

PLATFORM AND DATABASE ENHANCEMENTS

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CAS STNext application and interface enhancements

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Content and database enhancements



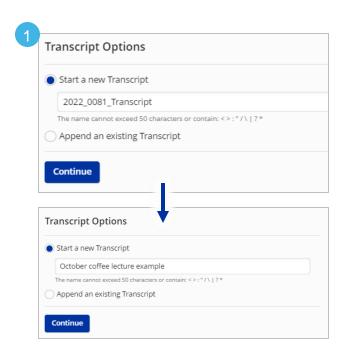


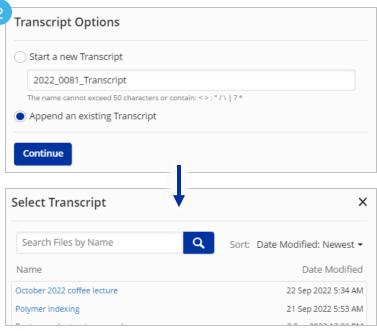
New Transcript Naming Options

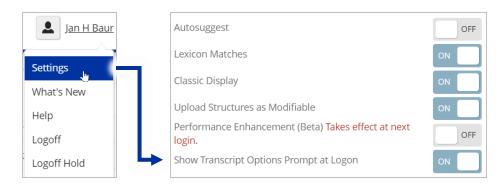
Turn prompt on in settings

With a logon, the system will provide transcript options:

- Start a new transcript (ability to name it there)
- Append an existing transcript







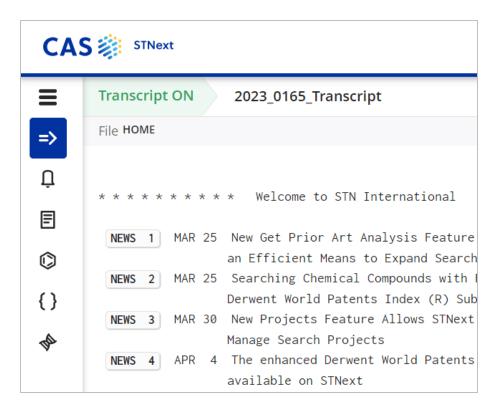




Sidebar Navigation Icons

Shortcut icons to different sections in STNext

Provides greater visibility and access for key features and functions:









Type Ahead Function Now Available

Further commands can be typed while current command is processed

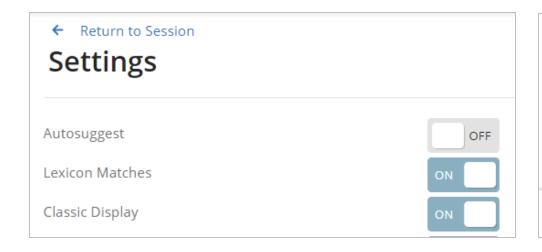
This file contains CAS Registry Numbers for substance identification.	easy and accurate				
=> s l1 or l2					
2461 L1 2772 L2					
L3 4040 L1 OR L2					
=> analyze l3 ct 1-	=> d 1-20				- 1
ANALYZE IS APPROXIMATELY 50% COMPLETE	=> s 13 and pac/r1				
→ enter command		○ Break	Submit	Oraw	{ } Scripts





Option to Disable Lexicon Suggestions

Additional setting to see if terms would match a CAS Lexicon term



Tags for Claimed substances now available in selected patents.

See NEWS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> Lexicon Matches Cycloaddition catalysts Cycloaddition Catalysts

