What's New on STN®

PIUG Biotech – February 2020
John Kratunis (CAS); Jim Brown (FIZ)

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Agenda

- Stay Updated with STNext®

- Enhancements to STNext

- CAS FORMULATIONS™

- STNext Database Enhancements

2

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- Check STN Online News after log in

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STNext Release Notes

Home > What's New

STNext®

What's New

December 23, 2019: Derwent World Patents Index: Manual Code Revision 2020

December 17, 2019: New Korean Patent Full-Text Database KRFULL from LexisNexis Univentio Launched on STN®

STN® Application Updates

November 22, 2019: What's New Link Added to Account Menu

October 25, 2019: Information Icon and Reporting Changes for CAS FORMULATIONS™ Database

See All Application Updates

STN® Content Updates

December 12, 2019: CAplus℠ Now Provides Non-Conventional Patent Families for Dual Chinese Filings

November 25, 2019: PatentPak® Now Available in USPATFULL/USPAT2 on STNext®

See All Content Updates

STN Online News

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* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

NEWS  1   MAR  7  Search Limits Significantly Expanded Exclusively in STNext(R)
NEWS  2   APR 18  New legal status codes for US patent applications and
                  granted patents in INPADOC
NEWS  3   APR 30  Derwent Markush Resource (DWPIM) Database Enhancements
NEWS  4   OCT  7  New CAS FORMULATIONS TM Database Launched on STNext
NEWS  5   OCT  8  Third 2019 update to Emtree(TM) now available on STN(R)
NEWS  6   NOV  8  Derwent Markush Resource (DWPIM) Enhanced to Improve Search
                  and Retrieval Quality
NEWS  7   NOV 15  INPADOC Enhanced with More Current and Complete Japanese Legal
                  Status Information.
NEWS  8   NOV 18  German Patent Full-Text Database DEFULL enhanced
NEWS  9   NOV 25  CAS FORMULATIONS (TM) Enhanced on STNext
NEWS 10   NOV 25  PatentPak(R) now available in USPATFULL/USPAT2 on STNext(R)
NEWS 11   DEC 10  CAplus (SM) Now Provides Non-Conventional Patent Families
                  for Chinese Dual Filings
NEWS 12   DEC 23  Derwent World Patents Index: Manual Code Revision 2020
```
5

STN Online News

```
=> NEWS 1


Search Limits Significantly Expanded Exclusively in STNext(R)

Effective immediately, search limits have been significantly and
exclusively expanded in STNext(R). You can now have up to 100 million
answers per file per session in all databases on STNext.

In addition, the structure searchable databases CAS Registry(SM),
MARPAT(R) and CASREACT(R) now allow up to 100 million iterations per
search.

These increases may reduce the need to run sample searches in the CAS
structure searchable databases, especially for customers with STN
Global Value pricing plans. Customers may still want to run sample
searches before proceeding to FULL searches, as a means to check
their structures.
```
6

STNext – Upcoming Releases

- Projects
  - Improved structure and transcript management
  - Searchable asset names
  - Combine multiple different assets into a single folder

- Query Summary File download in PDF format
  - Download your QSF for a summary of your search history
  - QSF is currently available in RFT format

- Reporting enhancements
  - More customization
  - Merge or split fields in report

- Claim Text Search in CAplus^{SM}

- Patent Legal Status in CAplus

7

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CAS FORMULATIONS in STNext   => FILE CASFORM

- Precision searching of formulations and compositions for well-targeted answers.

- Updated Weekly

- CAS FORMULATIONS content:
  - Largest formulation collection in the world
  - Human Indexed from patents, journals, and product inserts from NLM DailyMed
  - Pharmaceuticals, agrosciences, materials, cosmetics, flavors, fragrances
  - Over 20 years of backfile
  - Published in English, French, German, Japanese, Chinese, Korean

8

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CAS FORMULATIONS Unique Search Fields

- Fields specific to groups, components, products and targets

- Fields for functions of products, groups, and components

- Search for component optionality (e.g.: mandatory, exclude, one or more, etc)

- Search for availability of component amount data

- Easy crossover with CAS REGISTRY® and transfer with CAplus

9

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Finding common stabilizers for antibody formulations

1. Retrieve antibody records from CAS REGISTRY

2. Cross over to CAS FORMULATIONS to find formulations of these substances

3. Refine to formulations with stabilizing agents using controlled terminology in the CVO and GVO fields.

4. Analyze HIT RN to view most commonly used stabilizing agents in these formulations.

10

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Retrieve antibody records from CAS REGISTRY

```
=> FILE REGISTRY


=> S (?AMAB OR ?EMAB OR ?IMAB OR ?OMAB OR ?UMAB)/CNS
L1          4826            (?AMAB OR ?EMAB OR ?IMAB OR ?OMAB OR ?UMAB)/CNS


=> S IMMUNOGLOBULIN?/CN AND CASFORM?/LC
L2          30040           IMMUNOGLOBULIN?/CN AND CASFORM?/LC


=> S SQL>=250 AND PROTEIN/FS
L3          3360580         SQL>=250 AND PROTEIN/FS


=> S L3 AND CASFORM?/LC
L4          46806           L3 AND CASFORM?/LC
```

11

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Cross over to CAS FORMULATIONS to find antibody formulations

```
=> S L1 OR L2 OR L4
L5          74948           L1 OR L2 OR L4


=> FILE CASFORM


=> SET HIGHLIGHTING OFF


 => S L5
L6          57838           L5


=> SET HIGHLIGHTING ON
```

12

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Refine to formulations with stabilizing agents using controlled terminology in the CVO and GVO fields.

