Agenda

• General tips
• Remember the Members!
• **Numeric property search**
• DCR structure searching
Recommended settings

- American/British spellings & terminology
  - E.g. color/colour; diaper/nappy
  - Set spellings on perm

- Plurals and DWPI abbreviations
  - Set plurals on
  - Set abbreviation on perm

- Normalize all IPCs to IPC Reform format
  - H01J037-04/IPC = pre-Reform format
  - H01J0037-04/IPC = Reform format
  - Set icformat on perm

Note: None of these are the default settings on STN.
Agenda

- General tips
- Remember the Members!
- Numeric property search
- DCR structure searching
What are the members?

• DWPI records have two parts – invention (family) and members (publications)
  – The invention part with value-added DWPI content – patent family, abstract, etc
  – The members part with additional content and search options for members (publications) listed in the invention part

• Both parts can be searched or displayed separately or in combination
DWPI invention level data

- Patent family data
- Thomson Reuters value added data
  - Enhanced title and abstract(s)
  - Proprietary classification and indexing
- Deduplicated inventor and assignee data
- Deduplicated patent classifications
DWPI member level data

- Original titles, abstracts and claim(s)
- Full inventor names and addresses
- Original assignee names and addresses
- Attorney/agent names and addresses
- Available for many DWPI patent authorities

**Note:** Different patent authorities and publication types have different amounts of data at the member level. See this table for all the details:

http://www.stn-international.com/dwpi_table.html
The DWPI default Basic Index (/BI) is formed from value-added text fields.

**Basic Index /BI**

- AN 1999-265576
- PI EP913216 A1
  - CA2251524 A1
  - CN1219449 A
  - ...

**Basic Index Extension /BIEX**

- MEMBER 1 EP913216 A1
- MEMBER 2 CA2251524 A1
- MEMBER 3 CN1219449 A

**invention level**
- value-added text
  - Title, Abstract

**member level**
- original text
  - Title, Abstract, Claim(s)
Search examples to capitalize on the members level data

• Enhanced text search
  – Increased comprehensiveness (BIEX)
  – Increased precision (CLMEN)

• Improved company search
  – More comprehensive (AG)
  – More precise (DLVL)

• Precise inventor search (INO)
Text searching in the members level – Asian patents

Search Question

Search for recent anti-cancer treatment patent documents published in China, Korea, or Japan

Note: this example is designed to demonstrate DWPI coverage, database structure, and search technique. The simple anti-cancer search query used is not intended to be an exhaustive search for the topic.
Search in the DWPI Basic Index (BI)

=> FILE WPINDEX

=> S (JP OR CN OR KR)/PC (P) 2012/PY
L1 1159837 (JP OR CN OR KR)/PC (P) 2012/PY

=> S L2 AND ANTI? (1T) (?CANCER? OR ?TUMOR? OR ?NEOPLAS?) OR CYTOSTATIC
L2 105155 L1 AND ANTI? (1T) (?CANCER? OR ?TUMOR? OR ?NEOPLAS?) OR CYTOSTATIC

=> D SCAN

L2 105155 ANSWERS WPINDEX COPYRIGHT 2012 THOMSON REUTERS on STN

TI New polynucleotide comprising sequence encoding chimeric protein containing cytoplasmic domain of T cell costimulatory receptor of tumor necrosis factor receptor family, useful in preparation of activated T cells for treatment of cancer

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

... Review DWPI enhanced titles with D SCAN.
Add the DWPI Basic Index Extension (BIEX) - Increase comprehensiveness

=> SET SFIELDS BI BIEX
SET COMMAND COMPLETED

=> S L2
L3 105437 L1 AND ANTI?/BI,BIEX (1T) (?CANCER?/BI,BIEX OR ?TUMOR?/BI,BIEX OR ?NEOPLAS?/BI,BIEX) OR CYTOSTATIC/BI,BIEX

=> S L3 NOT L2
L4 282 L3 NOT L2

=> D L4 TI TIEN ABEN CLMEN 1-10

Use the SET command to add the BIEX to the default search.

