	ear		
EAPATIS U	ser Guide	E	APATIS Overview		EAPATIS Acce	ess Terms
Search Es	sentials		Search Tips		EAPATIS collection	ons coverage
+7 (495) 411-61-61 ©	Copyright EAP) 1998-2020.				
Selection of documentation collection	Search qu string	iery A	vailable collections	Referen	nce materials	



3. CARRYING OUT PATENT INFORMATION SEARCH

Conducting patent information search consists of the following stages:

- 1. compiling a search query;
- 2. selection of patent documentation collections;
- 3. executing query, viewing and processing the found documents.

Queries are entered using EAPATIS query language in the "Search" tab.

To create complex multi-factorial nested queries, the Query Builder can be used.

To search by a known document number, the special document search mode "By Number" can be used.

3.1. Bibliographic data elements and search criteria

Bibliographic data elements in the patent document are indicated using special codes (INID codes). EAPATIS has its own simplified coding system for those data elements. Figure 4 shows an example of a bibliographic description of a patent document and the codes used to search in EAPATIS.



(57) Изобретение относится к микролуночному чипу для скрининга целевых клеток, содержащему множество лунок на одной из основных поверхностей опорного элемента, где лунки имеют размер, который позволяет помещать в каждую лунку только одну клетку, причем лунки расположены в равноудаленных друг от друга рядах и колонках, отличающееся тем, что на The set of EAPATIS search criteria and EAPATIS codes was developed taking into account the fact that some elements of bibliographic data of documents have similar purpose. For example, the same application numbers can act as registration numbers of applications, and as numbers of priority applications (similar to the dates of application filing and priority dates). The names/titles of patent holders, applicants and inventors also belong to the same category in accordance with WIPO Standard ST.9 (Identification of parties concerned with the patent or SPC).

To take into account such a relationship and to optimize the search, the concept of "search criteria" is introduced. This is a special method that allows to simultaneously searching in the group of elements of the bibliographic data (search criteria). It also retains the possibility to explicitly indicate a specific EAPATIS code when compiling a query.

The correspondence of INID codes, bibliography data elements of document descriptions and EAPATIS search criteria and codes is given in Table 1.

Table 1

INID Code	EAPATIS code / search criteria	Bibliographic data elements			
(11)/(21)	PN	Publication number of the patent document (application/patent)			
(43) / (45) / (46) /(48)	DP	Publication date of the patent document (application / priority application / patent)			
(21) / (22) (31) / (33)	NU	Application/priority application number or filing date (AN/PR)			
(19) (21) (22)	AN	Application registration number Application filing date			
(31) (32) (33)	PR	Priority application number Priority application filing date Country code			
(51)	IC	IPC Symbols			
(71) / (72) / (73)	NM	Applicant/inventor/patent owner (AP/IN/PA)			
(71)	AP	Applicant			
(72)	IN	Inventor			
(73)	PA	Patent owner			
(86) / (87)	WO	International PCT application filing number or publication number			
(86)	E86	International application registration number (under the PCT procedure)			
(87)	E87	International application publication number (under the PCT procedure)			

EAPATIS user's manual

(54) / (57) / full text of description	KW	Keywords in titles, abstracts, claims, full texts of descriptions (TI/AB/TX)
(54)	TI	Title of the invention
(57)	AB	Abstract/claims (depends on documentation collection)
Full description	ТХ	Patent full description
(19) (11) (13) (19) (21) (13)	ID	The unique document ID number in EAPATIS. The format is SSnnnnnnnTT, where SS is the two-letter country / office code (according to WIPO ST.3), nnnnnnnn is the document number, TT is the document kind code Example: Number WO2012000665A2*
	SS	Data source code: gazette/publication/optical disc or another device. May be used for the publication information analysis

Using a single search criterion, you can simultaneously search for several elements of a bibliographic data description that have a close meaning. For example, when choosing the NU criterion, the search is performed by the registration number of the application AN or the priority application number PR.

If necessary, you can specify to which exact element of the bibliographic data the provided search values refer. For example, BOSCH\NM[AP] means searching for the name BOSCH only among the names of applicants.

The document elements codes and their relation to the search criteria are also given in the table 1. The full syntax of queries using codes of description elements and search criteria is given in paragraphs 3.4. Generate a Search Query in the "Search" Tab and 3.3. Use of the Query Builder to Generate a Query.

Examples of queries can be found in the "Search Essentials" of section of reference materials (Fig. 5).



3.2. Patent Documentation Collections Selection

Patent Documentation collections are to be selected in "Search" tab. Documentation collections are divided into two types: internal and external and into three groups: "Eurasian Region Patent Documentation Collections (rus)", "Global Patent Documentation Collections" and "External IPDBs (Metasearch)".

In English version of EAPATIS system collections of patent documents coverage patent documentation of the Eurasian Patent Office (EAPO), including patent documentation of the national patent offices and countries of the Eurasian region.

The group "Eurasian Region Patent Documentation Collections" includes Russian-language documentation collections, including abstract-bibliographic descriptions and full texts of patents and applications of the EAPO, bibliographic data and descriptions of patent documents from the regional disk CISPATENT, as well as bibliographic data and descriptions of patent documents of national patent offices of the Eurasian region in Russian, National or English languages. This feature is available in the Russian version of the program.

The "Global Patent Documentation Collections" group includes documentation collections of patent offices in English (mainly), German and French.

The "External IPDBs (Metasearch)" group includes open information systems on the Internet, which can be searched from the EAPATIS interface.

In this case, EAPATIS search queries are automatically **transmitted** into selected external systems for execution. Search results are shown in the EAPATIS interface.

Information on the EAPATIS documentation collections coverage is available in the tooltip of a specific documentation collection or in the Information and reference materials at the bottom of the page (Fig. 6).

Query Builder	Search	By Number	Search History	Search Results	Documents	Selected Documents	
Eurasian Region Colle	sian Region Patent Documentation Global Patent Documentation Collections (rus)				Ext (M	ternal IPDBs 1etasearch)	
EAPO (with fulltext Armenia Azerbaijan) CISPATENT (1 Russia,USSR full text) Tajikistan	rus) WIPO (P (with EPO (pa applicati	CT applications) Chi tents & Jap ons) Ko atent abstracts	ina (applications) pan (PAJ) rea (KPA)	USPTO (patent	net PATENTSCOPE USPTO (applications)	
Kyrgyzstan	Content: Eurasian pater	its (1997 - up to pres	ent) in English.	5IS:BIB)		Clear all	
Kazakhstan Moldova	Language: English Search in EAPATIS: by Note: access to:	bibliography and abs	tract/claims.	ermany, Switzerla	and		Description of certain collection
0 (полипептид)	 full texts of specification front pages main drawings access to full texts of PC for documents which ha Access to Internet DB: 	is to Eurasian patents IT specifications (pdf ve number of PCT put	format) from 2000 – up to Dication	present		Ĵ	
	 Espacenet: front page, EAPO Patent Register (R about fee payments Eurasian Publication Ser specification 	'ull specification .US): bibliography, da ver (RUS): bibliograp	ta on examination procedu hy, abstract/claims and ful	ing\KW OR process	sing\KW)		
EAPATIS	Search peculiarities: It is possible to carry out	all kinds of searches	in EAPATIS in English. It is	EAPAT	IS Access Terms		Databasas
Search	possible to link and recei Use of DB may be useful	ve specification of the in the following case:	necessary patent in Russi ::	an. EAPATIS d	ollections cover	age 🗲	Coverage
+7 (495) 411-61-61	 While searching Euras patent owner's name ent <u>transliteration</u> into Russi 	ian patents by applica ered in English it is n an.	ints name, author's name, ot necessary <u>to know their</u>	and			
	2. While searching Euras transliteration into Russi	ian patents by key wo an.	ords in English without thei	r			

Fig. 6

To select a documentation collection to search in, tick the checkbox to the left of its title. A simultaneous search in several collections is possible. Viewing the search results for a particular collection is possible during searches in other collections. To deselect collections, use button "Clear all".

3.3. Use of the "Query Builder" to Generate a Query

The "Query Builder" mode is used to generate a complex search query (Fig. 7).

	EURASIAN PATENT ORGANIZA	ATION		-	PATE	EURASIAN NT INFORMATION SYSTEM
User: eng	guest , Session: New session at 2020	0.05.27 09:47	1			I
Que	ery Builder Search	By Number	Search History	Search Results	Documents	Selected Documents
			Search Criteria			
		0 [Use "AND" for terms in	each search field		
0	[DP] Publication date	20	100312 [1989*-2018*] 40	years interval [1980*-202	200527]	
0	[PN] Publication number	~				
0	IIC1 IBC Symbols	20	28896 8901			
	[ic] in c symbols	A6	1K* G11C017* E21B007/2	28		
	[NM] Applicants/Patent Owners/Ir	nventors V	iversity SIEMENS\\PA Eva	ns\\IN		
0	[WO] PCT Application/Publication	n number 🗸				
0	IKM Kenwords		2010/000720 W01998/028	427 EP96/02419*		
		aci	id "cyano pyridylmethoxy + a	cetic"		
		Validate C	Query Proceed to Search	h Clear		
		Search	in Patent Classificati	on		
	View International Patent Classi	fication (IPC) scheme		View Cooperative Pa	tent Classificatio	n (CPC) scheme
0	Ouerv			Sear	ch in IPC Clea	r
	/			▲		
	EAPATIS User Guide	EAPATIS	Overview	EAPAT	IS Access Terms	
	Search Essentials	Searc	h Tips	EAPATIS	collections cover	age
+7 (495	411-61-61 © Copyright EAPC) 1998-2020.				
Searc a sear	h criteria to generate ch query	Search cont	rol buttons	Search in Pate (Schedu	ent Classificat ile) and Defir	tion Scheme hitions

Fig. 7

To compile a search query using the "Query Builder", you need to fill in the fields of the search form by criteria. Select the required search criterion for the selected search field from the drop-down list and add term (or several terms) to the search field. Correspondence of data elements of document description and search criteria is provided in paragraph 3.1 "Bibliographic data elements and search criteria".

To indicate the search terms correctly use the popup tips located below each search field or click the button 0 to the left of the search criterion selection field.

Entering search terms consider the following rules:

- each field is intended for terms and search conditions only for one selected search criterion;
- all search fields are not case-sensitive;
- compound words in the query (for example, optically-pumped) must be specified as two separate words, omitting the hyphen "-";
- several terms entered in the field, separated by a space, will be interpreted as variants of the value of the desired criterion (i.e., the logical operator "OR" will be used);
- search terms specified in different fields will be interpreted using the logical operator "AND";
- search by terms will be carried out using stemming if the asterisk '*' truncation operator or the exact term "equal" '=' operator is not used (for search criteria KW and NM);
- to search by phrases, you need to enclose the phrase in quotation marks "";
- Use the square brackets [StartDate-EndDate] to search for date ranges.

