A Class on Classification

Jim Brown – FIZ Karlsruhe, Inc.

Agenda

- Overview of patent classification systems
- International Patent Classification (IPC)
- National/Regional Classification Systems
  - European Classification (ECLA)
  - U.S. National Classification (NCL)
  - Japanese File Index (FI)
  - Japanese File Forming Terms (F-Terms)

Agenda

- Overview of patent classification systems
- International Patent Classification (IPC)
- National/Regional Classification Systems
  - European Classification (ECLA)
  - U.S. National Classification (NCL)
  - Japanese File Index (FI)
  - Japanese File Forming Terms (F-Terms)

What is Patent Classification?

- A patent classification system is a formalized way to describe the contents of patent documents
  - Hierarchical
  - Alphanumerical code ('symbol')
  - Designed to facilitate retrieval by content

Why use Patent Classification?

- Patent classification
  - Provides a concise subject code for the technology described in a patent document
  - Breaks down patentable technology into manageable units
  - Is independent of language and wording

Why use Patent Classification? (cont.)

- The classification symbol
  - Represents a searchable identifier for patents grouped together according to similarity of claimed subject matter
  - Allows you to gradually adjust precision by following the hierarchy in either direction
  - Is assigned by an examiner, not the applicant

How to use Patent Classifications

(1) Identify the appropriate classification system(s)

- Depending on the documents of interest, not all classification systems may be applicable
- Different classification systems offer different degrees of detail

How to use Patent Classifications (cont.)

(2) Identify the appropriate classification symbols

- Use online thesaurus
- Research on patent offices' websites
- ANALYZE answer sets

How to use Patent Classifications (cont.)

- Most patent offices offer web-based tools to navigate and search 'their' classification system

IPC - www.wipo.int/classifications/ipc/ipc8/?lang=en

ECLA - http://v3.espacenet.com/eclasrch?locale=en_EP

U.S. - www.uspto.gov/go/classification/

JP - www5.ipdl.inpit.go.jp/pmgs1/pmgs1/pmgs_E

How to use Patent Classifications (cont.)

(3) Use classification symbols or ranges to complete your search strategy

- Use as catchall for different languages, spellings, and synonyms
- Use to minimize false hits and defuse homonyms
- ANALYZE the technological focus of an answer set

Agenda

- Overview of patent classification systems
- International Patent Classification (IPC)
- National/Regional Classification Systems
  - European Classification (ECLA)
  - U.S. National Classification (NCL)
  - Japanese File Index (FI)
  - Japanese File Forming Terms (F-Terms)

International Patent Classification (IPC)

- Introduced in 1968
- Used by >100 patent authorities
  - Most widely used classification system
  - Core and Advanced levels
- Hierarchical
  - Non-expressive
- Revised on a regular basis
  - Reclassification of existing documents

IPC Core and Advanced Levels

Advanced level

G02C SPECTACLES

5/00 Constructions of non-optical parts

5/02 . Bridges; Browbars; Intermediate bars (nose-engaging surfaces 5/12)

5/04 . . with adjustable means

5/06 . . with resilient means

5/08 . . foldable

5/10 . . Intermediate bar or bars between bridge and side-members

5/12 . Nose pads; Nose engaging surfaces of bridges or rims

5/14 . Side-members

5/16 . . resilient or with resilient parts

5/18 . . reinforced

5/20 . . adjustable, e.g. telescopic

5/22 . Hinges (pivotal connection in general F 16 C 11/00)

Core level

G02C SPECTACLES

5/00 Constructions of non-optical parts

5/14 . Side-members

5/22 . Hinges (pivotal connection in general F 16 C 11/00)

From January 2006, many patent offices assign IPCs at the *Advanced Level*, while others assign IPCs at the *Core Level*.

STN

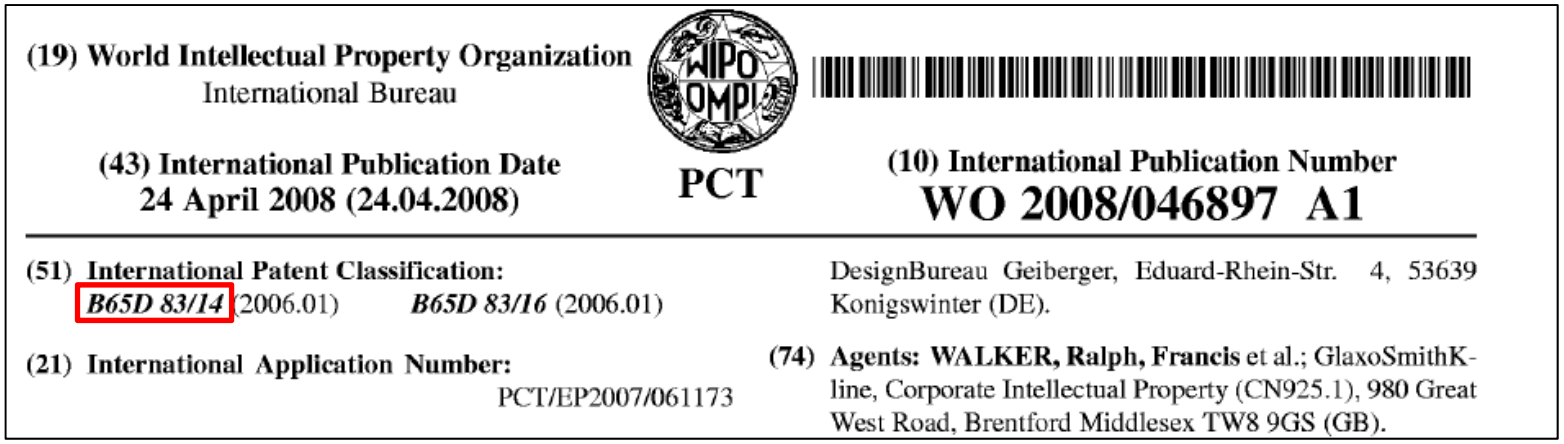
FIZ Karlsruhe

International Patent Classification (IPC)

