

Использование БД Европейского патентного ведомства «Espasenet» для проведения патентного поиска



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интеллектуальной
собственности*

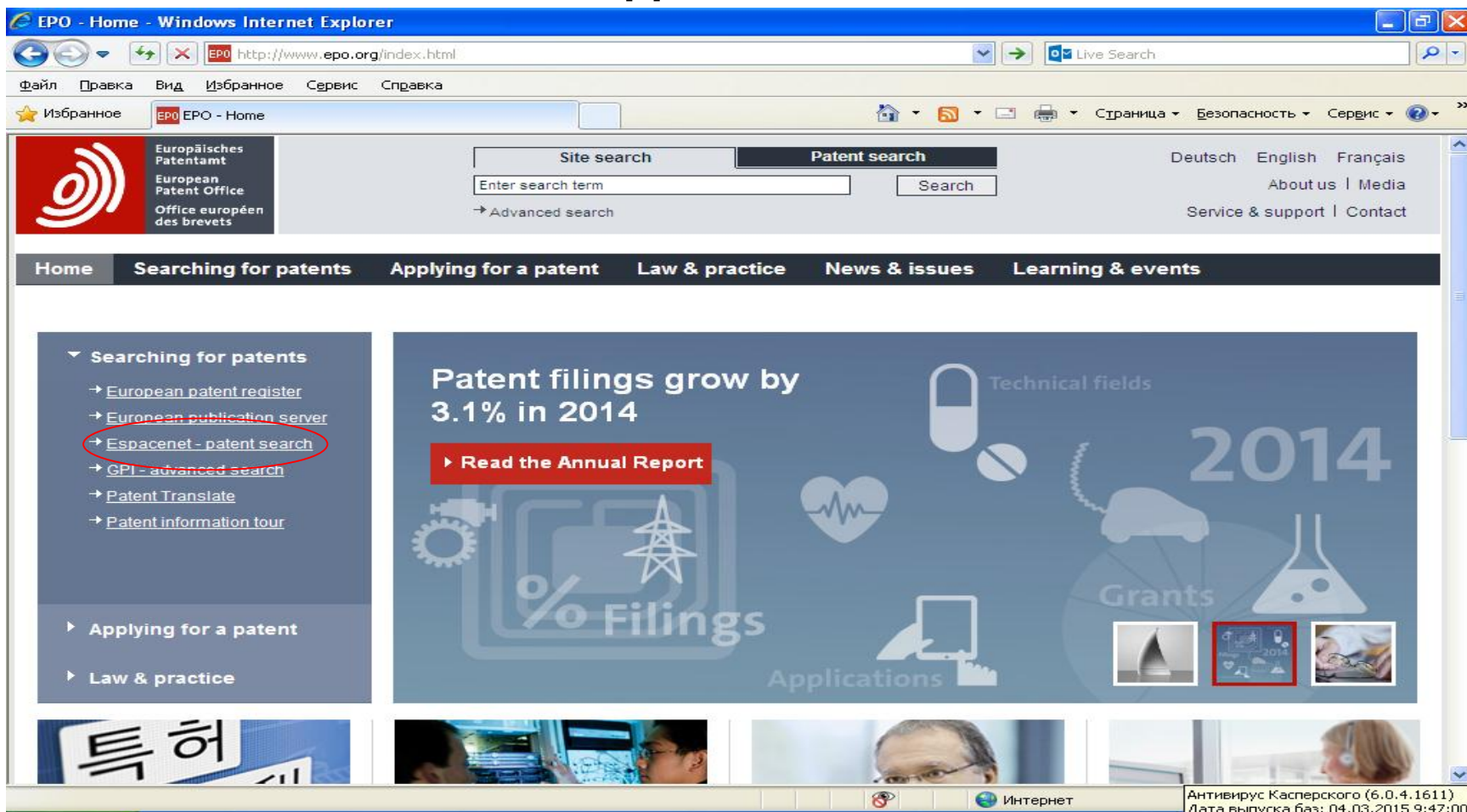
Esrasenet

- **БД Esrasenet - общие сведения**
- **Доступ**
- **Виды и возможности поиска**
- **Результаты поиска**
- **Просмотр документов**

БД Espacenet - общие сведения

Общедоступная патентная база данных Европейского патентного ведомства (<http://www.epo.org>)

