Derwent World Patents Index —
DWPI – the world’s largest value-add patent database
# Table of contents

- FIZ Karlsruhe provides Derwent World Patents Index (DWPI) on STN® International  
  page 3
- Derwent World Patents Index - the value-add  
  page 5
- First-ever unified Markush solution delivers access to generic chemical structures  
  page 16
- STNext™ – a new gateway to the world’s premier solution for scientific, technical and IP research  
  page 18
- Postprocessing  
  page 21
- The STN Full-Text Solution: Accessing the full text of patents and journal articles  
  page 23
FIZ Karlsruhe provides Derwent World Patents Index (DWPI) on STN® International

FIZ Karlsruhe is proud to offer access to the world’s largest database of value-added patent information, the Derwent World Patents Index (DWPI), via STN International®.

DWPI opens up patents to information professionals and end-users alike by providing clear and concise abstracts for patent documents from 50 global patent-issuing authorities, dating back to 1963. The database comprises more than 76 million patent documents in 36 million patent-family-based records, and selected patent drawings for more than 26 million of them (status: March 2018). DWPI is being updated every 3-4 days, with about 100,000 new patent documents per week.

Whether you are interested in patents for their technical content, for business planning and development, or for protecting the innovations within your own organization – Derwent World Patents Index will give you the most complete picture possible.

DWPI is available on STN as files WPIDS/WPIX for Derwent subscribers, and as file WPINDEX for all other users.

Leveraging the wealth of the Derwent World Patents Index

The DWPI database is amenable to extensive searching by text, chemical structure, and special coding. It can serve to explore the wider background of an invention for technology survey or possible infringements beyond the patent family, but it can also serve to monitor competitors, or to compile statistics on technology trends etc.

The entry point into the DWPI database may for instance be a document identifier like a patent publication number, or a patent assignee’s or inventor’s name, a text query, a deep indexing profile or a structure query. Once a relevant document has been identified, this can be used to fan out to related patent documents by leveraging the various indexing schemes available.

There is a wide range of options available for searching the information provided in DWPI, including free text, patent assignee (owner) names and codes, patent numbers, publication date, country of origin, and the inventor’s name. You can also search by Derwent Classification and International and National Patent Classification systems (IPC, CPC, ECLA/ICO, US and Japanese national classifications).

A fully integrated Chemical Repository allows searching for chemical structures in the same fashion as in other STN databases. Clarivate Analytics also provides a more detailed classification for electronic/electrical subjects called “Manual Codes”, which are available to all users.
If you are a Clarivate Analytics subscriber, you can also access some or all of the following intellectual indexing in DWPI:

- Chemical Manual Codes – a hierarchical classification system assigned by Clarivate Analytics subject specialists to enable precise retrieval of chemical and biological patent technologies
- Chemical Indexing – a detailed indexing system for comprehensive retrieval of chemical substance references in pharmaceutical, agrochemical or general chemical patents
- Polymer Indexing – a detailed indexing system for comprehensive retrieval of polymer and related chemical substance references in patents

Traditionally being regarded as the premier source of patent information through value-added patent data, DWPI also offers selected first level data, in particular original abstract and claims text. Both worlds — value-added and first level data — are kept separate in the STN database to allow the user to stay in the realm of value-added DWPI data — since they presumably contain data of different impact — or take the option to search in the selected first level data as well. Combining value-added and first level data in search statements opens up new opportunities to arrive swiftly at comprehensive search results.

There are both invention level documents and supplementary individual publication data uniquely available side by side permitting to exploit any synergistic effects.

The invention level comprises the ‘Patent Family’ information such as bibliographic data, value-add title and abstracts, and general and, where appropriate, in-depth chemical and polymer indexing, assigned by Clarivate Analytics. Each patent family starts with the new invention (Basic Patent) and information about the same invention issued in other countries (Equivalent Patents) is being added once it becomes available.

Additionally, electrical and engineering drawings are present in records dating back to 1988, and chemical structure drawings are present in records dating back to 1992.

The individual patent publication records allow users to specifically search and display bibliographic data and general indexing information within the realm of the individual documents. Additional data elements such as original titles and abstracts, claims, addresses and agent information are also available for individual patent publications extending the reach of the query and opening the possibility for performing combined searches for value-added and first level data.

The seamlessly integrated Chemical Resource (DCR) allows for chemical structure searching. It contains more than 3 million well-defined chemical structures, in particular organic compounds. STN structure queries can be used for searching DCR just like in any other STN structure database or multi-file environment comprising them.

**Why is patent information so important?**

Patents are the largest single source of technical information in the world, providing a unique and vast library of technical and research information. About one million new patent applications are filed every year. Over 80% of scientific information contained within patents is not published anywhere else. In addition, patent applications cannot be anonymous and are usually the first published account of an invention.

Patents are a vital resource for uncovering new technology information, avoiding duplication of research, following competitor activities, avoiding patent infringements, and highlighting potential infringements of your company’s own products. Using patent information as a current awareness information source ensures your company is always up-to-date with the latest developments in your field.
Derwent World Patents Index - the value-add

DWPI is compiled through a process of rigorous classification, abstracting and intellectual indexing:

- Information contained in Derwent World Patents Index is sourced from the original patent or patent applications from 50 international patent issuing authorities.