- Format
  - Alphanumerical code

A	NN	A	NNNN	/	NNNNN
Section	Class	Subclass	Group		Subgroup

IPC Sections



(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 April 2008 (24.04.2008)

PCT

(10) International Publication Number
WO 2008/046897 A1

(51) International Patent Classification:
B65D 83/14 (2006.01) *B65D 83/16* (2006.01)

(21) International Application Number:
PCT/EP2007/061173

DesignBureau Geiberger, Eduard-Rhein-Str. 4, 53639 Konigswinter (DE).

(74) Agents: **WALKER, Ralph, Francis** et al.; GlaxoSmithKline, Corporate Intellectual Property (CN925.1), 980 Great West Road, Brentford Middlesex TW8 9GS (GB).

- B - Performing Operations, Transporting
- 65 - Conveying, packing, storing, handling thin or filamentary material
- D - Containers for storage or transport of articles or materials, e.g., bags, barrels, bottles, (…)
- 83 - Containers or packages with special means for dispensing contents
- 14 - For delivery of liquid or semi-liquid contents by internal gaseous pressure, i.e. aerosol containers (…)

Searching with IPC Codes Utilizing the Online Thesaurus

Search Question:

What classification symbols are used to describe antilock braking systems?

Searching with IPC codes
Utilizing the STN Online Thesaurus

Step 1: Expand a keyword of interest in the /IPC field

Utilize the STN Thesaurus: EXPAND in the /IPC field

```
=> E ABS/IPC

E#   FREQUENCY     AT      TERM
--   ---------     --      ----
E1           0      1      ABRASIVE(S) * SELECTION OF ABRASIVE(S) PARTICLES FOR B
                           LASTING/IPC
E2           0      1      ABRASIVE(S) * SOAPS AND DETERGENTS CONTAINING ABRASIVE
                           (S)/IPC
E3           0        --> ABS/IPC
E4           0      1      ABS (ANTILOCK BRAKING SYSTEM)/IPC
E5           0      1      ABSORBENTS/IPC
...
```

STN®

FIZ Karlsruhe

Searching with IPC codes
Utilizing the STN Online Thesaurus

Step 1: Expand a keyword of interest in the /IPC field

Step 2: Expand a suitable result (E#) using the relationship code +KT (keyword terms)

Utilize the STN Thesaurus: EXPAND Using +KT Relationship Code

```
=> E ABS/IPC

E#    FREQUENCY     AT      TERM
--    ---------     --      ----
E1            0      1      ABRASIVE(S) * SELECTION OF ABRASIVE(S) PARTICLES FOR B
                            LASTING/IPC
E2            0      1      ABRASIVE(S) * SOAPS AND DETERGENTS CONTAINING ABRASIVE
                            (S)/IPC
E3            0         --> ABS/IPC
E4            0      1      ABS (ANTILOCK BRAKING SYSTEM)/IPC
E5            0      1      ABSORBENTS/IPC
...

=> E E4+KT

E1            0    -->    ABS (Antilock Braking System)/IPC
E2          305    KT     B60T0008-176/IPC
********** END **********
```

Type HELP RCODE to learn about the available relationship codes.

STN®

FIZ Karlsruhe

Searching with IPC codes
Utilizing the STN Online Thesaurus

Step 1: Expand a keyword of interest in the /IPC field

Step 2: Expand a suitable result (E#) using the relationship code +KT (keyword terms)

Step 3: Expand the resulting IPC symbol with a relationship code of your choice (ED, NT, HIE, ALL…)

Utilize the STN Thesaurus: EXPAND Using Various Relationship Codes

```
=> E E2+ALL

E1            0    BT6   B/IPC
                         SECTION B - PERFORMING OPERATIONS; TRANSPORTING
E2            0    BT6   TRANSPORTING/IPC
E3            0    BT5   B6/IPC
E4            0    BT4   B60/IPC
                         VEHICLES IN GENERAL
                         Note
                         (1) In this class, the following term is used with the
                         meaning indicated:
                         - "vehicle" means all vehicles except those restricted
                         to one of the following types of vehicles: rail
                         vehicles, waterborne vessels, aircraft, space vehicles,
                         hand carts, cycles, animal-drawn vehicles, and sledges,
                         which are covered by the relevant subclasses of B61 to
                         B64.
                         (a) Thus the term "vehicle" includes:
                         #3# vehicular characteristics which are common to more
                         than one of the above-listed types;
                         #3# certain characteristics restricted to automobiles,
```

The relationship code +ALL results in a rather lengthy display.