Additional answers are found by including BIEX (L4).

Review some results using the DWPI title, applicant title, applicant abstract and claims.
Use of beta3 adrenaline receptor inhibitor for e.g. adjusting and controlling Sirtuin 1, mammalian target of rapamycin and protein 53 signal path; preparing Sirtuin-1/3/4 inhibitor and preparing medicine for treating diseases such as cancer.

The invention claims the use of beta3 adrenaline receptor inhibitor and siRNA of targeted beta3 adrenaline receptor gene. A lot of experiments show that the beta3 adrenaline receptor is the important factor for adjusting and controlling the SIRT1, mTOR and p53, so...

[CLAIM 1] The use of beta3 adrenaline receptor inhibitor for adjusting and controlling the SIRT1, mTOR and p53 signal path.

[CLAIM 2] The use of beta3 adrenaline receptor inhibitor for...
English-language Asian patent claims in DWPI

• China
  – Human translation
  – Full claims for published applications and utility models from January 2007 onwards
  – Main claim for granted patents from January 2011

• South Korea
  – Machine assisted translation
  – Full claims for granted patents, published applications and utility models from January 2008

• Japan
  – Machine assisted translation
  – Main (first) claim for published applications, granted patents and utility models from December 4, 2008
Focus on patent claims (CLM) only – Increase precision

Use (L)-proximity to focus the search specifically to Asian patent claims (CLM).

Invention display, BIB.

(Cont . . .)
[CLAIM 1] The culture medium for functional mushroom the mycobiota cultivation wherein as to the culture medium for the mushroom mycobiota cultivation, the dried lung cold room sludge of the particle size 50 through 150 mesh is contained to the medium component to the culture medium dry weight standard with 5 through 15 weight%; the pH is 6.5 through 6.8 after sterilization; the percentage of water content is 64 through 68%; and the immunostimulating activity and anti-tumor agent of the cultivated mushroom are strengthened.

[CLAIM 2] As for claim 1, the culture medium for functional mushroom the mycobiota cultivation, wherein the mushroom is the Flammulina velutipes, and the Lentinus edodes or the Cervi Cornu mushroom.

[CLAIM 3] As for claim 1, the mushroom cultivation use Full claims of Korean patents, applications and utility models.

Tip: The member data (i.e., CLM) is free when displayed simultaneously with invention data (i.e., BIB):
=> D BIB CLM
[CLAIM 1] An anticancer drug, wherein the drug is prepared by using traditional Chinese medicine raw materials, the components and the mixing ratio by weight are as follows: 30-100 parts of codonopsis pilosula, 20-40 parts of fructus ligustri lucidi, 20-40 parts of orange peel, 30-50 parts of chrysanthemum, 10-20 parts of paris polyphylla, 20-30 parts of dandelion, 15-25 parts of patrinia, 15-25 parts of snakeskin, 30-45 parts of schizonepeta, 15-25 parts of safflower, 3-11 parts of potentilladiscolor, 0.2-0.8 part of fructus forsythia.
The taxane anticancer agent sensitivity determination method of the cancer cell which has the determination process determined as the sensitivity with respect to the taxane anticancer agent of the said cancer cell being high when the expression level of GST(pi) in the biological sample containing a cancer cell is larger than a threshold value.
Search examples to capitalize on the members level data

• Enhanced text search
  – Increased comprehensiveness (BIEX)
  – Increased precision (CLMEN)

• Improved company search
  – More comprehensive (AG)
  – More precise (DLVL)

• Precise inventor search (INO)
More comprehensive company search (AG)

=> S SYNGENTA/PA,AG OR SYGN/PACO
L1 2330 SYNGENTA/PA,AG OR SYGN-C/PACO

=> D BIB MEMB
L1 ANSWER X OF 2330 WPINDEX COPYRIGHT 2012 THOMSON AN 2011-B43353 [201113] WPINDEX
TI Producing transgenic plant with improved drought tolerance, by introducing expression cassette into plant cell comprising . . .
IN CHEN X; GUO L; LAWTON K A; RYALS J A
PA (CHEN-I) CHEN X; (GUOL-I) GUO L; (LAWT-I) LAWTON K A; (RYAL-I) RYALS J
PI US 20110030099 A1 20110203 (201113)* EN 31[1]
Provisional
US 2009-226517P 20090717
PRAI US 2010-837905 20100716
US 2009-226517P 20090717