Создана в 1998г



The screenshot shows the EPO website in a Windows Internet Explorer browser window. The address bar displays <http://www.epo.org/index.html>. The page features a search bar with 'Site search' and 'Patent search' tabs, and a navigation menu with options like 'Home', 'Searching for patents', 'Applying for a patent', 'Law & practice', 'News & issues', and 'Learning & events'. A sidebar on the left lists 'Searching for patents' with sub-links: 'European patent register', 'European publication server', 'Espacenet - patent search' (circled in red), 'GPI - advanced search', 'Patent Translate', and 'Patent information tour'. The main content area includes a large graphic titled 'Patent filings grow by 3.1% in 2014' with a 'Read the Annual Report' button, and a '2014' graphic with icons for 'Technical fields', 'Grants', and 'Applications'. The bottom of the browser shows a taskbar with an antivirus icon and the text 'Интернет' and 'Антивирус Касперского (6.0.4.1611) Дата выпуска баз: 04.03.2015 9:47:00'.

Переход в Espacenet

Espacenet - patent search
Release notes & known issues
About searching in Espacenet
Fair use charter
European patent register
Third-party observations
European publication server
European Patent Bulletin
Open Patent Services
EBD
IPscore
European patent applications and specifications
Common Citation Document
Patent translate

Espacenet

Print 

Patent search

Espacenet offers free access to more than 70 million patent documents worldwide, containing information about inventions and technical developments from 1836 to today.

See also

→ [Patent Information News](#)

Direct access

Access Espacenet at the EPO

Search the EPO's databases in German, English and French

[Open Espacenet at the EPO](#)

Access Espacenet at the European Commission

Search the EPO's databases in German, English and French

[Open Espacenet at the EC](#)

Access Espacenet at national and regional offices


Search using an interface in your language

Please select



Go

Стартовая страница Espacenet


Office européen des brevets
Patent search
Change country

[About Espacenet](#)
[Other EPO online services](#)

Search
Result list
★ My patents list (4)
Query history
Settings
Help

Smart search

- Quick search
- Advanced search
- Number search
- Classification search

Smart search

Smart search:

Espacenet presents:

The headquarters of PI5 were located in a nondescript building dov
thoroughfares. The premises were fronted by a bright white, chrom
intelligence activities going on in the dingy edifice behind.

M was in the office early that morning and, unusually, was at his de

M was worried. The previous evening, he had had some disturbing
dangerous mission. Pond refused to give all the details and M wan

M's finger jabbed at the [intercom](#) button as soon as he heard Geldpfennig enter her office, through which all visitors had to pass if they
wanted to speak to him.

"Geldpfennig!" he barked into the mike. "As soon as Pond gets in I want him and Q in my office."

"Yes, M," replied Geldpfennig, taken aback at his abruptness.


"There must be something wrong, I hope Jason's not in trouble again," she thought.

Change country

↗ Austria	↗ Belgium
↗ Bulgaria	↗ China
↗ Croatia	↗ Cyprus
↗ Czech Republic	↗ Denmark
↗ Estonia	↗ Eurasian Patent Organisa
↗ Finland	↗ France
↗ Germany	↗ Greece
↗ Hungary	↗ Iceland
↗ Ireland	↗ Italy
↗ Japan	↗ Korea
↗ Latipat	↗ Latvia
↗ Lithuania	↗ Luxembourg
↗ Monaco	↗ Netherlands
↗ Norway	↗ Poland
↗ Portugal	↗ Romania
↗ Russia	↗ Serbia
↗ Slovakia	↗ Slovenia
↗ Spain	↗ Sweden
↗ Switzerland	↗ Turkey

Maintenance news -

Scheduled maintenance

Espacenet outages - all times  are CET:

Thu 8th of Nov from 17:00 to 18:00 instead

Mon-Sat from 05:00-05:15,

Sun: 05:00 to 06:00 → [read more...](#)

News flashes +

Latest updates +

Related links +

Полезные отсылки

Smart search	
Quick search	
Advanced search	
Number search	
Classification search	
Maintenance news	+
News flashes	+
Latest updates	+
Related links	-
<ul style="list-style-type: none"> → Release notes and known issues → Worldwide patent data coverage information (updated bi-annually) → Some basic things you should know about Espacenet → Some basic things you should know about searching → Get assistance → Terms and conditions of use for Espacenet → Fair use charter for the EPO's online patent information products → The Patent Information Tour → Recommended standard on two-letter codes → Espacenetユーザーの皆様、 → Espacenet中文用戶界面 → Espacenet 한국어 사용자 인터페이스 	

Smart search

Smart search:

Espacenet presents:

The headquarters of PI5 were located in a nondescript building down an unobtrusive side alley leading off thoroughfares. The premises were fronted by a bright white, chrome and stainless, glitzy modern hotel with intelligence activities going on in the dingy edifice behind.