Utilize the STN Thesaurus: EXPAND Using Various Relationship Codes (cont.)

```
road or cross-country trailers
#3# The following exceptions
noted:
#4# subclass B60B or B60C emb
and tyres, except wheels for
wheels for model railway vehicles A63H0019-22, and
special adaptations of wheels or tyres for aircraft
B64C0025-36;
#4# subclass B60C embraces the connection of valves to
inflatable elastic bodies in general, and in this
respect it is not limited to vehicles;
#4# subclass B60L embraces certain electric equipment
of all electrically-propelled vehicles;
#4# subclass B60M embraces certain power supply
equipment for, but external to, any kind of
electrically-propelled vehicle;
#4# subclass B60R embraces safety belts or body
harnesses used in all types of land vehicles;
#4# subclass B60S relates to all kinds of vehicles,
except the servicing of rail locomotives B61K0011-00,
ground equipment for aircraft B64F, or cleaning
apparatus peculiar to waterborne vessels B63B0057-00,
```

The relationship code +ALL results in a rather lengthy display.

Utilize the STN Thesaurus: EXPAND Using Various Relationship Codes (cont.)

```
                        B63B0059-00;
                        #4# subclass B60T includes br
                        general applicability, and in
                        limited to vehicles. It also
                        power-brake systems and some
                        rail-vehicle brake systems;
                        #4# subclass B60V embraces air-cushion vehicles  per se
                         and land vehicles, waterborne vessels or aircraft
                        combined with features allowing them to alternatively
                        operate as air-cushion vehicles or to be partially
                        supported by an air cushion.
E5        62385   BT3   B60T/IPC
                        VEHICLE BRAKE CONTROL SYSTEMS OR PARTS THEREOF; BRAKE
                        CONTROL SYSTEMS OR PARTS THEREOF, IN GENERAL (control
                        of electrodynamic brake systemsB60L0007-00; conjoint
                        control of brakes and other drive units of vehicles
                        B60W); ARRANGEMENT OF BRAKING ELEMENTS ON VEHICLES IN
                        GENERAL; PORTABLE DEVICES FOR PREVENTING UNWANTED
                        MOVEMENT OF VEHICLES; VEHICLE MODIFICATIONS TO
                        FACILITATE COOLING OF BRAKES
                        Note
                        (1) In this subclass, the following expression is used
```

The relationship code +ALL results in a rather lengthy display.

Utilize the STN Thesaurus: EXPAND Using Various Relationship Codes (cont.)

```
                    with the meaning indicated:
                    - "brake control systems" incl
                    systems for vehicles or of ge
                    IMMOBILISATION
                    Portable devices B60T0003-00
                    BRAKING
                    Kind of braking and corresponding arrangements
                    B60T0001-00
                    Vehicle modifications for cooling brakes B60T0005-00
                    Kinds of brake control
                    initating means; varying braking force or its
                    distribution according to road or load conditions
                    B60T0007-00, B60T0008-00
                    continuous braking B60T0010-00
                    transmission of control between initiating means and
                    brakes B60T0011-00, B60T0013-00
                    Parts or accessories for fluid-pressure brake control:
                    valve structure, disposition, and operation B60T0015-00
                    other parts or accessories B60T0017-00
                    ------------------------------------
E6        6168   BT2  B60T0008-00/IPC
                    Arrangements for adjusting wheel-braking force to meet
```

The relationship code +ALL results in a rather lengthy display.

Utilize the STN Thesaurus: EXPAND Using Various Relationship Codes (cont.)

```
                              limiting or varying distribution of braking force (by
                              changing number of effective
                              brake systems B60T0017-10)
                              CORE
                              VALID FROM 19680901 TO PRESENT
E7          10765    BT1      B60T0008-17/IPC
                              . Using electrical or electronic regulation means to
                              control braking
                              CORE
                              VALID FROM 20060101 TO PRESENT    (  IPC EDITION: 8    )
                              Note
                              (1) When classifying in group B60T0008-17,
                              classification is also made in appropriate places in
                              groups B60T0008-18, B60T0008-24, B60T0008-26 or
                              B60T0008-32 if other aspects than electronic control
                              are of interest.
E8            305    -->      B60T0008-176/IPC
                              . . Brake regulation specially adapted to prevent
                              excessive wheel slip during vehicle deceleration, e.g.
                              ABS (B60T0008-1755 takes precedence)
                              ADVANCED
                              VALID FROM 20060101 TO PRESENT    (  IPC EDITION: 8    )
```

The relationship code +ALL results in a rather lengthy display.

Utilize the STN Thesaurus: EXPAND Using Various Relationship Codes (cont.)

```
E9          2351    NT1   B60T0008-1761/IPC
                          . . . responsive to wheel or l
                          slip, wheel acceleration or ra
                          fluid pressure
                          ADVANCED
                          VALID FROM 20060101 TO PRESENT    (  IPC EDITION: 8    )
E10          968    NT1   B60T0008-1763/IPC
                          . . . responsive to the coefficient of friction between
                          the wheels and the ground surface (B60T0008-1764 takes
                          precedence)
                          ADVANCED
                          VALID FROM 20060101 TO PRESENT    (  IPC EDITION: 8    )
E11          649    NT1   B60T0008-1764/IPC
                          . . . Regulation during travel on surface with
                          different coefficients of friction, e.g. between left
                          and right sides, mu-split
                          ADVANCED
                          VALID FROM 20060101 TO PRESENT    (  IPC EDITION: 8    )
E12          628    NT1   B60T0008-1766/IPC
                          . . . Proportioning of brake forces according to
                          vehicle axle loads, e.g. front to rear of vehicle
                          ADVANCED
```

Sub-classification is denoted with the relationship code NT (narrower terms).