Additional information is in paragraph 3.4 "Compiling a search query in the "Search" tab."

Example:

It is required to find documents on the subject "treatment of influenza" of the inventor "Hagner Patrick." To do this, in the "Query Builder" in the first field, select the EAPATIS code "NM" (name), enter **Hagner**\IN, in the second fieldselect EAPATIS code "KW" (keywords), enter the term "**treatment**", in the third fieldselect EAPATIS code "KW", enter the term - **flu**. If you click button "Validate Query", the system will display the generated request - (**Hagner**\NM) AND (**treatment**\KW) AND (**flu**\KW).

After clicking the "Proceed to Search" button, the system will go to the "Search" tab, where the query will also be displayed in the "Search Query" window. At this stage, the query can be edited.

Next, select the documentation collection to search in, for example, "CIS EN", and click button "Search". The system will automatically switch to the "Search History" tab and show the search results.

Examples of queries compilation are given in the reference materials section "Search Essentials" at the bottom of the page.

3.3.1. Validate Query Function

The button "Validate Query" in the tab "Query Builder" serves to verify the values of the search criteria and view the structure of the query before search. When you click this button, a window opens that displays the logical structure of the query, which indicates: the search criteria selected for the search (in separate fields of the Builder), their values and the logical operators AND and/or OR applied to the search criteria. In this case, the entered values of the search criteria are checked against query language rules and, if an error is detected, a message indicates the wrong value and recommendations for correction the syntax error. If there are no errors, the message "Query is valid" appears.

To execute a request compiled in the Query Builder tab, it is recommended to click button "Validate Query" and, if the query is valid, then click button "Proceed to Search". The system will switch to the Search tab, and the generated query will be displayed in the field "Search Query". Select the documentation collections to conduct search in, and click button "Search". Search results will be displayed in the "Search History" tab.

Note: If errors are detected in the search query in the Query Builder tab, the system will not switch to the Search tab until the detected errors are corrected. Error messages will be displayed in red below the corresponding fields of the Query Builder.

EAPATIS contains the scheme of the International Patent Classification (IPC) allowing search. To search in the IPC, you can use the "Search in Patent Classification", available in the "Query Builder" tab. Recommendations for using the search in the IPC are given in paragraph 3.5 "Search in the International Patent Classification". Found IPC symbols can be automatically added to the search field IC: IPC Symbols in the Query Builder (Fig. 9).

3.4. Compiling a Search Query in the Search Tab

To perform search in the selected collections, you can enter the search query using various combinations of search terms.

For example: laser (cutting **OR** processing) (c03b*\IC **OR** b23k*\IC).

For example: $(c12q^{i})$ (differential\kw and diagnostics\kw and disturbances\kw and balance\kw and microflora\kw).

The search query is entered in the search query field of the "Search" tab (Fig. 3) in accordance with the following rules:

search terms are specified in the format value\criterion code. Correspondence of details of document descriptions and search criteria is presented in paragraph 3.1 "Bibliographic data fields and search criteria";

search terms can be combined into logical queries using the logical operators **AND**, **OR**, **NOT**. If no operator is specified, the logical condition AND is applied by default;

the **operator equal** to '=' provides instruction to search by the exact term/word;

the **asterisk** '*' is used for truncated searches. For example, performing a search for a chemical gross claim. Asterisk is used for fields AN, PN, IC, WO, SS, DP, ID;

the space character. Individual search terms and logical operators must be separated by space;

parenthesis (). Terms in a query can be grouped using parentheses (). For example, (c03b*\IC) AND (institution\NM) AND (cutting OR processing)\KW AND (laser\KW);

The results of a previous search **can be used** as a search term. In this case, indicate the request number with the prefix 'Q'. For example, for query # 3 it will be: Q3 or q3. For example, (biomass\kw) AND (furfurol\kw) AND q3.

Compound words in the query (for example, a sofa-bed) must be specified as two separate words, omitting the **hyphen** "-".

For some criteria (namely, fields ID and IC), the spaces should be replaced with **zeros** when entering the search values.

3.4.1. Phrase Search

Quotation mark "" used if several terms are enclosed in quotation marks, a search by phrase will be performed (contextual search). Such a search can be used to search in bibliographic data fields - title (TI), abstract (AB), description (TX) or in the grouping criterion KW. In this case, the search result will contain documents where the specified search terms are close to each other, in one context block of text, in one sentence or a phrase. Moreover, special characters '+' may be used to specify the processing order of the phrase.

Note: When using full text queries, quotation marks "" must be specified.

The **plus character** '+' is a substitute for a single term. It is used to set the context distance. When searching for a phrase, you can specify the desired contextual distance between the terms inside the phrase. For example, specify three characters plus '+' as the number of words can be skipped. The presence of the substitute character '+' indicates that a certain word may, but not necessarily, be in a given place of the phrase. The number of such optional words corresponds to the number of '+' characters. Thus, the maximum distance in the text of one term from another can be set.

For example, the query "LASER +++ MATERIALS" will reveal documents containing phrases:

"laser cutting of brittle transparent materials",

"laser marking of sealing materials",

"laser marking of thickening materials",

"laser marking of materials",

"laser is directed to the layered material", etc.

3.4.2. Search in Ranges

Square brackets [] operator is used to set the date ranges to search in, syntax: [StartDate-EndDate].

The date format is YYYYMMDD (year, month and day). E.g. [20120301-20120430]. For example: [2012* -2016*].

It is possible to search in open end date range, open either from the beginning or from the end. E.g. [-20120320] (any dates until March 20, 2010). E.g. [2012*-] (from the beginning of 2012 to the present). E.g. [-2018*] (for the year 2018).

Date can be truncated to year/month. For example, 2018* or 201801*.

You can also search by ranges of document numbers.

3.4.3. Specification of search criteria

When using search criteria that combine values from various bibliographic data fields, you can narrow the search area by specifying the field code in which the given value should be found. For this, the bibliographic data field code is indicated in square brackets [] after the search criterion code.

For example, BOSCH\NM[AP] means searching for the term BOSCH precisely among the names of applicants.

3.4.4. Stemming and Wildcard Searching

Stemming is supported for Russian and English languages, thus, an information retrieval system responds equally to a query using the terms "machine" and "machines" or "machinery", etc.

However, if you need to disable the stemming function, you can use special commands. bibliographic data:

The asterisk '*' at the end of the word allows you to search for a term using truncation.

This method is used when searching for special terms to which the stemming of the Russian language should not be applied, for example, such as "dimethylbutane*", "benzodioxol*", etc., or when truncating long complex terms with the '*'.

The symbol **equal** to '=' at the end of the term indicates that this particular spelling will be found for the given term. For example, specifying the full-text phrase "crystals=" in the search terms will exclude documents containing the terms "Crystal", "crystalline", and so on from the search results. This type of query modification is called an Exact Term. If the symbol '=' equal is not indicated at the end of the word, the terms will be found based on stemming.

For example: for a query containing the phrase "Pyrrolidinone crystals", documents containing phrases: "crystals of Pyrrolidinone", "of Pyrrolidinone crystals", etc. will also be found.

Examples of queries compilation are given in the "Search Essentials" of reference materials at the bottom of the page.

After entering the query in the "Search Query" field click button "Search" located below to perform a search. The search will be performed in those documentation collections that were selected by the user in the documentation collections selection section. The system will switch to the Search History tab, which will display the results of conducted searches in different documentation collections.

3.5. Search in the International Patent Classification

Search in the IPC scheme and definitions are available in the "Search in the International Patent Classification" section in the "Query Builder" tab (Fig. 7, 8). This type of search can be used in the following cases:

- to limit the search area by specifying IPC codes in addition to searching for other details (keywords, names of authors, etc.),
- to improve the quality and ensure the completeness of patent search in individual EAPATIS collections, which contain only bibliographic descriptions and do not contain abstracts.
- when searching documents available in EAPATIS in other languages, classified in the IPC,

Search in Patent Classification					
View International Patent	Classification (IPC) scheme	View Cooperative Patent Cla	ssification (CPC) scheme		
0 Query Search in IPC Clear					
Tip for searching in the IPC	Search string	Search	Go to the classifier		

• to classify a new invention.



Search in the IPC is carried out applying the stemming of the Russian language, in natural language, according to the same rules that are used when conducting searches in EAPATIS. By default, the logical operator AND is used to combine keywords in the same field.

The search query is compiled in the search bar similar to queries in the EAPATIS collections using the EAPATIS operators: OR, AND, NOT, the brackets "()", the asterisk "*" and the full-text search operators — quotation marks and the '+' character.

To search by IPC symbols, the code is entered in whole or in part; the format is KKKKGGG/PPPP, where the first KK is the class and the second KK is the subclass, GGG is the main group, PPPP is the subgroup. For example: A01b001/12, F02M005*, E21B007/28, F02M001/1*.

When preparing a search query, it should be taken into account that the terminology of the IPC may differ from the terminology used in patent documents.

The search results display the summary headings of the classification codes of subgroups, each of which is a combination of the headings of the main group and subgroups. Each title in the list is displayed on a separate line for convenient visual perception.

The searched terms or classes will be highlighted (Fig. 9).



The found IPC classes can be added to the search query field by "Up arrow" button. Also, the found classes can be excluded from the results list by "Hide" button.

Also the system contains a link to the Cooperative Patent Classification on the EPO website. To browse the CPC, use the link: "Cooperative Patent Classification (CPC)".

3.6. Quick Search "By Number"

To search for patent documents by known publication numbers, use the "By Number" tab.

To perform a search, s elect the tab "By Number", enter the document number in the search field in conformity with the specified format for numbers, and click button "Search". The results will be displayed in the same window (Fig. 10).

Completed searches by number are not displayed in the search history.

The found document can be included to Selected Documents list using the Add to Selected Documents button (paragraph 6 "Selected Documents").

