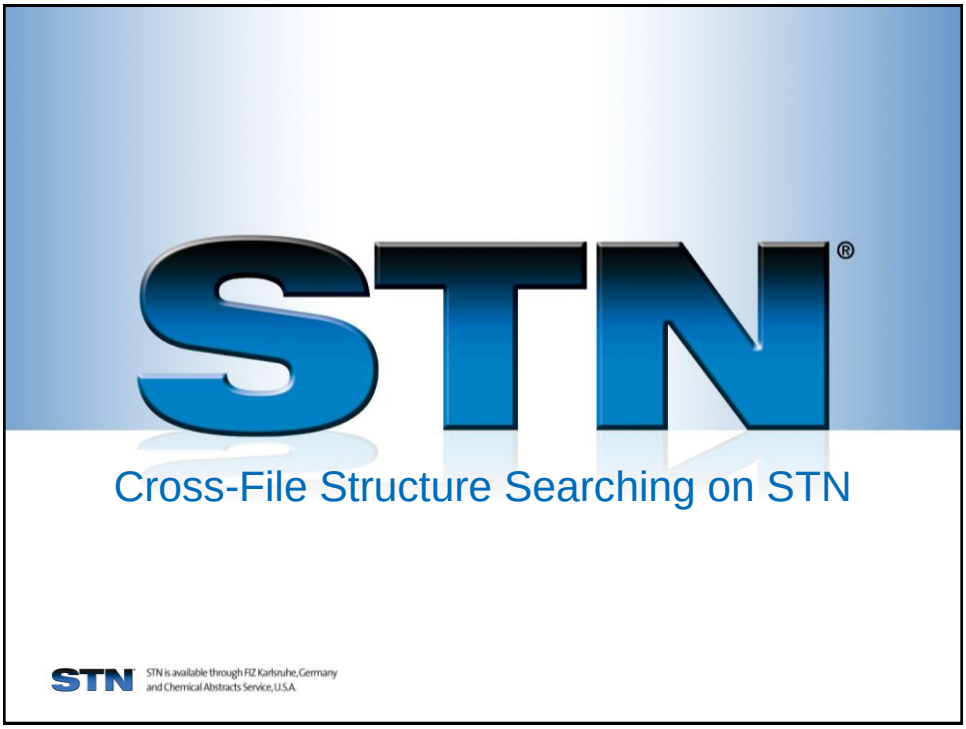


Cross-File Structure Searching on STN

- On STN, you have the unique option to perform a structure search in both REGISTRY, the world's leading chemistry information database and the Derwent Chemistry Resource (DCR), the structure part of the world's foremost patent information database, the World Patents Index.
  - using multiple, independent data sources increases reliability
  - a single platform offers ease of use and convenient duplicate removal
  - additionally, Patents containing Markush structures can be researched in the MARPAT database

STN

REGISTRY – coverage and contents

- Chemical structures and compound names
  - >50 M organic and inorganic compounds (excl. biosequences)
- Since 1957 (going back to 1900)
- Substance classes
  - organic, inorganic compounds, polymers
  - metals, alloys, minerals, coordination compds, metal organic compounds
  - elements, isotopes
  - proteins, nucleic acids
  - biosequences

STN

MARPAT – contents and coverage

- Markush structures from patents cited in CA file
  - Accession number identical to the one from CA
- Markush structures from patent claims and disclosure
- All classes, but
  - NO polymers
  - NO alloys
  - NO inorganic compounds
- Document based
  - approx. 350,000 documents
- 1988 onwards complete
- Pre-1988 data from INPI (~46k documents, 1960-)

STN

DWPI Chemistry Resource (DCR) – contents and coverage

- Chemical structures from pharmaceutical (B), agrochemical (C) or chemical (E) patent documents
- ~ 1.5 M substances
- Comprehensive coverage starting 1999
  - ~20k substances 1987-1999
  - ~2100 substances 1981-1987
  - specific inorganic and organic compounds, peptides (up to 15 AA), mod. polysaccarides, proteins
  - no polymers (> polymer indexing)
- Limited to 99 compounds per document