> s cycloaddition catalysts

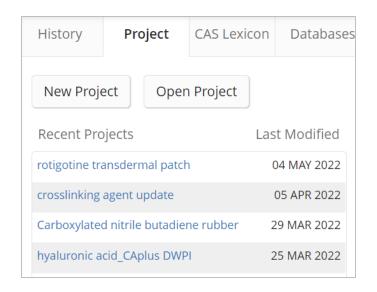


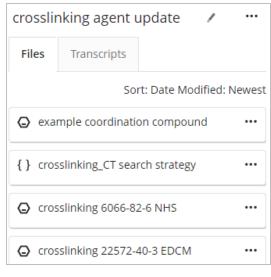


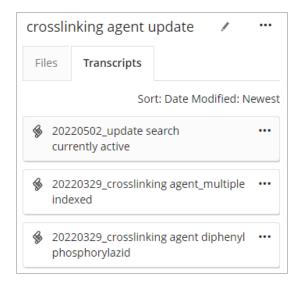
Projects Tab

Organize multiple file types into custom-named groupings

- Projects contain pointers to the files that are saved on the specific My Files pages (e.g., structures, scripts, etc.)
- Modifying a file affects any project(s) that point to it









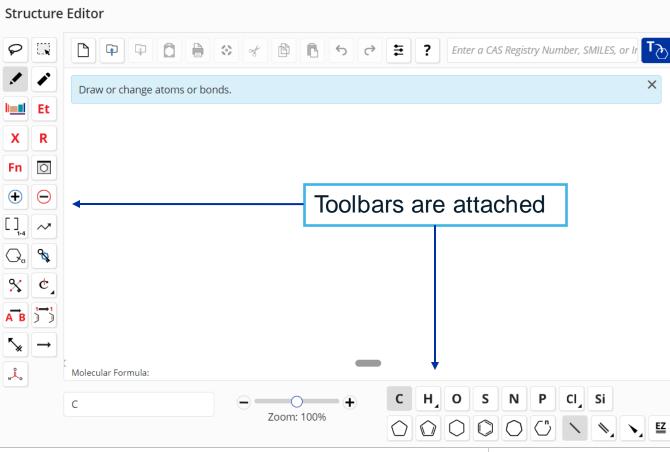


Structure editor enhancements

CASDraw editor toolbars can be attached to editor window

Updated Structure Editor user interface allowing for floating or attached toolbars





Improved Reporting

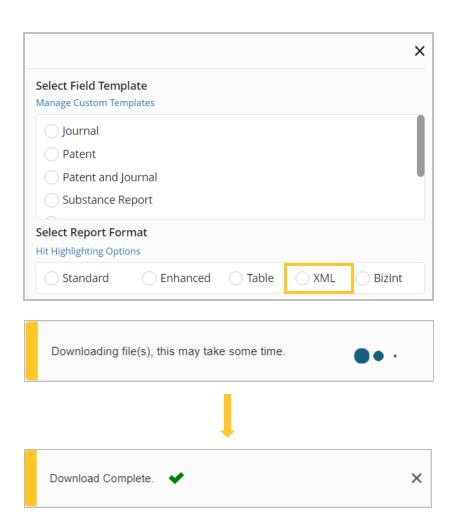
XML output format for reports

 The system generates and downloads a .zip file containing a .xml file with image extensions for the corresponding report content

 If using a standard template, the .zip / .xml file are assigned a system name in the following format:

[YEARMONTHDAY][TEMPLATE]REPORT.zip (.xml)

 From a custom template, .zip / .xml keeps the name of the custom template. E.g.: "MyCustomTemplate" template → MyCustomTemplate.zip (.xml)







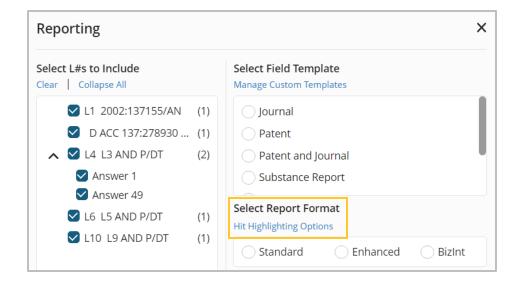
Hit Highlighting in Reports

Hit Highlighting now has options

- Highlight both text and structure information
- Hit Structure/Index Terms with Structures field now appears in the report/table

The options are found in Select Report Format

- Note: there are no style options for XML reports.
- Options on the active tab will be saved as sticky