EURAS PATEN	SIAN IT ORGAN	IZATION	-	427		254	PA	EUF TENT INFORM S	RASIAN IATION YSTEM
User: enguest , Session: New	w session at	2020.07.09 13:32							
Query Builder	Sear	ch By	Number	Search Hi	story Sea	irch Results	Documents	Selected Do	ocuments
			Searc	ו by Docum	ent Number				
EA032978									
		Number Forma	t : <u>country c</u>	ODE NUMBER K	(IND, no spaces, E.	g.:RU2517184C2			
			Multiple num	bers should be	separated by space	•			
				Search	Clear				
Examples of Do	cument Nur	nber Formats :							
	N	lumber A 010649 B1	Input Examp EA010649	ole	Number EA 200100123 A1	Input Example EA200100123	2	D	
	V	VO 99/03196 A1 DE 195 06 669	WO1999003 DE19506669	196 9	WO 95 11674 A1 EP 071792	WO19950116 EP071792	74	Remove fro	om
								the list	
								[0)чистить]
		Dublice	tions I 🗖	Dogistry I	A Econocopot				⊠ √ ^
		Publica [**] SAME	NE PREPAR	ATION APPA	ARATUS FOR D	IRECT NUME	RICAL SIMU	ATION OF	- ^
EA 032978B	1 201908	³⁰ ROCK PRC	PERTIES						
- <u>-</u>	†	[**] A sar	nple prepar paratus as	ation appara	atus and metho	od of preparii the digital p	ng a rock sa Imerical sin	mple using	
		properties	of the rock	. The disclo	sed apparatus	includes a fix	ably mount	ed diamond	
$\frac{1}{\sqrt{1-1}} = \frac{1}{\sqrt{1-1}} = \frac{1}$		the transla	r. Three line ation stages	ar translati moves the	on stages are of specimen in a	coupled to a s direction par	specimen ho allel t	older. One of	
		Publica	tions 🞑	Registry	🌛 Espacenet				¥ x
	+ 100200	EN] METH	IOD AND A	PPARATUS F	OR ELECTROC	HEMICALLY N	ACHINING	OF FLUTED	1
Results of searc	h hy						Γ	Add to Selec	rted
number	лоу							Documents	

Fig. 10

To perform search by number, enter the number of documents in the format XX99 ... 9TT in the search field, where

XX is the country code according to WIPO Standard ST.3;

99 ... 9 is the number of the application or patent (with or without publication kind code),

TT is the published document kind code (optional).

If the document kind code is specified, then the search will be conducted for a document with that kind code only. If the kind code is not specified, then all documents with this number will be found, for example, with the code A1 and A3. It is recommended to conduct search without specifying the publication kind code, however, for some countries documents that are essentially different can have the same numbers and differ only in the publication type code. For example, documents of German or US may have same numbers for different types of documents, in these cases it is desirable to indicate the type of document, for example C (patents) and U (utility models).

Quick search by number:

- to search for multiple documents, their numbers are entered with a space;
- the truncation, using asterisk character "*" at the end of a number is not supported;
- the country is determined automatically by the country/office code, so selection of documentation collections is not required;
- validity check for the two-letter country code and the number of digits in the document number is provided;
- some errors in submitted numbers are corrected automatically; in other cases error messages containing the type of error and recommendations for its correction appear;
- for the documents found, the document number, title, abstract, links to the database on the Internet, the main drawing (if any), a link to the full description in PDF format in EAPATIS (if any) are displayed;
- for easy viewing, the main drawing automatically zoomed in when pointed over;
- the document number is a hyperlink to open the document in a new window;
- information is displayed in a new window when switching to a database on the Internet;
- full description PDF file is displayed in a new window;
- to clear the list of documents found by numbers, click button "Clear all";
- for documents of the collection "Russia (with full texts)", the system automatically searches by number for documents with a code of both "SU" and "RU".

To search for US documents, the type should be indicated (paragraph 8.4 "Conducting a Metasearch in the USPTO database / collections (patents))".

Note: Information on the numbering formats of documents contained in EAPATIS is available in the description of documentation collections (paragraph 3.2 "Document Collections Selection").

3.7. Using the Built-in Dictionaries

EAPATIS implements two independent dictionaries: a dictionary of synonyms of the Russian language and a dictionary of machine translation of individual terms.

The dictionary panel is a separate pop-up window containing 2 tabs - "Dictionary of synonyms" and "Dictionary of machine translation". The panel is opened by double-clicking on the selected term in any search string of EAPATIS (Fig. 11). You can select synonyms or translated terms in the panel, to expand the search query.

You can close the pop-up window by clicking on the close button located in the upper right corner.

3.7.1. Using the Dictionary of Synonyms

The dictionary of synonyms is opened by double-clicking on the selected term in the search string of EAPATIS:

- In the Query Builder tab,
- in the Search tab,
- in the Query History tab,
- in the Search Results tab.

Using the dictionary of synonyms of the Russian language, the user can expand the search query by adding keywords. To select the required synonyms, use the checkboxes located on the left and press the Select button. The selected synonyms will automatically be added to the field of the search query in which the user works (Fig. 11), the OR logical operator will be used.

[KW] Ключевые слова	🗸 целлюлоза поли	чер полисахарид	
	Синонимы	перевод Х	усная" 1СТИТЬ
Selecting gynonyms from	Мой выбор целлюлоза		Закрыт
the list suggested by	г запроса :		исахарид\КW)
Machine Translation	полимер полисахари	4	
	холоцеллюл	03a	
0 3anpoc:	все: отметить / Выбрать	снять	Совместная патентная классификация (СПК) Искать в тексте МПК Очистить
			[Очистить] [Скрыть]
	Transfe search s	r synonyms to string	

Fig. 11

3.7.2. Translation of Query Terms into Other Languages

EAPATIS has a term translation system that supports translation:

- from Russian into English,
- from English into Russian.

The translation system is configured exclusively for patent terms translation.

To open the translation dictionary of query terms, double-click on the selected word in the EAPATIS search fields:

- in the "Query Builder" tab,
- in the "Search" tab,
- in the "Search History" tab,
- in the "Search Results" tab.



To select from the proposed translation of terms, use the checkboxes located to the left of the words. When you click button "Select", the selected term translation options will automatically be added to the search query field (Fig. 12, 13).

The system inserts translated terms into the query using the OR operator.

4. FUNCTIONS RELATED TO SEARCH RESULTS

4.1. Search History

After a search query is sent for processing by the "Search" button (Fig. 3, 10), the system automatically switches to the "Query History" tab. The results of the search are displayed under this tab for each collection marked for search (paragraph 3.2 "Document Collections Selection"). The general view of the screen is shown in Fig. 14.

Query Bu	ilder		Searc	h	Ву	Number	Search Histor	Y	Search Results	Do	cuments	Select	ed Documents
							EAPO (patents)	1				[Clear]	[Hide]
Query text :											Search	0	
	Q17	x	List	2	1	(f42b003*\i combustion	ic) and (hazardous\ \kw or pyrolysis\kw	kw or m /)	naterial\kw) and (expl	losion\	kw or		
	Q16	x	List	4	1	(f42b003*\i	ic) and (explosion\l	w or co	mbustion\kw or pyrol	lysis\kı	w)		
	Q15	x	List	1	1	(f42b003*\i	ic) and (electronic)	kw and	capsule\kw)				
	Q14	x	List	1	1	(f42b003*\i	ic) and (electronic)	kw and	blasting\kw and caps	ule\kw	ı)		
	Q11	x	List	1	1	(f42b003*\i system\kw	ic) and (detonator\)	kw and	free\kw and blasting	\ <mark>kw</mark> an	d		
	Q10	x	List	1	1	(f42b003*\i	ic) and (fiber\kw a	nd optic	\kw)				
	Q8	x	List	1	1	(fiber\kw ar	nd optic\kw and ada	apted\k	w and laser\kw and li	ght\kw	ı)		
	Q6	x	List	37	1	(f42b*\ic)							
	Q1	x	List	5	1	(circular\kw	v and roller\kw and	consists	s\kw)				
												[Clear]	[Hide]
							CISPATENT (eng)				[cicui]	[mac]
Query text :											Search	0	
	Q16	x	List	60	1	(f42b003*\i combustion	ic) and (hazardous\ \kw or pyrolysis\kw	kw or m /)	naterial\kw) and (expl	losion\	kw or		
	Q15	x	List	232	1	(f42b003* \i	ic) and (explosion\k	w or co	mbustion\kw or pyrol	lysis\kı	w)		

Fig. 14

The search query is executed in all selected documentation collections sequentially. During the execution of search queries in various documentation collections, it is possible to switch to viewing the results of completed searches, while the search will continue in other arrays.

Each search query is assigned its identifier, consisting of the letter 'Q' and the sequence number of the query for this documentation collection. The request identifier can be used in the preparation of subsequent search queries. In this case, the system will use the results of previous searches, which will reduce the overall response time.

Each documentation collection has its own numbering of queries. The numbering is maintained during the user session. When a user logs in again, the numbering starts anew from number '1'.

After the search is completed, information on the search results is displayed for each of the selected collections (Fig. 14). This information contains the following elements:

• title of the collection;

- field for entering an additional search query for a specific database (search string);
- the "Clear" button is used to clear the history of search queries;
- the "**Hide**" button is used to hide the history of search queries for a given documentation collection (you can re-open it when you select this array on the Search tab);
- The ⁽¹⁾ button is to get help on the query compilation rules;
- list of completed queries (queries are sorted in reverse order).

For each completed query, it displays:

- the query number Qn;
- total number of documents found;
- the "List" button is to go to the list of found documents;
- the "X" button is for deleting (hiding) the Qn request while working in the current session;
- the checkbox \Box to include the results of this query in a new search;
- button "arrow up" **†** for transferring the query text to the query field for editing;
- the query text; when clicked, a statistics summary is opened for the query terms.

4.1.1. Additional Search

In the mode of viewing the history of queries for a specific collection, you can execute a refined or corrected query without moving back to the "Search" or "Query Builder" tab. The query is entered into the search string "Query text" in accordance with the rules of the search (paragraph 3.4 "Generate a Search Query in the "Search" Tab"). To execute the query, click button "Search". When forming a search query, you can use the results of already completed queries, indicating the query identifier (Fig. 15).

To quickly enter the identifier / text of the query in the search field, you can use the checkbox in the search field.

Using *t* button "arrow up" you can copy the query text to the search field.

Note: If the logical operator is not explicitly specified in the query text, then the space between the terms is interpreted as the logical function AND.

4.1.2. Removing a Query from Search History

If the query is not needed in the search history (for example, it was not compiled correctly), then the query can be deleted by clicking on the button "X" next to its identifier (Fig. 15).





4.1.3. Clearing Search History

Additionally, for each documentation collection, it is possible to clear the query history (the "Clear" button in the upper right corner) (Fig. 14, Paragraph 4.1.).

Clearing the query history resets the query counter for a particular documentation collection and deletes the results of the queries performed.

4.1.4. Viewing Statistics on Demand

To view detailed statistics for a query, click on the text of the query. In this case, all query terms will be shown with the field codes, as well as the number of documents found for each of the terms (Fig. 16). It is recommended to look at these statistics before conducting an additional search, especially paying attention to the terms by which the largest number of documents was found or by which no documents were found (Fig. 16).





4.2. Viewing Search Results

The "Search Results" mode is designed to view a list of documents found. The system enters this mode after clicking on the "List" button for a completed Qn query in the "Query History" tab.

You can also access this mode at any time by going to the "Search Results" tab, and the last viewed list of documents (Fig. 17) will be displayed in the view mode selected by the user.