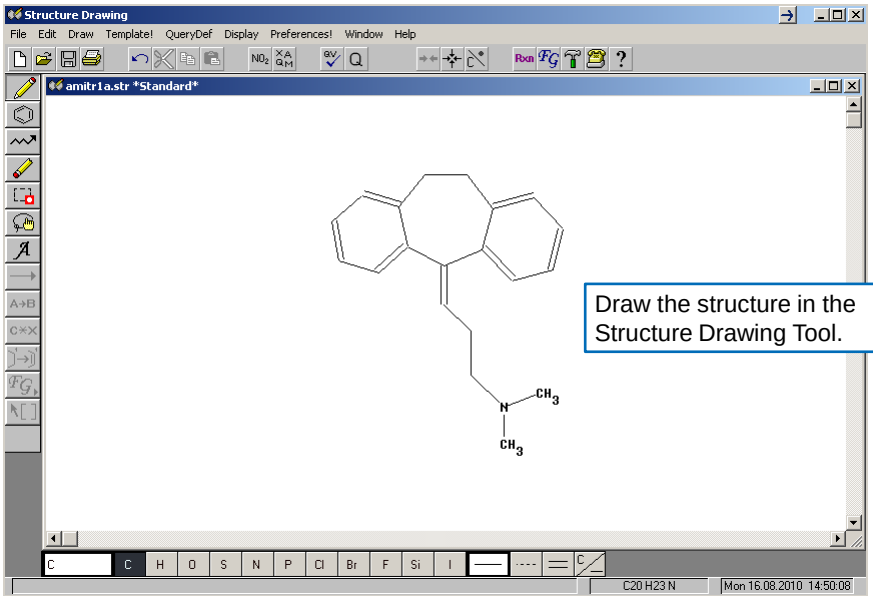
STN

Structure Search Example

Search Question

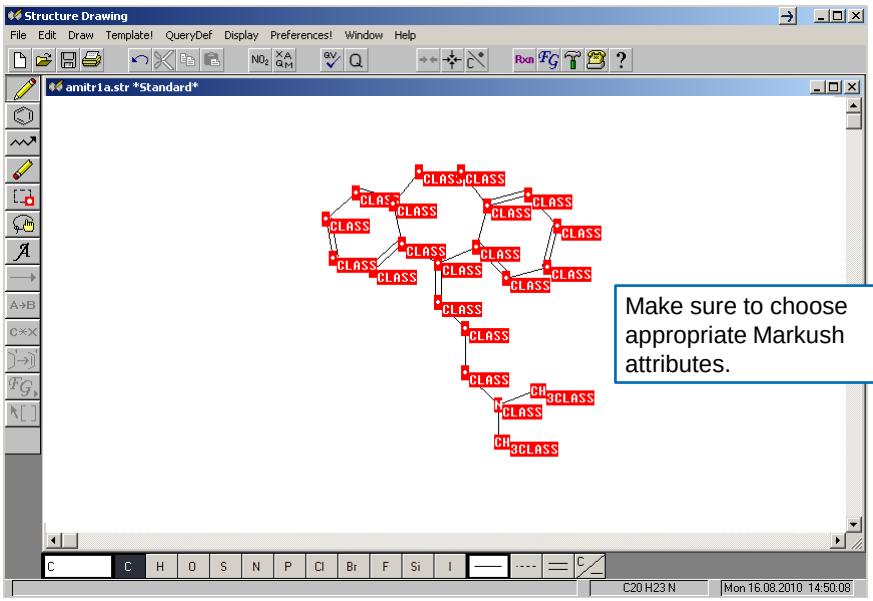
We‘re looking for patents related to amitryptiline, a tricyclic antidepressant.

STN



Draw the structure in the Structure Drawing Tool.

STN

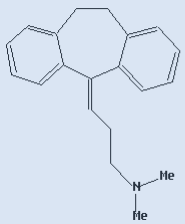


Make sure to choose appropriate Markush attributes.

STN

Upload the structure to REGISTRY and run a sample search

```
=> file registry
=>
Uploading C:\folder\folder\STN Express 8.4\Queries\amitr.str

L1      STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1               STR
```



Upload and display the structure.

STN

Upload the structure to REGISTRY and run a sample search

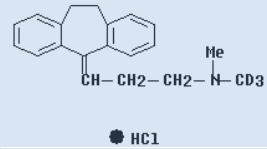
```
=> s l1 fam sam
SAMPLE SEARCH INITIATED 14:04:39 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      101 TO ITERATE

100.0% PROCESSED      101 ITERATIONS                    3 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:          1418 TO     2622
PROJECTED ANSWERS:                3 TO      163

L2             3 SEA FAM SAM L1
```

Run a sample search to make sure the search runs to completion.