Utilize the STN Thesaurus: EXPAND Using Various Relationship Codes (cont.)

```
                        VALID FROM 20060101 TO PRESENT   (  IPC EDITION: 8    )
E13         207   NT1   B60T0008-1769/IPC
                        . . . specially adapted for vehicles having more than
                        one driven axle, e.g. four-wheel drive vehicles
                        ADVANCED
                        VALID FROM 20060101 TO PRESENT   (  IPC EDITION: 8    )
********** END **********
```

Searching with IPC codes
Utilizing the STN Online Thesaurus

Step 1: Expand a keyword of interest in the /IPC field

Step 2: Expand a suitable result (E#) using the relationship code +KT (keyword terms)

Step 3: Expand the resulting IPC symbol with a relationship code of your choice (ED, NT, HIE, ALL…)

Step 4: SEARCH using E# and relationship codes

Search Using E# and Relationship Codes

```
                      VALID FROM 20060101 TO PRESENT    (  IPC EDITION: 8    )
E13        207   NT1  B60T0008-1769/IPC
                      . . . specially adapted for vehicles having more than
                      one driven axle, e.g. four-wheel drive vehicles
                      ADVANCED
                      VALID FROM 20060101 TO PRESENT    (  IPC EDITION: 8    )
********** END **********

=> S E8+NT,CORE

L1          10765 B60T0008-176+NT,CORE/IPC   (7 TERMS)

=> D TI …

L1   ANSWER 1 OF 10765  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
TI   Braking force control apparatus for hybrid vehicle, has control unit that…

L1   ANSWER 10 OF 10765  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
TI   Vehicle control apparatus e.g. anti-lock brake system (ABS) for…
```

Relationship codes can be used for searching as well.

Agenda

- Overview of patent classification systems
- International Patent Classification (IPC)
- National/Regional Classification Systems
  - European Classification (ECLA)
  - U.S. National Classification (NCL)
  - Japanese File Index (FI)
  - Japanese File Forming Terms (F-Terms)

European Classification (ECLA)

- Introduced 1975
- Assigned exclusively by the EPO
  - Very consistent use
- Extension of the IPC
  - Highly detailed
- Assigned to ~30M documents
- Revised on a regular basis
  - Reclassification of existing documents

ECLA Indexing Philosophy

- Classifying all new inventive concepts, whether claimed or not
  - Emphasis on function rather than application
  - Single specific use (application) precedes
- Additional information may be indexed
  - Originally indexed via ECLA
  - Moving toward using ICO for this information

European Classification (ECLA)

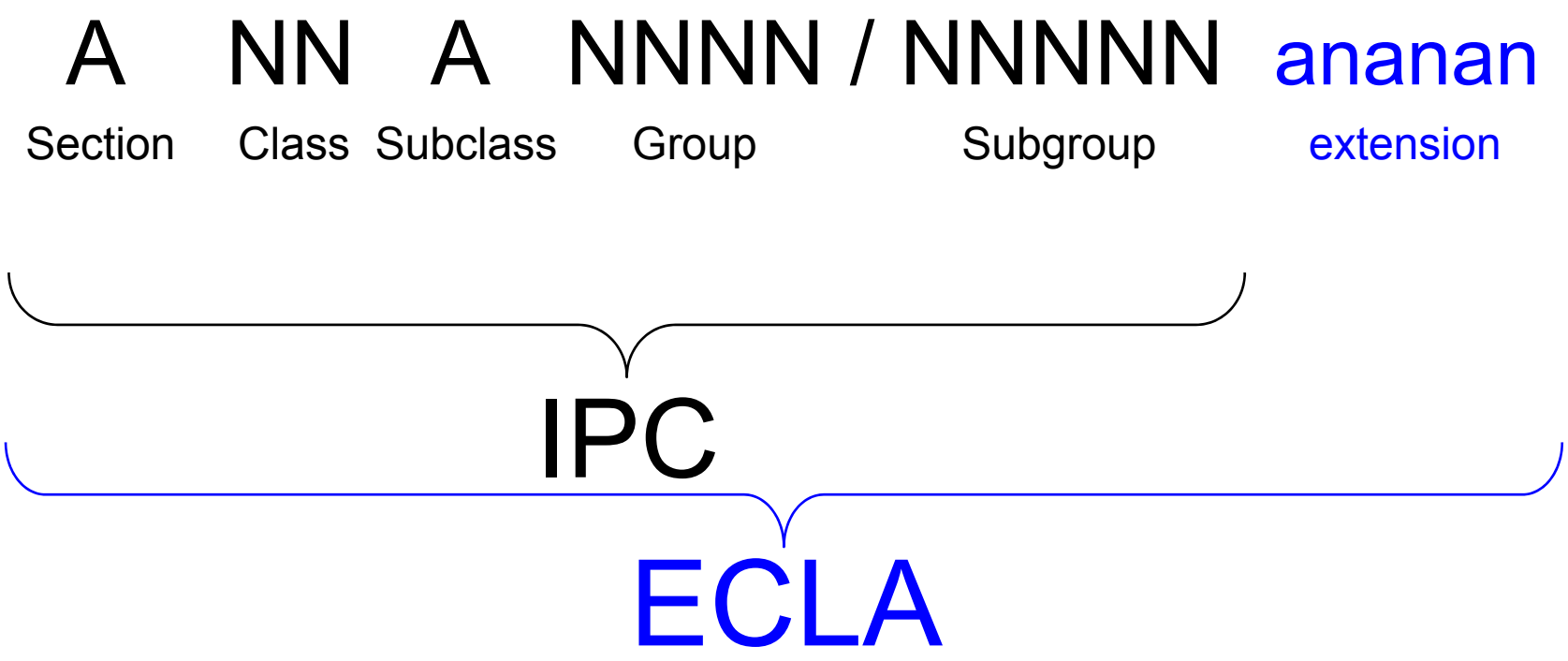
- Format
  - IPC + extension

A	NN	A	NNNN	/	NNNNN
Section	Class	Subclass	Group		Subgroup

IPC

European Classification (ECLA) (cont.)