M was in the office early that morning and, unusually, was at his desk before his secretary, the efficient G

M was worried. The previous evening, he had had some disturbing news over [the encrypted phone](#) from I on a dangerous mission. Pond refused to give all the details and M wanted to get to the bottom of it.

M's finger jabbed at the [intercom](#) button as soon as he heard Geldpfennig enter her office, through which he wanted to speak to him.

"Geldpfennig!" he barked into the mike. "As soon as Pond gets in I want him and Q in my office."

"Yes, M," replied Geldpfennig, taken aback at his abruptness.

"There must be something wrong, I hope Jason's not in trouble again," she thought.

Jason Pond was one of PI5's best secret patent agents (Geldpfennig thought he was THE best. She worried about his mission, and was always relieved to see him back safely). Pond was a member of the elite corps, cross-classified approximately 18535 entitled to the [D07 classification](#).

That morning Pond was returning from a very dangerous mission, in which he had saved the world (again) from the planet.

Pond had had the usual violent encounters with brutal thugs, and evil plots masterminded by twisted cat-thieves, and was simultaneously exhilarated, exhausted and relieved.

And very, very angry.

"But maybe it wasn't all bad," mused Pond as he steered the specially equipped [Aston Martin DBS](#) off the PI5's dismal subterranean garage.

Наполнение Espacenet

- Более 80 млн документов из более чем 90 стран и международных организаций
- Основа – минимум PCT

Due to the translation process from Japanese into English, these abstracts are not available until six months after publication.

The following table gives an overview of the availability of the PCT minimum documentation in the worldwide database:

Country	Facsimiles from	Abstracts from	European Classification
CH	1888, from CH1 onwards	1970	1888
DE	1877, from DE1 onwards	1970	1877, from DE1 onwards
EP	1978, from EP1 onwards	1978	1978
FR	1900	1970	1902
GB	1859	1893	1859
US	1836, from US1 onwards	1970	1836, from US1 onwards
WO	1978	1978	1978

Global patent data coverage
Click [here](#) for details.

Наполнение документами по странам

The screenshot shows a Windows Internet Explorer browser window displaying a list of countries. The address bar shows the URL: [http://documents.epo.org/projects/babylon/eponet.nsf/0/2464E1CD907399E0C12572D50031B5DD/\\$File/g](http://documents.epo.org/projects/babylon/eponet.nsf/0/2464E1CD907399E0C12572D50031B5DD/$File/g). The browser interface includes a menu bar with options like 'Файл', 'Редактирование', 'Переход', 'Избранное', and 'Справка'. Below the menu bar is a toolbar with various icons and a search box containing the text 'Найти'. The main content area displays a list of countries, numbered 11 through 82, arranged in two columns. The list includes countries such as Switzerland (CH), Chile (CL), China (CN), Costa Rica (CR), Czechoslovakia (CS), Cuba (CU), Cyprus (CY), Czech republic (CZ), German Democratic republic (DD), Germany (DE), Denmark (DK), Algeria (DZ), Eurasia (EA), Ecuador (EC), Estonia (EE), Egypt (EG), European Patent Office (EP), Spain (ES), Finland (FI), France (FR), Great Britain (GB), Gulf Cooperation Council (GC), Georgia (GE), Greece (GR), Hong Kong S.A.R (HK), Malawi (MW), Mexico (MX), Malaysia (MY), Nicaragua (NI), Netherlands (NL), Norway (NO), New Zealand (NZ), OAPI (OA), Panama (PA), Peru (PE), The Philippines (PH), Poland (PL), Portugal (PT), Romania (RO), Republic of Serbia (RS), Russia (RU), Sweden (SE), Singapore (SG), Slovenia (SI), Slovakia (SK), San Marino (SM), Soviet Union (SU), El Salvador (SV), Tajikistan (TJ), and Turkey (TR). The status bar at the bottom of the browser window shows 'Готово' and 'Неизвестная зона'.

