Discover how Derwent Innovations Index helps researchers find inventions easily

User guide

March 2022
Why researchers should care about patents

• Along with journals and conference proceedings, patents are a major component of the world's published scientific literature.

• Up to 80% of technical knowledge can only be found in patent documents (because industrials tend to disclose their innovations only in patent applications)

BUT...

• Patents are by nature very technical documents that can be difficult to read for patent non-experts
Why Derwent Innovations Index in Web of Science

• The Derwent Innovations Index (DII) is designed for use by the patent non-experts

• It is a resource providing easy search and discovery of patent content

• Clarivate-Derwent experts distill the contents of the patent, adding descriptive titles and structured abstracts, presented in a well-organized overview

• Derwent Innovations Index translates the key aspects of non-English language patents to ensure that you don’t miss those important discoveries which sets us apart from other databases.
Derwent Innovations Index

• Coverage and benefits
• Searching
• Using specialist indexing
• Analyzing results
• Tracking citations
• Searching all databases
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Derwent Innovations Index combines unique value-added patent information indexed from over 50 patent issuing authorities in the Derwent World Patent Index, with patent citations indexed from the Derwent Patents Citation Index.

For full details on the coverage see here:


- **101M Patents** (88K+ added per week)
- **51M+ Inventions**
- From 61 sources, including 59 patent-issuing authorities and 2 literature sources
- From 1963 to present
- Combines three sources:
  - Derwent World Patents Index (DWPI)
  - Derwent Patents Citation Index (DPCI)
  - Derwent Chemical Patents Index (DCPI)
- Updated every 3-5 days
Derwent Innovations Index enhances searchability and discoverability of patent data by adding valuable metadata to the patent record:

- Descriptive title: concise titles that describe the invention and its novelty
- Abstract: 250-500 words description in English about the claims and novelty of the invention
- Patent family: applications for the same invention in countries around the world are linked together in one record
- Derwent Class Codes: allows user to quickly retrieve a category of inventions
- Derwent Manual Codes: indicates the novel technical aspects of the invention, and also its applications

900+ patent editors write abstracts based on their technical domain expertise
A Typical Patent

Patents are filed in multiple offices around the world, each having its own formats and standards. They are usually written in a way that makes them difficult to understand. This can make the task of tracing patents an onerous one.
Our editorial team use the original patent to create a record in DII. This will have:

• a more descriptive English Title
• a plain English Abstract, with Novelty, Use, Advantage and if required, a Description of Drawings
• all of the patent numbers that make up the family
• links to original patent documents
• unified Assignee codes where available
• International Patent Codes and our own Derwent Codes
• full Patent Application details
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Searching

The search engine in Derwent Innovations Index (DII) is not the same as the one in Web of Science.

Searching fields are different because the indexation of patents is specific to DII.
Searching Limitations

The search engine in Derwent Innovations Index (DII) is not the same as the one in Web of Science. The main difference are shown opposite.

- You cannot use left-hand truncation in a search query including Topic and Title searches.
- You cannot use stopwords in a search query including Topic and Title searches. A search for Vitamin D will also find Vitamin A, Vitamin B, Vitamin C, and so on (unless you write it within quotation marks “vitamin d”)
- You cannot create search queries using the NEAR/n operator. For example, battery NEAR/15 lithium is not a valid search.
- The Lemmatization feature is not available in the current version of the Derwent Innovations Index.
- The Derwent Innovations Index is integrated with the All Databases function, and therefore, searchable when you search the All Databases function.
- The following indexes are only available in the Chemical version of DII:
  - Ring Index Number
  - Derwent Compound Number
  - Derwent Registry Number
  - DCR Number
The search Results List is similar to Web of Science but there are a few differences.

1. Coated paper or cardboard, useful e.g. to produce packaging for food, comprises layer of coupling agent arranged on layer of paper or cardboard, and layer of a bioplastic.

2. Production of cellulose nano-fibrils for manufacturing composite materials e.g. for biocompatible medical device, by chemically treating pulp to remove impurities, and defibrillating treated pulp at high pressure with high mechanical shear.