- Clarivate Analytics gathers worldwide patent publications which relate to the same invention. This is provided as a concise patent family table, representing the global protection of the invention as sought by the patent assignee/applicant. Each invention’s patent family is contained within a single database record for convenience and ease-of-use.

- Clear titles and abstracts written to summarize the novelty, use and advantage of an invention.

- The original patent titles are rewritten to make them more meaningful and easier to understand. Original patent titles are often deliberately vague. This allows users to quickly identify which patents are important to their work.

- Clarivate Analytics subject specialists write clear and concise 100-500 word English abstracts for patents issued in over 30 languages, which describe both the legal claims and the main uses and advantages of the technology. This enables users to retrieve focused, relevant search results, and so save time and money by making best use of their resources.

- Clarivate Analytics subject experts apply sophisticated systems of indexing, providing comprehensive searching for the professional searcher, allowing companies to search patent information with confidence.

- Clarivate Analytics assigns the top patenting companies a standardized code. Taking all name variations into account, this feature provides for efficient competitor monitoring and statistical analysis of patenting trends.

- Clarivate Analytics compiles all the Patent Classifications (IPC, CPC, ECLA, US National, Japanese F- and FI-Terms), patent assignee names and inventor names from an invention’s patent family members and records them in a single concise database record. This helps to make DWPI both a comprehensive and an efficient resource for patent searching.

Access the Derwent World Patents Index value-add on STN

STN is the ideal place to search the world’s largest value added patent database. In addition to the great benefits provided by Clarivate Analytics, STN offers you:

- File synergy with Chemical Abstracts Service (CAS) and other scientific and engineering databases. STN uniquely provides Derwent WPI alongside CAplus™ and CAS Registry™.
• Access to information from more than 48 million patents from 63 patent issuing authorities, giving details of over 29 million inventions in one database.

• Invention documents as well as individual publication records seamlessly integrated in one database.

• Bibliographic data, value-added titles, abstracts, general indexing searchable in detail and, where appropriate, in-depth chemical and polymer indexing.

• Documentation abstracts for the period between 1995 and 1999.

• All value-added text data indexed in the basic index without stopwords. Simultaneous left and right truncation is optionally available.

• All first level text data searchable in the separate basic index extension.

• Support for searching plurals, abbreviations and spelling variations.

• Extensively standardised bibliographic information.

• Extensive cross-filing capabilities, e.g. from PCI to DWPI since both have the same accession number.

• Monthly revision of patent office’s indexing: IPC, CPC, ECLA, FI/F-Terms

• Extra data available for individual patent publications like author abstracts and claims or original patent assignee names and addresses in the same database.

• All information pertaining to an individual publication separately searchable.

• Value-added and first level data searchable in combination.

• Several thesauri helping to navigate through the maze of search terms.

• Numeric values of 55 physical and chemical properties in almost 400 unit variants are searchable in all English text fields (titles, abstracts, claims).

• Electrical and engineering drawings present in records dating back to 1988, and chemical structure drawings present in records dating back to 1992.

• An integrated structure searchable chemical repository now containing more than 2 million chemical compounds which has been available since 1999.

• Sophisticated support for Derwent Chemical Fragmentation code searches.

• One-click navigation directly from Derwent WPI records to patent full-text options using the STN full-text solution.

• High quality human translation of patent documents from Arabic, Chinese, Japanese, Korean, Russian, Thai, and Vietnamese into English via the STN full-text solution/FIZ AutoDoc.

• Unique and powerful online analysis and two dimensional tabulation features.

• Post processing tools available in STN Express for generating professional reports and tables. Further analyses can be conveniently conducted with Analyze Plus.

• Updates every 3 to 4 days (83 updates per year). There are various options for current awareness profiles including chemical structure searches.
Semiconductor device e.g. MOSFET, has first ele
third semiconductor region and fourth semiconductor region, such that
first electrode is connected to third semiconductor region and fourth
semiconductor region

AB
NOVELTY - The semiconductor device (100) has first and second gate electrodes (10)
that provides on first semiconductor region (1) through first and second gate
insulating regions (11), respectively. Third and fourth semiconductor regions of a
first and second conductivity types provide on one and another portion of second
semiconductor regions, respectively. An insulating region (15) provides between
third and the fourth semiconductor regions. A first electrode provides on the third and
fourth semiconductor regions. The first electrode electrically connects to third and
fourth semiconductor regions.

DETAILED DESCRIPTION
An INDEPENDENT CLAIM is included for a method for
manufacturing semiconductor device.

USE - Semiconductor device e.g. MOSFET.

ADVANTAGE - The characteristic fluctuation differs from the respective
semiconductor devises and the on-resistance of the semiconductor device is reduced. The
manufacturing of the semiconductor device is smaller, according to the rate of reducing
of the both area decrease.

DESCRIPTION OF DRAWINGS - The drawing shows a perspective cross-sectional view
of a portion of the semiconductor device.

Semiconductor region (1)
Gate electrode (10)
Gate insulating region (11)
Insulating region (15)
Semiconductor device (100)
Embodiments of the present invention provide a parasitic transistor action in a semiconductor device is not easily. The semiconductor device of the embodiment has a first semiconductor region of first conductivity type, the first electrode, the second electrode, the first area of first conductive type, the second area of first conductivity type, and insulating part. The first electrode is arranged between the grid electrode and the second electrode. The first semiconductor region is positioned on a portion of first semiconductor region. The second semiconductor region is in the second direction and the third semiconductor region in parallel. An insulating part is set between the first semiconductor region and the second semiconductor region.