11	Switzerland (CH)	58	Malawi (MW)
12	Chile (CL)	59	Mexico (MX)
13	China (CN)	60	Malaysia (MY)
14	Costa Rica (CR)	61	Nicaragua (NI)
15	Czechoslovakia (CS)	62	Netherlands (NL)
16	Cuba (CU)	63	Norway (NO)
17	Cyprus (CY)	64	New Zealand (NZ)
18	Czech republic (CZ)	65	OAPI (OA)
19	German Democratic republic (DD)	66	Panama (PA)
20	Germany (DE)	67	Peru (PE)
21	Denmark (DK)	68	The Philippines (PH)
22	Algeria (DZ)	69	Poland (PL)
23	Eurasia (EA)	70	Portugal (PT)
24	Ecuador (EC)	71	Romania (RO)
25	Estonia (EE)	72	Republic of Serbia (RS)
26	Egypt (EG)	73	Russia (RU)
27	European Patent Office (EP)	74	Sweden (SE)
28	Spain (ES)	75	Singapore (SG)
29	Finland (FI)	76	Slovenia (SI)
30	France (FR)	77	Slovakia (SK)
31	Great Britain (GB)	78	San Marino (SM)
32	Gulf Cooperation Council (GC)	79	Soviet Union (SU)
33	Georgia (GE)	80	El Salvador (SV)
34	Greece (GR)	81	Tajikistan (TJ)
35	Hong Kong S.A.R (HK)	82	Turkey (TR)

Наполнение Espasenet (продолжение)

- Документы, не входящие в «минимум РСТ», часто не имеют ни реферата, ни даже полной библиографии (см. Help).
- В Espasenet включена и непатентная литература (НПЛ или NPL). Ссылкам на НПЛ присвоены номера с двубуквенным кодом XR, например: XR1 или XR000123456
- Поиск документов XR по автору и словам невозможен
- Нельзя ограничить поиск только НПЛ (т.е. по коду XR)

Виды поиска и Поисковые массивы

Виды поиска

- **Smart search** («Умный поиск», совпадает со стартовой страницей)
- **Advanced search** («Расширенный поиск»)
- **Classification search** (просмотр или поиск в классификационной системе ЕПВ «СРС»).

Поисковые массивы:

- **Worldwide** - вся вышеупомянутая коллекция патентных документов разных стран мира (в очень разных объемах представления информации).
- **EP** – полная коллекция (с 1978г) всех опубликованных документов ЕПВ [с возможностью поиска по полному тексту](#).
- **WIPO** – полная коллекция (с 1978г) всех опубликованных заявок РСТ [с возможностью поиска по полному тексту](#).

Advanced search (Расширенный поиск)

Advanced search

Smart search

Advanced search

Classification search

Quick help

- [How many search terms can I enter per field?](#)
- [How do I enter words from the title or abstract?](#)
- [How do I enter words from the description or claims?](#)
- [Can I use truncation/wildcards?](#)
- [How do I enter publication, application, priority and NPL reference numbers?](#)
- [How do I enter the names of persons and organisations?](#)
- [What is the difference between the IPC and the CPC?](#)
- [What formats can I use for the publication date?](#)
- [How do I enter a date range for a publication date search?](#)
- [Can I save my query?](#)

Related links

Select the collection you want to search in

Worldwide - collection of published applications from 90+ countries

Enter your search terms - CTRL-ENTER expands the field you are in

Enter keywords in English

Title: plastic and bicycle

Title or abstract: hair

Enter numbers with or without country code

Publication number: WO2008014520

Application number: DE19971031696

Priority number: WO1995US15925

Enter one or more dates or date ranges

Publication date: yyyyymmdd

Enter name of one or more persons/organisations

Applicant(s): Institut Pasteur

Inventor(s): Smith

Enter one or more classification symbols

CPC

IPC H03M1/12

Clear

Search

Advanced search (Расширенный поиск)

10 поисковых полей:

- ключевые слова из названия («Keyword(s) in title»);
- ключевые слова из названия и/или реферата («Keyword(s) in title or abstract»);
- номер публикации («Publication number»);
- регистрационный номер заявки («Application number»);
- номер приоритетной заявки («Priority number»);
- дата публикации («Publication date»);
- заявитель («Applicant(s)»);
- изобретатель («Inventor(s)»);
- Объединенная патентная классификация («CPC Cooperation Patent Classification» с 1 января 2013 года);
- Международная патентная классификация («International Patent Classification (IPC)»).

При поиске в массивах EP или WIPO (полные коллекции Европейских документов и заявок РСТ) в поисковую маску добавляется ещё одно поле – «Keyword(s) in full text» (Ключевые слова в полном тексте), но исключается поле «Cooperation Patent Classification (CPC)».