```
=> S L6 AND STABILIZING AGENT/CVO,GVO(L)RN/FA
L5          1573         L6 AND STABILIZING AGENT/CVO,GVO(L)RN/FA


=> S L7 AND P/DT
L6          1454         L7 AND P/DT


=> ANA L8 HIT RN
```

13

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```
    L9            ANALYZE L8 1- RN HIT :      568 TERMS

    => D TOP 10

    TERM #   # OCC  # DOC  % DOC RN
    ------ ------- ------ ------ ---------------
         1     415    413  28.40 57-50-1/RN
         2     200    199  13.69 99-20-7/RN
         3     185    180  12.38 74-79-3/RN
         4     156    156  10.73 56-40-6/RN
         5     120    120   8.25 69-65-8/RN
         6     113    113   7.77 10043-35-3/RN
         7      98     98   6.74 50-70-4/RN
         8      94     94   6.46 63-68-3/RN
         9      87     86   5.91 25322-68-3/RN
        10      76     75   5.16 7647-14-5/RN
```

14

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```
AN      2019:216523   CASFORMULTNS
CPAN    2018:2113747
TI      Stable formulations of programmed death receptor 1 (PD-1) antibodies
        and methods of use thereof
JT      PCT Int. Appl.


LCD     example 10, Table 22


COMPONENT   C1


RN      1374853-91-4
CNM     pembrolizumab
CAM     5 mg/mL
CFU     active agent; antibodies and immunoglobulins
COP     Mandatory
```

15

```
COMPONENT   C4


RN      99-20-7
CNM     trehalose
CCN     α-D-Glucopyranoside, α-D-glucopyranosyl (9CI, ACI)
CAM     1.4 %
CFU     stabilizing agents
COP     Mandatory


CVO     Stabilizing agents; Stability promoters; Stabilizing substances;
        Promoters, stability; Stabilization agents; Stability agents;
        Stability promoter; Stabilization agent; Stabilizing agent;
        Stabilizing substance; Stabilizer; Stability agent; Stabilization
        promoters
```

16

Finding antibody formulations free of surfactants

1. Search previously retrieved antibody formulations not including surfactants.

2. Search previously retrieved antibody formulations explicitly excluding surfactants.

3. Free-Text search basic index.

4. Family Sort to group formulations by patent family.

17

Retrieve antibody formulations not excluding surfactants

```
=> S L8 NOT (SURFACTANT? OR (SURFACE ACTIVE AGENT))/CVO,GVO
L10        698    L8 NOT (SURFACTANT? OR (SURFACE ACTIVE AGENT))/CVO,GVO


=> S L8 AND (SURFACTANT? OR (SURFACE ACTIVE AGENT))/CVO,GVO(L)EXCLUDE/COP,GOP
L11         26    L8 AND (SURFACTANT? OR (SURFACE ACTIVE
                  AGENT))/CVO,GVO(L)EXCLUDE/COP,GOP


=> S L8 AND SURFACTANT (2A) FREE
L12          8    L8 AND SURFACTANT (2A) FREE


=> S L10 OR L11 OR L12
L13        726    L10 OR L11 OR L12
```
18

Family Sort to group formulations by patent family

```
=> FSORT L13
L14           726    FSO L13


          83 Multi-record Families   Answers 1-640
                Family 1                Answers 1-37
                Family 2                Answers 38-41
                Family 3                Answers 42-206
                Family 4                Answers 207-216
                Family 5                Answers 217-218
                Family 6                Answers 219-231
                O O O
```

19

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```
    AN      2018:234736  CASFORMULTNS
    CPAN    2018:275897
    TI      Method of reducing immunogenicity of drug products
    JT      U.S. Pat. Appl. Publ.
    LCD     example 16


    COMPONENT  C1


    RN      331731-18-1
    CNM     adalimumab
    CAM     50 mg/ml
    CFU     active agent; antibodies and immunoglobulins; immunogenicity reducer
    COP     Mandatory
```

20

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```
    GROUP  G2

GDS    stabilizer

GFU    stabilizing agents; immunogenicity reducer

CMPS   C2-C4

GOP    Mandatory


COMPONENT  C2

RN     71-00-1

CNM    L-histidine

CAM    20 mM

CFU    amino acids; immunogenicity reducer

COP    Mandatory


GVO    Stabilizing agents; Stability promoters; Stabilizing substances;
       Promoters, stability; Stabilization agents; Stability agents;
       Stability promoter; Stabilization agent; Stabilizing agent;
```
21