3. Bioplastic composition useful for forming article e.g. agricultural films comprises macrophyte biomass and thermoplastic polymer in specific amounts.
The **Record View** is similar to Web of Science but there are a few special features in DII.

**Unique organisation code.**

**Links to indexed terms.**
The Record View is similar to Web of Science but there are a few special features in DII.

**Preparation of bioplastic material from a protein matrix and plasticizer, useful for making biodegradable packaging, films and adhesives**

**Inventors:** JEREZ GOMEZ A; PARTAL LOPEZ P; MARTINEZ GARCIA I; GALLEGOS MONTES C; GUERRERO CONEJO A

**Patent Assignee:** UNIV HUELVA

**Derwent Priority Number:** 2007-092424

**Abstract:**

**NOVELTY** - Method for preparing a bioplastic material (A) from a protein matrix (PM) and a plasticizer (I) comprises mixing PM and (I), then molding and compressing the mixture at suitable temperature and pressure.

**USE** - (A) is used to prepare biodegradable plastics for packaging; in preparation of films and adhesives, or to make plastic articles for general use.

**Technology Focus:**

TECHNOLOGY FOCUS - BIOLOGY - Preferred Materials: PM is of plant or animal origin, preferably gliadin or glutenin from wheat and/or egg proteins (from white or yolk) but also rice and/or potato proteins. (I) is one or more of water; glycerol; sorbitol; propylene glycol; sucrose; poly(ethylene glycol); fatty acids and monoglycerides. Preferred Process: PM and (I) are mixed in a discontinuous mixer operated at 5-500 rpm and10-200 degreesC, preferably under adiabatic conditions. Molding is at 10-200, particularly 25-140, degreesC and 0-500.

**Extension Abstract:**

EXAMPLE - Egg white proteins (66%) and glycerol (33%) were blended at 25 degreesC for 10 minutes, in a rheometer at 50 rpm, to form a homogeneous mixture which was recovered, subdivided and cooled. It was then compressed in a stainless steel mold (3 by 10 by 50 mm), covered with aluminum foil, for 10 minutes, at 120 degreesC and various pressures. The product had elasticity modulus, at constant traction of 20 mm/minute, of 650.1 N/mm2 when molded at 0 bar and 887.8 N/mm2 at 25 bar; compare 560.5 N/mm2 for low-density...
Searching

By combining a typical “Topic” search with a specialist index search like “International Patent Classification”, more precise results can be found.

The International Patent Classification (IPC) is an internationally recognized classification system that is controlled by the World Intellectual Property Organization (WIPO) and assigned to patent documents by Patent Offices.

If you need to widen the indexed search, simply remove the last 2 digits and add an “*”.

Multiple index search terms can be used in conjunction with the usual Boolean operators.
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Specialist Indexing

Derwent Innovations Index has several specialist indexes available for searching. Some are specific to Derwent, while others are standard patent indexes.

**Derwent Class Codes**: allows user to quickly retrieve a category of inventions

**Derwent Manual Codes**: indicates the novel technical aspects of the invention, and also its applications
Specialist Indexing

Since the national patent offices may apply IPCs in different ways, the same invention patented in several countries can have different IPCs.

The Derwent patent family structure solves this problem by assigning the most appropriate Derwent class(es) to the basic patent record.

All other members of the family then automatically take the same class(es). The exception to this is for Engineering patents where the classes applied to the equivalent patent may be revised if the IPCs change.

Derwent Manual Codes are assigned to patents by Derwent's indexers. They are used to indicate the novel technical aspects of an invention, and also its applications. Using manual codes to create a detailed search strategy can significantly improve the speed and accuracy of searching.

Manual codes are arranged in hierarchies where there is a broad or general code at the top of the hierarchy followed by subdivisions of the codes into more specific categories.

