

# WIPO



IPC/SEM/98/4

ORIGINAL: English

DATE: November 20, 1998

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**WORLD INTELLECTUAL PROPERTY ORGANIZATION**  
GENEVA

**ADVANCED SEMINAR  
ON THE INTERNATIONAL PATENT CLASSIFICATION  
(IPC)**

**Newport, United Kingdom, December 7 to 11, 1998**

INTERNATIONAL PATENT CLASSIFICATION IN DERWENT DATABASES

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## **Introduction**

### **History of IPC & Derwent**

The International Patent Classification, which is most often referred to as the IPC, has now existed for 25 years and is the only truly worldwide classification system for technical information. Derwent was founded in the early 1950's and is the leading supplier of value-added patents information from over 40 different issuing authorities around the world. It is therefore no surprise that the development of both Derwent and the IPC are inter-linked and reflected in each other and have faced some of the same issues in classification and indexing of patents information.

The IPC system was not developed from scratch but was based on an already existing classification system, the International Classification of Patents for Invention.

At the beginning of the 20th century, it was proposed to harmonize the classification systems used in different countries and to create an international patent classification. In 1904, the Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle (BIRPI, the predecessor of WIPO) forwarded to the States members of the Paris Union a draft proposal for such an international patent classification. Initial reaction to this proposal was predominantly unfavorable, so the proposal was dropped.

The main argument against an international system was that due to the fast development of technology in quite different fields in the various countries, a common system would not be used optimally.

In 1951, a Classification Working Party was set-up with the task of elaborating an international patent classification system. The fundamental discussions in the Working Party were devoted to the question of whether the new system should be based on the function-oriented principle – i.e., according to the intrinsic nature or function of a process, product or apparatus, independent of its field of application – or whether it should be an application-oriented system – i.e., according to the particular use or application of a process, product or apparatus. It was agreed that a system combining both principles would best meet the needs of all users. Consequently, the new system should be devised in such a way that classification according to both the function involved and the particular field of application would be possible. The Working Party, which mainly consisted of members of the Patent Offices of France, Germany (Federal Republic of), the Netherlands and the United Kingdom, elaborated a classification along those lines.

Under the provisions of the European Convention on the International Classification of Patents for Invention of December 19, 195, the European Classification had to be established in the two official languages of the Council of Europe, i.e., English and French. Furthermore, the European Classification had to be modified continuously in line with technical progress, so it was agreed that the Classification should be subject to general revision at intervals not shorter than five years. The first edition of the European Classification was published and entered into force on September 1, 1968. It divided technology into eight sections, containing 115 classes, 607 subclasses and about 46,000 groups, of which approximately 6,000 were so-called main groups.

On March 24, 1971, the Strasbourg (IPC) Agreement Concerning the International Patent Classification was adopted and signed.

Following the signing of the IPC Agreement, the International (European) Classification of Patents for Invention became the de facto first edition of the IPC, i.e., the European Classification, which had been published on September 1, 1968, was as of March 24, 1971, considered and referred to as the first edition of the IPC.

### How the IPC is used by Derwent

The IPC is fundamental to the production process used by Derwent to edit and abstract patent documents for inclusion in the Derwent services and publications.

On receipt of a patent document at Derwent, the complete bibliographic information, including the IPCs, is keyboarded and a search then run to establish whether the document is a basic (or first sight by Derwent of that invention) or equivalent (i.e. same invention, same inventor, different issuing authority). The IPC forms an important part of that search.

It is then used to help determine the Derwent sections in which the patent should be included for coverage. The three broad Derwent sections are CPI (for chemical technology), EPI (for electrical technology), or GMPI (for general and mechanical technology). These sections are important for determining the level of editorial treatment and indexing applied to a document.

Documents assigned to the CPI section receive editorial attention from a chemical point of view which means that in addition to the standard abstracting and classification according to the Derwent classification system, documents are also considered for deep-indexing using one or more of Derwent manual code classification, polymer code and/or chemical code indexing systems. These deep-indexing systems help retrieval of relevant documents at a finer level than is possible using the IPC alone.