STN

Use the free-of-cost D SCAN to evaluate the results of the sample search

```
=> d scan

L2    3 ANSWERS   REGISTRY  COPYRIGHT 2010 ACS on STN
IN    1-Propanamine, 3-(10,11-dihydro-5H-dibenzo[a,d]cycloheptен-5-
      ylidene)- N-methyl-N-(methyl-d3)-, hydrochloride (9CI)
MF    C20 H20 D3 N . Cl H
```



A labeled salt of the compound.

```
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>
```

STN

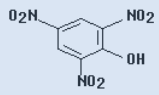
Run the full structure search in REGISTRY

```
=> s l1 fam ful
FULL SEARCH INITIATED 14:05:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     1877 TO ITERATE

100.0% PROCESSED     1877 ITERATIONS                    89 ANSWERS
SEARCH TIME: 00.00.01

L3           89 SEA FAM FUL L1

=> d scan

L3    89 ANSWERS   REGISTRY  COPYRIGHT 2010 ACS on STN
IN    1-Propanamine, 3-(10,11-dihydro-5H-dibenzo[a,d]cycloheptен-5-
      ylidene)-N,N-dimethyl-, compd. with 2,4,6-trinitrophenol
      (1:1)
MF    C20 H23 N . C6 H3 N3 O7

      CM   1
```

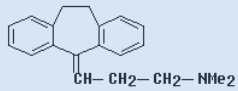
STN

Evaluate and save the structure search result

```
     CM   1
```




```
     CM   2
```



A mixture containing the compound.

```
 **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

=> save L3 amitr_reg/A
```

Always save the answer set of a structure search. It wasn't cheap, after all!

STN

Cross over to CAPlus to retrieve bibliographic records

```
=> fil caplus

=> s l3 and p/dt
          6584 L3
       7323869 P/DT
L4          889 L3 AND P/DT

=> d 1- all

L4   ANSWER 1 OF 889  CAPLUS  COPYRIGHT 2010 ACS on STN
AN   2010:943938  CAPLUS
ED   Entered STN:  30 Jul 2010
TI   Suppression of glial fibrillary acidic protein
IN   Messing, Albee; Cho, Woosung; Thorson, Jon Scott; Goff, Randal D.
PA   Wisconsin Alumni Research Foundation, USA
SO   U.S. Pat. Appl. Publ., 44pp.
     CODEN: USXXCO
 PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 20100190705       A1    20100729    US 2009-589638         20091026
PRAI US 2008-110356P      P     20081031
```

You could use Roles here for increased precision.

STN

Cross over to CAPlus to retrieve bibliographic records

```
CLASS
 PATENT NO.       CLASS   PATENT FAMILY CLASSIFICATION CODES
 ---------------  -----   ----------------------------------------------
 US 20100190705   INCL    514012000; 514061000; 514080000; 514118000;
514167000;
                          514169000; 514182000; 514183000; 514217000;
514225500
                  IPCI    A61K0038-17 [I,A]; A61K0031-715 [I,A]; A61K0031-675
                          [I,A]; A61K0031-66 [I,A]; A61K0031-593 [I,A];
                          A61K0031-59 [I,C*]; A61K0031-19 [I,A]; A61K0031-185
                          [I,C*]; A61K0031-565 [I,A]; A61K0031-396 [I,A];
                          A61K0031-55 [I,A]; A61K0031-5415 [I,A]; A61K0031-495
                          [I,A]; A61K0031-519 [I,A]; A61K0031-445 [I,A];
                          A61K0031-4535 [I,A]; A61K0031-4523 [I,C*]; A61K0031-
                          [I,A]; A61K0031-40 [I,A]; A61K0031-382 [I,A];
                          A61K0031-352 [I,A]; A61K0031-165 [I,A]; A61K0031-135
                          [I,A]; A61K0031-122 [I,A]; A61P0025-00 [I,A];
                          A61K0031-566 [I,A]
                  NCL     514/012.000; 514/061.000; 514/080.000; 514/118.000;
                          514/167.000; 514/169.000; 514/182.000; 514/183.000;
                          514/217.000; 514/225.500
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
```

STN

Cross over to CAPlus to retrieve bibliographic records

```
AB    Provided herein are methods of decreasing glial fibrillary acidic
      protein(GFAP) levels in a cell.  Such methods include administering an
      effective amt. of a GFAP lowering compd. to the cell.  Also provided
      are compds. useful for the treatment of Alexander disease in subjects
      at risk of or diagnosed with Alexander disease and methods for the
      identification of such compds.
ST    glial fibrillary acidic protein inhibitor Alexander disease treatment
IT    Tricyclic compounds
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (C-dependent amino; compds. for suppression of glial fibrillary
         acidic protein to treat Alexander disease)
…
IT    50-48-6, Amitriptyline   50-50-0, Estradiol benzoate   50-52-2,
      Thioridazine   56-72-4, Coumaphos   56-75-7, Chloramphenicol   59-01-8,
      Kanamycin   67-07-2, Phosphocreatine 67-97-0, Colecalciferol   69-23-8,
      Fluphenazine   70-22-4, Oxotremorine   79-83-4, Pantothenic acid
      …
      107254-86-4, NPPB   111470-99-6, Amlodipine besylate   121825-43-2
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (compds. for suppression of glial fibrillary acidic protein to treat
         Alexander disease)
```