Search Tip
When performing a search using manual codes, use the asterisk (*) character. For example, searching for J07-B finds patents that have not been assigned to one of the subdivisions within the J07-B hierarchy while J07-B* finds those patents as well as all patents within all subdivisions in the J07-B hierarchy.
Searching

By combining a typical “Topic” search with a specialist index search like “Derwent Class Code” or “Derwent Manual Code, more precise results can be found.

If you need to widen the indexed search, simply remove the last digits and add an “*”.

Multiple index search terms can be used in conjunction with the usual Boolean operators.
There are two Assignee search options.

“Assignee” and “Assignee – Name Only”

Derwent assigns a unique 4-letter code to approximately 21,000 companies (those with most patents), these codes retrieve subsidiaries and related holdings of the company. Other companies and individual patent assignees are given a non-standard 4-letter code, which is not unique. Patent codes appear as:

• ABCD-C (Standard Company)
• ABCD-I (Individual)
• ABCD-N (Non-standard)
• ABCD-R (Soviet Assignee)

Patent Assignee Codes: enable all of a company’s patents to be found even though they may have filed them under different name variations (>20k companies)
Complex queries

For complex queries, use the Advanced Search Query Builder where you will find additional field tags specific to DII.
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Analysis

**Analyze Results** is available for DII, though the options for analysis are specific to DII.
DII can help you

- Find patents without specialist knowledge
- Search for English language equivalents
- Review the novelty of an invention
- Determine the extent to which an invention is covered internationally
- Identify competitors or collaborators
- Avoid or watch for patent infringements
- Research technological advances
- Find gaps in the marketplace
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DII records any citation information associated with a patent family. This includes:

- any other patents that cited it
- patents cited by the Inventor and the Examiner
- articles cited by Inventor and the Examiner

Where these items are in the Web of Science, links are provided to the records.

The new Web of Science resolves > 50% more citations from patents to articles so there are more links available from patents on Derwent Innovation Index to the Web of Science Core Collection.
Citations

- Citations reflect the influence on other innovators of each patented idea.
- DII automatically removes double, triple (or more) counting of citation events between the same patented ideas.
- Clarivate normalizes patent citations compiled by patent examiners and uses this indicator as part of the methodology to determine the list of Top 100 Global Innovators (normalization for variation by technology sector and differences that occur by geography or language).

Displays the number of patent family records whose members have cited members of the current patent family. A zero means that no patents covered in the current database cite members of this patent family.

Displays the number of patents cited by the inventor/examiner. A zero means there are no patent references or the references were not keyed into the database.

Displays the number of articles (non-patent items) cited by the inventor/examiner. A zero means the patent has no article references or the references were not keyed into the database.
Cited Patent Search - DII

There is a Cited Patent Search option in DII, similar to the Cited Reference in Web of Science. However, it does not include an intermediary selection screen before showing the results list.

Cited Patent Number - Expand to Include Family

Expand your search to include all patent numbers found within a patent family by selecting this field. You must enter a unique patent number when using the Expand Family option.

Examples:
EP178925
EP178925-A
Derwent Innovations Index

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Studies and experiments get underway after a research team receives grant funding for a project.

Early findings are presented by the team at conferences, where they collect feedback from their colleagues.

The team works to publish journal articles that will share their findings more widely.

Meanwhile, the team conducts more studies.

The team files patent applications to protect new discoveries.

Research datasets generated in the lab or fieldwork are deposited in data repositories so others can reuse them.

New findings mean new journal articles.

The team publishes a book, which provides more information and detail on the research topic than the articles published along the way.
All Databases Search
Specialist Indexing is searched in addition to the usual fields

Web of Science Core collection
- Title, Abstract, Author Keywords, KeyWords Plus®

BIOSIS Citation Index
- Title, Abstract
- Major Concepts, Concept Code(s)
- Taxonomic Data, Disease Data, Chemical Data, …

Derwent Innovations Index
- Title, Abstract, Equivalent abstracts, International patent classification, Derwent Class codes, Derwent Manual codes

Inspec
- Title, Abstract, Controlled Indexing, Uncontrolled Indexing, Original Indexing
- Classification Code(s)