```
    GROUP  G4

GDS    Additional ingredients

CMPS   C6

GOP    Exclude


COMPONENT  C6

CNM    surfactant

CFU    surfactants

COP    Exclude


CVO    Surfactants; Cleaning agents, surfactant; Invert soaps; Polysoaps;
       Reversed soaps; Tensides; PAV; Surface-active agents; PAV
       (surfactant); Gemini surfactants; Gemini surfactant; Surfactant;
       Surface-active agent; Surface-active substance; Inverse soap; Reversed
       soap; Tenside; Capillary-active substance; Interface-active substance;
       Surface active agent
```
22

3/2/2020

PatentPak® is now available in USPATFULL/USPAT2

- PDF patent records will be available for US patent documents

- Coverage is 1975-present

- When the US document was indexed as the basic patent document, the PFD+ and Interactive viewer will also be available

- Limit by PDF/FA or PPAK/FA for PatentPak options

- Backfile added November 2019

Only available to customers licensing PatentPak

23

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PatentPak content in USPATFULL/USPAT2

- USPATFULL:
  - Over 2.2 M records with PDF links
  - Over 620,000 records with substance locations

- USPAT2:
  - Over 1.1 M records with PDF links
  - Over 56,000 records with substance locations

=> HELP PPAK
for more information

24

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PatentPak display formats in USPATFULL/USPAT2

- STD and BIB display formats include **only PatentPak links**

- SPP and BPP display formats include PPAK field with **page location for all substances**

- HITPPAK display format for **page location for only hit substances**

25

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PatentPak is built on the indexing effort of the scientific analysts that create the CAS REGISTRY

- Scientists review each patent and identify new substances for CAS REGISTRY inclusion

- They mark the specific location of substances in the text during analysis

- Algorithmic processing with human intervention allows previously registered substances to be located and annotated in backfile documents
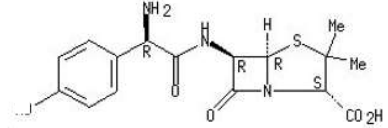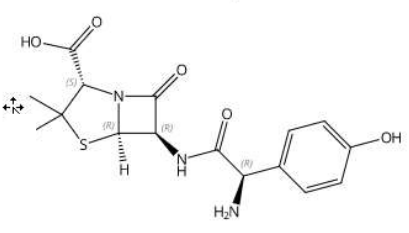
26

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Complete List of 46 Authorities Covered in PatentPak

Authority	Code
Argentina	AR
Australia	AU
Austria	AT
Belgium	BE
Brazil	BR
Bulgaria	BG
Canada	CA
China	CN
Croatia	HR
Czech Republic	CZ
Denmark	DK
EPO	EP
Estonia	EE
Finland	FI
France	FR
Germany	DE

Authority	Code
Greece	GR
Hungary	HU
India	IN
Ireland	IE
Israel	IL
Italy	IT
Japan	JP
Korea	KR
Latvia	LV
Lithuania	LT
Luxembourg	LU
Malaysia	MY
Moldova	MD
Monaco	MC
Netherlands	NL
Philippines	PH

Authority	Code
Poland	PL
Portugal	PT
Romania	RO
Russian Federation	RU
Slovakia	SK
Slovenia	SI
South Africa	ZA
Spain	ES
Sweden	SE
Switzerland	CH
Turkey	TR
United Kingdom	GB
United States	US
WIPO	WO

27

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CAplus Non-Conventional Patent Families for Chinese Dual Filings

- The Chinese patent system allows for parallel filing of a patent application and a utility model on the same day.

- Historically, the utility model and patent application would be in separate families because they lack a shared priority.

- CAplus now links together the utility model and patent application for the same invention.

- September 3, 2019 filings and later

- Look for **T0** kind code in the PRAI field to identify non-conventional patent families

28

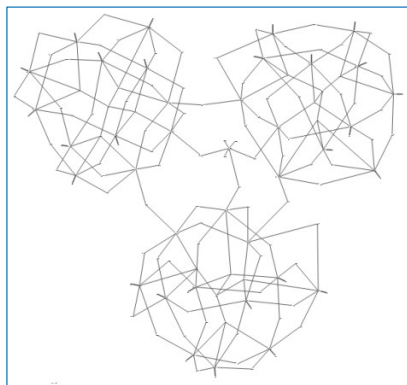**STNext** **FIZ Karlsruhe** Leibniz Institute for Information Infrastructure **CAS** A DIVISION OF THE AMERICAN CHEMICAL SOCIETY

Embase® - Emtree thesaurus updates 3X/Year

- Third Emtree update was October 2019

- 1,049 new preferred terms were added, including additional pharmacovigilance (PV) terms
  - 872 non-drug terms
  - 29 medical device terms
  - 177 drug terms

- Emtree now includes almost 84,000 preferred terms and nearly 380,000 synonyms

- Reminder: Check alerts to determine if new terminology should be added.

https://service.elsevier.com/app/answers/detail/a_id/16354/

29

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Agenda

| STN Database Enhancements	– Marpat & CAS Registry
	– Embase, Medline
	– DWPI
	– DWPIM on STNext
	– INPADOC
	– DEFULL & KRFULL
STNext News	– Information and latest enhancements

30

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Enhanced Structure Displays now available to CAS REGISTRY

- Exclusively in STNext

- Includes hit structure highlighting

- Handles structures which were previously split between pages

- Displays additional structures for which graphics could not be previously displayed

- Plot10 graphics images being replaced by modern SVG images

31

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Structure images will be much crisper

Examples	Before	After
Single component structure	Absolute stereochemistry.	Absolute stereochemistry.

32

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Hit structure highlighting in CAS REGSITRY in STNext makes it easy to see why you retrieved a structure
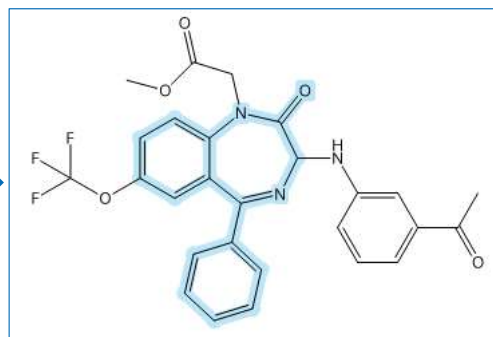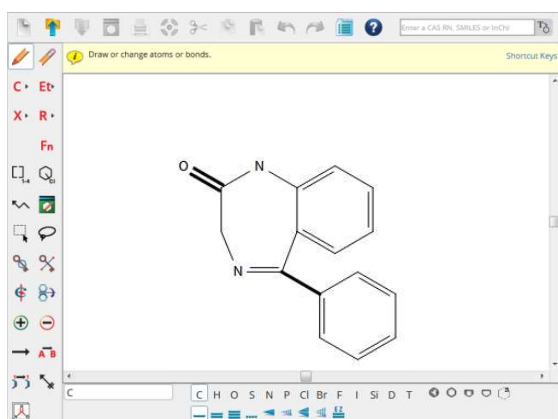
Large structures previously broken into pages can now be presented as a single image
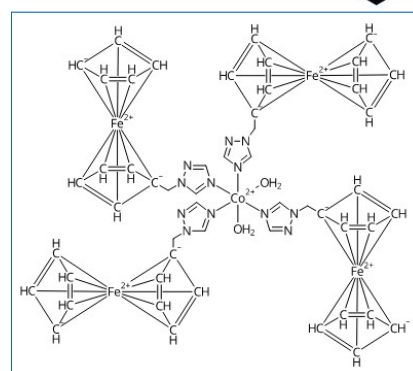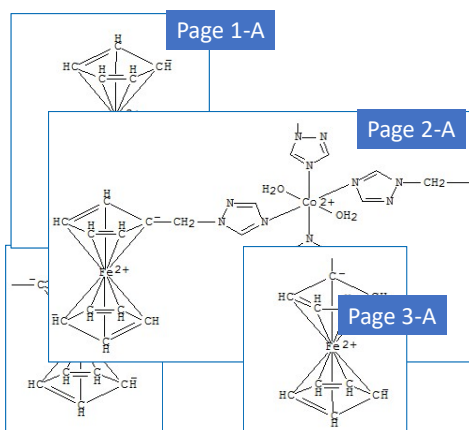
RN 2101698-30-8

Some structure diagrams which were previously too large to display can now be displayed
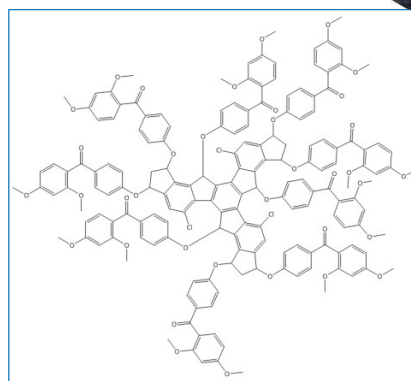
RN 1356461-74-9   *RN 2361141-47-9*

35

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Enhanced Structure Displays in MARPAT and CAplus

- MARPAT assembled Displays show hit structure highlighting

MSTR 1 Assembled
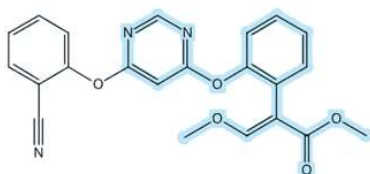
Patent location: disclosure
Note: or mixtures

- CAplus HITSTR Display includes hit structure highlighting