Member(0001)
PI US 20110030099 A1 20110203 (201113)* EN 31[1]
TIEN PLANTS AND MODULATORS FOR IMPROVED DROUGHT TOLERANCE
AG SYNGENTA BIOTECHNOLOGY, INC.; PATENT DEPARTMENT
AGA: 3054 CORNWALLIS ROAD, P.O. BOX 12257, RESEARCH TRIANGLE . . .

With the search field AG 29 additional documents were found.

This record would not have been retrieved without using the AG field.
(L)-proximity can be used for precision searches within individual family members

<table>
<thead>
<tr>
<th>AN</th>
<th>1999-265576</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td>EP913216 A1</td>
</tr>
<tr>
<td></td>
<td>CA2251524 A1</td>
</tr>
<tr>
<td></td>
<td>CN1219449 A</td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
</tbody>
</table>

**INVENTION /DLVL**
value-added data

<table>
<thead>
<tr>
<th>MEMBER 1</th>
<th>EP913216 A1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMBER 2</td>
<td>CA2251524 A1</td>
</tr>
<tr>
<td>MEMBER 3</td>
<td>CN1219449 A</td>
</tr>
</tbody>
</table>

**PUBLICATION /DLVL**
original member data

*DLVL = Document Level. Options are INVENTION /DLVL or PUBLICATION /DLVL
More precise company search (DLVL)

=> S BADI/PACO (L) JP/PC (L) PUBLICATION/DLVL
L1 6483 S BADI/PACO (L) JP/PC (L) PUBLICATION/DLVL

=> D MEMBF L1
The MEMBF display format displays all available member (publication) details.

L1 ANSWER X OF 6483 WPINDEX COPYRIGHT 2012 THOMSON REUTERS on STN ...
Member(0001)
AN 2011-P60879 [201180]
PA (BADI-C) CONSTR RES&TECHNOLOGY GMBH
PAA: JP
PI JP 2011241095 A 20111201 (201180)* JA 16[0] <--
ADT JP 2011241095 A JP 2010-111987 20100514

BASF (BADI-C) is the patent assignee for the Japanese family member.
This BASF DWPI record would NOT be retrieved . . .

The invention level seems to indicate that BASF has a JP publication.

The members level specifies that the patent assignee for the JP publication is Nippon RM, not BASF.
Search examples to capitalize on the members level data

- Enhanced text search
  - Increased comprehensiveness (BIEX)
  - Increased precision (CLMEN)

- Improved company search
  - More comprehensive (AG)
  - More precise (DLVL)

- Precise inventor search (INO)
Search for full inventor name to increase precision (INO)

=> S SCHMIDT R/IN
L1       2114 SCHMIDT R/IN

=> S (RALF(P)MICHAEL(P)SCHMIDT)/INO
L2       24 (RALF(P)MICHAEL(P)SCHMIDT)/INO

=> D BIB HIT
L2   ANSWER 1 OF 24 WPIINDEX COPYRIGHT 2012 THOMSON REUTERS on STN
AN   2006-079406 [200608] WPIINDEX
DNC  C2006-028718 [200608]
TI   Method for increased production of transgenic plants with . . .
DC   C06; D16; P13
IN   FRANK M; SCHMIDT R; STAUDER S; SCHMIDT R M
PA   (BADI-C) BASF PLANT SCI GMBH
CYC  110
PIA  WO 2006000319 A2 20060105 (200608)* DE 96[1]
     DE 102004030608 A1 20060126 (200609) DE
     ...
Member (0001)
INO  FRANK, Markus; SCHMIDT, Ralf-Michael;
     STAUDER, Sandrajnmh5r6tttttt