A page with a list of documents found will contain the name of the documentation collection, information about the number of documents found, page navigation buttons, a menu for sorting the list, and the list of documents for the current page (20 documents per page). Also there is an field to a new

or additional query on the page. It is designed to refine the executed query without returning to the tabs "Search" / "Query Builder".

For each document in the list displayed its number, title (TI) and other bibliographic data. Additionally, the user is able to view the abstract/claim of the document and the main drawing (if available) (Fig. 17, 18, 19).

Note: When the mouse pointer is placed over the main drawing, the drawing is shown enlarged in a pop-up window. And when you click on the drawing, it opens in a separate window.

The user is able to control the content of information displayed in the list using the checkboxes in section "Show":

- the Info checkbox controls the amount of displayed bibliographic data,
- the Abstract checkbox controls the display of the abstract and the main drawing,
- the Main Drawing Only checkbox controls the display of the main drawings of documents.



Fig. 17

4.2.1. Grouping Documents Based on Sorting Mode

You can view the list of documents page by page, select the desired page from the list, sort the list by various fields (Fig. 17, 18).

To sort documents in the list by one of the fields, you need to select the field in the "Sort by" dropdown menu. By default, the list is sorted by the document publication numbers. When changing the sort order, the display starts from the first page of the list in ascending order of the specified field values. The list of documents can be sorted by the following criteria:

- application/patent number,
- symbol IPC,
- application registration number,
- application date,
- priority application registration number,
- data source code,
- document publication type code.

$\langle \langle \langle \rangle$	Page: 2 🗸 😒 😒	Select all	Add to Selected	Deselect all	Sort by: IPC	~	
	F42B 12/04						
	EA 026966B1 20170630	[**] ARMOUR-PIER	CING BULLET				[Hide]
		(21) [**] EA201400296 20140402	IPC: [8] F42B 12/04	Source: [pd	lf] eab21706		
Abstra	act -						
	F42B 12/06 🦷						
	EA 001318B1 20010226	(EN) PROJECTILE	OR WARHEAD				[Hide]
		(21) EA199900625 19971222	IPC: [7] F42B 12/06	Source: [pd	if] EAB20101		
bstra	act -						
	EA 009142B1 20071026	[EN] LEAD-FREE P	ROJECTILE				[Hide]
		(21) EA200601893 20050509	IPC: F42B 12/06	Source: (pd	lf] EAB20705		
stra	act -						
] (EA 005726B1 20050630	[EN] PIERCING BU	LLET AND METHOD I	FOR MANUFAC	TURING THEREOF		[Hide]
		(21) EA200400233 20030305	IPC: [7] F42B 12/06	Source: [pd	If] EAB20503		_
bstra	act -						Docur
	F42B 12/20 🔶						group
1	EA 006030B1 20050825	[EN] PROJECTILE	HAVING A HIGH PEN TED FRACTURING D	ETRATING ACT	ION AND LATERAL ACTION	ON EQUIPPED	symbo IPC sy
		(21) EA200400732 20021121	IPC: [7] F42B 12/20	Source: [pd	If] EAB20504		
Abstra	act -						
	F42B 12/32						

Fig. 18

4.2.2. Hide/Show Document

You can manage the list of viewed documents using the Hide/Show buttons. For example, you can hide already viewed documents so that they do not interfere with viewing.

The list of hidden documents is kept till the end of current session.

Note: When changing the sort mode of the list of documents, hidden documents will remain hidden (Fig. 17, 19, 20, 21).

To show a hidden document, click on button "Show" on the right side of the list. To show all hidden documents, check the Show Hidden checkbox in the selection panel of the list display modes.

		Show	all hidden documen	ts		Show document in I	ist
Show: 🗸	Info Abstra	ct Main Drav	ving Only Show Hid	lden			
K K Pag	je: 20 🗸 🔊 🔊	Select a	II Add to Selected	Deselect all	Sort by: Public	ation date	•
381 🗌 💕	EA 003971B1 20031225						[Show]
382 🗌 💕	EA 003987B1 20031225	[EN] FORMING	MACHINE WITH A RO	TATING WEDGED	DISC		[Hide]
		(21) EA200201285 20010717	IPC: [7] B21J 13/03	Source: [pdf	EAB20306		
- Abstract -							
383 🗌 💕	EA 003985B1 20031225	[EN] METHOD F	OR CONSTRUCTING	A BALANCED STA	IR		[Hide]
all shows at		(21) EA200201267 20010521	IPC: [7] E04F 11/02	Source: [pdf	EAB20306		
- Abstract -							
384 🗌 💕	EA 003969B1 20031225	•					[Show]
385 🗌 💕	EA 004000B1 20031225	[EN] OPTIC-ELE SYSTEM	CTRONIC SYSTEM, A	ANTENNA STATION	I AND MOBILE AI	R DEFENSE MISSILE	[Hide]
- Abstract -		(21) EA200200458 20020212	IPC: [7] F41G 7/20	Source: [pdf	EAB20306		
- Abstract -							
		Hidden doc	ument			Hide document i	n list
			F	ig. 19			

4.2.3. Inclusion of Documents in the Selected Documents

When viewing documents in the list of the found documents, you can mark a document for inclusion in the "Selected Documents" (Fig. 20). To do so, check the box to the left of the document number in the list. To add checked documents to "Selected Documents", click button "Add to Selected Documents". To select all documents on the current page of the result list, click button "Select all". To remove all marks on the current page of the list, click button "Deselect all".

When scrolling the pages of the list, the documents included in the Selected Documents set will be highlighted (Fig. 21).

		Include che	cked documents in	the Selected Docume	nts set	
Query Builder	Search	By Number	Search History	Search Results	ocuments Selec	cted Documents
			: documents found: 7			
New query: (elasti	c\kw and compress	ion\kw and perfo	prated\kw and bandage	kw)	Search	0
Show: 🖌 Info 🗌 Ab	stract 🗌 Main Dr	awing Only	Show Hidden			
	Select	all Add to 9	Selected Deselect ments all	Sort by: Patent nu	ımber/date	~
1 🗹 🚔 EA201900067A2 20190830	[EN] perforated	compression e	lastic bandage			[Hide]
	(21) [**] EA201900067 20190219	IPC: [8] A61L 1	5/00 Source:	[PDF] eaa21908		
- Abstract -						
2 EA201900067A3 20191031						[Show]
3 ☑ 🗃 MD 634Y 20130531	[RU] Endovascula	ar method for tre	eatment of varicose dise	ease		[Hide]
	(21) [**] MDs 2012 013 20120926	1 IPC: [**] A61B	17/00 Source:	[rum] CS201305		
- Abstract Hide abstract -						
4 🗌 🗃 MD 634Z 20131231						[Show]
5 🔲 💕 RU 2324048C2 20080510						[Show]
6 ✔ 📽 RU 2334908C2 20080927	[EN] COMPRES	ED HEAT INSU	JLATING CASING			[Hide]
	(21) [06] RU200410446 20020710	0 IPC: [8] F16L 5	59/02 Source:	[rum] CS200809		
- Abstract Hide abstract -						
7 🔲 💕 RU 2674497C1 20181211						[Show]
Select all Add to Select	ted Deselect	Sort by:	Patent number/date	~		
Checked documents	Select	all document	s in the list / Desele	ct all		

Fig. 20





Note: If the documents for inclusion in the "Selected Documents" were marked in the list, then before proceeding to the next page of the list, it is recommended to click on button "ADD to Selected Documentsset", as when you go to another page of the list or when reordering the list, all previously set marks are automatically removed without including documents in the Selected Documents.

The documents included in the Selected Documents are highlighted (Fig. 21).

Click button "Open window" to open the complete document in a separate window. To view brief information about a document, click on title or publication number of this document.

To switch between modes in EAPATIS, use bookmarks. The back button in the browser is locked.

4.3. Machine Translation of Abstract or Claims

When viewing the search results in the list of documents (tab Search Results), the name of the invention is automatically translated from English into Russian.

When viewing a bibliografic data of document, you can translate the abstract/claim into Russian click on "RUS" button next to the abstract/claim text (Fig. 22).

	Query Builder	Search	By Number	Sea	arch History	Search Results	Documents	Selected	Docu
	Back to list		CISP	ATEN	T (eng) (CISEN	1)			
(Ě	
	🔊 Espacenet		Patent number	/date	UZ 938C1 20000	000			
			Application number	/date	UZ IHAP 394911	8 19850903			
	Description			IPC	[4] D01B 9/00				
	UZ000000938C1		Priority document number	/date	SU3949118 1985	0903			
	RETRU-4-UZ		Patent publication nu	mber	[UZC] 938				
			Kind	code	UZC1				
			Invent	or(s)	Hikitin Radik Pav Mupzagildeevich	lovich (UZ); Adylov Yun (UZ)	us Abidovich (UZ); G	ulyaev Am	ip
			Patent own	er(s)	Nauchno-proizvo	dstvennoe obedinenie "H	(hlopkoprom" (UZ)		
			Applica	nt(s)	Centralnyi nauch promyshlennosti	no-issledovatelskii instit (UZ)	ut khlopkoochistiteln	oi	
				Title	[EN] A device for	moistening the raw cot	ton		
					[RU] устройство	увлажнения хлопка сы	рца		
			Gazette/bulletin nu	mber	[PDF] UZRETRO4	\sim			
[T 1 /		Manual				Translation	of the	
	I ranslate		[RUS]				·		
`					Abs	stract	invention ti	tle	
			[EN] The invention re efficiency of the humidi the confusor 2 is place transporting the fibre- connected to the cham	lates ificatio d arou air mi iber 1	to the textile in on of the raw cott and the cylindrica ixture. The conf for supplying a	dustry and makes it ton before джиниров al pneumatic pipeline user 2 is made in th wetting agent, and p	: possible to incre анием, due to the 3 with perforated ie form of a box, placed at a distan	ease the fact that walls for directly ce from	

Fig. 22

The translation is displayed in the column next to the source text (Fig. 23).

Applicant(s)	[RU] REZVOV ANDREV. VLADIN	IROVICH	
Title			DACE
litte	[]ELASTIC COMPRESSION	PERFORATED DAI	DAGE
Gazette/bulletin number	[pdf] eab22004		
[**] The invention rel dressing means bandage bands and compressid well as in case dislocations of lin the injured limb prevent edema. a warp knitted fa along a base (a yarns) with elast the needle wales, natural, and/or	Abstract ates to medicine, namely to in the form of elastic intended for the prevention on treatment of veins, as e of sprains of tendons, nbs or bruises, helping to fix in the desired position or to A bandage is formed from bric containing needle wales a closed chain of synthetic comeric yarns located inside , and systems of yarns from artificial, and/or synthetic	Аб [* *] Изобретение от именно к обога упругих ба предназначенно лечения сжатия растяжения с конечностей ил фиксации поври желаемом по образована из об содержащего по основания (з	острактных носится к медицине, а щению средства в виде ндажа полос , о для профилактики и вен, а также в случае ухожилий, дислокации и ушибов, способствуя ежденной конечности в оложении или для отека. Бандажа снововязаного трикотажа, етельных рядов вдоль амкнутую цепь из
		синтетических ни	пеи) эластомерных нитеи,
	Tropolation	finuantion	
	I ranslation of	of invention	

abstract from English

5. FUNCTIONS RELATED TO DOCUMENTS VIEWING

5.1. Viewing Bibliographic Data of the Document

To view the bibliographic description of the document found, in the tab Search Results click on the title or on publication number of the document. The system will go to the Documents tab displayed in the current browser window. The bibliographic data of the document, the main drawing (if available) and the abstract will be shown. If the document was found based on keywords in full description, then excerpts from the description will be shown, with respective terms of the query highlighted. An example of a screen form containing an abstract-bibliographic description of the document is shown in Fig. 24, 25.