```
IT   2305611-90-7, Azoxystrobin-3-Decenoic acid mixt.
     2305612-33-1, Azoxystrobin-7-Octenoic acid mixt.
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
         (synergistic pesticidal compns. and methods for delivery of active
         ingredients)
RN   2305611-90-7  CAPLUS
CN   INDEX NAME NOT YET ASSIGNED

     CM   1

     CRN  131860-33-8
     CMF  C22 H17 N3 O5
```
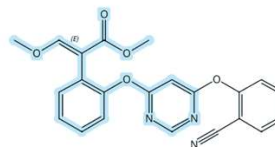
36

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Update your alerts

- **MeSH** controlled terms updated – Medline
  - Additional terms (>360), moved (131) or deleted (9) terms

- **Emtree** thesaurus updated – Embase
  - 3 times a year: 1st (January), 2nd (May) and 3rd (October) update loaded

- **Manual Codes** updated – Derwent World Patents Index
  - 59 new Manual Codes
  - Manual code revision for 2021: your comments are welcome!
    scientific.mcrdwpi@clarivate.com

- Expand in CT or MC field and adjust your alerts regularly

37

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Derwent World Patents Index 2020: new manual codes

- **59 new Manual Codes added**
  - 39 new CPI (Chemical Patents Index) codes and
  - 20 new codes in the GMPI/EPI (General and Mechanical Patents Index and Electrical Engineering Patents Index) areas

- Significant revisions for 2020 include:
  - New drug administration codes, e.g. intracardiac (B12-M12Y)
  - New drug nano-formulation codes, e.g. nanoparticle (B12-M11Q1)
  - New code S05-G02G5 for Pharmacovigilance systems
  - New code X21-W for general by-wire / (semi)autonomous vehicle control
  - New code X25-A08M8 - 4D compatible materials (4D printing)

- A lookup tool for DWPI Manual Codes is available at http://ips.clarivate.com/mcl/

- Manual code revision for 2020: your comments are welcome!

38

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The Derwent World Patents Index

- DWPI and DWPIM with more frequent updates
  - From April 3, 2019: **updates twice a week**
  - Alerts running on every update will be delivered on the new twice-weekly schedule

- Coverage Enhancements – Adding CIS Countries (next slides)

- CPC combination sets (next slides)

39

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DWPI Coverage Enhancements – Adding CIS Countries

- Inclusion of records from 8 former Soviet republics that form the CIS (Commonwealth of Independent States) + Eurasian Patent Organization (EAPO)
  - **AM** Armenia
  - **BY** Belarus)
  - **EA** Eurasian Patent Organization
  - **GE** Georgia
  - **KZ** Kazakhstan
  - **KG** Kyrgyzstan
  - **MD** Moldova
  - **UZ** Uzbekistan
  - **TJ** Tajikistan
- From update 2019/17
- Backfiling started and will provide documents from most authorities back to around 2002
- Strong focus on pharmaceuticals, biotechnology and chemistry, as well as civil and mechanical engineering 40

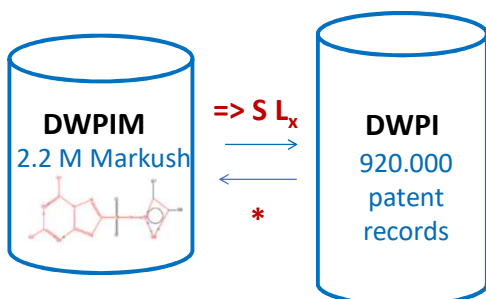**STNext**

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CIS Country Coverage on STN (April 2019)

Patent Country		DWPI	CAplus	INPADOC Bib	PCT*	INPADOC Legal Status
Armenia	AM	P + U	-	limited coverage	+	-
Belarus	BY	P	-	limited coverage	+	-
Eurasian PO	EA	P	P	P (1996-)	+	withdrawl, lapse, license, etc
Georgia	GE	P + U	-	P + U (1992-)	+	-
Kazakhstan	KZ	P	-	P (1995-2013)	+	-
Kyrgyzstan	KG	P + U	-	limited coverage	+	-
Moldova	MD	P	P + U	P + U (1987-)	+	fee payment, expiration, lapse, etc
Russia	RU	P + U	P	P + U (2000-)	+	patent invalid, appl. withdrawn, etc.
Tajikistan	TJ	P	-	P + U (1993-2007)	-	-
Ukraine	UA	-	-	P + U (1999-)	+	-
Uzbekistan	UZ	P + U	-	limited coverage	+	-

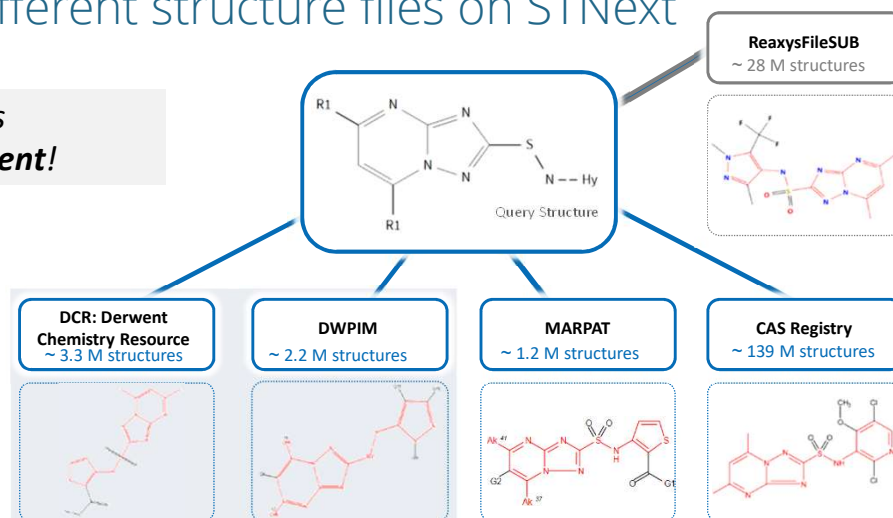*P = patents U = utility models, (publication year), * - PCT entry into national phase*

41

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DWPI – CPC Combination Sets now fully available

- CPC classification with combination sets is now available for more than 1 million DWPI records
- CPC combination sets are groups of CPC symbols linking multiple features of an invention
  - Assigned in special technical fields
  - Support more precise CPC searching
  - Many CPC codes are unique to CPC combination sets
  - Value for novelty searching

see online news 20 for more details

42

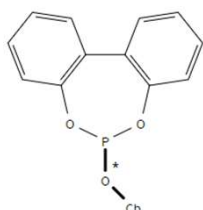**STNext** FIZ Karlsruhe Leibniz Institute for Information Infrastructure CAS A DIVISION OF THE AMERICAN CHEMICAL SOCIETY

Major CPC Subclasses of CPC Combination Sets in DWPI

|	
H01L	Semiconductors
C08L	Polymer Compositions
A61K	Formulations (Pharma)
C08K	Inorganics in mixtures
C07C	Organic Reactions
A23V	Food Products
C04B	Cements
C08F	Polymer Reactions
A01N	Formulations (Agro)
C12Q	Bioanalysis

no of records in DWPI, 7ᵗʰ of January 2019
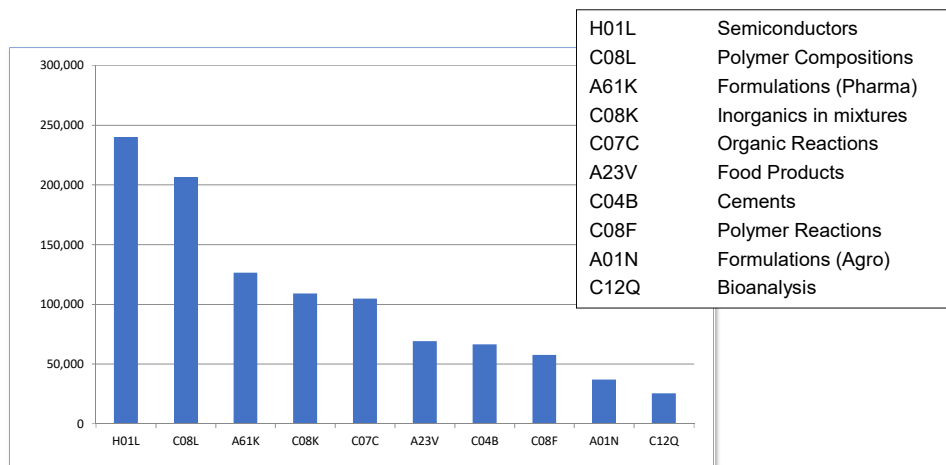
43

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44

Searching CPC Combination Sets

Example: Polymeric mixtures of polyamides and carbon nanotubes, used in automobiles or aircraft

Use (S)-proximity to search CPC codes in one combination set
=> FILE WPIX
=> S C08K0003-041/CPC**(S)**C08L0077-00+NT/CPC
L1   67 C08K0003-041+NT/CPC(S)C08L0077-00+NT/CPC

C08K0003-041   carbon nanotubes
C08L0077-00   polyamide comp.

44

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CPC Display indicates Combination Sets