Traditional search.
Member level search.
Invention Level.
Member Level.
Popular member display formats*

- **MEMBF (MEMBer Full)**
  - All available member level data for every member
- **MEMBB (MEMBer Brief)**
  - Only unique member level data for every member
- **HIT**
  - Only the information in the hit FIELD
- **HITMEMB (HIT MEMBer)**
  - All member data ONLY for the hit member(s)
- **CLMEN, CLM, TIO...** (individual member fields)

*FREE when combined with Invention displays such as ALL, FULL, MAX, etc., none of which include member level data.
Agenda

- General tips
- Remember the Members!
- **Numeric property search**
- **DCR structure searching**
Numeric property search

• Now available in 12 databases on STN, including CNFULL, JPFULL, CANPATFULL, AUPATFULL, PCTFULL and MOBILITY
• Over 30 numeric fields covering nearly 400 units
  – A wide variety of chemical and physical properties
  – Including magnitude variation and alternative spelling
• Search within all English-language text fields
• Automatic unit conversion

Numeric property search fields and base units:
http://www.stn-international.com/pctfull_nps.html
Enhanced numeric property search in DWPI

- More than 1,800 original unit variants indexed
- Over 50 numeric property search fields
- Enhanced indexing of open and closed ranges
  - New qualifier to exclude indexed open ranges: .EX
- Available in all DWPI English-language text fields in BOTH the Invention and the Member level, e.g. enhanced title, abstract and claims

http://www.stn-international.com/dwpi_nps.html
Here we are using the time (/TIM) field to search for a chemical reaction time of less than 2 hours.

Then the Teflon vacuum pump was turned on and the vacuum was immediately applied to the system. After a total reaction time of 60 minutes, the heat was turned off and the flask was backfilled with nitrogen. The reaction mixture was then charged with... reaction, which avoids the system solvent losses and also air pollution caused by solvent evaporation. The residence time or the reaction time is not more than 75 minutes in a continuous cycle, thus the method is commercially viable.
Additional hits are often retrieved in the Chinese and South Korean English-language translated claims.

degrees centigrade.

[CLAIM 5] The integrated multi-density polyurethane foaming product according to claim 1, wherein in the step three, the mould reaction time is 4-5 minutes.

=> S REACT? TIME/ADV (5A) TIM<2 HOURS
L4  115 REACT? TIME/ADV (5A) TIM<2 HOURS

=> D KWIC 1-115

More focused searches are possible using DWPI abstract sections, e.g. the advantage (/ADV).

ADV

ADVANTAGE - The method can greatly enhance catalytic activity, has reaction time of 1.5 hours and quickly form high molecular weight product at maximum molecular weight of more than 20; has body producing, simple.. . .

ADV

ADVANTAGE - The reactor system does not use oxygen, has high temperature heating rate (1000-10000 K/s) and has short reaction time (less than 2 seconds). It is capable of providing short chain low molecular substance product and improves yield and quality of biological oil.
Search example: Reaction time (cont.)

=> S REACT? TIME/ADV (5A) TIM.EX<2 HOURS
L5 104 REACT? TIME/ADV (5A) TIM.EX<2 HOURS

=> S L4 NOT L5
L6 11 L4 NOT L5

=> D KWIC 1-11

Option: exclude indexed open ranges (.EX), as this may help focus the search even further.

Open range hits are not always relevant (L6).

L6 ANSWER ... OF 11 WPINDEX COPYRIGHT 2012 THOMSON REUTERS on STN ADV. . . . can be processed for obtaining the Na2Ta2O6 while the hydrothermal reaction temperature is lower than 150 degrees C and the reaction time is less than 8 hours.