CLAIM 1
A semiconductor device, wherein comprising: a first semiconductor region of first conductivity type, a first gate electrode, a gate insulating layer interposed therebetween is provided in the semiconductor region on the first gate electrode. Separating with the second gate insulating layer is provided on the semiconductor region in the first direction and the second direction. The second semiconductor region is arranged between the gate electrode and the second electrode. A second semiconductor region is positioned on a portion of first semiconductor region. The second semiconductor region is in the second direction and the third semiconductor region in parallel. An insulating part is set between the first semiconductor region and the second semiconductor region.

[CLAIM 2] The semiconductor device according to claim 1, wherein the insulating part and the gate insulating layer are connected to the semiconductor region.

[CLAIM 3] A semiconductor device, wherein comprising: a first semiconductor region of first conductivity type, a first gate electrode, a gate insulating layer interposed therebetween is provided in the semiconductor region on the first gate electrode. The second semiconductor region is arranged between the gate electrode and the second electrode. A second semiconductor region is positioned on a portion of first semiconductor region. The second semiconductor region is in the second direction and the third semiconductor region in parallel. A metal part is provided between the semiconductor region and the second semiconductor region.
with the first 3 area, the second 4 area, and the metal part.

[CLAIM 4] The semiconductor device according to claim 3, wherein the metal portion and the gate insulating layer 1 and the gate insulating 2 layer.

[CLAIM 5] A semiconductor device, wherein comprising: 1 first semiconductor region of first conductivity type 1, 1 gate electrode, 1 gate insulating layer interposed therebetween is provided in the semiconductor region 1 on the first gate electrode 2. 2 gate insulating layer interposed therebetween is provided on the semiconductor region 1 in the first direction 1 and the second 1 electrode, the 2 conductivity type semiconductor regions 2, 1 over the first semiconductor region disposed between the gate electrode 1 and the second 2 electrode; the first 3 semiconductor 1 conductivity type provided at the 4 area a portion of the semiconductor region 2 on the first 2 conductivity type provided on another portion of the semiconductor region of the first 2. conduction type of the 2 carrier concentration higher than the 2 semiconductor region, a metal part is provided in the semiconductor region 4 on the insulating part, arranged between the semiconductor region 3 and the metal part, and a second electrode 1 disposed on the first 3 area. the metal part, and the insulating part electrically connected with said first 3 region and the metal part.

[CLAIM 6] The semiconductor device according to claim 5, wherein said insulating part around the annularly disposed around the metal part, the metal part and the insulating part is surrounded by the first semiconductor region 3.

[CLAIM 7] The semiconductor device according to claim 5 3, wherein the first semiconductor region between the gate electrode 1 and the second 2 electrode is provided in plurality, the insulating part between the gate electrode 1 and the second 2 electrode is provided in plurality, the plurality of insulating part in the first direction 1 is set in the first 3 area between the metal part in the first direction 1 is set between the insulating part.

[CLAIM 8] The semiconductor device according to claim 5 3, wherein the first semiconductor region, the metal part and the insulating part in the 2 direction and the 1 direction crossed with the metal part and the insulating part and the gate insulating layer.

STN allows you to extend your search into the entire STN world of information with ease

INPADOCDB/INPAFAMDB is one of the databases which perfectly complement the Derwent World Patents Index giving easy access to wide international patent family and legal status information.
An example from chemistry

**AB**

**NOVELTY** - A substituted-quinolin-4(1H)-one compound (Ia) or (Ib), is new.

**DETAILED DESCRIPTION** - A substituted-quinolin-4(1H)-one compound of formula (Ia) or (Ib), or its salt, is new.

(R-a)-Rd-m, halo, 1-6C alkyl, 1-6C haloalkyl, 1-6C hydroxalkyl, 1-6C alkoxy, 1-6C haloalkoxy, 2-10C alkenyl, 2-10C haloalkenyl, 2-10C alkynyl, 2-10C haloalkynyl, hydroxy, nitro, cyano, 1-6C alkoxy carbonyl amino, amino, 1-6C alkylamino, di(1-6C alkyl amino), amino, 1-6C haloalkyl, (1-6C) amino, 1-6C haloalkoxy, 1-6C haloalkenyl, 1-6C haloalkynyl, 1-6C alkoxy, 1-6C haloalkoxy, 2-10C alkenyl, 2-10C alkenyl carbonyl, 2-10C haloalkenyl, 2-10C alkynyl, 2-10C haloalkynyl, hydroxy, nitro, cyano, 1-6C alkoxy carbonyl, amino,
1-6C alkylamino, 1-6C cyanoalkyl, di(1-6C alkyl)amino, amino(1-6C)alkyl, (1-6C) alkylamino(1-6C)alkyl, 1-6C alkanoyl, 3-7C cycloalkyl, (1-6C)alkyl(3-7C)cycloalkyl, aryl, (1-6C)alkylaryl, (1-6C) haloalkylaryl, (2-6C) alkenylamido(1-6C)alkylalkoxy, heteroaryl, (1-6C)alkylheterocyclyl, heteroaryl, or (1-6C)alkylheteroaryl (all optionally substituted);

R3=1-4C alkyl, isoalkyl, cycloalkyl, phenyl, or 1-4C haloalkyl;

n=0-2; and

Y’=H, alkyl, haloalkyl, -C(O)alkyl, -C(O)aryl, sulfonylalkyl, sulfonylaryl, aryl, or alkylaryl, in which alkyl has 1-10 carbon atoms, and aryl is optionally substituted.