The IPC classes that are assigned to the Derwent CPI section are as follows:

IPC class	Derwent CPI section
A01n	Section C
A21-A23	Section D
A61K	Section B, D
B01	Section J
B29	Section A,M
C	All chemical sections
D	Section F
G21K	Section K
B23K	Section M
G03G	Photographic

### What Derwent services include the IPC?

As a fundamental part of the production process of Derwent's patents information, all Derwent's major patents publications contain the IPC as part of the bibliographic information provided. These publications include the standard Alerting and Documentation abstracts journals for each section of technology, as well as customised products such as tailor-made profile booklets.

The main use of the IPC for search and retrieval of patents information in Derwent services is in the core database, Derwent World Patents Index (DWPI). This is covered in more detail below. The IPC is also included for search and retrieval of original patent information from Patent Explorer, Derwent's complementary Internet full text patents search and document delivery service.

### Derwent policy on handling IPC

Since the inception of the IPC in 1968, 6 editions have been produced as follows:

Edition	Scope
1 <sup>st</sup> Edition	1 <sup>st</sup> Sept 1968 - 30 <sup>th</sup> June 1974
2 <sup>nd</sup> Edition	1 <sup>st</sup> July 1874 - 31 <sup>st</sup> Dec 1979
3 <sup>rd</sup> Edition	1 <sup>st</sup> Jan 1980 - 31 <sup>st</sup> Dec 1984
4 <sup>th</sup> Edition	1 <sup>st</sup> Jan 1985 - 31 <sup>st</sup> Dec 1989
5 <sup>th</sup> Edition	1 <sup>st</sup> Jan 1990 - 31 <sup>st</sup> Dec 1994
6 <sup>th</sup> Edition	1 <sup>st</sup> Jan 1995 -

Derwent's policy of handling IPCs within its products and services has changed over time with the introduction of different editions.

Since Derwent's coverage of patents information goes back to the time before the IPC was in general use, early Derwent data contains scant coverage of the IPC. In particular, pharmaceutical patents, which have been covered within Derwent since 1963 do not contain the IPC as part of the bibliographic information until after 1968.

IPCs are available for most basic documents from 1970 onwards. They are not available for unexamined Japanese applications published before April 1975 or for Canadian documents published before 1974.

From 1974 IPCs from equivalents that differ at the main group level or above from those of the Basic have been added.

Until 1980, a maximum of six IPCs was recorded from a single document. From 1980 this was increased to a maximum of twelve. If IPCs differ only at the subgroup level, only one is entered.

## Introduction of Indexing Schemes

In December 1979, the IPC Committee of Experts decided that – when a specific technical field of the IPC could not be further developed by using conventional classification techniques – in order to improve the effectiveness of the IPC as a search tool, the classifying entries of that field could be supplemented by indexing entries, which should be presented in an indexing scheme. A technical subject classified into such a field of the IPC could, if appropriate, also be indexed. The indexing entries permit indexing of aspects of the technical subject that cannot be classified, for example, a technical subject classified according to its intrinsic nature may be indexed according to its application.

Whereas the States members of the IPC Union are obliged to allot and print the classification symbols of the IPC on the patent documents they issue, they are not obliged to allot and print the codes of the indexing entries.

At first, there was some reluctance on the part of offices participating in the IPC revision work as to the usefulness of the indexing codes in the search process, so indexing entries were introduced only in a few IPC areas, for example, in the chemical field, where searching with the use of classifying symbols alone often was insufficient. However, after offices had gained experience in using the indexing codes, which appeared for the first time in the fourth edition of the IPC, they became convinced of their value for searching. Since then, more and more indexing schemes have been introduced in the IPC.

In Derwent, the full format of the IPC down to the third or fourth digit of the subgroup has been entered from 1992 and from this time onwards finer divisions are searchable.