L6 ANSWER ... OF 11 WPINDEX COPYRIGHT 2012 THOMSON REUTERS on STN ADV. . . . greater than 30 (preferably greater than 50) kg. The process of preparing omeprazole form B is carried out at total reaction time of less than 35 hours; is simple, cost-effective and large scale applicable; and has improved purification step.
Search example: Cisplatin dosage

=> FILE WPINDEX

=> S CISPLATIN/CN
L1  2 CISPLATIN/CN

=> SEL CN
E1 THROUGH E40 ASSIGNED

=> D SEL
E1  4  CISPLATIN/CN
E2  1  ABIPLATIN/CN
E3  1  BRIPLATIN/CN
E4  1  CDDP/CN
E5  1  CIS-DDP/CN
E6  1  CIS-PLATINUM/CN
E7  1  CISMAPLAT/CN
E8  1  CISPLATINE/CN
E9  1  CISPLATINO/CN

In this example, we are looking for DWPI records describing a cisplatin dosage* of less than 16 mg/Kg.

*NEW!

To be more comprehensive, we will use the various DWPI Chemistry Resource (DCR) chemical names (/CN) for cisplatin (E1-E40).
PHARMACEUTICALS - Preferred Components: The dosage quantities of each ingredient are 2 mg/kg of cis-platinum, 0.2 l/kg of super-liquid iodized oil, and 0.6 Ug/kf of bafilomycin A1 or 60 mg/kg of chloroquine.

ABEX ADMINISTRATION - Administration of the cisplatin is 10 mg/kg, intraperitoneally or orally. Administration of the NK1 receptor antagonist is intravenous.

ACTV disulfide in physiological saline was administered at 40 mg/kg/day via intraperitoneal (IP) injections. At one hour after MPG disulfide administration, cisplatin (2 mg/kg) was administered to these rats by IP. MPG treatment alone without cisplatin was continued for two more days in...
A lubricant composition contains an organic molybdenum compound (A) (200-2000 ppm), base oil (1-30 % mass) having kinematic viscosity of 25 mm²/second or more at 100 degrees C, and base oil cleaning agent, ash-free dispersant, metal deactivator, rust-preventive agent and antifoamer. The extreme-pressure agent is zinc dithiophosphate having phosphorus content of 300-800 ppm. The organic molybdenum compound is of formula (I) R₁-R₄=4-18C linear or branched alkyl, X₁-X₄=O or S.
lubricating viscosity; (b) 20-300 parts per million by weight of titanium in the form of an oil-soluble titanium-containing material; (c) 40-500 parts per million by weight molybdenum in the form of an oil-soluble molybdenum-containing material; and (d) 0.3-3% by weight of a hindered phenolic anti-oxidant.

sodium-containing detergent contributes 100-2000 parts per million by weight sodium to the lubricating composition. The lubricating composition further comprises: (c) 40-500 parts per million by weight molybdenum in the form of an oil-soluble molybdenum-containing material. In a second alternative case, the lubricating...
Agenda

- General tips
- Remember the Members!
- Numeric property search
- DCR structure searching
What is DWPI Chemistry Resource?

- DCR is a chemical structure database covering specific chemical structures indexed in DWPI bibliographic patent records
- An integral part of DWPI on STN since 1999
- Available to all users of DWPI

21,500,000+ patent records

1,800,000+ substance records
DWPI Chemistry Resource (DCR)

• For each specific chemical substance a DCR record is created with a unique DCR number
  – Basic compound
  – Salts, isotopes, mixtures, isomers
• Substance records include structure diagrams and substance data, e.g.
  – IUPAC-name, synonyms
  – Molecular formula, molecular weight
• DCR numbers (/DCR) form the connection to DWPI patent records
Bibliographic record

Recovery of solvent and styrene from polystyrene solution involves recovering solvent by evaporation and recovering styrene from polystyrene thermally decomposed by solvent.

**DC** A13; A35; E14; J01

**IN** KANG E; KYO Y; OGURA A

**PA** (TOSH-N) TOSHIBA PLANT KENSETSU KK

**TI** Recovery of solvent and styrene from polystyrene solution involves recovering solvent by evaporation and recovering styrene from polystyrene thermally decomposed by solvent.

**AB** JP 2005060471 A

**NOVELTY** - Solvent from a polystyrene solution obtained by dissolving polystyrene in a solvent is evaporated and the solvent is recovered. The solvent thermally decomposes the separated polystyrene and styrene is recovered.