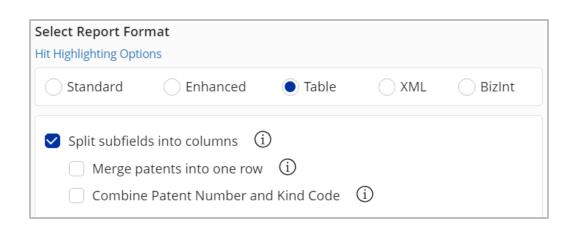


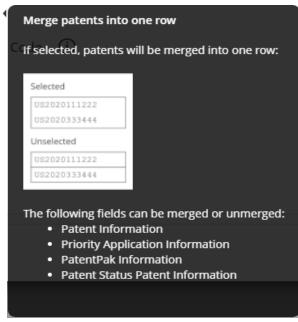


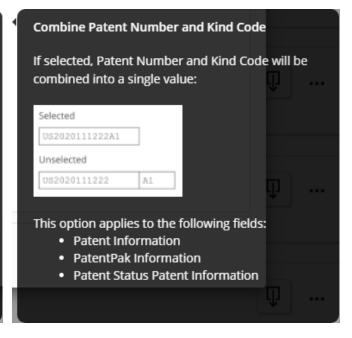


Combine Patent Number and Kind Code in Excel Table Reports

Patent number kind codes have new options in Table reporting:











Combine Patent Number and Kind Code in Excel Table Reports

Patent number kind codes have new options in Table reporting:

- Merge patents into one row: If this option is selected, all patent information associated with a record appears in a single cell within their respective columns/fields
- Combine Patent Number and Kind Code: If this option is selected, each Patent Number and its corresponding Kind Code associated with a record appears in a cell together
- If both options are checked, then patent numbers and kind codes are displayed together in one cell.

Fields/columns containing hyperlinked data are NOT merged.

These options are available for all databases where PI, PRAI, PSPI, PPPI fields/information is present: CAPLUS, MARPAT, DWPI, INPAFAMDB, INPADOCDB, WPIX, WPIDS, WPINDEX, etc.

Patent Number	Kind Code
WO22222222222	A1
WO333333333333	A1
WO4444444444444	A1

Patent Number/Kind Code
WO22222222222 A1
WO33333333333 A1
WO44444444444 A1

Patent Number/Kind Code
WO2222222222 A1
WO33333333333 A1
WO4444444444 A1



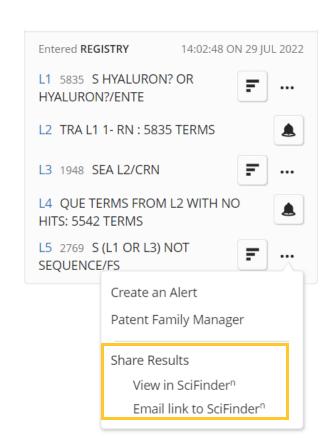


CAS STNext / CAS SciFinderⁿ Interoperability

The first of several planned CAS product integrations

CAS STNext users may now visualize CAS STNext answer sets in CAS SciFinderⁿ

- Available in the CAplus, MEDLINE, and CAS REGISTRY® databases.
- Two options: View in SciFinderⁿ and Email link to SciFinderⁿ
- The crossover options are accessed via on the History tab.
- Crossover is based on database-specific identifiers, i.e., AN for CAplus,
 Medline's document number and the CAS Registry Number[®] for Registry