As discussed, the IPC is a key part of the Derwent production process and is used to route documents to appropriate subject specialists for processing. The initial stage of this is based on an automated concordance between the original IPC as assigned by the patent publishing authority and an inhouse database of Derwent classes which results in suggested Derwent classes for the document and appropriate analysts who handle these technologies. The documents are then routed to the appropriate analyst who will then read and understand the document and verify the assigned Derwent classes and apply others where appropriate.

It happens from time to time that IPCs are either incorrectly assigned or typographical errors occur in the published patent document. The analysts in Derwent are trained to check for this and where an error is discovered, a correction to the original IPC assignment is made for inclusion in the Derwent data. Some recent examples of this are given below:

Patent Number	Original assigned IPC	Derwent corrected IPC
US 5829794	F16I-023/00	F16L-023/00
US 5830469	A16K-039/395	A61K-039/395
US 5831869	H06F-017/50	G06F-017/50
WO 9847706	B32F-001/07	B31F-001/07
WO 9847786	A43K-013/10	A47K-013/10

These errors and corrections are notified by Derwent to the patent publishing authorities so that remedial action can be taken by them. As a further enhancement to the original source information, if no IPCs are given by a patent office, Derwent assigns its own IPC to the subclass level. These Derwent assigned IPCs can be identified by the main group and subgroup numbers which are given as 000/01; for example A23L-000/01

The IPC has also formed an important part of selection criteria for Japanese patent documents within Derwent over the years.

Since the end of 1995, all Japanese Kokai applications (JP-A documents) have been included in the Derwent data. Before that time, coverage was restricted to chemical and electrical technologies based on the IPC. The table below gives the IPCs of Japanese patents included in Derwent before mid-1995

IPC Section	IPC Covered	% Covered	Abstracts
A Human Necessities	A01N, A21, A22, A23, A61K	100	Yes
	A61L, A61M, A62D	50-99	Yes
	A01H, A01J, A01K, A24D, A41B, A41C, A41D, A44B, A47J, A47K, A47L, A61B, A61C, A61F	25-49	Yes
	A01G, A01M, A24B, A41F, A41G, A45D, A61J, A62C	10-24	Yes
B Performing Operations; Transport	B01, B29	100	Yes
	B21B, B21H, B21K, B22, B23K	50-99	No
	B27K, B60C	50-99	Yes
	B03, B04, B05, B07B, B32, B65H	25-49	Yes
	B21C, B21J, B41D, B41M, B41N	10-24	Yes
C Chemistry	C	100	Yes
D Textiles & Paper	D	100	Yes
E Fixed Constructions	E21B	50-99	Yes

IPC Section	IPC Covered	% Covered	Abstracts
F Mechanical, Lighting, Heating, Explosives	F17C, F42B	50-99	Yes
	F25, F27	25-49	Yes
	F22B, F26, F28	10-24	Yes
G Physics	G21, G01N31-33	100	Yes
	G03C, G03G	50-99	Yes
H Electrical	Just Kokai since 1982	100	No

## Searching the IPC in Derwent databases

### DWPI on Dialog

Search in the form of:

IC=ANNA (Sub-Class)  
 IC=ANNA-NNN (Group)  
 IC=ANNA-NNN/NNnnn (Sub-Group)

Where: A = letter

Nn = number

The issuing authorities assign Main, Secondary and Additional IPCs to patent documents. Secondary and Additional IPCs are not distinguished on Dialog and both are displayed under the heading "Additional IPCs".

To search for IPCs with three or four digit subgroups, it is necessary to enclose the term within "".

For example;

S IC="H01L-021/8242"

IPC indexing terms in DWPI since 1992 are input with a hyphen (-) between the main group and the sub-group instead of a slash (/) as in true IPCs.