**DETAILED DESCRIPTION** - An INDEPENDENT CLAIM is included for equipment for recovering solvent and styrene from a polystyrene solution.

**USE** - Used for recovering solvent and styrene from a polystyrene solution.

**ADVANTAGE** - The solvent and styrene are recovered efficiently from the polystyrene solution. The styrene monomer of high purity is obtained with high yield.

**DESCRIPTION OF DRAWINGS** - The figure shows the thermal decomposition portion of the apparatus used for solvent and styrene recovery. (Drawing includes non-English language text).

**TECH ORGANIC CHEMISTRY** - Preferred Process: The cracked gas obtained by thermally decomposing polystyrene is condensed. The oil component is distilled and styrene of high purity is recovered.

**FS** CPI

**MC** CPI: A04-C02D; A10-E05C; A10-G01A; E10-J02A1; E10-J02B2; E11-Q01A; J01-A01

Substance record (DCR)

**MOLECULAR FORMULA** C8 H8

**MOLECULAR WEIGHT** 104.1512

**SYSTEMATIC NAME** Vinyl-benzene

**SYNONYM** POLYSTYRENE (MONOMER); STYRENE

**MOLECULAR FORMULA** C10 H16

**MOLECULAR WEIGHT** 136.239

**SYSTEMATIC NAME** 4-Isopropenyl-1-methyl-cyclohexane

**SYNONYM** (+-)-LIMONENE; 1,8-P-MENTHADIENE; CAJEPUTENE; CINENE; DIFENTENE; DL-LIMONENE; EULIMEN; KAUTSCHIN; LIMONENE; MENTHADIENE, 1,8-P-; REFCHOLE

**MOLECULAR FORMULA** C10 H16

**MOLECULAR WEIGHT** 136.239
DCR numbers form the connection between substance and patent records

**WPINDEX/WPIDS/WPIX**

- Bibliographic segment
  - Patent families, titles, abstracts & indexing
  - (DWPI)

- Substance segment
  - Structures and substance data
  - (DCR)

/DCR  /AN.S
Structure searching using DCR

- Overcoming system limits
- Enhanced display formats
Search Question

Search for DWPI patent references to compounds which include the following general structure fragment

Learn more about the basics of structure searching: http://www.cas.org/support/stngen/stndoc/structure.html.
Draw & save the structure query in standard format with STN Express
Upload structure query and run sample structure search

The uploaded structure query (L1).

Option: display the query (L1), to verify that the Upload was successful.

Run a substructure (SSS) sample (SAM) search using the query (L1).

Now what?

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
When system limits are exceeded during a structure search

1. Ask requestor for a more specific structure
2. Limit the structure search to a SUBSET
   a. Options within DCR
   b. Bibliographic criteria first
Options to limit search within DCR

- Molecular Formula (MF)
  - E.g.: C6 H11 Br O2 . Na

- Element Symbol (/ELS)
  - E.g.: => S BR/ELS

- Element Symbol Count (/ELS.CNT)
  - E.g.: => S O 2-3/ELS.CNT

- Classification Codes (/CC)
  - E.g.: => S ANTIBODIES/CC

- Roles

- ....
Limit using classification codes

=> E A/CC 10
**** START OF FIELD ****
E3 0 --> A/CC
E4 7743 ALKALOIDS/CC
E5 188 ALLOYS/CC
E6 729 ANTHRACYCLINES/CC
E7 230 ANTIBODIES/CC
...

=> S E4
L4 7743 ALKALOIDS/CC

=> SET SUBSET
ENTER SUBSET L# OR (NONE): L4
SET COMMAND COMPLETED

=> S L1 SSS FULL
FULL SUBSET SEARCH INITIATED 00:41:37 FILE 'WPINDEX'
FULL SUBSET SCREEN SEARCH COMPLETED - 5837 TO ITERATE
100.0% PROCESSED 5837 ITERATIONS 647 ANSWERS
SEARCH TIME: 00.00.03

L6 647 SEA SUB=L4 SSS FUL L1

Expand to review classifications.