	Query Builder	Search	By Number	Se	arch History	Search Results	Documents	Selected	Docu
	Back to list		CISP	ATEN	T (eng) (CISEN	1)			
6	0 0 0							È	M
	Espacenet		Patent number	r/date	UZ 938C1 20000	000			
			Application number	r/date	UZ IHAP 394911	8 19850903			
	Description			IPC	[4] D01B 9/00				
	UZ000000938C1		Priority document number	r/date	SU3949118 1985	50903			
	RETRO-4-UZ		Patent publication nu	umber	[UZC] 938				
			Kind	l code	UZC1				
			Inven	tor(s)	Hikitin Radik Pav Mupzagildeevich	lovich (UZ); Adylov Yunu (UZ)	s Abidovich (UZ); (Gulyaev Ami	ip
			Patent own	ner(s)	Nauchno-proizvo	dstvennoe obedinenie "K	hlopkoprom" (UZ)		
			Applica	ant(s)	Centralnyi nauch promyshlennosti	no-issledovatelskii institu (UZ)	t khlopkoochistitelr	noi	
				Title	[EN] A device for	moistening the raw cott	on		
					[RU] устройство	увлажнения хлопка сыр	оца		
			Gazette/bulletin nu	ımber	[PDF] UZRETRO4	ŧ			
			[RUS]					,	
					Ab	stract			
			[EN] The invention re efficiency of the humid the confusor 2 is place transporting the fibre- connected to the chan	elates lificatio ed arou -air m nber 1	to the textile ir on of the raw cot und the cylindrica ixture. The conf for supplying a	dustry and makes it ton before джинирова al pneumatic pipeline 3 user 2 is made in the wetting agent, and pl	possible to incm нием, due to the 9 with perforated e form of a box, laced at a distar	ease the fact that walls for directly ce from	

Fig. 24

The page with the abstract-bibliographic description contains the following control elements:

- name of the documentation collection in which the viewed document was found;
- navigation buttons
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
 o
- Add to Selected Documents button 📓 ;
- Open in a New Window 💕 button ;
- links to external sources that may contain a given document;
- a link to a full description of the document in PDF format (if available);
- button for the machine translation of the abstract into Russian / English;
- button button

You can go to the next or previous document in the current list using the arrow buttons. To go to the first and last document of the current list use buttons with double arrows. When viewing a document quickly, use button "Back to List" to return to the previous place in the list you are viewing.

To go to the list of documents, use the Search Results tab, the Back button in the browser is locked. When dragging the mouse over the IPC symbol in the bibliographic data of the document, a tips appears with a description of this symbol.



Fig. 25

5.2. Display of Description in a New Window

To view the full description of the document in a separate window, in the "Search Results" tab, click "Open folder" button (Fig. 21). The description of the document opens in a new tab of the web browser. Fig. 26 shows an example of a browser window with a full description of the document.



Fig. 26

A page with a description of the document displays the search query used to find the document, as well as buttons for including the document in the Selected Documents set and for printing.

It contains links to external sources that may also contain this document, and a link to the full description (if available).

The volume of displayed bibliographic data can be changed using the "- more -" link (Fig. 26, 27).

The "Highlight query terms" link is used to display statistics on the search terms in a document and to navigate through the terms in the text of the document (Fig. 27).



Fig. 27

Different search terms found on the displayed page are highlighted in different colors. The color of the terms found is assigned depending on the frequency of occurrence of the term in the document. The most common term is highlighted in red. Colors are assigned to the terms in the following order: red, blue, darksalmon, blueviolet, chocolate, coral, cornflowerblue, cyan, darkgoldenrod, gold.

5.3. Viewing Full Description

A description of the document can be found in EAPATIS in the following ways (Fig. 28):

- by clicking on the corresponding hyperlink to the PDF document in EAPATIS (if the given patent document description),
- download the description from external Internet databases by clicking on the link from EAPATIS to the corresponding resource.

The transition to external Internet resources from the page of the bibliographic data of the document is carried out by the link to the appropriate external source. In this case, the request from EAPATIS is redirected to the server of the selected external information system. Search results are displayed in a new window in the interface of the selected system.

It is also possible to access, from the web page of the bibliographic data of the document,

additional information about the document, such as data from the registers of national/regional patent offices, and information about the patent family (equivalents).



Fig. 28

6. SELECTED DOCUMENTS SET

The function of creating own Set of Selected Documents is available only for Russian-speaking users and for certain categories of users of EAPATIS.

6.1. Operations with Selected Documents Set

The "Selected Documents" tool was created so that the user has the opportunity to save the found documents of interest in a set linked to the current session. During one session, the user has access to one current set of selected documents. Work with the set is carried out when going to the tab "Selected Documents". The Selected Documents set is formed in the form of a single list of documents without pagination. When displaying documents in a set, the identification data of the document, the name and code of the source are used (Fig. 29).

So	t documents	in the Se	election Doc	cuments	Save the Selection	n documents on the	user's comp	uter
	Query Builder		Search	By Number	Search History	Search Results	Documents	Selected Documents
		Sort list	t by: document	t number 🗸 🥵	Save Add Select	Unselect Reverse	Delete Reload	
	EA 001290B1	20001225	B65B 1/36	POWDER FILLING	APPARATUS AND METHOD	D THEREFOR		EAB20006
	EA 003757B1	20030828	H01H 33/66	ELECTRICAL SWIT	TCHGEAR <mark>APPARATUS</mark> CON NECTOR	IPRISING A VACUUM CART	RIDGE AND A FLE	XIBLE EAB20304
	EA 003758B1	20030828	H01H 33/666	MULTIPOLE ELECT	TRICAL SWITCHGEAR APPA	RATUS		EAB20304
	EA 004074B1	20031225	G06F 17/30	METHOD AND SYS	STEM FOR ALTERNATE INTE	RNET RESOURCE IDENTIFI	ERS AND ADDRES	SES EAB20306
	EA 004201B1	20040226	B63C 11/42	APPARATUS FOR ACCURACY AND A	R DEPLOYING A LOAD TO AN A METHOD TO CONTROL SUG	I UNDERWATER TARGET P CH APPARATUS	OSITION WITH EN	HANCED EAB20401
	EA 004279B1	20040226	B61L 23/34	RAIL SAFETY SYS	ТЕМ			EAB20401
	EA 005268B1	20041230	G06F 17/28	CONTENT CONVE	RSION METHOD AND APPA	RATUS		EAB20406
	EA 032978B8	20200618	B23D 57/00	SAMPLE PREPARA	TION APPARATUS FOR DIF	RECT NUMERICAL SIMULAT	TION OF ROCK PRO	OPERTIES eab22006
				Documents selec	cted: 5. Documents added: 4. ((duplicates: 1)		
				Ø Sear	ch Report List for A	nalysis		
	Instruction inform from E	ctions to ation on EAPATIS	export the found docu S (RUS)	ments Sta im do	atistics on ported list of cuments	Search report gen	eration	

Fig. 29

The set of Selected Documents serves for compiling a search report, and documents of the saved set can be included in other searches.

Documents can be added to Selected Documents set at various stages of the search:

• when viewing the list of documents found in the tab Search Results (paragraph 4.2 "Viewing Search Results"),

- when viewing a specific document in the Documents tab (paragraph 5.1 "Viewing Bibliographic Data of the Document") or in a separate window (paragraph 5.2 "Display of Description in a New Window"),
- a document found by number (paragraph 3.6 "Quick Search "By Number").

During the current session, the Selected Documents set may be:

- supplemented with the results of search when browsing lists of documents found;
- saved for future use;
- merged with previously saved set;
- reorganized by deleting documents previously included in the set.

To manage Selected Documents set, the system provides a menu containing the following controls for operations and information display:

- sorting by document code or by data source code;
- button for refreshing the list of documents in the set;
- for saving the current set of selected documents (downloading to a user's computer in a file);
- button to add a previously saved set to the current set (merging sets);
- button to select (check) all documents in the set;
- button to deselect all documents in the set;
- button for deleting documents marked in checkboxes from the set;
- buttons for downloading information "Search report" and "List for analysis".

Each time documents are added to "Selected Documents", a report is displayed (Fig. 30).

RU 2334908C2 20080927	COMPRESSED HEAT INSULATING CASING	CS200809
	Documents selected: 1. Documents added: 1.	

Fig. 30

6.2. Saving Selected Documents Set to a File on the User's Computer

The current Selected Documents set can be saved on the user's computer as a text file with the LST extension (Fig. 31, 32). To save the set to the user's computer, click button "Save", then Save As and specify the location to save the set. Thus, the selected file stored on the user's computer can be further used for other searches in EAPATIS and can be uploaded to any other user session. The documents from the saved set will be added to the Selected Documents of the current search session.

It is recommended to use file names so as to facilitate the further use of the saved set.

	Query Builder	Sear	ch By Numb	er	Sear	ch H	istory	Searc	h Results	Docu	ments	Selected Documents
		Sort list by	document number 🗸	S	ave Add	I	Select	Unselect	Reverse	Delete	Reload	
~	RU 2542804C	1 20150227	DETONATION	LOGI	DEVICE FO	R SH	HAPING OF	EXPLOSIO	N WAVE			CS201502
	RU 2544653C	2 20150320	DETONATING	TUBE								CS201503
_			ı [
S	electing docu	uments		Sav	ving the	cur	rent set	;				

Fig. 31





6.3. Sharing Selected Documents Between Sessions and Users

To add another, previously saved set of documents to the current session or to Selected Documents, click button "Add" in the "Selected Documents" tab, select a previously saved set file using button "Browse", and click button "Download file" (Fig. 33).

As a result of this operation, documents from the stored file will be added to the Selected Documents set of the current session. If a Selected Documents set has already been created in the current session, then a combined set is created. The new set can be refined and/or saved for future work.

Note: The same document obtained from the same information array is included in the set only once. Therefore, similar documents loaded from a file and already existing in the current Selected Documents set will be displayed only once in the resulting set.