An INDEPENDENT CLAIM is included for composition, which comprises the compound (Ia) or (Ib), and a carrier.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - c-Myc inhibitor. Test details are described but no results given.

USE - New substituted-quinolin-4(1H)-one compound is used in composition (claimed) used for destroying, modifying, controlling or eliminating primary, localized or metastatic cancer cells or cancer tissues, minimizing spread of cancer, and providing therapeutic benefits in treatment or management of cancer, neoplastic diseases, or tumors such as lung cancer, colorectal cancer, colon cancer, rectal cancer, breast cancer, bladder cancer, leukemia, myelogenous leukemia, lymphoma, small cell lung cancer, lung cancer, cervical carcinoma, osteosarcoma, glioblastoma, and melanoma by inhibiting c-Myc/MAX/DNA complex formation.

ADVANTAGE - The substituted-quinolin-4(1H)-one has excellent inhibition effect on c-Myc/MAX/DNA complex formation.

TECH ORGANIC CHEMISTRY - Preparation: No general preparation given. Preferred Components: The compound (Ia) or (Ib) is preferably compound of formula (IIa) or (IIb).

R4a,R4b=H, halo, 1-4C alkyl, 1-4C haloalkyl, or 1-4C haloalkyl and some H are substituted with substituent other than Ar=phenyl, 5-6-membered heteroaryl having heteroatom chosen from N, S, and O, or 8-12-membered biheteroaryl having heteroatom chosen from N, S, and O, which is optionally substituted with 1 or more halo, 1-6C alkyl, 1-6C alkythio, 1-6C haloalkythio, alkoxy, haloalkoxy, 2-10C alkenyl, 2-10C haloalkeny, 2-10C alkynyl, 2-10C haloalkynyl, hydroxy, COOH, nitro, cyano, alkoxycarbonyl, amino, 1-6C alkylamino, di(1-6C alkyl)amino, amino(1-6C)alkyl, (1-6C)alkylamino(1-6C)alkyl, (1-6C)alkylamino(1-6C)alkylamino, 1-6C alkanoyl, SF5, S(O)CF3, SCF3, NHC(O)CH3, C(O)NHCH3, NHSO2CH3, 3-7C cycloalkyl, aryl, benzoyl, heterocyclyl, heteroaryl, phenyl, oxazolyl, pyrazolyl, pyrrolyl, imidazolyl, thiazolyl, thiophenyl, pyridinyl, pyrindinyl, indolyl, benzopyrazolyl, benzothiazolyl, benzoxazolyl, isoxazolyl, benzimidazolyl, and benzo thiophenyl; preferably CF3, halo, (1-3C)alkyl, (1-3C)haloalkyl, H, COOH, nitro, cyano, amino, di(1-3C alkyl)amino, NHC(O)CH3, and C(O)NHCH3.

ABEX ADMINISTRATION - The composition is administered at a dose of 0.001-100 mg/kg/day, preferably 0.01-30 mg/kg/day by any suitable route.

SPECIFIC COMPOUNDS - 107 Substituted-quinolin-4(1H)-one compounds (Ia) or (Ib) are specifically claimed, e.g.

3-acetyl-8-bromo-5-chloro-2-(methylsulfinyl)quinolin-4(1H)-one (III), 3-acetyl-8-bromo-5-chloro-2-(methylthio)quinolin-4(1H)-one (IV), 3-acetyl-8-bromo-5-chloro-2-(methylsulfonyl)quinolin-4(1H)-one (V), 3-acetyl-8-bromo-5-chloro-2-(methylthio)quinolin-4(1H)-one (VI), and 3-acetyl-8-bromo-5-chloro-2-(methylthio)quinolin-4(1H)-one (VII).

EXAMPLE - 393.69 g/mol Ethyl (Z)-2-(((2-bromo-5-chlorophenyl)amino)(methylthio)methylene)-3-oxobutanoate was dissolved in o-dichlorobenzene and stirred for 12 hours at 180 degrees C. The reaction mixture was cooled to room temperature and was subjected to distillation under reduced pressure to obtain solid. A nucleic acid was added to the resulting solid, and the mixture was stirred for 10 minutes and was subjected to filtering to obtain 3-acetyl-8-bromo-5-chloro-2-(methylthio)quinolin-4(1H)-one. 347.62 g/mol 3-Acetyl-8-bromo-5-chloro-2-(methylthio)quinolin-4(1H)-one was oxidized with 1.5 equivalent meta-chloroperoxybenzoic acid in anhydrous dichloroethane to obtain 363.62 g/mol 3-Acetyl-8-bromo-5-chloro-2-(methylthio)quinolin-4(1H)-one.
Various Chemical Indexing schemes allow for highly selective retrieval of chemical information. (Searching requires a subscription)
ABEN The present invention is to provide the novel compound or the pharmaceutically-acceptable salt thereof having the activity suppressing the c-Myc / Max / DNA co integration of the specific chemistry structure.