Логические операторы

- Три логических (булевых) оператора – **AND** (И), **OR** (ИЛИ) и **NOT** (НЕ) [кроме Smart search, где добавлены операторы близости и сравнения]
- Оператором по умолчанию в текстовых полях является оператор **AND**
- Все номера (подачи заявки, приоритета и публикации) и даты публикации – по умолчанию объединяются оператором **OR** (ИЛИ)
- При поиске в поле «Дата публикации» не вводятся никакие операторы, хотя логика соединения дат соответствует логике **OR** (ИЛИ)

Поисковые возможности и ограничения Espacenet

- В одно поисковое поле может быть введено не более 10 терминов
- В расширенном виде поиска (Advanced search) на все 10 поисковых полей для составления запроса может быть использовано не более 20 поисковых терминов с 19 логическими операторами.
- Ключевые слова, вводимые для поиска в поле реферат, должны быть только на английском языке
- Нельзя использовать термины, определенные, как «стоп - слова» (**FOR, WITH, THE, BUT, AND, OF, ANY** и т.п.)
- Регистр букв (строчные или заглавные) может быть любым, при этом будут найдены эти слова, записанные как строчными, так и заглавными буквами
- При заключении группы слов в кавычки производится поиск «как задано», т.е. заданных слов рядом в заданном порядке (в виде «фразы»);

Усечения и подстановки

- Только в текстовых полях в конце слов
- Подстановки «?» и «#»
(не менее 2-х букв в начале слова)
- Усечение *
(не менее 3-х букв в начале слова)

Усечения и подстановки

?

1 или 0 символов **ozon?** **ozon ozone**

#

1 символ **ozon#** **ozone**

*

любое количество символов **ozon*** **ozone**
ozonation ozonide ozonize ozonized
ozonometer

Форматы записи номеров и дат

- Формат записи регистрационных номеров заявок (в том числе приоритетных) - **ССГГГГnnnnnnnn**, где **СС** - двухбуквенный код страны, **ГГГГ** - год, **nnnnnnnn** – шестизначный или семизначный регистрационный номер заявки (если знаков в номере заявки меньше семи, то лучше дополнять его предшествующими нулями до 7). Номер записывается без пробелов. Например, GB1995**000**8026.
- Формат ввода номера публикации: **ССnnnnnnnnnn**, где **СС** - двухбуквенный код страны, **nnnnnnnnnn** - номер, состоящий из различного (от 1 до 10) количества знаков. Не следует делать пробел между двухбуквенным кодом и цифрами.
Пример: **FR4231348, CH218103.**
- Формат ввода дат: **ГГГГ** или **ГГГГММ** или **ГГГГММДД**. Допускается **ДД/ММ/ГГГГ**.

Задание диапазона дат

- Поиск документов внутри задаваемого диапазона дат осуществляется указанием начальной и конечной дат интервала. Задать интервал дат можно несколькими способами:
 - - даты, разделенные пробелом, например "**2000 2001**", как в кавычках, так и без них;
 - - даты, разделенные двоеточием, например: **2000:2001** (только в Advanced search);
 - - даты, разделенные запятой, например **2000,2001**;
- Во всех этих случаях система будет искать публикации, осуществленные между **01.01.2000** и **31.12.2001**, включая эти даты.

Формат записи рубрик классификаций

- **H04N7/173** - без пробелов
- «Авто-усечение» (**нельзя** ставить*) на любом уровне МПК: *H, B62, B62J, A47D15, B60N2/28, A47D15/00 AND B60N2/28*
- Ho в **CPC** при поиске по более дробным рубрикам, чем подгруппа МПК, для усечения ставится знак усечения: *A47D15/00**

Формат имен и названий

- Стандартный формат: сначала фамилия (Surname или Last name), а затем имя (First name).
- Если неясно, изобретателю или заявителю принадлежит это имя, используйте для поиска **Smart search**.
- Очень трудно искать по фирмам, т.к. их названия не стандартизированы. Пробуйте все возможные варианты написания названий, их частей, транслитерации, аббревиатур и т.п.