- Format
  - IPC + extension



European Classification (ECLA) (cont.)

```
=> S B23K0026-00?/ECLA
L1            942 B23K0026-00?/ECLA
```

Working by laser beam, e.g. welding, cutting, boring (lasers per se H01S3/00) B23K26 ☐ B23K26/00 ☐

```
=> D HIT 1-5

L2   ANSWER 1 OF 942  WPINDEX COPYRIGHT 2009        THOMSON REUTERS on STN
EPC  B23K0026-00J; B23K0026-03; B23K0026-08L; B23K0031-00
```

[N: for surface treatment (laser shock processing C21D10/00L)] [N0701] B23K26/00J ☐

```
L2   ANSWER 2 OF 942  WPINDEX COPYRIGHT 2009        THOMSON REUTERS on STN
EPC  B23K0026-00F3; B23K0026-00J; B23K0026-08E4
```

[N: Semiconducting material] B23K26/00F3 ☐

```
L2   ANSWER 3 OF 942  WPINDEX COPYRIGHT 2009        THOMSON REUTERS on STN
EPC  B23K0026-00F4; B23K0026-02C
```

[N: Non-metallic material, isolators (B23K26/00F2 and B23K26/00F3 take precedence)] B23K26/00F4 ☐

```
L2   ANSWER 4 OF 942  WPINDEX COPYRIGHT 2009        THOMSON REUTERS on STN
EPC  B23K0026-00J2C; B23K0026-03; B24B0033-02; B24B0049-00
```

[N: for surface treatment (laser shock processing C21D10/00L)] [N0701] B23K26/00J ☐

```
L2   ANSWER 5 OF 94
EPC  B23K0026-00; H
```

- [N: Modifying rugosity] [N0701] B23K26/00J2 ☐
  - [N: Diminishing rugosity, e.g. grinding; Polishing; Smoothing] [N0701] B23K26/00J2C ☐
  - [N: Increasing rugosity, e.g. roughening] [N0701] B23K26/00J2E ☐
- [N: Texturing] [N0701] B23K26/00J7 ☐

STN®

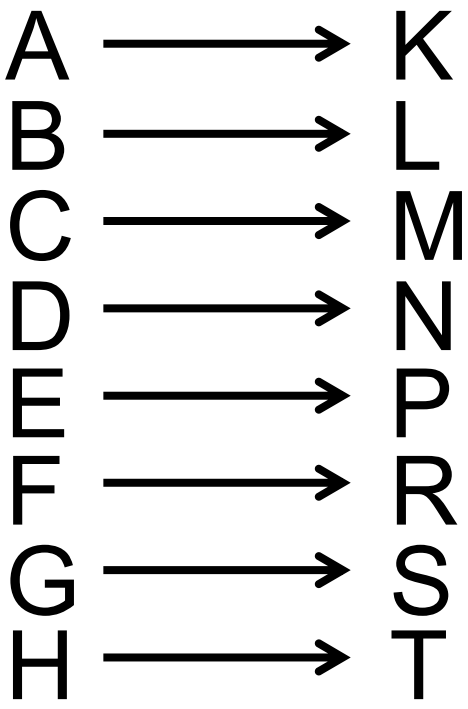
FIZ Karlsruhe

European Classification
ICO

- In Computer Only (ICO)
  - Internal EPO indexing tool
  - Introduced in the mid-1990s
- 'ECLA for side aspects'
  - Used for minor aspects
  - Same as the ECLA + experimental codes
    - For characteristics not covered by ECLA codes
  - Only in combination with ECLA
  - Non-obligatory

European Classification
ICO (cont.)

- Format
  - ECLA, section codes shifted



European Classification (ICO) (cont.)

```
=> S L23K0026-00?/ICO
L6              41 L23K0026:00?/ICO

=> D HIT 1-5

L6   ANSWER 1 OF 41  WPINDEX COPYRIGHT 2009
ICO  L23K0015:00; L23K0026:00; L23K0101:00B

L6   ANSWER 2 OF 41  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
ICO  L23K0026:00C20B2

L6   ANSWER 3 OF 41  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
ICO  L22F0998:10+B22F9/08B+B22F1/00B; L23K0026:00; R02B0275:18

L6   ANSWER 4 OF 41  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
ICO  L23K0026:00; S11B0005:60D1

L6   ANSWER 5 OF 41  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
ICO  L23K0026:00C40; L23K0026:00D4
```

The ICO definitions are available in PDF format for download in the INPADOCDB, INPAFAMDB, and EPFULL file entry banners.