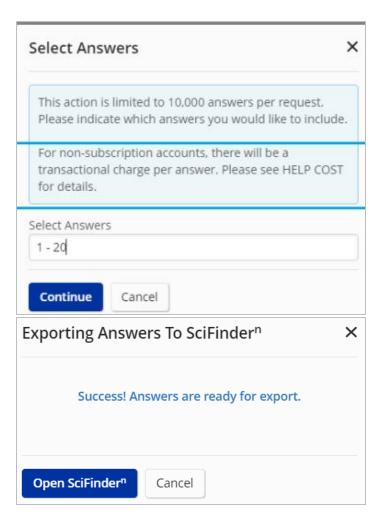




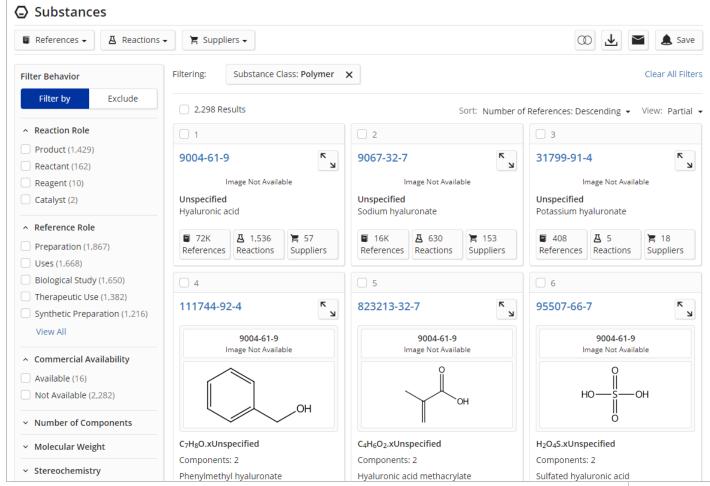


CAS STNext / CAS SciFinderⁿ Interoperability

View in SciFinderⁿ



SciFinderⁿ

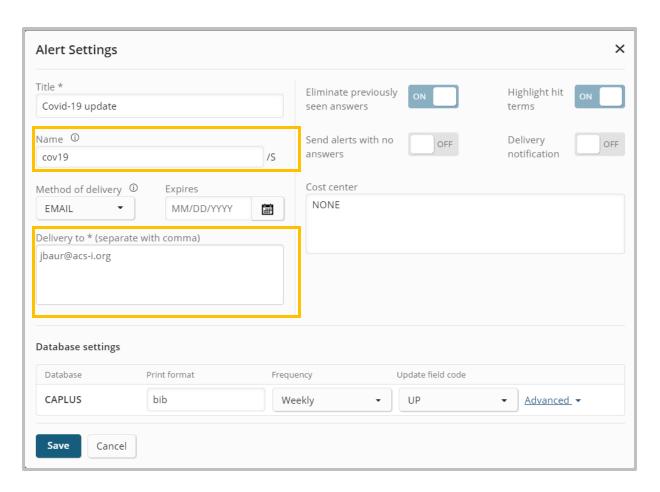






New Alert Options

- Name can be assigned using the Alert Settings window
- If left blank, the system assigns an autogenerated name
- If RSS or Email is selected as delivery option, an email address must be entered in the "Delivery to" field.





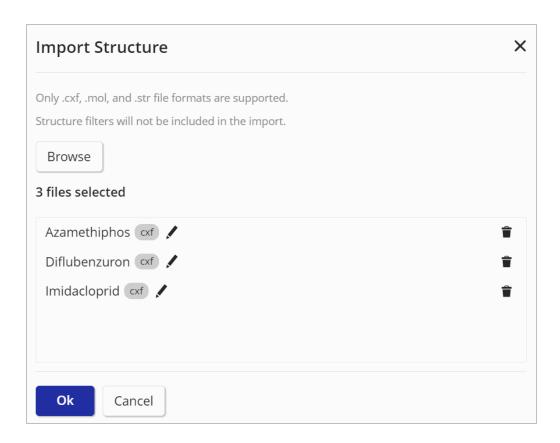


File Import Window Redesign

For Structures, Sequences and Scripts

Provides more visibility and flexibility for importing files:

- Importing up to 10 files simultaneously
- Interactive list of selected files:
 - Edit file names
 - Add/remove files to be imported
- Overwrite file functionality:
 - "File name already exists in this location" messaging appears when a duplicate name occurs
 - If left blank, the system assigns an autogenerated name