```
=> D AN TI PA PN CPC

AN      2019-18884L [201917]   WPIX
TI      Carbon nanotube enhanced polymer used in air and space vehicles including
        passenger ships, automobiles and marine products, comprises a polymer and
        many carbon nanotube sheetlets mixed with the polymer
PA      (BOEI-C) BOEING CO
PI      EP 3447083     A1 20190227 (201917)* EN  16[10]
        US 20190062524 A1 20190228 (201917)  EN
        CA 3010858     A1 20190225 (201918)  EN
        CN 109423005   A  20190305 (201919)  ZH
        JP 2019039001  A  20190314 (201919)  JA  15
CPC     B29B0007-90; B29C0064-118; B29C0064-153; B29K2507-04; B33Y0010-00;
        B33Y0070-00; C08K0003-041; B29L2031-30; C08K2201-001; C08K0003-041,
        C08L0077-00; C08K0003-041, C08L0071-12; C08K0003-041, C08L0081-04
```

CPC codes of a combination set are separated by commas

45

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Derwent Markush Resource on STNext

DWPIM
2.2 M Markush

=> S L$_x$

*

DWPI
920.000 patent records

* => TRA MCN /AN

- Markush Indexing provided for DWPI records of Derwent sections B (pharma), C (agro) and E (chemistry)

- Powerful Markush retrieval solution including Derwent nodes

- Full integration in DWPI

- **Functionality enhancements in November 2019**

46

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Access different structure files on STNext

Each file has
unique content!

ReaxysFileSUB
~ 28 M structures

Query Structure

| **DCR: Derwent Chemistry Resource** ~ 3.3 M structures | **DWPIM** ~ 2.2 M structures | **MARPAT** ~ 1.2 M structures | **CAS Registry** ~ 139 M structures |

47

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Derwent Markush (DWPIM)– alert functionality on STNext

- STNext alert feature supports monitoring of Markush structures
- Alert frequency is in sync with DWPI:
  twice per week/weekly/monthly
- Alert results via email link or online for further processing

Entered **DWPIM** 11:44:03 ON 14 MAY 2019
L1 STRUCTURE UPLOADED Edit …
L2 519 S L1 SSS FULL …
Create an Alert
Patent Family Manager

48

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DWPIM - subset structure searching is now available

- Subset searching is very useful when the search request is too broad for a single structure query

- Search syntax follows STN conventions, see HELP SUBSET
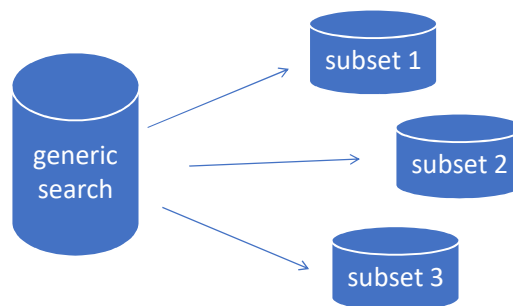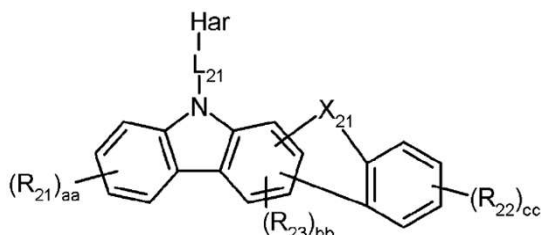
49

Subset structure search for refinement in DWPIM

- The SUBSET feature is used to restrict a structure search on any answer set created in DWPIM

$$\Rightarrow \quad S \quad L3 \quad SUBSET=L2 \quad SSS \quad FULL$$

Command
Structure query
Specify answer set to be used
Search type: SSS or CSS
Search scope: FULL or SAMPLE

- Example: Search strategy to retrieve separate subclasses for a substance class
  1. Search for the basic structure with a generic structure query.
  2. Refine with multiple more specific structure elements to retrieve separate answer sets for each subclass.

50

Subset structure search for refinement in DWPIM
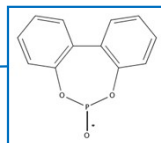
```
...
L1        STRUCTURE UPLOADED