To search for both kinds of classes, use the truncation symbol "?" between the main group and the sub-group i.e. ANNA-NNN?NNnnn

### DWPI on STN

Six fields are available for searching IPCs in DWPI on STN:

/IPC	All IPCs are searched
/IC	Both main and secondary IPCs are searched
/ICM	Main IPC only is searched
/ICA	Additional IPCs only are searched
/ICI	IPC Index terms only are searched
/MGR	Main groups of Main, Secondary, Additional and Index IPCs are searched

Search in the form of:

ANNA/IPC (Sub-Class)  
 ANNA-NNN/IPC (Group)  
 or ANNANNN/IPC  
 ANN-ANNN-NNnnn/IPC (Sub-Group)  
 or ANNANNN-NNnnn/IPC

For index IPCs since 1992, use truncation to search the complete time range of the database.  
 Search in the form of:

ANNA-NNN:NNnnn  
 or ANNANNN:NNnnn

When searching at the Class level, search using the “!” truncation symbol i.e. ANN!/IC. This reduces processing time for the search.

## DWPI on Questel.Orbit

Search in the form of:

ANNA/IC (Sub-Class)  
 ANNA-NNN/IC (Group)  
 ANNA-NNN/NNnnn/IC (Sub-Group)

Main IPCs only may be searched using the qualifier /PN e.g. A63B-053/02/PN

## Patent Explorer

The main IPC for US, EP and PCT documents is searchable within Patent Explorer by using the Int. Patent Class (Main) field. IPCs are searched in the form:

e.g. A63B 053/02, where A = section; 63 = class; B = subclass; 053 = main group; 053/02 = sub-group.

IPC	Searches for	Hits in US	Hits in EP-A	Hits in EP-B	Hits in PCT
A63*	All docs in class A63	30776	5528	2195	4534
A63B	All docs in subclass A63B	15213	1979	761	2021
A63B 053	All docs in group A63B 053	1526	146	46	167
A63B 053/02	All docs in sub- group A63B 053/02	191	8	2	22
Total docs		2025480	910166	440051	367103
Latest pub date		11/03/98	11/04/98	11/04/98	10/29/98



A 63 B - APPARATUS FOR PHYSICAL TRAINING, GYMNASTICS, SWIMMING, CLIMBING, OR FENCING; BALL GAMES; TRAINING EQUIPMENT

.53/00 Golf clubs

..53/02 Joint structures between the head and the shaft

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



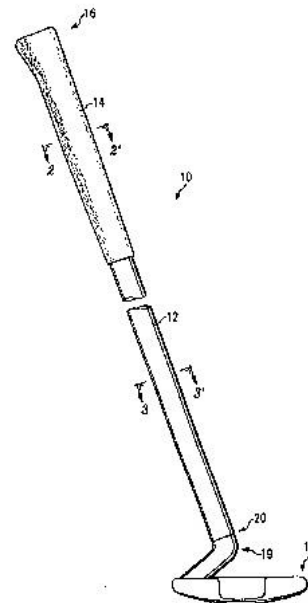
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification<sup>6</sup> : A63B 53/02, 53/12, 53/14</p>	<p>A1</p>	<p>(11) International Publication Number: <b>WO 98/07476</b> (43) International Publication Date: 26 February 1998 (26.02.98)</p>
<p>(21) International Application Number: PCT/US97/14673 (22) International Filing Date: 19 August 1997 (19.08.97) (30) Priority Data: 08/699,649 19 August 1996 (19.08.96) US (71)(72) Applicant and Inventor: BILLINGS, David, P. [US/US]; 6432 Walnut Hill Lane, Dallas, TX 75230 (US). (74) Agent: JUDSON, David, H.; Hughes &amp; Luce, L.L.P., Suite 2800, 1717 Main Street, Dallas, TX 75201 (US).</p>	<p>(81) Designated States: AU, CA, JP, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  Published With international search report.</p>	

(54) Title: GOLF CLUB AND CLUB SHAFT CONSTRUCTIONS

(57) Abstract

This invention is a golf club shaft (12) for use in a golf club such as a putter (10). The shaft (12) preferably comprises an oversized hollow, circular tube having an outer diameter of at least 0.75 inch along substantially its entire length. In an alternate embodiment, the shaft includes a tapered intermediate section (46), and the tip end (44) has an outer diameter of approximately 0.63 inch to accommodate an oversized club head.