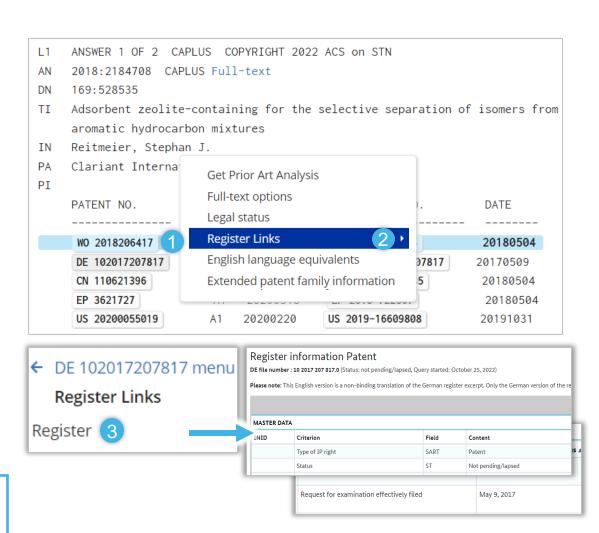


National Register Links

Available in CAS STNext patent databases

- Appears in the 1 patent number drop-down menu
- Selecting 2 Register Links in submenu:
 - Depending on what the patent office allows,
 selecting 3 Register either opens the distinct
 register entry of the patent application or patent
 office webpage in a new tab
 - For some countries, an additional link, either to the IP5 Global Dossier (CN, JP, KR, US, and WO) or to EPO's Federated Register is available

In DWPI, register links are available from application details (ADT). Type **HELP REGISTER** to learn more.



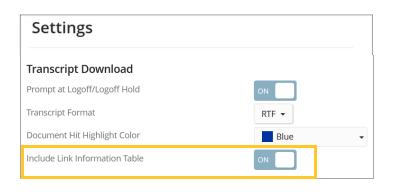


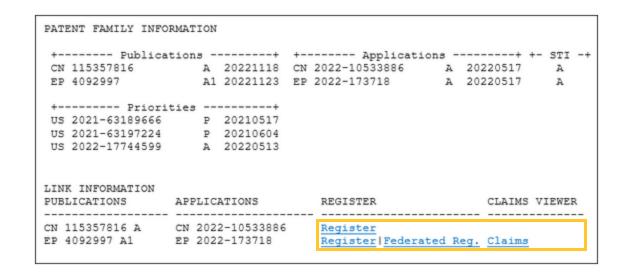


National Register Links in Transcripts and Reports

Select options in CAS STNext settings

National office (Register) and Interactive Claims Viewer hyperlinks can be included in transcript and report exports:





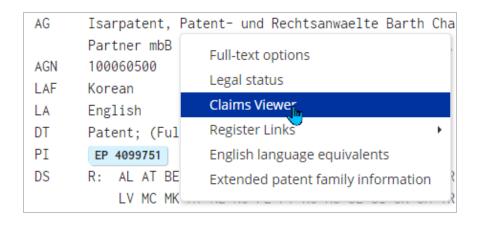




Interactive Claim Viewer

Quick overview of relations between different claims

- Available for EPFULL, PCTFULL and JPFULL
- A graphical claims tree depicting the relationships between independent and dependent claims
- Claim texts are available for each claim on the right panel



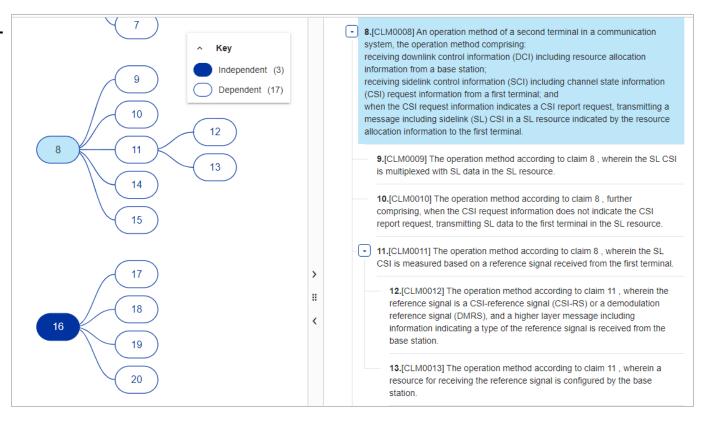






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CAS STNext application and interface enhancements