Search for alkaloids (L4).

Restrict structure search to the SUBSET alkaloids (L4).
Review some answers using D SCAN

Use the free-of-charge SCAN format to compare answers to the original general structure:

[Diagram of the original general structure]
Retrieve and display DWPI patent records

=> SET SUBSET=None

=> S L6/DCR

L7 4407 L6/DCR

4407 DWPI patent records are retrieved (L7).

=> D FULL HIT HITSTR

L7 ANSWER 4 OF 4407 WPINDEX COPYRIGHT 2012 THOMSON REUTERS on STN
AN 2012-D03542 [2012223] WPINDEX Full-text
TI New quinazoline compound used in pharmaceutical composition or preparing medicaments for treating hyperplasia disease, cancer, non-cancer and chronic obstructive pulmonary disease in mammal . . .
IT UPIT 20120404 . . .
103128-USE; 133806-CL 133806-USE; 93613-CL 93613-USE; 8769-CL . . .
AN.S DCR-133806
CN.P VINORELBINE
SDCN R17804

Display the DWPI patent records with in-context hit structures (HITSTR).
When system limits are exceeded during a structure search

1. Ask requestor for a more specific structure

2. Limit the structure search to a SUBSET
   a. Options within DCR
   b. Bibliographic criteria first
      - Antineoplastic agents (A61P003-00/IPC)
      - Basic publication year = 2012 (2012/PY.B)
Perform bibliographic search before the broad structure search

=> S A61P0035-00/IPC
L8  79945 A61P0035-00/IPC

=> S L8 AND 2012/PY.B
L9  689 L18 AND 2012/PY.B

=> TRANSFER L9 1- DCR /AN.S
L10  TRANSFER L19 1- DCR : 24140 TERMS
SEARCH OF L20 IS APPROXIMATELY 17% COMPLETE

L11  8160 L20/AN.S

=> S L1 SSS FULL SUBSET=L11
FULL SUBSET SEARCH INITIATED 01:49:35 FILE 'WPINDEX'
FULL SUBSET SCREEN SEARCH COMPLETED - 2267 TO ITERATE
100.0% PROCESSED  2267 ITERATIONS  131 ANSWERS
SEARCH TIME: 00.00.01

L12  131 SEA SUB=L11 SSS FUL L1

Antineoplastic agents (L8).
689 DWPI patent records are retrieved (L9).
Retrieve all of the substances (L10) which were indexed in the DWPI patent records (L9).
Perform the broad structure search (L1) in the SUBSET of structures resulting from the bibliographic search (L11).
Review some answers using D SCAN

Use the free-of-charge SCAN format to compare answers to the original general structure:

N
Medical agent useful for treating cancer e.g. gastric cancer and stomach cancer, comprises antitumor agent containing protein polysaccharide derived from Trametes versicolor and immunosuppressive cell inhibitor.

AN.S DCR-436339

CN.P SUNITINIB

Retrieve and display DWPI patent records

5800 DWPI patent records are retrieved (L13).

Display the DWPI patent records with in-context hit structures (HITSTR).
Structure searching using DCR

• Overcoming system limits
• Enhanced display formats
ALLSTR display format

• All specific chemical structures indexed by Thomson Reuters for a given DWPI record, may now be displayed in one step using the ALLSTR format

• ALLSTR combines all of the DWPI Chemistry Resource (DCR) structures associated with a DWPI bibliographic record into a single unified display

• Additional text data relating to the structures are displayed as well, including the DCR numbers, and any DCR preferred or systematic chemical names

• ALLSTR is a free-of-charge format for DWPI on STN
Example: ALLSTR display format

=> S WO2010028012/PN
L1 1 WO2010028012/PN

=> D AN TI ALLSTR

L1 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2012 THOMSON REUTERS on STN
AN 2010-C71770 [201021] WPINDEX
TI Protection of plant from phytophagous nematode for reducing crop production losses comprises applying nematocide mixture consisting of methomyl and neonicotinoids to plant, seed or growing medium

AN.S DCR-72275
CN.P METHOMYL
SDCN R01993
SDRN 1993

The ALLSTR display can be combined with any standard DWPI bibliographic displays, e.g., the Thomson Reuters enhanced title (TI).
Example: ALLSTR display format (cont.)