Smart search (УМНЫЙ ПОИСК)

- Ввод запроса осуществляется в одно поисковое окошко
- Запросы могут вводиться как с кодами (идентификаторами) полей, так и без них.
- Основные типы полей: pd (дата публикации),
 cl (классификация),
 num (номер),
 ia (изобретатель и заявитель),
 txt (код по умолчанию)
- Поисковые поля можно соединять оператором OR (но по умолчанию, т.е. без его ввода, используется AND)
- Каждый тип поля (кроме даты публикации) подразделяется ещё на несколько более конкретных полей.

Поля в Smart search

Код поля	Описание	Примеры
in	изобретатель	in=smith
pa	заявитель	pa=Siemens
ti	название	ti="mouse-trap"
ab	реферат	ab="mouse-trap"
pr	номер приоритетной заявки	pr=ep20050104792
pn	номер публикации	pn=ep1000000
ap	номер заявки	ap=jp19890234567
pd	дата публикации	pd=20080107.....или· pd="07/01/2008".....или· pd=07/01/2008
ct	цитата/цитируемый документ	ct=ep1000000
ec	европейская классификация	ec="A61K31/13"
ia	изобретатель и заявитель	ia=Apple.....или·¶ ia="Ries-klaus"
ta	название и реферат	ta="laser-printer"
txt	название, реферат, изобретатель и заявитель	txt="microscope-lens"
num	номер публикации, заявки или приоритетной заявки	num=ep1000000
ipc	<u>международная классификация (все версии МКК, текущая и предыдущие)</u>	ipc=A63B49/08
cl	классификация (ipc и ec)	cl=C10J3

Дополнительные операторы в Smart search

Операторы близости (proximity – близость)

- **T1 prox/distance<n T2** Пример: **mouse prox/distance<3 trap**
(**МЫШЬ prox/distance<3**
ловушка)
Система найдет патенты, где слова **mouse** и **trap** находятся в текстовых полях (код поля txt) на расстоянии не более 3 (трёх) слов между ними в заданном порядке (в порядке написания).
- **T1 prox/unit=sentence T2** Пример: **mouse prox/unit=sentence trap**
Система найдет патенты, где слова **mouse** и **trap** встречаются в одном и том же предложении в текстовых полях.
- **T1 prox/unit=paragraph T2** Пример: **mouse prox/unit=paragraph trap**
Система найдет патенты, где слова **mouse** и **trap** встречаются в одном и том же параграфе (абзаце) в текстовых полях.
- **T1 prox/ordered T2** Пример: **ia=Apple prox/ordered ia=Corp**
Система найдет документы, содержащие в указанном порядке (в заданном поле) Apple Corp, а не Corp Apple.

Работа с результатами поиска

Espacenet - results view - Windows Internet Explorer

http://worldwide.espacenet.com/searchResults?AB=bicycle+and+motor&AP=&CPC=&DB=EPODOC&IC=

Европäische Patentamt
 European Patent Office
 Office européen des brevets

Deutsch English Français
Contact
Change country

Espacenet
 Patent search

About Espacenet Other EPO online services
 Search Result list My patents list (0) Query history Settings Help

Refine search → Results page 1

Smart search
 Advanced search
 Classification search

Quick help

- Can I subscribe to an RSS feed of the result list?
- What does the RSS reader do with the result list?
- Can I export my result list?
- What happens if I click on "Download covers"?
- Why is the number of results sometimes only approximate?
- Why is the list limited to 500 results?
- Can I deactivate the highlighting?
- Why is it that certain documents are sometimes not displayed in the result list?
- Can I sort the result list?
- What happens if I click on the ...

Result list
 Select all (0/25) Compact

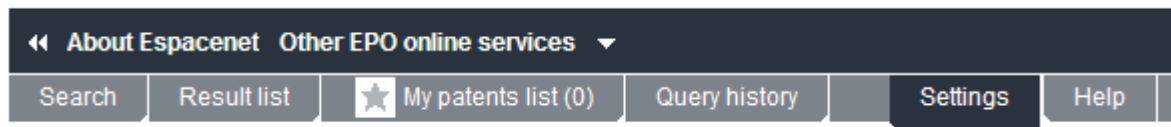
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<input type="checkbox"/>	1. Wheel Clamping Bicycle Carrier					
★	Inventor: PEDRINI FABIO [IT]	Applicant: PEDRINI FABIO [IT]	CPC:	IPC: B60R9/10	Publication info: US2015076200 (A1) 2015-03-19	Priority date: 2013-09-17
<input type="checkbox"/>	2. ELECTRIC BICYCLE					
★	Inventor: SONG JOON KYU [KR]	Applicant: SONG JOON KYU [KR]	CPC: <u>B62M6/65</u>	IPC: B62M6/45 B62M6/65	Publication info: US2015075887 (A1) 2015-03-19	Priority date: 2013-09-17
<input type="checkbox"/>	3. SAFETY APPARATUS OF ELECTRIC BICYCLE AND SAFETY DRIVING METHOD THEREOF					