Agenda

- Overview of patent classification systems
- International Patent Classification (IPC)
- National/Regional Classification Systems
  - European Classification (ECLA)
  - U.S. National Classification (NCL)
  - Japanese File Index (FI)
  - Japanese File Forming Terms (F-Terms)

United States Patent Classification (USPC)

- Dates back to 1830
- Used by the USPTO
  - Very consistent use
- Hierarchical, non-expressive
- Consists of ~450 classes and ~150,000 subclasses
- Patent documents revised and reclassified at regular intervals

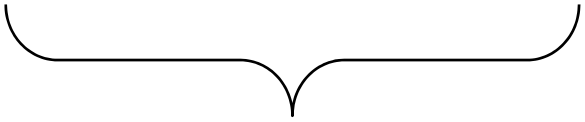
USPC Indexing Philosophy

- Application-oriented system
- ‘Main’ and ‘secondary’ classification levels
- Three main disciplines
  - Chemical, electrical, mechanical
- Classes are mutually exclusive – no overlaps

United States Patent Classification

- Format
  - Numerical code(*)

NNN / NNN . NNN (AA)



Class Subclass (Alpha-Subclass)

(* letters are used to denote alpha subclasses and digests)

United States Patent Classification (cont.)

```
=> S 219121?/NCL
L1          8212 219121?/NCL

=> D HIT 1-5

L1  ANSWER 1 OF 8212  WPINDEX COPYRIGHT 2
NCL  NCLM  623/011.110
     NCLS  029/428.000; 219/121.850

L1  ANSWER 2 OF 8212  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
NCL  NCLM  219/121.720

L1  ANSWER 3 OF 8212  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
NCL  NCLM  438/795.000
     NCLS  219/121.800; 257/E21.347

L1  ANSWER 4 OF 8212  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
NCL  NCLM  219/121.680
     NCLS  219/121.690

L1  ANSWER 5 OF 8212  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
NCL  NCLM  219/121.550
```

The NCLM and NCLS search fields allow to search for main and secondary USPC classification symbols.

Agenda

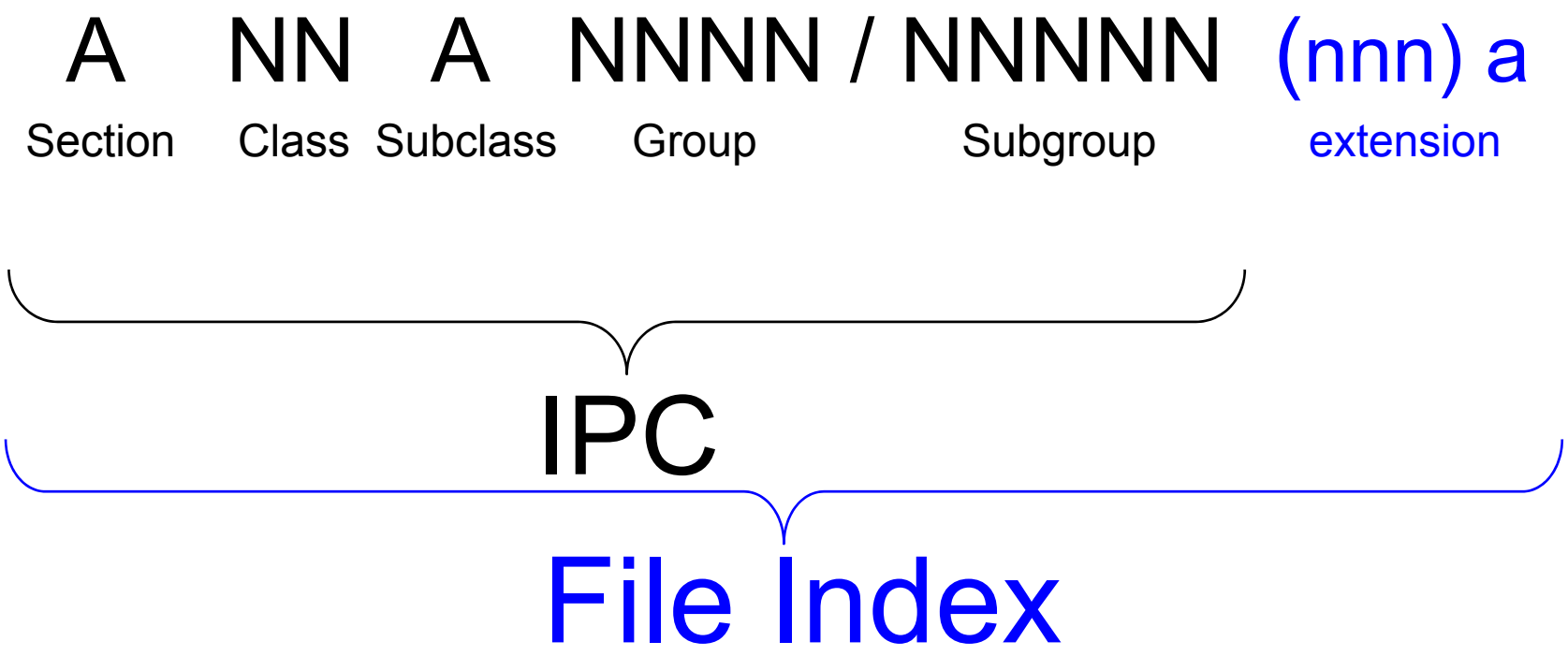
- Overview of patent classification systems
- International Patent Classification (IPC)
- National/Regional Classification Systems
  - European Classification (ECLA)
  - U.S. National Classification (NCL)
  - Japanese File Index (FI)
  - Japanese File Forming Terms (F-Terms)

Japanese File Index

- Introduced in 1980 as JPO-internal system
  - Based on IPCv4 (extension)
  - Revised 2006 for better compliance with IPCv8
  - ~192K symbols
- Assigned to claimed content
  - To all Japanese patents and utility models
  - By the IPCC
- Additional disclosed content may be indexed
  - Technology, uses, chemical substances

Japanese File Index (cont.)