CLAIM 1 A salt, wherein: salt is allowable to the pharmaceutically.

([Chemical formula 1 a]) ([Chemical formula 1 b]) In the chemical formula 1, each other R1a to R1d R1a to R1d is not independently substituted with the hydrogen, halogen, C1-6 alkyl, C1-6 haloalkyl, C1-6 hydroxyalkyl, C1-6 alkoxy, C1-6 haloalkoxy, C1-10 alkenyl, C2-10 haloalkenyl, C2-10 alkynyl, C2-10 haloalkynyl, hydroxyl group, nitro, cyano, C1-6 alkoxy carbonyl, amino, C1-6 alkyl amino, the die (C1-6 alkyl) amino, amino (C1-6) alkyl, (C1-6) alkyl amino (C1-6) alkyl, C1-6 alkanoyl, C3-7 cycloalkyl, aryl, heterocycle or the heteroaryl or it can be optionally substituted. The R2, is the hydrogen, C1-6 alkyl, (C1-6) alkoxy (C1-6) alkyl, C1-6 haloalkyl, C1-6 hydroxyalkyl, C1-6 haloalkoxy, C1-6 alkoxy, C1-6 haloalkoxy, C2-10 alkenyl, C2-10 haloalkenyl, C2-10 alkynyl, C2-10 haloalkynyl, hydroxyl group, nitro, cyano, C1-6 alkoxy carbonyl, amino, C1-6 alkyl amino, the die (C1-6 alkyl) amino, amino (C1-6) alkyl, (C1-6) alkyl amino (C1-6) alkyl, C1-6 alkanoyl, C3-7 cycloalkyl, (C1-6) alkyl (C3-7) cycloalkyl, aryl, (C1- the the) alkyaryl, and (C1- the the) haloalkylaryl, (C2-6) alkenyl amide (C1-6) alkyl alkoxy, heterocycle, (C1- the the) alkyl heterocycle, and the heteroaryl or (C1- R2 is not substituted with the) alkylheterosaryl or it can be optionally substituted. R3 is the C1-4 alkyl, iso alkyl, cycloalkyl, phenyl or the C1-4 haloalkyl. The n is the integer of 0 ~ 2. Y is the hydrogen, alkyl, haloalkyl, - C (O) alkyl, - C (O) aryl, sulfonylalkyl, sulfonyl aryl, aryl or the alkylaryl. Here, preferably the alkyl silver, and the carbon number 1 ~ 10 is the carbon number 1 ~ 4. The aryl is not substituted or it can be optionally substituted.
## Patent Family and Legal Status of JP 4086498 B2 from INPADOCDB

<table>
<thead>
<tr>
<th>AN</th>
<th>Publication Details</th>
<th>Legal Status Details</th>
</tr>
</thead>
</table>
| 93468266 INPADOCDB | | 2016-07-29 KRA PRI Patent application  
2017-07-24 KRA APP Patent application  
2017-07-24 KRA201 REQUEST FOR EXAMINATION  
2017-11-24 KRA302 REQUEST FOR ACCELERATED EXAMINATION |

**c-Myc/Max/DNA Compounds inhibiting formation of c-Myc/Max/DNA complex.**
Derwent patent files that you can use together with DWPI

**DPCI** (Derwent Patents Citation Index) – Unmatched coverage of patent citations from 23 patent-issuing authorities.

**DGENE** (Derwent Geneseq™) – The most comprehensive source of information on nucleic and amino acid sequences from worldwide patents.

**DCR** (Derwent Chemistry Resource) – Included in Derwent WPI for searching specific chemical compounds indexed in the bibliographic records.

**BIOTECHABS** (Derwent Biotechnology Abstracts) – All aspects of biotechnology from patents, journals and conferences

**CROPU** (Derwent Crop Protection File) – All aspects of pesticides, including their use in crop protection and pest control from patents journals and conferences

**DJSMONLINE** (Derwent Journal of Synthetic Methods) – Structure-searchable chemical reactions database from patents, journals and conferences

**DWPIM** (Derwent Markush Resource) – Fully integrated in the STN search environment for chemical (structure) databases, it is possible to conduct combined chemical structure and Markush searches on a single platform using CAS Registry®, MARPAT, Reaxysfile, Derwent Chemical Resource and Derwent Markush Resource.

**LitAlert** (Litigation Alerts) – Litigation activity in U.S. patent and trademark portfolios

Other complementary patent files on STN

**CAplusSM** – Worldwide literature from all areas of chemistry, biotechnology, and chemical engineering. Provides timely access to bibliographic data, abstracts and CAS® patent family information.

**INPADOCDB**/**INPAFAMDB** – Patent records including international patent family data from more than 100 patent-issuing organizations, and legal status data published by 77 patent organizations.

**USPATFULL**/**USPAT2** – Full text and the current classifications for the original publications of patent documents issued by the U.S. Patent and Trademark Office from 1971 to the present

**EPFULL**/**PCTFULL** – Patent full texts from the European Patent Office and WIPO, respectively. PCTFULL includes English machine translations for PCT-filings in a non-Latin language.