## Issues & resolutions

### Different editions & changes over time

Changes in the IPC system have been introduced with each successive new edition. Different Patent Offices introduced the new codes at varying times and there is considerable overlap between the times when different editions apply. Therefore, for a full retrospective search using the IPC, it is necessary to use the IPCs from all editions.

### Inconsistent application of IPC

There are often inconsistencies at the sub-group level resulting from variations in practice between different Patent Offices. Therefore more complete (although less precise) retrieval can be obtained by searching at the sub-class or group level.

In particular, it is well known that IPCs assigned by the US patent office are commonly at variance with other offices. The invention by Vivus relating to the preparation of prostaglandins illustrates this:

WPI Acc No: 96-433726/199643

XRAM Acc No: C96-136126

Prepn of prostaglandin derivs in high yields - using one pot process with good reproducibility, used as pharmaceuticals

Patent Assignee: VIVUS INC (VIVU-N)

Inventor: TRAMPOTA M; ZAK B

Number of Countries: 071 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
WO 9628419	A1	19960919	WO 96US3090	A	19960307	C07C-405/00	199643 B
AU 9653036	A	19961002	AU 9653036	A	19960307	C07C-405/00	199703
US 5618959	A	19970408	US 95403251	A	19950310	<del>C07C-405/00</del> <b>C07F-007/18</b>	199720
NO 9704061	A	19970910	WO 96US3090	A	19960307	C07C-405/00	199750
			NO 974061	A	19970904		
EP 815076	A1	19980107	EP 96909598	A	19960307	C07C-405/00	199806
			WO 96US3090	A	19960307		
BR 9607364	A	19971230	BR 967364	A	19960307	C07C-405/00	199807
			WO 96US3090	A	19960307		
CZ 9702785	A3	19980114	WO 96US3090	A	19960307	C07C-405/00	199810
			CZ 972785	A	19960307		
SK 9701215	A3	19980114	WO 96US3090	A	19960307	C07C-405/00	199812
			SK 971215	A	19960307		
JP 10504321	W	19980428	JP 96527707	A	19960307	C07C-405/00	199827
			WO 96US3090	A	19960307		

Abstract: US 5618959 A

A process for preparing prostaglandins having the structural formula (I)

wherein

R1 and R2 may be the same or different and are selected from the group consisting of (a) and (b);

in which R3 and R4 are independently selected from the group consisting of hydrogen, OR5 and lower alkyl,

A is selected from the group consisting of (c) and (d);

in which R5 is selected from the group consisting of hydrogen, tetrahydropyranyl, tetrahydrofuranlyl, trilooweralkylsilyl, 1-methyl-1-methoxyethyl, 1-methyl-1-ethoxyethyl and -(CO)-R8, wherein

R8 is hydrogen, lower alkyl or halogen-substituted lower alkyl,

R6 is ethylene or vinylene,

R7 is R5, lower alkyl or lower alkenyl, which process comprises:

(a) preparing a reaction mixture containing (i) a first reagent selected from the group consisting of 2-furyllithium, 2-furylmagnesium chloride and 2-furylmagnesium bromide, (ii) a second reagent comprising a lower alkyl lithium compound, (iii) a third reagent comprising copper cyanide, and (iv) a fourth reagent comprising either halogenide (III) or (E)-alkenylstannane (IV)

B-CH=CH-R1-R2-R10(III)

M-CH=CH-R1-R2-R10(IV)

in which B is halogenide, M is  $-\text{Sn}(\text{R}_9)_3$  wherein  $\text{R}_9$  is lower alkyl,  $\text{R}_{10}$  is lower alkyl, and  $\text{R}_1$  and  $\text{R}_2$  are as defined above;

(b) contacting cyclopentenone (II)

with the reaction mixture under conditions effective to give rise to one or more products having the structural formula (I).