=> S L1 SSS FULL

L2          519 SEA SSS FUL L1

...
L3        STRUCTURE UPLOADED

=> S L3 SUBSET=L2 SSS FULL

L4          412 SEA SUB=L2 SSS FUL L3
```
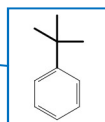
Refine answer set L2 by a subset search for structure query L3

Structures in L4 have both structure queries (L1 and L3) present

51

Subset structure search for refinement in DWPIM

Structures in L4 have both structure queries (L1 and L3) present

52

26
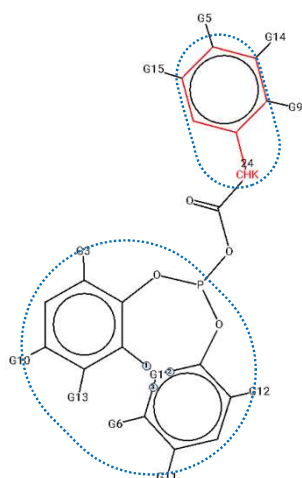
INPADOC/INPAFAM: Significant Legal Status Enhancements for PCT Entry into national phase and JP LS information

- PCT entry data is now available for 17 additional countries including : AZ, CO, CR, CU, DK, ID, IN, KG, KZ, MA, NI, PE, RS, SG, TR, VN, YU

- Coverage will be completed for major patent authorities over the next weeks including: CN, DE, EP, KR, MX, US

- Country-specific search options are available, e.g. PCT publications with national phase entry in Indonesia
  => S ID/LSCY(L)WOWWE/LSC

- More current Japanese legal status information

53

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Status of US patents on INPADOCDBDB/INPAFAMDB

- New event codes of legal status data for US patent applications and granted patents
- Important pre-grant legal events are now be made available
- New legal event codes will be loaded for more than 8.5 million US records
- Around 80 US events assigned into 10 generic legal status codes (**/LSC**)
- Original status values from USPTO searchable (**/LSFT**)
- Convenient search of legal status information using legal status categories (**/LSC2**)
- See online Help 25 for more details

54

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New US legal status codes in /LSC

Legal status code	Description in Legal Status text (/LSTX)	/LSC2-Category
USSTCA	Information on status: Application Filing	-
USSTCB	Information on status: Application Discontinuation	NIF
USSTCC	Information on status: Application Revival	REI
USSTCE	Information on status: Pre-grant Review	EXA
USSTCF	Information on status: Patent Grant	-
USSTCH	Information on status: Patent Discontinuation	NIF
USSTCK	Information on status: Patent Revival	REI
USSTCT	Information on status: Administrative Procedure Adjustment	-
USSTCV	Information on status: Appeal Procedure	ORE
USSTPP	Information on status: Patent Application and granting procedure-general	-

55

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Original status events and corresponding legal status codes

Legal Status Code in /LSC	Original status value (USPTO) in /LSFT	Description in /LSTX
USSTCA	Utility Application Converted into a Provisional Application	Information on status: Application Filing
USSTCA	Utility Application Converted to Provisional Application	Information on status: Application Filing
USSTCB	Abandoned -- After Examiner's Answer or Board of Appeals Decision	Information on status: Application Discontinuation
USSTCB	Abandoned -- Failure to Pay Issue Fee	Information on status: Application Discontinuation
USSTCB	Abandoned -- Failure to Respond to an Office Action	Information on status: Application Discontinuation
USSTCB	Abandoned -- File-Wrapper-Continuation Parent Application	Information on status: Application Discontinuation
USSTCB	Abandoned -- Incomplete (Filing Date Under Rule 53 (b) - PreExam)	Information on status: Application Discontinuation
USSTCB	Abandoned -- Incomplete Application (Pre-examination)	Information on status: Application Discontinuation
USSTCB	Abandonment for Failure to Correct Drawings/Oath/NonPub Request	Information on status: Application Discontinuation
USSTCB	Expressly Abandoned -- During Examination	Information on status: Application Discontinuation
USSTCB	Expressly Abandoned -- During Publication Process	Information on status: Application Discontinuation
…	…	

See HELP 25 for complete list of new US legal events in INPADOCDB/INPAFAMDB

56

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28

Example: monitoring legal events may be more timely

```
PI    US 20190072929    A1 20190307
TI    LADDER LOGIC GRAPHICAL PROGRAMMING AND TEXTUAL PROGRAMMING
      SYNCHRONIZATION.