**CNFULL**/**INFULL**/**JPFULL** – English patent full texts for patent documents published in China, Japan and India. The full text in CNFULL and JPFULL is based on machine translations.

**AUPATFULL**/**CANPATFULL**/**FRFULL**/**GBFULL**/**PATDPAFULL** – Patent full texts published in Australia, Canada, France, Germany and the UK, respectively. English machine translations are available for patent full texts in original French language (FRFULL, CANPATFULL).

**IFICLAIMS** (IFICDB, IFICLS, IFIPAT, IFIREF, IFIUDB) files – Complete and up-to-date range of U.S. patents, dating back to 1950.

... and more.
First-ever unified Markush solution delivers access to generic chemical structures

As the number of chemical structures disclosed in patents rapidly increases, it is imperative that IP professionals have the right tools for searching this information efficiently and reliably. STN introduced on the new STN platform the first-ever unified Markush structure search solution with MARPAT® from CAS and the Derwent Markush Resource (DWPIM) from Clarivate Analytics.

For the first time, patent information professionals are able to conduct all of their chemical structure and Markush searches on a single platform using the most important chemical structure databases including CAS RegistrySM, Reaxysfile and Derwent Chemical Resource.

Easy Markush searching and evaluation:
• easy-to-use structure drawing editor
• straightforward structure searching in multiple databases
• efficient evaluation by meaningful assembled hit structures

The Derwent Markush Resource database on new STN
The inclusion of chemical Markush structures in patent searches is decisive for assessing the patentability of a substance or substance class. The Derwent Markush Resource database (DWPIM) is fully integrated in the STN search environment for chemical (structure) databases with an easy-to-use modern interface. The database is exclusively available on the new STN platform.

Derwent Markush Resource is a comprehensive value-added database covering generic chemical structures of various substance classes. The records in DWPIM are structure based, i.e., one record contains a single Markush structure with all variations linked to a corresponding record in DWPI via a Markush compound number. This design ensures that DWPIM is seamlessly integrated with other related Clarivate Analytics databases (DWPI, DCR) on new STN.

Content and Coverage
Patent countries and data sources
• Markush indexing for about 780,000 DWPI records
• 33 patent-issuing authorities
• US, EP, and WO coverage from 1978 onwards
• DWPI major authorities from 1987 onwards
• Complete INPI backfile (1961-1998)
**Substance classes**
- 1.9 million Markush structures
- Major classes include organic and organometallic compounds.
- Inorganic compounds, polymers, peptides, fullerenes

**Sophisticated Search and Retrieval Empower Search Precision**
- Consistent and comfortable Markush search capabilities due to preserved STN structure search conventions
- Hierarchical Markush search concept supported by established attributes

**Flexible Display Options**
- Three distinct display formats for efficient and comprehensive hit structure evaluation (full, brief, assembled)
- Hit structure highlighting helps to establish relevance and speeds up results review
STNext™ – a new gateway to the world’s premier solution for scientific, technical and IP research

STNext™ is a modern new gateway to the comprehensive content and powerful features of STN® that reflects the needs and priorities of today’s patent experts.

Built on the classic STN foundation to deliver the comfort and confidence of classic STN in a browser based interface, STNext eliminates burdensome IT overhead and offers secure access from any computer without installing any software, enhanced security, new functionality, and an intuitive interface to improve workflow efficiency.

STNext also provides contextual assistance to make STN easier to use for newcomers as well as occasional users while making sure STN searching for experts becomes more efficient.

Unique content, unparalleled power and precision, proven reliability

STNext offers access to all classic STN databases, commands and functionality to ensure availability of the essential content and capabilities you rely on, along with the familiarity of the STN command line interface. STNext is tailored to STN’s unique value-added content, the CAS, Derwent and INPADOC databases, as well as to its comprehensive portfolio of patent full-text and STM databases.
STNext Interface

STNext – uses the CASDraw Structure Editor (Javascript structure editor) and automatically saves structures under your user ID.

---

**STNext Interface**

**Transcript ON** 2018_0008_Transcript

FILE 'HOME' ENTERED AT 14:30:14 ON 29 AUG 2018

-> file CAPPLUS

http://www.cas.org/legal/infopolicy

This file contains CAS Registry Numbers for easy and accurate substance identification.

-> s "Serotonin"

L1 103910 "SEROTONIN"

L2 2019 "RHODIOLA ROSEA" OR "SEDUM ROSEA" OR "PINK ROSEWORT" OR "ROSEWORT"

6288 "RHODIOLA"
5019 "ROSEA"
1963 "RHODIOLA ROSEA"
"(RHODIOLA")" "ROSEA"
4873 "SEDUM"
5019 "ROSEA"
13 "SEDUM ROSEA"
"(SEDUM")" "ROSEA"
31889 "PINK"
84 "ROSEWORT"
2 "PINK ROSEWORT"
"(PINK")" "ROSEWORT"
84 "ROSEWORT"

L2 2019 "RHODIOLA ROSEA" OR "SEDUM ROSEA" OR "PINK ROSEWORT" OR "ROSEWORT"

-> logout y

---

**STNext – uses the CASDraw Structure Editor (Javascript structure editor) and automatically saves structures under your user ID.**
The STNext Scripting Feature — Automate Your Retrieval, Create and Manage Your Own Retrieval Knowledge Base

Scripting on STN allows you to automate your retrieval and to create and manage your own retrieval knowledge base. Scripting is an easy to learn programming language with variables, operators, conditions, and statements.