Content and database enhancements

- The Derwent™ reload
- Further databases enhancements
- Unitary Patent
- Claims tagging in PatentPak
- CAS Sequences
- Prior Art Analysis
- Patent Status Events
- Patent Claims in CAplus

- CAplus authority coverage expansion
- Ultimate Owner
- CNFULL Reload
- Claim Groups





Derwent Databases Reload

on CAS STNext in 2022

Derwent World Patents Index® has been reloaded with additional content

- Derwent Patents Citation Index[™] data
- Extended claims coverage

Derwent Chemistry Resource® (DCR) is now a standalone database

- Highlighting available
- Improved display for larger structures
- SMARTracker capabilities

GENESEQ (formerly DGENE)

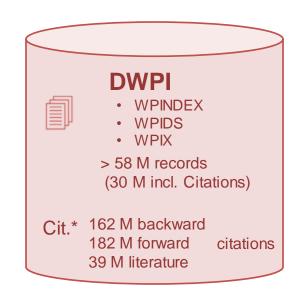
 Additional search options and content enhancements (similar updates in USGENE, PATGENE)





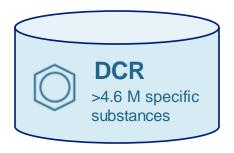
DCR file segment converted into a self-contained file, DPCI file added to DWPI

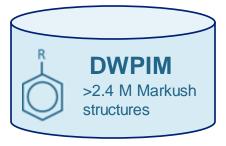
Current implementation











* formerly **DPCI**

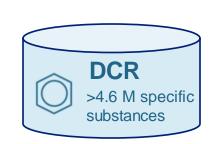




The New DCR Database on CAS STNext

Highlights

- Consistent workflow with other substance/bibliographic databases on STNext
- HIT structure highlighting
- Higher system limits for structure searching
- Enhanced structure displays
- SMARTracker crossfile SDI with WPINDEX/WPIX/WPIDS



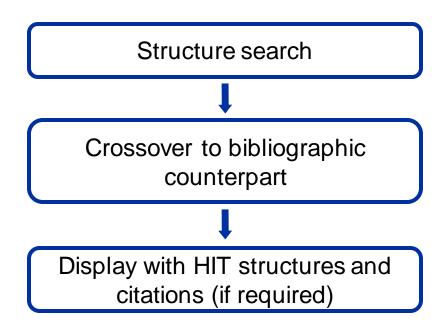






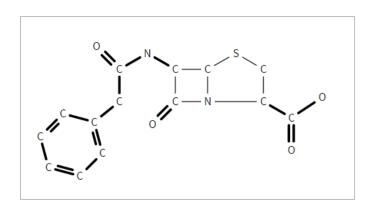


Consistent Workflow Across all STN Structure Files



Chemical substance searching and crossover to associated database is consistent for STN database pairs:

Registry – CAplus DCR/DWPIM – DWPI ReaxysFileBib – ReaxysFileSub



- => FIL DCR
- L1 STRUCTURE UPLOADED
- => S L1 SSS FUL
- => FIL WPINDEX (WPIDS/WPIX)
- => S L2
- L3 8274 L2
- => D BIB AB TECH HITSTR





Enhancements to the DWPI Content

Highlights

New role field /RL

Has been introduced to simplify role searching for substances

New search option for fragmentation codes

To search compounds which have unique frag code indexing

Extended claims coverage

To include all claims for more than 20 patent authorities

Enhanced search options

Claims searching with more precision and more focussed HIT displays

Consolidated implementation for update codes

Backfile data are kept from the old DWPI, e.g. for ED, UP and UPP





Recent INPADOC Enhancements

Coverage of documents from Ukraine (UA) has been extended

- 61,000 records added mostly from the years 1993 - 2005

EP and JP Appeal data added to INPADOCDB and INPAFAMDB

- EP: 55 legal status codes (since 1996)
- JP: 49 legal status codes (since 2009)