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1. **METHOD AND SYSTEM FOR OPTIMIZING THE CONFIGURATION OF A SOLAR POWER SYSTEM**

	Inventor: HINNERS BILLY [US] WAYNE GARY [US]	Applicant: SUNRUN INC [US]	CPC: H01L31/042	IPC: F24J2/38 G06F17/50	Publication info: WO2014078002 (A1) 2014-05-22	Priority date: 2012-11-14
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2. **COMBINED COOLING, HEAT, AND POWER SYSTEM AND METHOD FOR DISTRIBUTED INTERNAL COMBUSTION ENGINE WITH COMPLEMENTING SOLAR ENERGY AND ALTERNATIVE FUEL**

	Inventor: JIN HONGGUANG [CN] HONG HUI [CN] (+3)	Applicant: INST ENG THERMOPHYSICS CAS [CN]	CPC:	IPC: F03G6/06 F24J2/04 F24J2/06 (+2)	Publication info: WO2014075221 (A1) 2014-05-22	Priority date: 2012-11-13
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3. **METHOD FOR CONVERSION OF STRONG SOLAR RADIATION INTO ELECTRIC POWER AT A SOLAR TOWER POWER STATION**

	Inventor: LUDANOV KOSTIANTYN IVANOVYCH [UA]	Applicant: LUDANOV KOSTIANTYN IVANOVYCH [UA]	CPC:	IPC: F24J2/00 H01M14/00	Publication info: UA87705 (C2) 2009-08-10	Priority date: 2007-04-17
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Approximate (ta = solar a

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✓ 1. **Vacu** coated soda

★ Inventor

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2. **Solar** powered voltage driver-stage for operating **solar engine**, has **solar** module whose output voltage is limited by diode or transistor, where stage switches its output voltage to zero during low voltage

★ Inventor:

Applicant: BEHNKE WOLFGANG
MICHAEL [DE]

EC: [H01L31/02H2B](#)
[Y02E10/50](#)

IPC: H01L31/02
H02N6/00
H02J7/35
(+1)

Publication info: DE202005014831 (U1)
2005-11-17

Publication info: DE202005014032 (U1)
2005-11-17

3. **Solar** light system for outdoor light fixture has brightness sensor for controlling the brightness and accumulat

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- US2005213233 (A1)
- US2005279094 (A1)
- JP2005340821 (A)
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DE202005013699 (U1)	Solar light system for outdoor light ...	4
KR20050109500 (A)	SEALING AGENT FOR PHOTOELECTRIC CONVE...	5
US2005279982 (A1)	Implement for demarcating an area, as...	6
KR20050109481 (A)	PHOTOELECTRIC CONVERSION ELEMENT USIN...	7
DE202005010363 (U1)	Sealing element for solar collectors ...	8
US2005217719 (A1)	Method and apparatus for filling a dy...	9
US2005284514 (A1)	Organic electronic element with elect...	10
JP2005271920 (A)	COMPLEX TYPE SOLAR CAR	11
WO2005119133 (A2)	SOLAR COLLECTOR MOUNTING ARRAY	12
US2005217665 (A1)	Solar collector mounting array	13
US2005213233 (A1)	Optical element for shielding against...	14
US2005279094 (A1)	Almost-perpetual ecology system	15
JP2005340821 (A)	SOLAR MODULE AND MANUFACTURING METHOD...	16

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Description US2015065309 (A1) — 2015-03-05

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BICYCLE TRAINER

Description of US2015065309 (A1)

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The EPO does not accept any responsibility for the accuracy of data and information originating from other authorities than the EPO; in particular, the EPO does not guarantee that they are complete, up-to-date or fit for specific purposes.

[0001] This application claims priority from regularly filed U.S. provisional application No. 61/872,942 filed Sep. 3, 2013 by Gary Bauer, Konstantine Poukhov, Nikolay Bakunin under the title BICYCLE TRAINER.

FIELD OF THE INVENTION

[0002] The present concept relates to bicycle trainers and more particularly relates to a bicycle trainer that can simulate actual road conditions and utilize the riders own bicycle for the training exercise.