STN

Perform an additional keyword search in CAPlus

```
=> s ?amitript!l? and p/dt
L5          740 ?AMITRIPT!L? A

=> s l5 not l4
L6           48 L5 NOT L4

=> d ti kwic

L6   ANSWER 1 OF 48  CAPLUS  COPYRIGHT 2010 ACS on STN
TI   Pharmaceutical composition for treating depressive psychosis
DT   Patent
AB   .  .  .  No.  II is composed of amitriptyline, sulpiride,
     Borneolum Syntheticum, and Chinese.  .  .
ST   amitriptyline; sulpiride; borneolum syntheticum; rhizoma
     cyperi;.  .  .
```

To ensure a complete result, you should use additional synonyms!

Thorough indexing takes time, so a keyword search will often retrieve recent publications that have not received chemical indexing yet.

STN

Do a follow-up search in MARPAT

```
=> file marpat

=> s l3 css sam
SAMPLE SEARCH INITIATED 11:25:49 FILE 'MARPAT'
SAMPLE SCREEN SEARCH COMPLETED -      118 TO ITERATE

100.0% PROCESSED       118 ITERATIONS                              1
ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:           1709 TO     3011
PROJECTED ANSWERS:                 1 TO       80

L7            1 SEA CSS SAM L1

=> d scan
```

Use CSS in MARPAT.

Try a sample search first.

Use the result of the REGISTRY structure search (L3) for your MARPAT search to receive a discount!

STN

Do a follow-up search in MARPAT

```
L7    1 ANSWERS   MARPAT  COPYRIGHT 2010 ACS on STN
IPCI  A61K0031-137 [I,A]; A61K0031-496 [I,A]; A61K0031-5415 [I,A]; A61K0031-
      55 [I,A]; A61K0031-553 [I,A]; A61P0025-28 [I,A]; A61P0025-00 [I,C*]
IPCR  A61K0031-137 [I,C]; A61K0031-137 [I,A]; A61K0031-496 [I,C]; A61K0031-
      496 [I,A]; A61K0031-5415 [I,C]; A61K0031-5415 [I,A]; A61K0031-55 [I,C];
      A61K0031-55 [I,A]; A61K0031-553 [I,C]; A61K0031-553 [I,A]; A61P0025-00
      [I,C]; A61P0025-28 [I,A]
CC    1-11 (Pharmacology)
TI    Treatment of protein aggregation diseases
ST    protein aggregation disease treatment phenothiazine tricyclic
      antidepressant combination; Alzheime                    ine tricyclic
      antidepressant combination
IT    Brain disease
      Prion diseases
         (Gerstmann-Straussler-Scheinker s                    protein
         aggregation diseases such as Alzh                    combination of
         phenothiazine and tricyclic antidepressant)
IT    Amyloid
      RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
      unclassified); BIOL (Biological study)
         (aggregation; treatment of protein aggregation diseases such as
         Alzheimer's disease with combination of phenothiazine and tricyclic
         antidepressant) […]
```

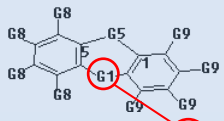
This looks like a CAplus document…

…until you look further down.

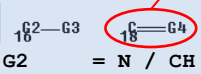
STN

Evaluate the MARPAT search

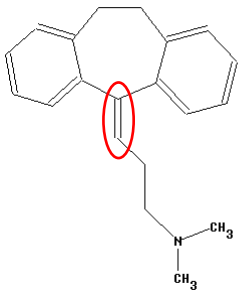
```
(Biological study); USES (Uses)
 (treatment of protein aggregation diseases such as Alzheimer's disease
 with combination of phenothiazine and tricyclic antidepressant)

 MSTR 2
```




```
G1      = 16 / 18 / O
```



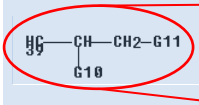

```
G2      = N / CH
G3      = R <"pharmaceutically acceptable substituent"> /
          (Specifically claimed: 34 / 44 / 57 / 73)
```

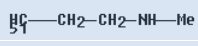


STN

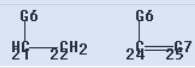
Evaluate the MARPAT search

G4 = R <"pharmaceutically acceptable substituent"> /
(Specifically claimed: 39 / 51 / 66)

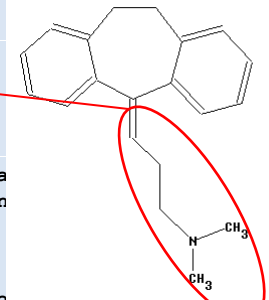




G5 = 21-5 22-1 / 24-5 25-1



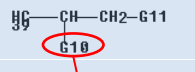
G6 = H / R <"pharmaceutically accepta
(Specifically claimed: piperazin
G7 = CH / N
…
G10 = H / alkyl <containing 1-3 C>
G11 = NH2 / alkylamino <containing 1-3 C> /
dialkylamino <each alkyl containing 1-3 C> / piperidino /
morpholino / piperazino / pyrrolidino
Patent location: claim 13