Query Builder Search By Number Search History Search Results Documents Selected Document Sort list by: document number Save Add Select Unselect Reverse Delete Reload -Select stored file: O6sop Load file Load file RU 2542804C1 20150227 RU 2544653C2 20150320 Image: Company of the second and				Import	ting documents fro	om a file	
Sort list by: document number ▼ Save Add Select Unselect Reverse Delete Rehoad -Select stored file: Obsop Load file RU 2542804C1 20150227 RU 2544653C2 20150320 Image: Constraint of the select state of the select	Query Builder	Search	By Numb	er Search History	Search Results	Documents	Selected Documents
-Select stored file: Обзор Load file	So	rt list by: docum	nent number 🗸	Save Add Selec	t Unselect Reverse	e Delete Reload	d
RU 2542804C1 20150227 RU 2544653C2 20150320 RU 2546914C1 20150410 RU 2566116C1 20151020 RU 2579321C1 20160410 RU 2585103C1 20160527 RU 2596171C1 20160827	-:	Select stored fil	le:		Обз	sop Load file]
	RU 2542804C1 201	50227	Выбор вык	ладываемого файла 🧯 « Пример 🕨 Zakharova	а Luda_поиски 🔫	- 😽 Поиск: Zakh	аrova Luda_noucки 🔎
RU 2566116C1 20151020 * Тип Размер Название RU 2579321C1 20160410 * CSS-документ 5 КБ RU 2585103C1 20160527 Файл "LST" 11 КБ Файл "LST" 5 КБ Файл "LST" 5 КБ	RU 2546914C1 201	50410	Упорядочи	гь 🔻 Новая папка			i≡ - □ 0
RU 2579321C1 20160527 Image: CSS-документ 5 КБ RU 2585103C1 20160527 Image: Document of the second s	RU 2566116C1 201	51020	r 1	Гип	Размер Наз	вание	
RU 2585103C1 20160527 □ Файл "LST" 11 КБ № Файл "LST" 5 КБ Ш Документ Microsoft Word 26 КБ	RU 2579321C1 201	60410	1	📰 CSS-документ 💵 Локумент Microsoft Word	5 КБ 432 КБ		
RU 2596171C1 20160827 Файл "LST" 5 КБ Документ Microsoft Word 26 КБ	RU 2585103C1 201	60527		айл "LST"	11 КБ		
	RU 2596171C1 201	60827	l l	🗋 Файл "LST" 🚰 Документ Microsoft Word	5 КБ 26 КБ		
EAPATIS User Guide	EAPATIS Us	er Guide	+ +		m		4
Search Essentials Имя файла: Все файлы (*.*) Все файлы (*.*) Отмена +7 (495) 411-61-61 © Соругідht EAPO 15 Отмена Отмена Отмена Отмена	Search Ess +7 (495) 411-61-61 © (entials Copyright EAPO 19		<u>И</u> мя файла:		 Все файлы (*, <u>О</u>ткрыть 	*) –

Fig. 33

6.4. Generating a Search Report According to Russian State Standard (GOST R15.011-96 (RUS))

GOST R15.011-96 (RUS) regulates the content of patent information research, the procedure for its conduct, as well as the generation of a report on patent information research. The report should contain data on the object of research; main (analytical) part; conclusion; annexes.

The main analytical part of the report describes the technical level and development trends of the studied object, as well as conclusions about A Freedom to Operate / infringing patent rights / patent clearance and conclusions about the prospects of the business entity in this direction.

The report on patent search must be in the format specified in "Appendix B" of the GOST. This format provides for a description of the object of study and a list of documents found indicating a number of bibliographic data.

EAPATIS allows to automatically generating a search report in the GOST-approved format based on selected documents. To do so, use the link Search Report (Fig. 29, 34, paragraph 6.1 "Operations with Selected Documents Set").

RU 2585103C1 20160527	EXTENDED MINE CLEARING CHARGE	FVDV	TIS user's manu CS201605
RU 2596171C1 20160827	LASER DETONATOR		C5201608
	Documents selected: 3. Documents added: 2	2. (duplicates: 1)	
	Отчёт о поиске Список д	ля анализа	
EAPATIS User Guide	EAPATIS Overview	EAPATIS Access Terms	
Search Essentials	Search Tips	EAPATIS collections coverage	

Fig. 34

An example of such a report, formed on the basis of the Selected Documents set above, is presented in Fig. 35

EA 026872B1 20170531 EA200000303A1 20000828	EA 026872B1 20170531 2017.05.31 [8] F16L 55/103 EA200000303A1 20000828 2000.08.28 [7]	[US] БАЙОФИЛМ ИП, ЛЛЦ ([US] БАЙОФИЛМ ИП, ЛЛЦ), [**] EA201300018 20110615 , (приоритет US61/397,759 20100615) [NL] ШЕЛЛ ИНТЕРНЭШНЛ РИСЕРЧ МААТСХАППИЙ Б.В.,	[**] СПОСОБЫ, УСТРОЙСТВА И СИСТЕМЫ ДЛЯ ПОЛУЧЕНИЯ ТЕПЛОВОЙ ЭНЕРГИИ ИЗ ТЕПЛОПРОВОДЯЩЕГО МЕТАЛЛИЧЕСКОГО ТРУБОПРОВОДА [RU] СПОСОБ И СОЕДИНЕНИЕ ДЛЯ ИНГИБИРОВАНИЯ ЗАБИВАНИЯ
EA200401450A1 20050630	E21B 37/06 EA200401450A1 20050630 2005.06.30 ,[7]	ЕА200000303 19980908 , (приоритет ЕР97306988.3 19970909) [GB] АБЕРДИН ЮНИВЕСИТИ,	ТРУБОПРОВОДОВ ГАЗОВЫМИ ГИДРАТАМИ RUJ УМЕНЬШЕНИЕ ПРОТЕЧЕК В ТРУБОПРОВОДЕ
<u>RU 167623U1 20170110</u>	<i>F16L 55/162</i> RU 167623U1 20170110 2017.01.10 <i>[8] F17D</i> <i>5/02</i>	ЕА.200401450 20030429 , (приоритет GB02097/1.5 20020429) ((RU] федеральное государственное бюджетное образовательное учреждение высшего образования "Ульяновский государственный университет" (RU)), 2016112636 20160404	[RU] Устройство определения места утечки нефтепродуктов на участках трубопровода с помощью съемных металлических зондов
RU 2037725C1 19950619	RU 2037725C1 19950619 1995.06.19 , [6] F16L 53/00	 [BR] Петролео Брасилейро С.А Петробрас ([BR] Петролео Брасилейро С.А Петробрас), [29] RU5001465 19910827 , (приоритет BRPI 9004240 19900828) 	[RU] УСТРОЙСТВО ДЛЯ ЭЛЕКТРИЧЕСКОГО НАГРЕВАНИЯ ТРУБОПРОВОДОВ, ТРАНСПОРТИРУЮЩИХ ВЯЗКИЕ ЖИДКОСТИ ЧЕРЕЗ ГЛУБОКОВОДНЫЕ ПРЕГРАДЫ
RU 2066019C1 19960827	RU 2066019C1 19960827 1996.08.27 .[6] F17D 5/02	Акционерная компания "Транснефтепродукт (Акционерная компания "Транснефтепродукт), [06] RU94015515 19940427	RUJ УСТРОЙСТВО ДЛЯ ОБНАРУЖЕНИЯ ПОД СНЕГОВЫМ ПОКРОВОМ УТЕЧЕК УГЛЕВОДОРОДОВ ИЗ МАГИСТРАЛЬНЫХ ТРУБОПРОВОДОВ
RU 2099632C1 19971220	RU 2099632C1 19971220 1997.12.20 [6] F17 D 3/00	Акционерное научно-проектное внедренческое общество "НГС- Оргпроектяхономика (Акционерное научно-проектное внедренческое общество "НГС-Оргпроектакономика), [06] RU96108760 19960429	[RU] СПОСОБ ОПРЕДЕЛЕНИЯ ТОЛЩИНЫ ГРЯЗЕПАРАФИНОВЫХ ОТЛОЖЕНИЙ В НЕФТЕПРОВОДЕ

Fig. 35

This search report contains a list of selected patent documents indicating the country information (two-letter country code in the resulting document inventory number), the application or patent number, the IPC symbols, the applicant's name, the application registration number and filing date, the invention title. The resulting table can be copied to Microsoft Word for subsequent processing of the report.

6.5. Data Extraction for Patent Analysis

For patent analysis, you can use the EAPATIS function – export of Selected Documents set information as a simple table. To do this, use the List for analysis link (Fig. 36). The resulting table can be copied to a spreadsheet editor, such as Microsoft Excel. Further, the table can be converted into various formats or loaded into databases.

Some types of statistical analysis can be carried out directly in Excel, for example, you can identify the countries that are most active in the area of interest, or find out in which IPC subdivisions the found documents are classified most often.

Also you can research in which countries and which companies are most actively conducting research in a given area, as well as find out the trends of patenting by year and country.

Fig. 36 shows an example of charts made in Excel based on information downloaded from EAPATIS.





The pie chart clearly illustrates that ignition systems for internal combustion engines in the Eurasian region are most actively engaged in Russia (including the USSR), Ukraine and Belarus. The second chart shows that granted patents are most often classified by IPC subclasses F02M and F02D.

Such an analysis of patent data can help in the future in the search and systematization of information in the studied area of expertise.

7. METASEARCH

7.1. Metasearch. General information

Metasearch is a feature that allows parallel searches both in local EAPATIS and in external documentation collections with free access such as Espacenet, PATENTSCOPE and USPTO. When searching, the EAPATIS user interface and the unified EAPATIS query language are used.

To conduct a Metasearch, the following steps should be performed:

- form a search query in accordance with EAPATIS query language (described in paragraph 3 "Carrying out patent information search");
- in the section "External IPDBs (Metasearch)" of the "Search" tab select one or more external collections of patent documents for search;
- Press "Search" button.



Fig. 37

Search results are displayed in the "Search History" tab (Fig. 37). Switch to this tab performed automatically.

External databases search results are displayed on the computer screen in the interface of the external information system selected for search. The following describes the features of conducting searches in external systems.

7.2. Carrying Out a Metasearch in ESPACENET system

Metasearch in Espacenet system can be done by document number and EAPATIS search criteria KW, IC, NM, AN, PN, ID.