Dwg.0/0

Derwent Class: B03; B05

International Patent Class (Main): C07C-405/00; C07F-007/18

International Patent Class (Additional): A61K-031/557

File Segment: CPI

Manual Codes (CPI/A-N): B04-H03B; B14-E07; B14-F04; B14-G02A; B14-K01D;

B14-N03; B14-P01B

In this case, all Patent Issuing Authorities other than the US Office have assigned C07C-405/00 as the main IPC for this invention

#### C 07 C - ACYCLIC OR CARBOCYCLIC COMPOUNDS

..405/00 Compounds containing a five-membered ring having two side-chains in ortho position to each other, and having oxygen atoms directly attached to the ring in ortho position to one of the side-chains, one side-chain containing, not directly attached to the ring, a carbon atom having three bonds to hetero atoms with at the most one bond to halogen, and the other side-chain having oxygen atoms attached in gamma-position to the ring, e.g. prostaglandins [5]

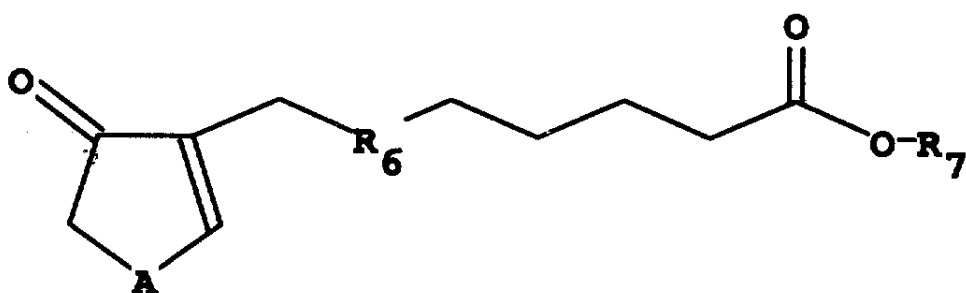
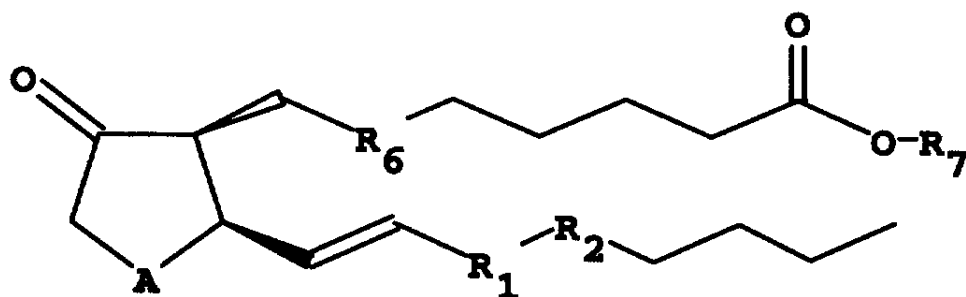
The US Office has assigned C07F-007/18 as the main (and only) IPC for this invention

#### C 07 F-ACYCLIC, CARBOCYCLIC, OR HETEROCYCLIC COMPOUNDS

CONTAINING ELEMENTS OTHER THAN CARBON, HYDROGEN, HALOGEN, OXYGEN, NITROGEN, SULFUR, SELENIUM, OR TELLURIUM (metal-containing porphyrins C 07 D 487/22)

..7/18•••Compounds having one or more C—Si linkages as well as one or more C—O—Si linkages

As we can see from the formulae below, both these IPCs are valid and applicable, but variation has arisen because of variations in the way that IPCs are applied by the different offices



A includes CH(OH)

R7 includes triloweralkylsilyl

In addition to the IPCs above, a further IPC, A61K-031/557, has been applied by at least the European Patent Office. This further illustrates variation in practice.

A 61 K - PREPARATIONS FOR MEDICAL, DENTAL, OR TOILET PURPOSES (bringing into special physical form A 61 J; chemical aspects of, or use of materials for, bandages, dressings, absorbent pads or surgical articles A 61 L; compounds per se C 01, C 07, C 08, C 12 N; soap compositions C 11 D; micro-organisms per se C 12 N)

..31/557•Prostaglandins or analogues thereof, e.g. carbocyclins, prostacyclins,

heteroprostaglandins [3] (3)In this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.