EP intention to grant data from the European Patent Register added

- 21 new legal event codes related to the intention to grant of EP applications
- New intention to grant data is available about two weeks after publication





Update and Patent Coverage in ReaxysFile Databases

For the first time ReaxysFile Databases contain > 100 million documents

- Increase of chemistry patent records (> 35 million) over the last years
- Multiple records from same patent family
- Substance data from > 49 million substances and > 60 million reactions

Patent coverage from 26 patent authorities (US, DE, FR, GB, JP, CH, SU, BE, NL, DD, ZA, AT, HU, CA, IT, PL, SE, RU, ES, NO, CZ, IN, DK, FI, IL, YU)

In-depth patent information for major patent authorities

- English language patents from US/EP/WO from 1976
- Asian patents of JP/KR from 2015 and CN/TW from 2016

Multifile Search with e.g. CAplus, DWPI: commands FSORT, DUPLICATE are available





Updates on Thesauri in CAS STNext

Incorporation and Adjustment of terms and codes

- Updated MeSH (Medical Subject Headings) in MEDLINE and Emtree in EMBASE for terminology in the area of biomedicine, pharmacology and medical devices
 - New headings added in MESH e.g. on Post-Acute COVID-19 Syndrome
 - New drug, non-drug terms and medical device trade names were added in Emtree e.g. on tumors and neoplasms, and COVID-19 terminology was updated.
- 2) Revised Manual Codes in **DWPI**
 - New Manual Codes e.g. in solid-state batteries, extension of section vaccines adjuvants, additional subdivisions on cell therapies

More information on added or changed terms/codes in CAS STNext Help and links

If you run Alerts (SDIs) in the respective databases, we recommend reviewing the used terminology/codes!





Unitary Patent in CAS STNext

In CAplus, DWPI, INPADOCDB/INPAFAMDB, and EPFULL

The **EP unitary patent** is an extension of the European patent system that **centralizes the post-grant procedure**. The unitary patent is in effect since June 1, 2023.

- The unitary patent is currently valid in 17 member states of the European Union:
 AT, BE, BG, DK, EE, FI, FR, DE, IT, LV, LT, LU, MT, NL, PT, SI, SE (08/2023).
- Advantages of the Unitary Patent:
 - Saving costs, simpler post-grant procedure, wider coverage and greater legal certainty
- For further details about the unitary patent, visit the EPO website:
 https://www.epo.org/applying/european/unitary.html





Unitary Patent in CAS STNext

In Caplus, DWPI, INPADOCDB/INPAFAMDB, and EPFULL

All standard retrieval options on the new patent family member and new legal event information are fully supported in CAS STNext:

- Existing patent families will be updated with new EP C0 family members
- UP participating states with specific display and search options

INPADOC legal events:

- Two new Legal Status Categories specifically monitor Unitary Patent activities
- usual post grant events as fee payment, licensing, lapse, or withdrawal are available

UER – Unitary effectrequestUOO – Opt-out from UPCjurisdiction

- Status indicator for EP C0 documents in INPADOC and CAplus
- Unitary patent and UPC opt-out monitoring:
 - Standard STNext options and FIZ PatMon





Unitary Patent in CAS STNext

In CAplus, DWPI, INPADOCDB/INPAFAMDB, and EPFULL

TI	Pharmaceutical composition of S1PR modulators								
IN	Meacci, Elisabetta; Pierucci, Federica								
PA	Universita degli Studi di Firenze, Italy								
ΡI									
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
	WO 2021024101	A1	20210211	WO 2020-IB57144	20200729				
	EP 3972578	A1	20220330	EP 2020-764154	20200729				
	EP 3972578	B1	20230705						
	EP 3972578	C0	20230705						
	US 20220313672	A1	20221006	US 2021-17620879	20211220				
PRAI	IT 2019-13890	Α	20190802						
	WO 2020-IB57144	W	20200729						
PSPI									
	PATENT NO.	KIND	STATUS	STATUS DATE					
	WO 2021024101	A1	Alive	20210218					
	EP 3972578	A1	Indeterminat	te 20230706					
	EP 3972578	B1	Indeterminat	te 20230706					
	EP 3972578	C0	Alive	20230831					
	US 20220313672	A1	Alive	20221013					
OS	MARPAT 174:483148								
J	1/4.403140	J							