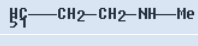


STN

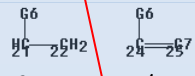
Evaluate the MARPAT search

G4 = R <"pharmaceutically acceptable substituent"> /
(Specifically claimed: 39 / 51 / 66)

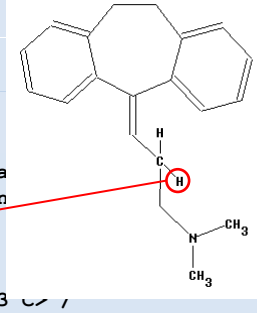




G5 = 21-5 22-1 / 24-5 25-1



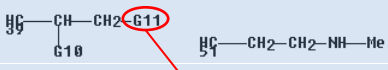
G6 = H / R <"pharmaceutically accepta
(Specifically claimed: piperazin
G7 = CH / N
…
G10 = H / alkyl <containing 1-3 C>
G11 = NH2 / alkylamino <containing 1-3 C> /
dialkylamino <each alkyl containing 1-3 C> / piperidino /
morpholino / piperazino / pyrrolidino
Patent location: claim 13



STN

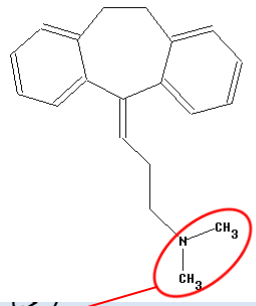
Evaluate the MARPAT search

G4 = R <"pharmaceutically acceptable substituent"> /
(Specifically claimed: 39 / 51 / 66)



G5 = 21-5 22-1 / 24-5 25-1

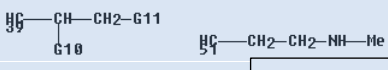
G6 = H / R <"pharmaceutically accepta
(Specifically claimed: piperazin
G7 = CH / N
…
G10 = H / alkyl <containing 1-3 C>
G11 = NH2 / alkylamino <containing 1-3 C> /
dialkylamino <each alkyl containing 1-3 C> / piperidino /
morpholino / piperazino / pyrrolidino
Patent location: claim 13



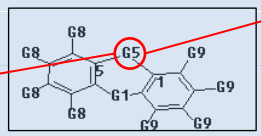
STN

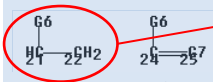
Evaluate the MARPAT search

G4 = R <"pharmaceutically acceptable substituent"> /
(Specifically claimed: 39 / 51 / 66)

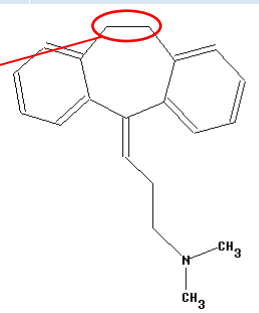


G5 = 21-5 22-1





G6 = H / R <"pharmaceutically accepta
(Specifically claimed: piperazin
G7 = CH / N
…
G10 = H / alkyl <containing 1-3 C>
G11 = NH2 / alkylamino <containing 1-3 C> /
dialkylamino <each alkyl containing 1-3 C> / piperidino /
morpholino / piperazino / pyrrolidino
Patent location: claim 13

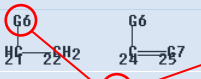


STN

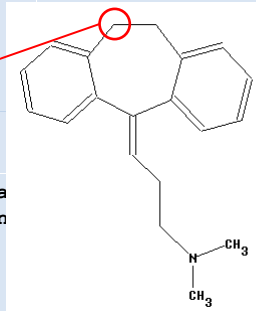
Evaluate the MARPAT search

```
 G4      = R <"pharmaceutically acceptable substituent"> /
           (Specifically claimed: 39 / 51 / 66)
```

```
G5       = 21-5 22-1   / 24-5 25-1
```



```
G6       = H / R <"pharmaceutically accepta
           (Specifically claimed: piperazin
G7       = CH / N
...
G10      = H / alkyl <containing 1-3 C>
G11      = NH2 / alkylamino <containing 1-3 C> /
           dialkylamino <each alkyl containing 1-3 C> / piperidino /
           morpholino / piperazino / pyrrolidino
Patent location:             claim 13
```



STN

Run the full search in MARPAT and evaluate the answers

```
=> s l3 css full
FULL SEARCH INITIATED 15:45:36 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED -     2563 TO ITERATE

100.0% PROCESSED     2563 ITERATIONS                    27 ANSWERS
SEARCH TIME: 00.00.01

L8            27 SEA CSS FUL L1

=> save L8 amitr_mar/A

=> s l8 not (l4 or l5)
L9             8 L8 NOT (L4 OR L5)

=> d bib abs hit 1-

L9   ANSWER 1 OF 8  MARPAT  COPYRIGHT 2010 ACS on STN
AN   153:29334  MARPAT
TI   Nortriptyline compounds for promoting bone growth
IN   Ellies, Debra; Rosenberg, William
```

Again: Always save the answer set of a structure search!