To help overcome this issue of variation in application of IPC, Derwent early on developed alternative systems of classification and indexing to help in retrieval of patents information from around the world. These systems are maintained and applied by a single group of trained specialists within Derwent which helps to ensure continuity and consistency over the data and over time. The Derwent Class system is related to the IPC as shown below.

## Derwent Class

The Derwent Class system is a broad categorisation of different technologies and is primarily intended to break down the subject matter simply and unambiguously for greater search precision. It is broken down into three main areas: Chemical, Engineering and Electronic & Electrical

## Chemical

### *Sections*

Chemical patents currently covered by Derwent are selected for inclusion in one or more of the following twelve sections. All patents with the following IPCs are guaranteed to be included in the Chemical Patents Section: A01N, A21- A23, A61K, B01, B29, C, D, G21.

A Polymers and Plastics  
B Pharmaceuticals  
C Agricultural Chemicals  
D Food, Detergents, Water Treatment and Biotechnology  
E General Chemicals  
F Textiles and Paper-Making  
G Printing, Coating, Photographic  
H Petroleum  
J Chemical Engineering  
K Nucleonics, Explosives and Protection  
L Refractories, Ceramics, Cement and Electro(in)organics  
M Metallurgy

### *Classes*

These twelve Sections are sub-divided down into 138 well-defined Classes.

Classification covers the complete patent document taking into account all the claims, particularly references to the use of chemicals or polymers, even when the main subject matter is non-chemical.

Where any patent specification falls logically into more than one section of the Chemical Classification it will be included in each of these Sections. Thus a patent involving a new dyestuff for polymeric fibres will be included in the appropriate classes of Sections A, E and F.

## Engineering

### *Sections*

Engineering patents currently covered by Derwent are selected for inclusion in one or more of the following 15 sections based upon the International Patents Classification (IPC) shown in brackets.

P General  
P1 Agriculture, Food, Tobacco (A01 excluding N, A24).  
P2 Personal, Domestic (A41-A47).  
P3 Health, Amusement (A61-A63, excluding A61K).  
P4 Separating, Mixing (B02-B09).  
P5 Shaping Metal (B21-B23).  
P6 Shaping Non-metal (B24-B28).  
P7 Pressing, Printing (B30- B32, B41-B44).  
P8 Optics, Photography; General (G02, G03, G09, G10).

## Q Mechanical

Q1 Vehicles in General (B60).

Q2 Special Vehicles (B61-B64).

Q3 Conveying, Packaging, Storing (B65-B68).

Q4 Buildings, Construction (E).

Q5 Engines, Pumps (F01-F15)

Q6 Engineering Elements (F16-17).

Q7 Lighting, Heating (F21-F28, F41-F42).

### *Classes*

These 15 Sections are broken down into 103 finer IPC-based Classes so as to narrow the subject matter into finer profiles for greater precision. Classification is made automatically by computer, based on the IPCs on the specification or, where not present as for the Research Disclosure items, on Derwent-assigned IPCs.

Where a patent falls into more than one of the Sections P or Q, it will be placed in each, and may also occur in one or more of the Chemical Sections A-M or Electronic and Electrical Sections S-X.

Unlike the Chemical Classification, an equivalent may introduce a fresh P or Q Class (which is then added to the master record) if it has a fresh IPC which is outside the range of IPCs covered by the Classes already assigned to the patent family.

## Electronic and Electrical

### *Sections*

Electrical and electronics patents covered by Derwent are selected for inclusion in one or more of the following six Sections:

S Instrumentation, Measuring and Testing

T Computing and Control

U Semiconductors and Electronic Circuitry

V Electronic Components

W Communications

X Electric Power Engineering

### *Classes*

These six Sections are broken down into 50 Classes. These Classes are assigned by Derwent according to the technical content as disclosed in the basic specification and take into account all the claims, particularly references to electrical applications, even when the main subject matter is chemical or mechanical in nature.