...
20190420 USSTPP    INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING
                   PROCEDURE IN GENERAL
                   RESPONSE TO NON-FINAL OFFICE ACTION ENTERED AND FORWARDED
                   TO EXAMINER
                   .......................................20190620
20190425 USSTPP    INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING
                   PROCEDURE IN GENERAL
                   NOTICE OF ALLOWANCE MAILED -- APPLICATION RECEIVED IN
                   OFFICE OF PUBLICATIONS
                   .......................................20190620
20190524 USSTPP    INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING
                   PROCEDURE IN GENERAL
                   PUBLICATIONS -- ISSUE FEE PAYMENT VERIFIED
                   .......................................20190704
20190619 USSTCF    INFORMATION ON STATUS: PATENT GRANT
                   PATENTED CASE
                   .......................................20190704
```

Only application listed (20190718), no granted patent.

Early indicators

Legal event provided before publication of granted patent (20190704)

57

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News from the full text databases

KRFULL	December 17, 2019	**NOW ON STNext**
DEFULL	November 17, 2019	
GBFULL	February 26, 2019	**RELOADED**
FRFULL	February 26, 2019	

58

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KRFULL now available on STNext

- **Patent applications, granted patents and utility models** published by the Korean Intellectual Property Office

- **Full text in English** from 1978 onwards

- **Records are available for display in Korean**
  E.g. TIKO, ABKO, PAKO, CLMKO, BIBO, BRIEFO, MAXO, etc.

```
TIEN   HORIZONTAL LINE DRIVER AND DISPLAY DEVICE INCLUDING THE SAME
TIKO   수평 라인 드라이버
       및 이를 포함하는
       표시 장치
PA     SAMSUNG DISPLAY CO., LTD.
PAKO   삼성디스플레이
       주식회사, 경기도
       용인시 기흥구
       삼성로 1  (농서동), KR
```

59

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Features for KRFULL and DEFULL on STN

- **Improved text quality**
- **Key terms** (for precise searching and efficient relevance checking)   *HELP KEY*
- **Numeric property search** (59 physical properties searchable)   *HELP NPS*
- **Standardized and normalized patent assignee names**   *HELP PAN*
- **CPC combination sets** (searching multiple CPCs in same combination *HELP CPC* set retrieves highly relevant answers)
- **New update date for full text** (/UPTX)
- **More application details** (/PNO, /APO /PRNO)

60

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New features for DEFULL and KRFULL (1): **UPTX**

New update date **UPTX** for updated full-text

```
=> S (ELECTRIC? OR ENERG?) (2W) (BATTER? OR (STORAG? (2W) DEVIC?)) AND 20191215<UP

L1   7778 (ELECTRIC? OR ENERG?) (2W) (BATTER? OR (STORAG? (2W) DEVIC?)) AND 20191215<UP

=> S (ELECTRIC? OR ENERG?) (2W) (BATTER? OR (STORAG? (2W) DEVIC?)) AND 20191215<UPTX

L2    80 (ELECTRIC? OR ENERG?) (2W) (BATTER? OR (STORAG? (2W) DEVIC?)) AND 20191215<UPTX

=> D

L2    ANSWER 1 OF 80 DEFULL COPYRIGHT 2020 LNU on STN.

AN     5910763   DEFULL  ED 20190926 UP 20200107 EDTX 20190926 UPTX 20191217
       DUPD 20200102 Full-text
TIEN   EQUIPMENT FOR VIEW OF DIRECTION OF ROTATION OF A ROTARY ONEBODY
TIDE   GERAET ZUM ANZEIGEN DER DREHRICHTUNG EINES ROTIERENDEN KOERPERS
PA        ...
```

ED	Entry date
EDTX	Entry date, fulltext
UP	Update date
UPTX	Update date, fulltext

61

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Additional features for DEFULL and KRFULL (1): PAS and PAN

Standardized and normalized patent assignee names: **PAS** and **PAN**