Subtract results already seen in CAplus.

STN

Unify the results and proceed to WPI

```
=> file caplus

=> s l4 or l5 or l8
L10          946 L4 OR L5 OR L8

=> file wpindex

=> s l1 fam sam
SAMPLE SEARCH INITIATED 11:27:14 FILE 'WPINDEX'
SAMPLE SCREEN SEARCH COMPLETED -        25 TO ITERATE

100.0% PROCESSED        25 ITERATIONS                        0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:           101 TO       399
PROJECTED ANSWERS:                0 TO         0

L11           0 SEA FAM SAM L1
```

Don't worry, this is only a sample search!

STN

Run the full search and retrieve the bibliographic records

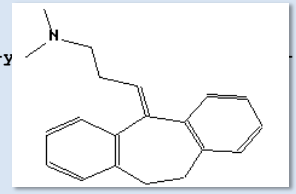
```
=> s l1 fam ful
FULL SEARCH INITIATED 11:27:20 FILE 'WPINDEX'
FULL SCREEN SEARCH COMPLETED -       174 TO ITERATE

100.0% PROCESSED       174 ITERATIONS                       4 ANSWERS
SEARCH TIME: 00.00.01

L12            4 SEA FAM FUL L1

=> s l12/dcr
L13          675 L12/DCR
```

Remember the internal crossover to the bibliographical part of WPI!

STN

Evaluate the results in a free-of-cost display format

```
=> d trial hitstr

L13  ANSWER 1 OF 675  WPINDEX COPYRIGHT 2010       THOMSON REUTERS on STN
AN   2010-J14225 [201050]   WPINDEX
TT   TT: PHARMACEUTICAL COMBINATION TREAT CENTRAL NERVE SYSTEM DISORDER
         COMPRISE NICOTINIC AGONIST THERAPEUTIC AGENT ANTIDEPRESSANT
         ATYPICAL ANTIPSYCHOTIC ANXIETY ANTICONVULSANT
DC   B05; D13
IPCI A61K0045-00 [I,C]; A61K0045-06 [I,A]; A61P0025-00 [I,A]; A61P0025-00[I,C]
MC   CPI: B04-G21; B05-B01M; B06-H; B07-H; B08-D03; B09-D01; B10-A12C; B10-
          A15; B10-B02; B10-B03B; B10-B04B; B10-C04A; B10-C04E6; B14-C01;
          B14-E11; B14-F02C; B14-F02D1; B14-F06; B14-J01; B14-J02B1; B14-
          J05A; B14-J07;B14-L01; B14-L09; B14-N07; B14-N16; B14-S18;
          D03-H01T2B
AN.S DCR-87308
CN.P AMITRIPTYLINE
CN.S [3-(10,11-Dihydro-dibenzo[a,d]cyclohepten-5-y
     amine
SDCN R00022; R16160
SDRN 0022
```



STN

Subtract previously seen answers and display the results

```
=> tra l10 pn, apps
L14          TRANSFER L10 1- PN APPS :   10245 TERMS
L15       1441 L14

=> s l13 not l15
L16        223 L13 NOT L15

=> d all hitstr 1-

L16  ANSWER 1 OF 223  WPINDEX COPYRIGHT 2010       THOMSON REUTERS on STN
AN   2010-J14225 [201050]   WPINDEX
TI   Pharmaceutical combination for treating central nervous system
     disorders comprises alpha4beta2 nicotinic agonist, and therapeutic
     agent including antidepressants, atypical antipsychotics,
     antipsychotics, anxiolytics, and anticonvulsants
DC   B05; D13
IN   BENCHERIF M; HAEBERLEIN S L B; JOHNSON E; NORDSTROM E
PA   (ASTR-C) ASTRAZENECA AB; (TARG-N) TARGACEPT INC
CYC  125
PI   WO 2010080757   A2 20100715 (201050)* EN  19[0]
```