- Format
  - IPC + extension



Japanese File Index (cont.)

```
=> S B23K0026-00?/JPC
L1          9483 B23K0026-00?/JPC

=> D HIT 1-5

L1   ANSWER 1 OF 9483  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
FCL  B23K0026-00 M; B23K0026-00 Q; B23K0026-06 A

L1   ANSWER 2 OF 9483  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
FCL  B23B0027-14 A; B23B0051-00 J; B23K0026-00 E; B23P0015-28 Z
     Index:     B23K0101:20

L1   ANSWER 3 OF 9483  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
FCL  B23K0026-00 M; B23K0026-00 N

L1   ANSWER 4 OF 9483  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
FCL  B23K0026-00 310 C; B23K0026-20 310 C; B23K0009-16 K

L1   ANSWER 5 OF 9483  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
FCL  B23K0026-00 M
```

Agenda

- Overview of patent classification systems
- International Patent Classification (IPC)
- National/Regional Classification Systems
  - European Classification (ECLA)
  - U.S. National Classification (NCL)
  - Japanese File Index (FI)
  - Japanese File Forming Terms (F-Terms)

Japanese F-Terms

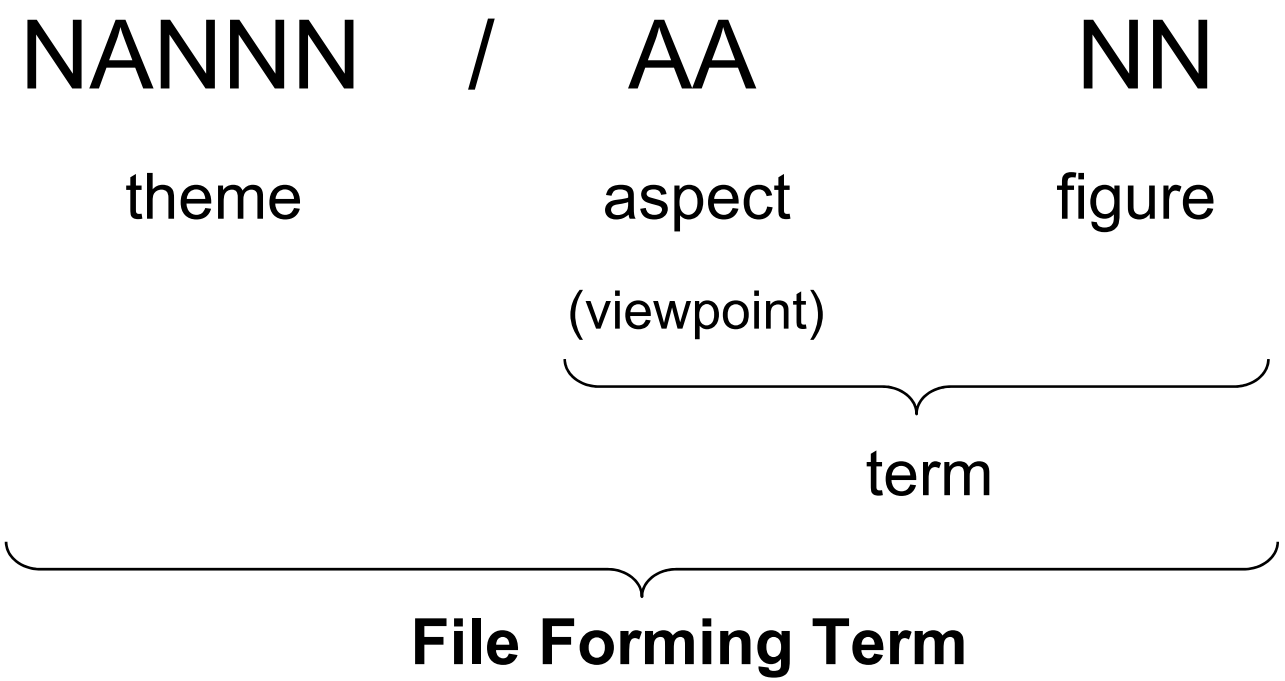
- Introduced in 1987 as JPO-internal system
  - For additional indexing
  - For all disclosed aspects
- Designed for electronic (Boolean logic) retrieval
  - Never assigned alone
- Designed for use with keywords, FI and IPC
  - Not fully elaborated for areas sufficiently covered by FI/IPC
- Printed on publications since 1999

Japanese F-Terms concept

- Coverage of the IPC split in ~2,800 themes
  - Based on FI (IPCv4)
- Themes are subdivided in terms (viewpoints)
  - Use, purpose, material, preparation, process, control, structure…
- Over 350K term codes (symbols)
- Assigned by the IPCC
  - To Japanese documents only

The Japanese F-Terms

- Format
  - Alphanumerical code



Class example

- Find appropriate class(es)
  - By looking at class titles/definitions
  - By doing keyword search and ANALYZE class
- Include appropriate class(es) to search

Class example

```
=> FILE WPINDEX

FILE 'WPINDEX' ENTERED AT 14:45:36 ON 02 OCT 2009
COPYRIGHT (C) 2009 THOMSON REUTERS

=> S DIAPER AND PY>2008
         14618 DIAPER
          7104 DIAPERS
         18158 DIAPER
                 (DIAPER OR DIAPERS)
       1331932 PY>2008
                 (PY>2008)
L1        2590 DIAPER AND PY>2008

=> S NAPPY AND PY>2008
          2602 NAPPY
          2021 NAPPIES
          4186 NAPPY
                 (NAPPY OR NAPPIES)
       1331932 PY>2008
                 (PY>2008)
L2         157 NAPPY AND PY>2008

=> S L1 NOT L2
L3        2558 L1 NOT L2

=> S L2 NOT L1
L4         125 L2 NOT L1
```

In this example, the SET PLURALS is ON and the SET SPELLINGS is OFF.