**AN.S DCR-200552**
**CN.P THIAMETHOXAM**
**CN.S 3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-
 ylidene(nitro)amine; 3-[(2-chloro-5-thiazolyl)methyl]tetrahydro-5-
 methyl-N-nitro-4H-1,3,5-oxadiazin-4-imine**

SDCN RA0I7Q

ALLSTR combines all of the DWPI Chemistry Resource (DCR) structures associated with a DWPI bibliographic record, into a single display.

**AN.S DCR-226531**
**CN.P THIACLOPRID**
**CN.S 3-(6-Chloro-pyridin-3-ylmethyl)-thiazolidin-2-ylidene-cyanamide**

SDCN RA0JU9
FRAGHITSTR display format

- D FRAGHITSTR displays the corresponding DWPI Chemistry Resource (DCR) HITSTR for any specific compounds retrieved after a fragmentation code search has been conducted.

- Ideal for the time period since DCR was introduced (1999-date), but is also available for 20K+ backfile compounds dating from 1987.

- Like HITSTR and ALLSTR, FRAGHITSTR is a free-of-charge display format.
Example: FRAGHITSTR display format

=> FILE WPIDS

=> S (H641(P)01829(P)P442)/M2

L1 271 (H641(P)01829(P)P442)/M2

=> D TI HIT FRAGHITSTR 3

L1 ANSWER 3 OF 271 WPIDS COPYRIGHT 2012 THOMSON REUTERS on STN

TI Medicament e.g. morphine, for treating diseases e.g. chronic . . .

M2 *10* D014 D022 D780 G010 G100 H4 H401 H421 H6 H602 H641 H8 . . .

M781 N103 P442 P444 P448 P510 P517 P633 P816 M905 M904

RIN: 01829
DCN: R04819-K R04819-U
DCR: 102942-K 102942-U

AN.S DCR-102942
CN.P OXAZEPAM
CN.S 7-Chloro-3-hydroxy-5-phenyl-1,3-dihydro-benzo[e][1,4]diazepin-2-one
SDCN R04819

FRAGHITSTR displays the corresponding DWPI Chemistry Resource (DCR) hit structure (HITSTR) for specific compounds retrieved after a fragmentation code search.

H641 = chloro substituent
01829 = diazepine ring
P442 = anti-convulsant
/M2 = pharma/agrochem

HIT Fragmentation Code paragraph includes the corresponding DCR number for this specific compound.
New predefined hit display formats

- Relevant portions of the coding are displayed when they include HIT terms
- Selective display of code fields include
  - HITCMC: Hit Chemical Code
  - HITCODE: CMC, EPC, IPC, NCL, FCL, FTERM, MC, PLC, PLE containing hit terms
  - HITPLC: Hit Polymer Coding (Plasdoc)
  - HITPLE: Hit Polymer Indexing Enhanced
- Enter HELP FORMATS at an arrow prompt (=>) in WPINDEX, WPIDS, or WPIX for details
Summary

• Remember the Members!
  – English language translations of Asian documents
  – Display formats (MEMBB, MEMBF, HITMEMB)

• Enhanced numeric property search
  – Captured from both Invention and Members level
  – Includes Dosage (DOS) and PPM (PER)

• DCR structure searching
  – Available to all DWPI users
  – SUBSET command overcomes system limits
Additional Resources

- Recorded e-seminars
  - http://www.stn-international.com/recorded_events.html
    - Introduction to the Derwent World Patents Index (DWPI)
    - Structure Searching in DWPI Chemistry Resource (DCR)
    - Setting up SDIs in the Derwent databases on STN
    - Search for key patents in DPCI

- DWPI resources and reference materials
  - www.stn-international.com/stn_dwpi.html