STN

Subtract previously seen answers and display the results

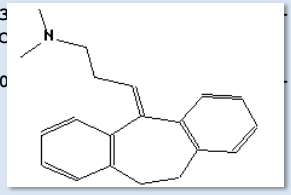
ADT WO 2010080757 A2 WO 2010-US20118 20100105
PRAI US 2009-142959P 20090107
IPCI A61K0045-00 [I,C]; A61K0045-06 [I,A]; A61P0025-00 [I,A]; A61P0025-00
AB WO 2010080757 A2 UPAB: 20100806
NOVELTY - A pharmaceutical combination comprises first therapeutic agent, which is an alpha 4 beta 2 nicotinic agonist; and second therapeutic agent, comprising antidepressants, atypical antipsychotics, antipsychotics, anxiolytics, anticonvulsants, Alzheimer's therapies, Parkinson's therapies, migraine therapies, stroke therapies, urinary incontinence therapies, neuropathic pain therapies, insomnia therapies, mood stabilizers, statins, nutraceuticals, anticholinergics, antihistamines, benzodiazepines, barbiturates, anticonvulsants, muscle relaxants, sedative-hypnotics, or chemotherapeutics.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a kit comprising a dosage unit of mixture of alpha 4 beta 2 nicotinic agonist; and antidepressants, atypical antipsychotics, antipsychotics, anxiolytics, anticonvulsants, Alzheimer's therapies, Parkinson's therapies, migraine therapies, stroke therapies, […]
ACTIVITY - CNS-Gen; Nootropic; Neuroprotective; Tranquilizer. No biological data given.
MECHANISM OF ACTION - alpha 4 beta 2 Nicotinic receptor (partial) agonists.

STN

Subtract previously seen answers and display the results

USE - Pharmaceutical combination for treating central nervous system disorders comprising cognitive dysfunction in schizophrenia (CDS), Alzheimer's Disease (AD), attention deficit disorder (ADD), pre-senile dementia (early onset of Alzheimer's Disease), dementia of the Alzheimer's type, mild cognitive impairment, age associated memory impairment, and attention deficit hyperactivity disorder (ADHD) (claimed).
ADVANTAGE - The composition enhances effect of either alpha 4 beta 2 nicotinic agonist or the second therapeutic agent when an alpha 4 beta 2 nicotinic agonist is taken in combination with the second therapeutic agent, and thus permits reduced quantities of these agents to be used and permits improved management of disease symptoms. This synergistic/additive effect results in faster onset of therapeutic action of the compounds.
MC CPI: B04-G21; B05-B01M; B06-H; B07-H; B08-D03
A15; B10-B02; B10-B03B; B10-B04B; B10-C
B14-E11; B14-F02C; B14-F02D1; B14-F06;
J05A; B14-J07; B14-L01; B14-L09; B14-N0
H01T2B

=>



STN

Conduct a supplementary keyword search in WPI

```
=> s ?amitript!l?/bi,biex
           595 ?AMITRIPT!L?/BI
           132 ?AMITRIPT!L?/BIEX
L17        630 ?AMITRIPT!L?/BI,BIEX

=> s l17 not (l13 or l15)
L18         53 L17 NOT (L13 OR L15)

=> d ti kwic

L18  ANSWER 1 OF 53  WPINDEX COPYRIGHT 2010       THOMSON REUTERS on STN
TI   Compound selected from e.g. tramadol, resveratrol, acetaminophen,
     xorphanol, cinfenoac, furcloprofen, subsalicylate, enofelast,
     triflusal, ketorfanol, indriline, and/or cizolirtine derivative is
     useful for e.g. treating depression
ACTV .  .  .  Antidepressant activities of tramadol and amitriptyline in the
     treatment of Major..  .  .  and 5 patients treated with amitriptyline
     showed Ham-D change of 22-0,..  .  .

=> d all 1-
```

Including first level data (BIEX) will increase your chances of a comprehensive retrieval.

Remember to use synonyms for improved retrieval. A single keyword is rarely enough!

STN

INPAFAMDB – contents and coverage

- More than 70 million documents / 38 million patent families
- Bibliographic and patent family information for more than 90 authorities from the mid-1800's
- 26 million abstracts for more than 50 authorities
- Cited references from 23
- Patent classification cod
  ECLA, ICO, NCL and IDT
  - Including: IPC, ECLA, ICO, USPC and IDT
- Legal status for 58 patent authorities from 1978

Profit from the unique coverage of INPAFAMDB by including a keyword search.

STN

Finally, conduct a keyword search in INPAFAMDB

```
=> s l13 or l17
L19         276 L13 OR L17

=> file inpafamdb

=> tra l10 pn, apps
L20          TRANSFER L10 1- PN APPS :   10245 TERMS
L21        1009 L20

=> tra l19 pn, apps
L22          TRANSFER L19 1- PN APPS :    2758 TERMS
L23         279 L22

=> s l21 or l23
L24        1287 L21 OR L23
```

We're still in WPI at this point.