- Search by **ID** document identification number is set in the format: country code + publication number of the document. For example: ID: EP3650419* or ID: WO1995011674*.
- Search by IC the International Patent Classification. The rules for IC formation are the same as in EAPATIS. For example, G11C017/12* or C12C007/20. If you specify part of the code, you can use the truncation operator asterisk "*". For example: G11C*.
- Search by **KW**, i.e. keywords. The rules for entering KW terms are the same as in EAPATIS. For example, laser or nonchlor*. Search is carried out in titles and abstracts.
- Search by phrase is possible. In this case the phrase is specified in quotation marks "". For example: "optically pumped semiconductor laser" or "nonchlorinated aliphatic hydrocarbon". **Note:** compound words in the query (for example, optically-pumped) must be specified as two separate words, omitting the hyphen "-".
- Search by **NM**, i.e. name of the applicant, the inventor, and the patent owner. By default, the search is carried out by the name of the applicant or the inventor or the patent owner. If the search query is specified in the format: name\IN, then the search is carried out only by the name of the inventor. If you need to search by the name of the applicant, then the search query is specified in the format: name\AP. For example: NM: Horikoshi or NM: Nippon\AP.
- Search by **AN**, i.e. application registration number / application filing date is set in the format: country code + application number. For example: AN: SE8500255* or AN: EP18204659*.

You can specify up to four values per search string (no more than four are recommended).

For example:

IC: G11C17/12* B61L1/18* C12C* F02B*

KW: electro* device plane*

To use logical operator "AND", you must specify the required search terms in separate lines of the query in the "Query Builder".

Example 1: IC: H01L021/8246 IC: G11C017/12 Example 2:

IC: G11C016* AB: laser

7.3. Carrying Out a Metasearch in the USPTO system Database (patents)

Metasearch in the USPTO patent database can be performed by document number (item 3.6 Quick "By Number"), as well as by search indexes **ID**, **IC**, **KW**, **AN**, **NM**, **DP**.

• Search by **ID** document identification number is set in the format: US99...9TT, where US is the country code, 99...9 is the publication number of the security document, TT is the published document kind code. For example: US4650524, US6009062, US5507PP, US37777RE.

Note: The following types of patent documents contained in the USPTO DB (with numbering examples):

Utility -- 5,146,634, enters US5146634; Design -- D339,456, enters US339456D; Plant -- PP08,901, enters US08901PP; Reissue -- RE35,312, enters US35312RE; Defensive Publication -- T109,201, enters US109201T; Statutory Invention Registration -- H001,523, enters US001523H; Re-examination -- RX29,194, enters US29194RX; Additional Improvement -- AI00,002, enters US00002AI.

- Search by IC the International Patent Classification. The rules for IC formation are the same as in EAPATIS. For example, G11C017/12* or C12C007/20. If only part of the code is specified, you can use the truncation operator asterisk "*". For example, G11C*.
- Search by **KW**, i.e. keywords. The rules for compiling KW are the same as in EAPATIS. For example, laser or nonchlor*. The search is carried out in titles, descriptions, abstracts and claims of documents.
- Search by phrase is possible. In this case the phrase is specified in quotation marks "" and entered in the "Search" tab in search field. For example, "optically pumped semiconductor laser" or "nonchlorinated aliphatic hydrocarbon". **Note:** compound words in the query (for example, optically-pumped) must be specified as two separate words, omitting the hyphen "-".
- Search by **NM**, i.e. name of the applicant, the inventor, and the patent owner. By default, the search is carried out by the name of the applicant or the inventor or the patent owner. If the search query is specified in the format: name\IN, then the search is carried out only by the name of the inventor. If you need to search by the name of the applicant, then the search expression is specified in the format: name\AP. For example: NM: Horikoshi or NM: Nippon\AP.
- Search by **DP**, i.e. date of publication of the document. The value is set in the format: YYYYMMDD (year + month + day). For example, 20020226.

You can specify several values per search string.

For example:

NM: Kim Kang IC: G11C17/12* B61L1/18* C12C* F02B1,25* KW: electro* device plane*

To use logical operator "AND", you must specify the required search terms in separate strings of the query.

Example 1: IC: H01S3/10 IC: G01J3/45 Example 2: IC: G11C016*

AB: laser

7.4. Carrying Out a Metasearch in the USPTO system Database (applications)

The USPTO system application database contains information on applications for inventions starting with application No. 20010000001 published on March 15, 2001.

Metasearch in the USPTO system applications database can be carried out by document number, document description and search criteria codes **ID**, **IC**, **NM**, **KW**.

- Search by **ID** document identification number is set in the format: US99...9*, where US is the country code, 99...9 is the publication number of the security document. For example: US20190292600*, US20060086278*.
- Search by IC the International Patent Classification. The rules for IC values formation are the same as when searching in internal EAPATIS databases. For example, G11C017/12* or C12C007/20. If only part of the code is specified, you can use the truncation operator asterisk "*". For example, G11C*.
- Search by **KW**, i.e. keywords. The search is carried out in titles, descriptions, abstracts and claims of documents. You can apply truncation operator asterisk "*". for example, dioxid*.
- Search by phrase is supported for this database. The phrase should be entered using quotation marks "", for example, "optically-pumped semiconductor laser" or "nonchlorinated aliphatic hydrocarbon"\KW.

Note: When searching the USPTO application database using a phrase, the query should contain this phrase ONLY. A phrase enclosed in quotation marks "" cannot be combined with other search terms. For example, the following query is not correct:

KW: "halogen compound"

IC: G01N*

To search by the terms above, you can use the following query:

KW: halogen

EAPATIS user's manual

KW: compound

IC: G01N*

• Search by **NM** is performed in the name of the inventor. For example, when you search for Chen, you'll get a list of patents that have the "Chen" in the "Inventor" field.

7.5. Carrying Out a Metasearch in PATENTSCOPE system

PATENTSCOPE system provides a keyword search in descriptoins of documents, including the abstract and the claims.

Search in the PATENTSCOPE system can be carried out by search criteria: **IC**, **NM**, **KW**, **AN**, **ID**, using the "Query Builder" tab of EAPATIS.

- Search by **ID** document identification number is set in the format: country code + number of the document. For example: ID: EP3650419* or ID: WO1995011674*.
- Search by IC the International Patent Classification. The rules for IC values formation are the same as when searching in internal EAPATIS databases. For example, G11C017/12* or C12C007/20. If only part of the code is specified, you can use the truncation operator asterisk "*". For example, G11C*.
- Search by **KW**, i.e. keywords. The rules for compiling KW are the same as in EAPATIS. For example, laser or nonchlor*. The search is carried out in titles, descriptions, abstracts and claims of documents.
- Search by phrase is possible. In this case the phrase is specified in quotation marks "" For example, "optically pumped semiconductor laser" or "nonchlorinated aliphatic hydrocarbon".

Note: compound words in the query (for example, optically-pumped) should be specified using a hyphen "-". Unlike EAPATIS, where words must be specified separately.

- Search by **NM**, i.e. name of the applicant, the inventor, and the patent owner. By default, the search is carried out by the name of the applicant or the inventor or the patent owner. If the search query is specified in the format: name\IN, then the search is carried out only by the name of the inventor. If you need to search by the name of the applicant, then the search query is specified in the format: name\AP. For example: NM: Horikoshi or NM: Nippon\AP.
- Search by **AN**, i.e. application registration number / application filing date is set in the format: country code + application number. For example: For example: AN: SE8500255* or AN: EP18204659*.

You can specify several values per search string. For example:

NM: Kim Kang IC: G11C17/12* B61L1/18* C12C* F02B1/25* KW: electro* device plane*

To use logical operator "AND", you must specify the required search terms in separate lines of the query.

Example 1:

IC: H01L021/8246 IC: G11C017/12 Example 2: IC: G11C016* KW: laser

8. RECOMMENDATIONS FOR CARRYING OUT PATENT SEARCH

This section contains some examples of search queries allowing to get the expected search results, as well as a description of additional tools and methods to increase the likelihood of finding the required documents.

8.1. General Recommendations for the Search. Choosing a Search Strategy

EAPATIS is optimized for searching by individual terms, combined into a logical combination of any complexity. The system also maintains and uses an internal query cache (i.e., saving results obtained with previously used terms to increase the speed of processing complex queries). Therefore, it is recommended that before entering complex multi-aspect queries the user searches for individual terms, among other things to make sure that the terms are entered in an optimal way.

Before starting the search, it should be noted that most likely it will not be possible to compose such a single universal query that will allow you to immediately find all the documents of interest. It should be assumed that the subject area of interest can be described by different authors using different words, similar or substitute terms can be applied, IPC classification may also be ambiguous.

Therefore, the following search strategy can be recommended:

- make several separate queries for specific terms, IPC symbols or other details;
- intersect or combine the results using the names of completed queries Q1 ... Qn;
- gradually get several samples of appropriate documents from 1 to about 10-20 documents;
- start viewing the documents found in the received selections.
- •

8.2. Stemming and Truncation

The system implements a mechanism for stemming for words in Russian and English. Stemming is used for search criteria NM (names of authors, names of patent holders), KW (names, claims/abstracts, full texts). This system allows you to search for terms represented in different word forms. For example, for the term "шарнир", documents containing the terms: «шарнир», «шарнира», «шарнирая», «шарнирная», «шарнирно», «шарнирно», «шарнирно», «шарниров», «шарниров», «шарниром», «шарниру» will be found.

It is also possible to use truncated search in the system. In this case all terms containing the term with different spellings of the truncated part will be found. In this case, one can find derivative words that are not morphologically related, however, terms that are not related to the desired one can also be found. For example, at the request in Russian "бур*" morphologically not related but meaningful terms «бурильных», «буронабивных», «бурошнековой», etc. will be found, but at the same time documents like containing irrelevant terms like «буртик», «буровчика», «бурелом» etc.

Thus, use the truncation "*" carefully, as you can get a large array of documents that are not related to the desired subject area. It should also be recognized that a search with truncation is conducted slower than the stemming search.

The system also contains a list of "stop words". For example, according to such words as "DID", "DEFINITE", "FORMERLY", "UPON", "REALIZE", etc., the search will not be conducted. The search will result in 0 documents found. A complete list of such "stop words" for Russian and English can be viewed at the "List of stop words" access in the section "Search Tips" of reference materials located at the bottom of EAPATIS pages.

8.3. Proximity Search

Proximity search is based on the execution of queries using separate terms with the subsequent additional processing of the results. It uses an internal query cache for terms. This type of search requires large computing resources and can be performed slower than searches by separate terms. Therefore, it is recommended that before moving on to search by phrases using stemming and proximity features, to conduct searches by separate terms, and then compose proximity queries with these terms using the proximity operator to combine them.

Proximity search allows to find documents in which the desired terms are in the same phrase of the text, but with optional presence of some unknown words between them (Fig. 38, 39).

Example:

By the query "cutting ++ plates ++ laser"\TX, 2 documents will be found in the EAPO document database.