Long-standing users of STN and search departments maintain collections of scripts as part of their knowledge base. Scripts are indispensable search aids to automatize parts of the online retrieval and develop and share search strategies. Typically, scripts are multiline search statements which form a search strategy for one or more databases. Most importantly, scripts are used to:

- Build, refine and save search strategies (daily work application)
  - Upload multiple query lines and combine them for searching via variables (independent of search session)

- Run the same search for frequently requested subject matters

- Run manual alerts, often comprising all steps of online retrieval including SEARCH/DUPLICATE REMOVE/DISPLAY

- Share search strategies with colleagues

- Enhanced patent analysis

Long-standing users of STN and search departments maintain collections of scripts as part of their knowledge base. Scripts are indispensable search aids to automatize parts of the online retrieval and develop and share search strategies. Typically, scripts are multiline search statements which form a search strategy for one or more databases. Most importantly, scripts are used to:

- Build, refine and save search strategies (daily work application)
  - Upload multiple query lines and combine them for searching via variables (independent of search session)

- Run the same search for frequently requested subject matters

- Run manual alerts, often comprising all steps of online retrieval including SEARCH/DUPLICATE REMOVE/DISPLAY

- Share search strategies with colleagues

- Enhanced patent analysis
# Postprocessing

STN offers a wide selection of postprocessing tools.

## Table tool

<table>
<thead>
<tr>
<th>Accession Number</th>
<th>Full-Text</th>
<th>Title</th>
<th>Patent Assignee</th>
<th>Patent Number</th>
<th>Kind Code</th>
<th>Publication Date</th>
<th>Priority Number</th>
<th>Priority Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-E22760 [201129] WPIX</td>
<td>Full-Text</td>
<td>Fuel electrode material for solid oxide fuel cell comprises metal oxide having perovskite type crystal structure</td>
<td>(SMSU-C) SAMSUNG ELECTRONICS CO LTD (SMSU-C) SAMSUNG SDI CO LTD (INHA-N) INHA IND PARTNERSHIP INST</td>
<td>US 20110091794 A1 A1</td>
<td>20110421</td>
<td>20110422</td>
<td>KR 2009-98774</td>
<td>20091016</td>
</tr>
<tr>
<td>2011-E22448 [201129] WPIX</td>
<td>Full-Text</td>
<td>Fluid regulation system for fuel cell stack assembly, has fluid collection component which is connected to fluid conduit in fluid communication, for providing flow path to drain liquid</td>
<td>(GENK-C) GM GLOBAL TECHNOLOGY OPERATIONS INC (GENK) GM GLOBAL TECHNOLOGIES OPERATIONS INC</td>
<td>US 20110091779 A1 A1</td>
<td>20110421</td>
<td>20110428</td>
<td>US 2009-579610</td>
<td>20091015</td>
</tr>
<tr>
<td>2011-E22114 [201128] WPIX</td>
<td>Full-Text</td>
<td>Fluid regulation system for fuel cell system for use in automobile, has oxidation gas supply pipe and coolant supply pipe that are integrated, where oxidation gas passage and coolant supply passage that are separated from each other by single partition wall</td>
<td>(TOYT-C) TOYOTA BOSHOKU KK (TOYT-C) TOYOTA BOSHOKU CORP</td>
<td>US 20110091784 A1 AA</td>
<td>20110421</td>
<td>20110526</td>
<td>JP 2009-239526</td>
<td>20091016</td>
</tr>
<tr>
<td>2011-E22058 [201128] WPIX</td>
<td>Full-Text</td>
<td>Method for reconditioning fuel cell stack, involves performing fuel cell stack reconditioning by waiting for cell membranes in fuel cell stack to saturate after humidification level of cathode side is increased</td>
<td>(GENK-C) GM GLOBAL TECHNOLOGY OPERATIONS INC (GENK) GM GLOBAL TECHNOLOGIES OPERATIONS INC</td>
<td>US 20110091781 A1 A1</td>
<td>20110421</td>
<td>20110526</td>
<td>US 2009-580912</td>
<td>20091016</td>
</tr>
<tr>
<td>2011-E21423 [201128] WPIX</td>
<td>Full-Text</td>
<td>Energy storage apparatus for microbial fuel cell has inductor and capacitor which are electrically connected in series and parallel connection</td>
<td>(UYTA-N) UNIV NAT TAIWAN SCI&amp;TECHNOLOGY (SUJII) SUJI</td>
<td>US 20110091745 A1 A</td>
<td>20110421</td>
<td>20110416</td>
<td>TW 2009-134904</td>
<td>20091015</td>
</tr>
<tr>
<td>2011-E21374 [201129] WPIX</td>
<td>Full-Text</td>
<td>Electronic equipment e.g. digital single lens reflex camera controls battery check unit so as to operate with high load and small load, based on elapsed time from stopping time to starting time of supply of electric power to equipment</td>
<td>(CANO-C) CANON KK</td>
<td>US 20110091783 A1 A1</td>
<td>20110421</td>
<td></td>
<td>JP 2005-317182</td>
<td>20051031</td>
</tr>
<tr>
<td>2011-E21228 [201129] WPIX</td>
<td>Full-Text</td>
<td>System for fabricating radiation-cured component e.g. diffusion media of polymer electrolyte membrane fuel cell, comprises radiation-sensitive material, pulsable radiation source, radiation directing device, and mask</td>
<td>(GENK-C) GM GLOBAL TECHNOLOGY OPERATIONS INC (GENK) GM GLOBAL TECHNOLOGIES OPERATIONS INC</td>
<td>US 20110091813 A1 A</td>
<td>20110421</td>
<td>20110601</td>
<td>US 2009-603147</td>
<td>20091021</td>
</tr>
</tbody>
</table>
Golf club head, has fixing member comprising primary fixing part combined within hollow part of body along oblique direction, and front plate combined in opened front side of body for striking golf ball