Where any patent specification falls logically into more than one Section of the Electronic and Electrical Classification it will be included in each of these Sections. Thus a patent involving a TV receiver line output transformer will be included in Classes V02 and W03 (Inductors and Transformers).

Basic documents are selected for inclusion in the Electronic and Electrical Classification based mainly on their relevance to electronic and electrical industries. This means, for example that documents bearing the following IPCs are normally included: A61N, B60L, B60M, G01, G02F, G03G, G04, G05 (not G05G), G06, G07, G08, G09G, G10H, G11, G12, G21B and all IPC H.

In addition, we select from all other basics and include those of relevance to the electrical/electronic industries irrespective of assigned IPC.

All equivalents are regarded as falling within the same classes of Sections S-X as the parent document.

Approximate IPCs are given in brackets.

In the Vivus invention relating to production of prostaglandins above, the Derwent Classes B03 and B05 have been assigned. Definitions for these, together with the rest of Section B, are given here for illustration.

## Derwent Classification System: Pharmaceuticals

All patents stated to be of pharmaceutical or veterinary interest, as well as those relating to compounds for use as intermediates in the manufacture of pharmaceutical or veterinary products. Compositions used for diagnosis and analysis in the pharmaceutical and veterinary fields (eg stains for bacterial pathogens) are also included.

Artificial sweeteners, chemical warfare agents and plaque disclosing compositions are also included.

Patents dealing with the production of tablets, pills, capsules, suppositories etc. are included, as are devices for dispensing pharmaceuticals such as - syringes, child-proof closures, calendar pill boxes, aerosols etc.

- |            |   |
|------------|---|
| <b>B01</b> | Steroids - including systems containing carbocyclic and/or heterocyclic rings fused onto the basic steroidal ring structure.  |
| <b>B02</b> | Fused ring heterocyclics.   |
| <b>B03</b> | Other heterocyclics.  |
| <b>B04</b> | Natural products and polymers. Including testing of body fluids (other than blood typing or cell counting), pharmaceuticals or veterinary compounds of unknown structure, testing of microorganisms for pathogenicity, testing of chemicals for mutagenicity or human toxicity and fermentative production of DNA or RNA. General compositions. |
| <b>B05</b> | Other organics - aromatics, aliphatic, organo-metallics, compounds whose substituents vary such that they would be classified in several of B01 - B05.  |
| <b>B05</b> | Other organics - aromatics, aliphatic, organo-metallics, compounds whose substituents vary such that they would be classified in several of B01 - B05.  |
| <b>B06</b> | Inorganics - including fluorides for toothpastes etc.   |

etc.

**B07**

General - tablets, dispensers, catheters (excluding drainage and angioplasty), encapsulation etc, but not systems for administration of blood or saline or IV feeding etc.

**Derwent Manual Code system**

In addition to the Derwent Class system, a more detailed indexing system is used to help in retrieval of information from the Derwent data. This system is called the Derwent Manual Code system. It is based on the uses and applications of an invention, rather than just a straight-forward description of what the invention is. The Vivus prostaglandin invention above illustrates this. The Manual Codes that have been assigned to this invention, together with their definition, are given below.

Manual Codes (CPI/A-N): B04-H03B; B14-E07; B14-F04; B14-G02A; B14-K01D;  
B14-N03; B14-P01B

**B04-H03B PROSTAGLANDIN E2**

**B14-E07 GASTRIC SECRETION INHIBITOR**

**B14-F04 ANTICOAGULANT, ANTIAGGREGANTS, THROMBOLYTIC**

**B14-G02A ANTIALLERGIC**

**B14-K01D BRONCHODILATOR**

**B14-N03 EYE DISORDER TREATMENT**

**B14-P01B FEMALE, ABORTIFACIENT, ANTIOVULATORY**

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