L3 and L4 illustrate that some documents have the word DIAPER but not NAPPY and vice versa.

Class example

```
=> S L1 OR L2
L5          2715 L1 OR L2

=> ANALYZE L5 IPC 1-
ANALYZE IS APPROXIMATELY 68% COMPLETE
ANALYZE IS APPROXIMATELY 95% COMPLETE
L6            ANALYZE L5 1- IPC :     3682 TERMS

=> D DOC
L6            ANALYZE L5 1- IPC :     3682 TERMS

TERM #    # OCC   # DOC   % DOC IPC
------ ------- ------ ------ ---------------
     1     5723   1562  57.53 A61F0013-15
     2     1537    985  36.28 A61F0013-49
     3     1403    459  16.91 A61F0005-44
     4      533    356  13.11 A61F0013-53
     5      791    337  12.41 A61L0015-16
     6     1132    332  12.23 A61F0013-56
     7      361    246   9.06 A61F0013-511
     8      369    227   8.36 A61F0013-496
     9      326    200   7.37 A61F0013-494
    10      247    166   6.11 A61F0013-472
```

Class example

```
=> E A61F0013-15+NT/IPC
E1        21059    -->    A61F0013-15/IPC
                          . Absorbent pads, e.g. sanitary towels, swabs or
                          tampons for external or internal application to the
                          body (non-absorbent catamenial receptacles
                          A61F0005-44); Supporting or fastening means therefor;
                          Tampon applicators
                          CORE
                          VALID FROM 19900101 TO PRESENT    (  IPC EDITION: 5-8 )
E2         4201    NT1    A61F0013-20/IPC
                          . . Tampons, e.g. catamenial tampons; Accessories
                          therefore
                          CORE
                          VALID FROM 19680901 TO PRESENT    (  IPC EDITION: 1-8 )
E3          102    NT2    A61F0013-22/IPC
                          . . . Tampons made of rolled-up material
                          ADVANCED
                          VALID FROM 19900101 TO PRESENT    (  IPC EDITION: 5-8 )
E4           39    NT2    A61F0013-24/IPC
                          . . . Cup-shaped type tampons
                          ADVANCED
                          VALID FROM 19900101 TO PRESENT    (  IPC EDITION: 5-8 )

          ...
```

Class example

```
=> E A61F0013-49+NT/IPC
E1        8982    -->   A61F0013-49/IPC
                        . . . specially adapted to be worn around the waist,
                        e.g. diapers, nappies
                        ADVANCED
                        VALID FROM 20000101 TO PRESENT    (  IPC EDITION: 7-8 )
E2          17    NT1   A61F0013-491/IPC
                        . . . . specially adapted for gender distinct urine
                        discharge pattern
                        ADVANCED
                        VALID FROM 20000101 TO PRESENT    (  IPC EDITION: 7-8 )
E3          50    NT1   A61F0013-493/IPC
                        . . . . adjustable
                        ADVANCED
                        VALID FROM 20000101 TO PRESENT    (  IPC EDITION: 7-8 )
E4        1656    NT1   A61F0013-494/IPC
                        . . . . characterised by edge leakage prevention means
                        ADVANCED
                        VALID FROM 20000101 TO PRESENT    (  IPC EDITION: 7-8 )
E5          91    NT1   A61F0013-495/IPC
                        . . . . with faecal cavity
                        ADVANCED
                        VALID FROM 20000101 TO PRESENT    (  IPC EDITION: 7-8 )

                  ...
```

Class example

```
=> S A61F0013-49+NT/IPC
L7          9762 A61F0013-49+NT/IPC  (6 TERMS)

=> S L7 NOT L5
L8          8700 L7 NOT L5

=> D TI 2 3 5

L8   ANSWER 2 OF 8700  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
TI   Urine absorption apparatus for e.g. elderly people, has pair of electrodes
     bonded each other at bonding portions so that liquid permeable sheets are
     reduced in thickness and are in close contact with each other at bonding
     portions

L8   ANSWER 3 OF 8700  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
TI   Absorptive article for use by e.g. elderly people, has absorber positioned
     on both surfaces of non-liquid permeable sheet, and another absorber
     positioned at upper surface of non-liquid permeable sheet

L8   ANSWER 5 OF 8700  WPINDEX COPYRIGHT 2009       THOMSON REUTERS on STN
TI   Absorptive article e.g. urine pad for male, has skin surface sheet
     comprising expandable/shrinkable folded portion that is folded along
     longitudinal direction of absorber during wearing
```

Summary

- Classification codes are an important tool in searching
- Consider strengths/weaknesses of each system
- Consider what classes are available in each database
  - Also consider class revisions

A Class on Classification

Jim Brown – FIZ Karlsruhe, Inc.