Abstract
KR 2009060746 A UPAB: 10 July, 2009
NOVELTY - The head (100) has a fixing member comprising a primary fixing part combined within a hollow part (15) of a body (10) along oblique direction. A front plate (20) is combined in an opened front side of the body for striking a golf ball. The fixing member includes a secondary fixing part combined within the hollow part of the body such that the primary fixing part and the secondary fixing part are crossed. The primary fixing part and the secondary fixing part of the fixing member are in curve shape.

USE - Golf club head.
ADVANTAGE - The kinetic energy of the Golf club head cannot be distorted. The head minimizes the deformation while striking the golf ball and the ball can be struck accurately. The repulsive power of the head is maintained uniformly.

DESCRIPTION OF DRAWINGS - The drawing shows an exploded perspective view of a Golf club head.

Body (10)
Crown portion (11)
Hollow part (15)
Front plate (20)
Golf club head (100)

Inventor(s)
PARK J

Assignee(s)
(PARK-I) PARK J

Application Information

Priority Information

Patent Information
<table>
<thead>
<tr>
<th>Number</th>
<th>Kind</th>
<th>Date</th>
<th>Application</th>
<th>Date</th>
</tr>
</thead>
</table>
The STN Full-Text Solution: Accessing the full text of patents and journal articles

Some databases on STN contain the full text of patents or technical disclosures. However, when a database does not contain full text, the STN Full-Text Solution is available to help you access the full text of an original document, whether it is a journal article, a patent, or other published material. By clicking the "Full-Text" button/link in an STN database record, you will get seamless access to the full text of the original document via the STN Full-Text Solution. The STN Full-Text Solution consists of two services:

CAS Full Text Options – A free service that provides access to full-text documents that are electronically available with publishers, open access archives, subscription agencies, patent offices, or patent document services. Access to your corporate library holdings can also be integrated.

FIZ AutoDoc – FIZ Karlsruhe’s document delivery service partners with renowned national and international scientific libraries, publishers, and document procurement services whose extensive holdings will most probably contain the publication you are looking for. FIZ AutoDoc can be used either as a stand-alone web service or as part of the STN Full-Text Solution. It can also be integrated into intranets or portals.

The FIZ AutoDoc system analyzes your order data and finds the best supplier for you!

The supplier will send the document directly to you in the format you have chosen (e-mail, fax, mail). Whenever possible, you may order the original document directly from the publisher in pdf and full color or procure it via open access sources. All copyright rules in connection with your FIZ AutoDoc order are fully complied with, and all copyright fees are paid to the rights holders or to the national clearing houses.

Your advantage: Using FIZ AutoDoc you can order and pay for documents from a multitude of different sources through one central system. A patent translation service is also available.

FIZ AutoDoc: Convenient document ordering directly after searching STN databases. (Multiple document suppliers/sources through one central system.)
About FIZ Karlsruhe

FIZ Karlsruhe – Leibniz Institute for Information Infrastructure is a not-for-profit limited liability company. As one of the largest non-academic information infrastructure institutions in Germany, we have the public mission to provide researchers and scientists with scientific information and to develop the appropriate products and services. To this end, we edit and index large data volumes from manifold sources, develop and operate innovative information services and e-research solutions, and carry out research projects of our own.

Our business areas:

• STN International – the world’s leading online service for research and patent information in science and technology

• KnowEsis – innovative e-Science solutions to support the process of research in all its stages (e.g., research data management), and throughout all scientific disciplines

• Databases and Information Services – Databases and science portals in mathematics, computer science, crystallography, chemistry, and energy technology

FIZ Karlsruhe is a member of the Leibniz Association which comprises more than 90 institutions involved in research activities and/or the development of scientific infrastructure.

About STN

The choice of patent experts, only STN® offers access to trusted scientific and technical information including the authoritative chemistry content from CAS and patent content from Clarivate Analytics’ Derwent World Patents Index. Intellectual property professionals and patent examiners at the world’s major patent offices and research organizations rely on STN for their information needs.

STN® is the premier single source for searching the world’s disclosed scientific and technical research. Providing integrated access to the most current and complete collection of global disclosed patent and non-patent, scientific and technical content, STN supports comprehensive retrieval to inform critical business decisions. STN puts instant access to over more than 100 diverse data collections at your fingertips, including leading chemistry content from CAS and patent content from Clarivate Analytics’ Derwent World Patents Index.