Transfer the previously seen answers.

STN

Finally, conduct a keyword search in INPAFAMDB

```
=> s ?amitript!l?
L25          85 ?AMITRIPT!L?

=> s l25 not l24
L26          15 L25 NOT L24

=> d ti pn kwic 1-

L26   ANSWER 1 OF 15      INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI    METHOD FOR COMBINED TREATMENT OF PATIENTS WITH FUNCTIONAL DISEASES OF
      ESOPHAGUS AND STOMACH.
PI    UA 69327             A  20040816
ABOL  .  .  .  fear, the antidepressants are used (Amitriptylin, Azaphen,
      Maprotylin, etc.).

L26   ANSWER 2 OF 15      INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI    AMITRIPTYLINOXIDE CONTAINING COMPOSITION.
PI    IE 8602764           L  19870430
TI    AMITRIPTYLINOXIDE CONTAINING COMPOSITION.
```

The CN fields in REGISTRY and DCR are a good source for synonyms.

A Ukrainian document.

STN

Finally, conduct a keyword search in INPAFAMDB

```
L26   ANSWER 3 OF 15      INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI    PROCEDIMIENTO EXTRACTOR PARA PSICOFARMACOS DE NATURALEZA BASICA Y
      NEUTRA EN MATERIAL BIOLOGICO.
    - Extn. of psycho-drugs of basic and neutral type.
PI    ES 541531            D0 19851216
PI    ES 8603084           A1 19860316
AB    .  .  .  morphine, pentazocine, amphetamine, cocaine, diazepan,
      amitriptyline, chlorpromazine, pethidine, methadone, d-propoxifen,
      trihexiphenidyl,.  .  .

L26   ANSWER 4 OF 15      INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI    ANTIDEPRESSANT COMPOSITIONS AND DOSAGE UNITS.
    - ANTIDEPRESSANT METHOD AND COMPOSITION FOR SAME COMPRISING A TRICYCLIC
      ANTIDEPRESSANT AND A THYROID HORMONE.
PI    GB 1310594           A  19730321
PI    US 3621096           A  19711116
AB    .  .  .  selected from imipramine, desmethylimipramine protriptyline,
      amitriptyline and nortriptyline and a thyroid.  .  .

L26   ANSWER 5 OF 15      INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI    PIPERIDINE, MORPHOLINE AND PIPERAZINE DERIVATIVES.
PI    GB 1243991           A  19710825
AB    .  .  .  drugs, for example imipramine, desipramine, amitriptyline,
```

STN

Finally, conduct a keyword search in INPAFAMDB

```
AB    .  .  .  chlorodiacepoxide, phenaglycodol, methyl phenidlate,
      imipramine, amitriptyline, tranylcypromine, butabarbitol
      phenobarbital, amobarbital, methyprylon,.  .  .

L26   ANSWER 10 OF 15     INPAFAMDB COPYRIGHT 2010 EPO/FIZ KA on STN
TI    PROCESSO DE PREPARACAO DE UMA COMPOSICAO FARMACEUTICA PROVENDO UMA
      LIBERACAO PROLONGADA DE UMA DROGA NO APARELHO GASTRO INTESTINAL.
    - Procede de production de pastilles assurant une liberation prolongee
      d'un medicament.
    - Pharmaceutical preparations in sustained release form.
    - Medicinal pellets coated with overlapping porous fatty acid leaflet
      layers.
PI    BE 644643            A  19640903
PI    BR 6457270           D0 19730920
PI    FR 4731M             M
PI    FR 1462169           A  19660415
PI    GB 1044572           A  19661005
PI    NL 6402159           A  19640907
PI    US 3383283           A  19680514
AB    .  .  .  phenobarbital, barbital, and amobarbital, and amitriptyline.

=> d 1-
```

STN

Summary results of what we found

- Our combined structure & keyword search of REGISTRY & CAplus found 937 Patent documents
- MARPAT added 8 Markush-type Patent records
- The combined structure & keyword search of DCR & DWPI produced 276 additional Patent records
- Our keyword search of INPAFAMDB found 15 patent families referencing amitryptiline not identified in any of the above structure searches

STN

Lessons Learned

- STN offers a unique combination of structure searchable databases on a single platform
  - multiple data sources offer security through redundancy
  - a single, powerful retrieval language offers ease of use
  - convenient deduplication tools are available
- Several supplementary full-text and bibliographic databases are available for follow-up searches

STN

Cross-File Structure Searching on STN

STN is available through FIZ Karlsruhe, Germany and Chemical Abstracts Service, U.S.A.

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helpdesk@fiz-karlsruhe.de
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www.stn-international.de

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