1. Document EA 008773B1

Полный текст патента

(57) Реферат / Форнула: обнаружения дефектов в листовом стекле с использованием лазерного излучения и последующей визуализации или фотографирования, отличающийся тем, что дефекты, а также локальные микронапряжения в массе стекла определяют за счет проявления выпуслых или вогнутых пятек и линейных полос в плоскости торцевой поверхности сквозного реза стеклянных пластин лазерным лучом, как результат взаимодействия равномерных растягивающих напряжений в процессе термораскалывания стекла и микронапряжений хинических неоднородностей или включений.

Fig. 38

2. Document EA 012311B1

Полный текст патента

(57) Реферат / Формула:

Способ резки хрупких прозрачных неметаллических материалов, заключающийся в том, что на материал многократно воздействуют сфокусированным прямым и отраже Спосор резил другима продрамых нене волноских покрытика и начили в счето отражающих зеркал, расположенных спротивоположных сторон материала, отличающийся тем, что зеркала соединены посредством электромагнитных сил в единую оптическую систему таким образом, что они способны совместно перемещаться в горизонтальной плоскости, при этом нижнее зеркало также способно перемещаться в вертикальной плоскости. Способ по п.1, отличающийся тем, что расстояние между фокальными плоскостями прямого и отраженного излучений изменяют в зависимости от толщины разрезаемого материала путем перемещения нижнего зеркала в вертикальной плоскости.

Способ по пп.1 и 2, отличающийся тем, что нижнее зеркало снабжено схользящей системой или роликами, позволяющими зеркалу при движении верхнего зеркала перемещаться совместно с ним в горизонтальной плоскости.

012311

012311 Изобретение относится к способу резки хрупких прозрачных неметаллических материалов, например стекла, лазерным лучом и может быть использовано в стекольной, злектронной и других отраслях народного хозяйства. Известен способ резки пластин хрупких материалов, например стекла, [1] путем нагрева лазерным лучом (аломоиттриевый гранат) поверхности стеклянной пластины или стопы пластия путем облучения зоны нагрева лазерным лучом, многократно отраженным системой наклонных зеркал. При этом зеркала находятся по обе стороны стекла разрезаемой области стекла, а при резке стопы стекла разделены прокладками. Недостатком способа является спожность стабликации режима резки, т.к. требуется точное регулирование мощности излучения и строгое обеспечение температурного режима, а также спобая управляемость движения линии реза по криволинейным траекториям. Кроме того, для реализации данного способа в условиях промышленного производства требуются столы с отражающими поверхностями высокой точности и высокого козффициента отражения (до 96-98% на длине волны X - 1,06 мкм). Поэтому способ не нашел практического применения. Известен также спобо резки пластин хрупких материалов [2] лазерным лучом или другим источником излучения, которое частично поглощается материалом по всей способ не накже способ резки пластин хрупких материалов [2] лазерным лучом или другим источником излучения, которое частично поглощается материалом по всей способ на накже способ резки пластин хрупких материалов [2] лазерным лучом или другим источником излучения, которое частично поглощается материалом по всей способ на наке способ резки пластин хрупких материалов [2] лазерным лучом или другим источником излучения, которое частично поглощается материалом по всей способ на наке способ резки пластин хрупких материалов [2] лазерным лучом или другим источником излучения, которое частично поглощается материалом по всей способ на наке способ резки пластин хрини стериалов по всей способ на наке способ резки пластин хрупких материалов по всей способ на

reported toward clocked brand internation [x] variable and the provide the second state and t
его толщине, причем источник излучения создает в области резки пятно облучения, имеющее две различающиеся по плотности мощности излучения зоны зоны большей и
меньшей плотности мощности излучения. Зона с большей плотностью мощности излучения находится в любой точке пятна облучения. Кривая распределения плотности
мощности излучения имеет "конусообразную" форму, а образующая кривой распределения плотности мощности излучения может быть линейной, криволинейной или
ступенчатой.

Fig. 39

However, if you specify a smaller proximity: "cutting ++ plates + laser"\TX, then the document EA 012311B1 will not be found.

8.4. An Example of Proximity Search in Collection, Containing Data in English

Query: "command ++ valve ++ calculated ++++ actually measured" (Fig. 40). Document found:

	Патентная документац	ия Японии (РАЈ) 🗃 🗃 🍑
Espacenet	Номер и дата охранного документа	JP2003343709A 20031203
🗋 РАЈ Перевод	Регистрационный номер и дата заявки	JP2002155940 20020529
	Индексы МПК	F16H 61/02
	Номер документа	[JPA] 2003343709
	Код вида документа	JPA
	Сведения об авторах	TANIGUCHI KOJI, KONO KATSUMI, MATSUO KENJI, TERAJIMA MASATO, KONDO HIROKI
	Сведения о патентообладателях	TOYOTA MOTOR CORP
	Название документа	[EN] CONTROL DEVICE FOR CONTINUOUSLY VARIABLE TRANSMISSION
	Номер бюллетеня	[mim] JP04003

Реферат / Формула

Реферат/формула:

PROBLEM TO BE SOLVED: To improve following-up property of an actual gear ratio to a desired gear ratio from the beginning of control.

SOLUTION: In S102, it is judged whether or not a duty ratio-orifice area characteristic in a storage means 130 approximately agrees to an actual duty ratio-orifice area characteristic of a flow control device 50, and a feedforward command value and weighting factors a, β for the feedforward command value to be output to the flow control device 50 are set. In S103, the feedforward command value and a feedback command value are calculated. The feedforward command value is calculated by using the actually measured, inherent duty ratio-orifice area characteristic of the flow control device 50 and a physical model concerning the flow control device 50.

COPYRIGHT: (C)2004.1PO

8.5. Examples of Search Using the Exact Term

Document EA 015267B1

🗆 🖻	EA 015267B1 20110630	СОВМЕСТНЫЕ КРИСТАЛЛЫ ПИРРОЛИДИНОНОВ		
[**]			~	
1. Совместный кристалл, включающий пирролидинон, который представляет собой 2-[4-(2,2-дифторвинил)-2-оксопирролидинил] бутанамид или (2S)-2-(2-оксо-4-н-пропил-1-пирролидинил)бутанамид, и соль, выбранную из группы, включающей MgCl 2, MgSO 4, MgBr 2, Mg 3 (PO 4) 2, MgHPO 4, Mg(H 2 PO 4) 2, MgCO 3, Mg(HCO 3) 2.				
2. Coв	местный кристал	л по п.1, в котором солью является MgCl ₂ .		
3. Сов	местный кристал	л по п.2, который является гидратом.		
4. Сов	местный кристал	л по любому из пп.1-3, в котором пирролидинон представляет собой (2S)-2-[(4S)-4-(2,2-дифторвинил)-2-		
оксоп	ирролидинилјоут	анамид		
5. Совместный кристалл по п.4, имеющий стехиометрию (2S)-2-[(4S)-4-(2,2-дифторвинил)-2-оксопирролидинил]бутанамид × 0,5MgCl			~	



May be found by query:

«COBMECTHЫЕ КРИСТАЛЛЫ ПИРРОЛИДИНОНОВ» «КРИСТАЛЛЫ ПИРРОЛИДИН*». "JOINT CRYSTALS OF PYRROLIDINONES" "CRYSTALS OF PYRROLIDINE*".

But it CANNOT be found by query:

«КРИСТАЛЛОМ= ПИРРОЛИДИН*»,

"BY CRYSTAL= Pyrrolidine*"

since the query condition requires the exact term "BY CRYSTAL" in the phrase, however, this document does not contain such a phrase (Fig. 41).

8.6. Using Transliteration Table

To increase the effectiveness of search using the NM search code (Patent holders / Applicants / Authors), it is recommended to refer to the transliteration table available on the EAPO web portal: "Information materials" / "Reference resources" or at http://www.eapatis.com/general/translit.htm

The transliteration spreadsheet is used when conducting a search by name in the EAPO database. Using the transliteration table allows you to increase the accuracy and completeness of this type of search due to the presence of various translation options and the Russian spelling of some names of applicants, inventors and patent holders. A fragment of the transliteration table generated for the EAPO database is shown in Fig. 42. The table for each spelling of the name of the applicant, inventor and patent holder in Latin indicates the options for their transliteration into the Russian language present in the EAPO DB, as well as the number of occurrences of the term in Russian in the issued patents.

Термин на латинице	Варианты транслитерации на русский язык	Кол-во вхождений	Кол-во патентов
AALBERT	АЛБЕРТ	2	2
	АЛЬБЕРТ	2	2
AARTS	AAPTC	1	1
	APTC	1	1
AB	АБ	215	106
	эйби	2	1
ABBOTT	ЭББОТ	1	1
	ЭББОТТ	9	6
ABDEL	АБДЕЛ	1	1
	АБДЕЛЬ	2	2
ABDERRAHIM	АБДЕРРАИМ	1	1
	АБДЕРРАХИМ	1	1
ABDRAIMOVA	АБДРАИМОВА	2	1
	АБРАИМОВА	1	1

Таблица соответствия англ. и рус. слов из наименований заявителей, изобретателей, патентообладателей БД ЕАПВ

Fig. 42

The user can use this information to enter several possible spellings in Russian of name of foreign applicant/patent holder. For example, for the name "ADRIAN" there are four spellings in Russian: АДРИАН, АДРИАН, АДРИАН, ЭДРИАН. The search query will look as follows:

АДРИААН\NM OR АДРИАН OR АНДРИАН\NM OR ЭДРИАН\NM

For BP company, the name can be specified as «БИ ПИ» or "БП". In this case, the query may look like («БИ ПИ»)\NM OR $\overline{\text{BH}}$ NM.

8.7. Finding Patent Family Equivalents

The search for patent family equivalents by priority application number is not always effective due to the mismatch of formats used by different patent offices to indicate priority data.

To solve this problem, it is recommended to conduct a search, including the name of the inventor (patent holder) and the priority date in the query.

Example:

To search for patent family equivalents for the Eurasian application EA199700348, which has a priority date 05/01/1995, the inventors Fisher Richard (Фишер Ричард) et al, as well as the patent holder U.S. BORAX INC. (Ю. ЭС. БОРАКС ИНК.),

The search query in the query builder will look like: PR: 19950501

```
NM: Fisher ^ Фишер
or
PR: 19950501
NM: BORAX ^ Боракс
```

Note: the ^ sign is used un the above examples to visualize the space character.

As a result of search in the EPO database for these queries, European patent EP 824502B1 will be found.

In addition, it is recommended to use the hyperlink "Patent family equivalents in Espacenet:" in the "Documents" section when viewing the bibliography and abstract.

9. REFERENCE MATERIALS

Tooltips on system functions are opened by the buttons ⁽¹⁾ located next to the EAPATIS interface elements.

Also links to informational, reference and methodological materials are located at the bottom of each EAPATIS page:

- EAPATIS User Guide;
- EAPATIS Overview ;
- EAPATIS Access Terms;
- Search Essentials (How to fill Search Form);
- Search Tips (including links to the "List of stop words" and the transliteration table);
- EAPATIS collections coverage.