```
AN     6816539   DEFULL  ED 20200107 UP 20200107 EDTX 20200107 DED 20191224 DUPD 20191224
TIEN   A diffractive optical element and method for its manufacture
TIDE   Diffraktives optisches Element sowie Verfahren zu dessen Herstellung
IN     Quintanilha, Richard, DE, Heidenheim, 89522; Hetzler, Jochen, DE, Aaler
       73434
PA     Carl Zeiss SMT GmbH, Oberkochen, 73447, DE, [NAT: DE, RES: DE], for all
       designated states
PAS    CARL ZEISS SMT
PAN    CARL ZEISS
LAF    German
LA     German
DT     Patent; (Fulltext)
PIT    DEA1 DOC. LAID OPEN (FIRST PUBLICATION)
PI     DE 102018221406         A1      20191224
...
```

=> HELP PAN

PAS   PATENT APPLICANT STANDARDIZED
A set of rules are applied to reduce the number of variations in spelling, punctuation, legal entities, etc.

PAN   PATENT APPLICANT NORMALIZED
A semi-automated process to group based on the highest-level company name.

62

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KRFULL, DEFULL, etc.: Application and grants in one record

Accession Number 4440332

Application
```
KR 2019101900 A
...
...
```

Granted patent
```
KR 2030309 B1
...
...
```

Multi-level record with all corresponding publications connected to the application.

63

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Agenda

STN Database Enhancements
- Marpat & CAS Registry
- Embase, Medline
- DWPI
- DWPIM on STNext
- INPADOC
- DEFULL & KRFULL

STNext News
- Information and latest enhancements

64

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Keeping Up with the Latest STNext Developments

- STNext releases occur monthly!
- Vehicles for staying up-to-date:
    1) STN News: bimonthly e-mail newsletter
    2) STN online news: view when you log in to STNext
    3) STNext Release Notes: most up-to-date
        - Access before logging on via Release Notes hyperlink
        - Access via Help

65

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STNext Help

- STNext Quick Start
- Building the Query
- Displaying and Formatting Results
- Managing Your Session Transcript
- Managing Your STNext Files
- User Preferences
- STNext Information
    - STNext Release Notes
    - STNext Resources
    - System Requirements
    - Terms and Conditions
    - Contact Us

Release Notes

April 1, 2019: Updates to **Reporting** and **Delete Confirmation**
February 15, 2019: **Structures, Password Reset,** and **Performance Enhancement**
December 19, 2018: **Query Summary File** and **Settings Update**
November 21, 2018: **Sequence Searching** and **CAS Registry BLAST Alignment Report**
October 11, 2018: **DWPIM in STNext**
September 27, 2018: **Alignment Report for CAS Registry BLAST** and **Structure Editor Derwent Ge**
September 14, 2018: **Performance Improvements** and **Updated Structure Attribute Display**

- Access before logging on via Release Notes hyperlink
- Access via Help

66

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Access STNext via **stn.org** with your existing STN ID and password
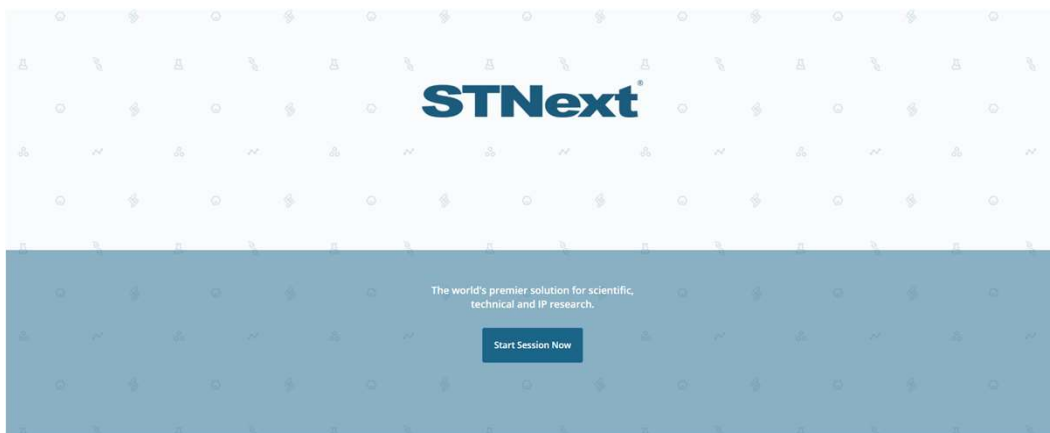
67

Stronger STN passwords increase your security

- If you choose to change your STN password, your new password will need to be "strong"
  - 7-15 characters
  - Not too similar to your STN loginID, or to your previous password
  - Includes at least three of the following:
    - Lowercase letters
    - Uppercase letters
    - Numbers
    - Non-alphanumeric characters (@, #, %, &, and * all work)
- Also applies to STNext forgotten passwords
- HELP SET PASSWORD

68

Slide 69: Import list of terms to create Search Term Script File

- Access from My Files -> Scripts
- Select search term file, e.g. list of patent numbers
- Define search field and term separator
- STNext creates script conforming to command line character limit of 256
- User executes script to be run in STNext

Slide 70: Revised transcript download files and status indicator

Transcript Download and Reporting Update

This release includes updates to UI changes when downloading transcripts.

Update	Before	After
Transcript Download This release adds two new download options: • RTF (Compressed) • PDF (Compressed) The ZIP format is now called **Text (Plus Image Files)**.		
Progress Indicator for Transcript Download	None	
Progress Indicator for Report Creation	None	

Search Limits Have Been Expanded Exclusively in STNext

- You can now have up to 100 Million answers per file per session when searching databases on STNext

- Structure searchable databases CAS REGISTRY, MARPAT and CASREACT now allow up to 100 million iterations per search

- Allows to skip most sample search

- Refer to HELP SLIMITS within these databases, and to HELP LIMITS

```
DESCRIPTION                            LIMIT

L-numbers                                999
Answers per file per session (STNext*) 100,000,000
Answers per file per session            20,000,000
```

71

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Performance Enhancements on STNext

Settings

Autosuggest	OFF
Classic Display	ON
Upload Structures as Modifiable	ON
Performance Enhancement (Beta) Takes effect at next login.	ON

Transcript Download

Prompt at Logout/Logoff Hold	ON
Transcript Format	RTF ▾

Query Summary File

Prompt at Logout/Logoff Hold	ON
Query Summary Format	RTF ▾

Abbreviation	ON
Audit	ON
Logoff History (LHIST)	ON
Multiple-step (Mstep)	ON
Plurals	ON
Spellings	ON

Cost Notification (EUR)

Display Cost Notifications	OFF
Search Cost Notifications	OFF

Splits session window of STNext into pages for optimal use of browser memory. **It does not affect captured transcript!**

Further performance enhancements have also been realized in STNext

STNext

Transcript ON   monitoring catalysts_str1_April2019

File **WPIX**

Previous Page

```
L3   ANSWER 4 OF 162  WPINDEX COPYRIGHT 2019   CLARIVATE ANALYTICS on STN
AN   2019-03486B [201910]   WPINDEX
TI   Composition for shaped article, comprises benzofuranone compound and
     polyolefin comprising polypropylene and polyethylene, and hindered
     phenolic antioxidant is N.N'-hexamethylenebis(3.5-di-tert-butyl-4-
```

72

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Autosuggest for Search and first letter L…

Autosuggest is command sensitive

Create reports from transcripts

- STNext offers text document and table reports
- Predefined templates are available, custom templates can be created

Create reports from transcripts

- STNext offers text document and table reports
- Predefined templates are available, custom templates can be created

STNext Reporting Improved Based on Customer Requests

When creating a custom report, fields that were not displayed are now greyed out

Drag and Drop fields, Use "CTRL" or "SHIFT" to select multiple fields

77

More reporting options

Fields that are part of template but were not displayed

Title and creator added to header and cover page

Option to include comment on cover page

78

For more information …

CAS	FIZ Karlsruhe
help@cas.org	helpdesk@fiz-karlsruhe.de
Support and Training:	Support and Training:
www.cas.org	www.stn-international.de

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