Zoological Records
- Title, Abstract, Broad Terms
- Descriptors Data, Super Taxa, Taxa Notes

MEDLINE
- Title, Abstract, MeSH Terms
- Keyword List, Chemical, Gene Symbol, Subject,…

CABI
- Title, Abstract, Descriptors, Broad Descriptors, Organism Descriptors, Geographic Location, CABICODE Names

Data Citation Index
- Titles, Abstracts, Repository Name, Data Study, Data Set

Food Science and Technology abstracts
- Title, Abstract, FSTA Thesaurus, MeSH Thesaurus

Current Contents Connect
- Title, Abstract, Author Keywords
- KeyWords Plus®

Chinese Science Citation Database
- Title, Abstract, Author Keywords

SciELO Citation Index
- Title, Abstract, Author Keywords
When searching in **All Databases** or the **Web of Science Core Collection**, the results can easily be filtered to show just **Patents** if required.

- See all document types
- Select “Patent” and refine
Record View

The DII indexed terms links are not present in the **Record View** of a **Patent** record when searching from **All Databases** or the **Web of Science Core Collection**.

**Preparation of bioplastic material from a protein matrix and plasticizer, useful for making biodegradable packaging, films and adhesives**

**In Web of Science the indexed information is not linked**

**International Patent Classification:** C08L-000/00; C08H-001/00 Macromolecular products derived from proteins INFO 5542

**Derwent Class Code(s):** A92 (Packaging and containers - including ropes and nets.;); A17 (Polymers of unsubstituted aliphatic monolefins; including polyethylene.;); A25 (Polyurethanes; polyethers.;); G03 (Adhesives - excluding dispensers. Polymeric adhesives are also classified in Section A [C09H, J].)

**Derwent Manual Code(s):** A03-C01; A08-P01; A09-A07; G03-B02A

**In Derwent Innovation Index it is linked**

**International Patent Classification:** C08L-000/00; C08H-001/00 Macromolecular products derived from proteins INFO 5542

**Derwent Class Code(s):** A92 (Packaging and containers - including ropes and nets.;); A17 (Polymers of unsubstituted aliphatic monolefins; including polyethylene.;); A25 (Polyurethanes; polyethers.;); G03 (Adhesives - excluding dispensers. Polymeric adhesives are also classified in Section A [C09H, J].)

**Derwent Manual Code(s):** A03-C01 PROTEINACEOUS POLYMERS; A08-P01 PLASTICISERS AND EXTENDERS [GENERAL]; A09-A07 BIODEGRADABILITY; G03-B02A NATURAL POLYMERS ADHESIVES
Cited Patent Search – All Databases

The **Cited Reference** in **Web of Science** can be used to search for **Cited Patents** too.

To do a Cited Reference Search for patents, enter the patent number in the **Cited Title** field. Do not specify a country code. For example, enter “5015744” to look up references to patent US5015744. This search will retrieve results for citations to this patent from source items indexed in the Web of Science.

TIP – Search the patent numbers of a patent family with the operator OR to find the citations to an invention.
More resources
More resources for patent specialists

Get started with search
Enter keywords, phrases or text blocks to search

Smart Search Publication numbers

Built by IP experts and data scientists, Derwent Innovation is a market-leading patent research and analytics platform delivering access to globally trusted patents and scientific literature. Our enhanced content, proprietary search and data intelligence technology helps a global community of more than 40,000 innovators and legal professionals find answers to complex questions. Learn more below and request a demo.

PATENT SEARCH
Research global patent landscapes with precise search strategies and extensive, worldwide full-text coverage.

NATIVE JAPANESE SEARCH
Search and review published Japanese patent documents in original Japanese-language text.

LITERATURE SEARCH
Investigate the state of the art by published in scientific literature such as academic journals and conference papers.

SEARCH HISTORY
Review and manage your previous search strategies.

Top 100 Global Innovators
2022
Every visionary needs to see over the horizon.