BACKGROUND OF THE INVENTION

[0003] There are numerous bicycle trainers which are known in the prior art some of which have been patented including U.S. Pat. No. 7,862,476 titled: Exercise Device, by David A. Blau et al. which was issued on Jan. 4, 2011.

[0004] The exercise device described in U.S. Pat. No. 7,862,476 does not enable the person to utilize his or her own bicycle nor does it simulate real road conditions, in particular it does not simulate the freedom of movement available on a regular bicycle in real life conditions.

[0005] Most of the bicycle training devices utilize a rigid stand and/or setup such as that described in U.S. Pat. No. 7,862,476 in which the user will sit in a simulated environment and pedal a bicycle like machine which attempts to simulate real road conditions.

Формула (Claims)

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Original claims

Claims tree

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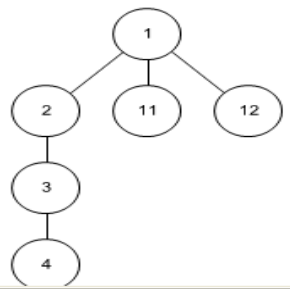
1. I claim: 1. A bicycle trainer comprising:

- a) the front forks of a bicycle mounted to a stand;
- b) the stand including a flexible support arm allowing the bicycle to rock back and forth along a rocking arc;
- c) the rear tire of the bicycle making contact with a roller face of a roller such that the roller is free to rotate in proportion to the rotation of rear tire;
- d) wherein the roller is rotationally connected to a motor for selectively applying resistance and assistance to the rear tire rotation, for simulating real course conditions.

2. The bicycle trainer claimed in claim 1 further comprising a motor assembly which includes a frame for housing the roller and motor and rigidly connecting the motor assembly to the stand, the motor is pivotally mounted to the frame about its shaft, such that the motor and roller rotate in proportional unison with each other.

11. The bicycle trainer claimed in claim 1 wherein the flexible support arm selected to allow a rocking arc of 45° each side of centre for a total arc of 90°.

12. The bicycle trainer claimed in claim 1 wherein the flexible support arm selected to allow a rocking arc of 30° each side of centre for a total arc of 60°.



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graph TD
    1((1)) --- 2((2))
    1 --- 11((11))
    1 --- 12((12))
    2 --- 3((3))
    3 --- 4((4))
  
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FIG. 2

FIG. 2

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US 20150065309A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2015/0065309 A1**

Bauer et al. (43) **Pub. Date: Mar. 5, 2015**

(54) **BICYCLE TRAINER** (52) **U.S. Cl.**

(71) Applicant: **Velo Reality Corp., Niagara Falls (CA)** CPC *A63B 22/0605* (2013.01)

(72) Inventor: **Gregory R. ...** USPC **482/61**

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« B62J B62J3/00 »

Symbol	Classification and description
★★★★★ <input checked="" type="checkbox"/> B62J 1/00	Saddles or other seats for cycles; Arrangement thereof; Component parts (...) [2013-01-01]
<input checked="" type="checkbox"/> B62J 1/002	• { Saddles having a seating area with a central cavity or depression } [2013-01-01]
<input checked="" type="checkbox"/> B62J 1/005	• { Saddles having a seating area with multiple separate weight bearing surfaces } [2013-01-01]
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<input checked="" type="checkbox"/> B62J 1/02	• Saddles resiliently mounted on the frame; Equipment therefor, e.g. springs (...) [2013-01-01]
<input checked="" type="checkbox"/> B62J 1/04	•• Saddles capable of swinging about a horizontal pivot [2013-01-01]
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<input checked="" type="checkbox"/> B62J 1/08	• Frames for saddles; Connections between saddle frames and seat pillars; Seat pillars (...) [2013-01-01]
<input checked="" type="checkbox"/> B62J 1/10	• Internal adjustment of saddles [2013-01-01]
<input checked="" type="checkbox"/> B62J 1/12	• Box-shaped seats; Bench-type seats, e.g. dual or twin seats [2013-01-01]
<input checked="" type="checkbox"/> B62J 1/14	• Separate pillions [2013-01-01]
<input checked="" type="checkbox"/> B62J 1/16	•• for children [2013-01-01]
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B62J 1/165

••• Child seats attachable to handlebars [2013-01-01]

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••• Child seats attachable in front of the driver saddle [2013-01-01]

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Publication number: **i** WO2008014520

Application number: **i** DE19971031696

Priority number: **i** WO1995US15925

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