Search for EPC0/PK





Designated Unitary States

Relevant when more countries join the UPC

```
2021-149916 [2021016] WPINDEX Full-text
AN
    Pharmaceutical composition for treatment of atrophy and/or degeneration of
     skeletal muscle, comprises 1-benzyl-1H-pyrrole derivative,
     (3R) -3-amino-4-(3-hexylphenyl) amino-4-oxobutyl-phosphonic acid, and small
    interfering RNA
    MEACCI E; PIERUCCI F
IN
PΑ
     (UYFI-N) UNIV FIRENZE
    WO 2021024101
PΤ
                    A1 20210211 (2021016) * EN 50[41]
    EP 3972578 A1 20220330 (2022027)
     SG 11202114034 A 20220225 (2022046) EN
    US 20220313672 A1 20221006 (2022081)
                                           EN
    EP 3972578
                    B1 20230705
                                (2023054)
    EP 3972578
                    C0 20230705 (2023071)
DS
         U: AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI
```





UPC Opt-out Information in Inpadoc

```
DETECTING SUCCINYLACETONE.
ΙN
     CERDA, BLAS; CHERKASSKIY, ALEX; LI, YIJUN; LA MARCA, GIANCARLO
PΑ
     PERKINELMER HEALTH SCIENCES, INC.; AZIENDA OSPEDALIERO UNIVERSITARIA
     MEYER DI FIRENZE
      EP 2155185
                          A1 20100224
PI
PΙ
      EP 2155185
                          A4 20101124
PΙ
      EP 2155185
                          B1 20120328
PΤ
      EP 2155185
                          B2 20211201
ΑI
      EP 2008-755064
                          A 20080505
PRAI
      WO 2008-US62694
                            20080505
      US 2007-744789
                          A 20070504
     36136804 INPADOCDB Full-text
LEGAL STATUS
20230705 EPP01
                     OPT-OUT OF THE COMPETENCE OF THE UNIFIED PATENT COURT
                     (UPC) REGISTERED
                     20230525
                 UOO Opt-out of UPC Jurisdiction
                 W OTHER
```

Search for UOO/LSC2





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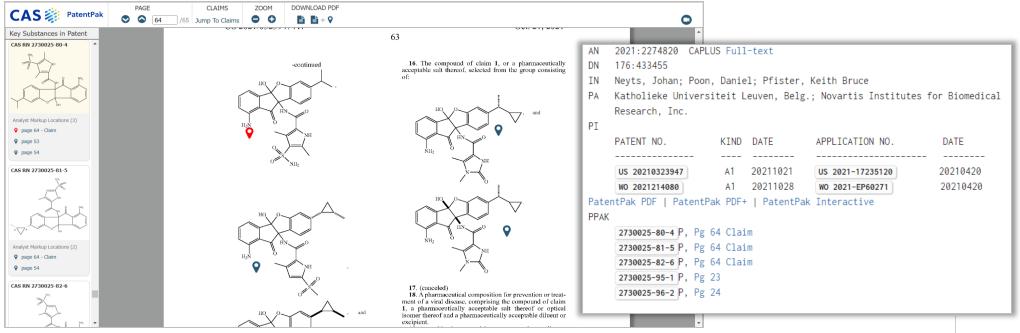
- CAS STNext application and interface enhancements
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- CAplus authority coverage expansion
- Ultimate Owner





Claimed Compounds Tagged in CAS PatentPak

 Currently available for US basics back to 1975, for CN back to 2011, for WO back to 2010, for JP back to 2010, for KR back to 2011, working on EP documents next







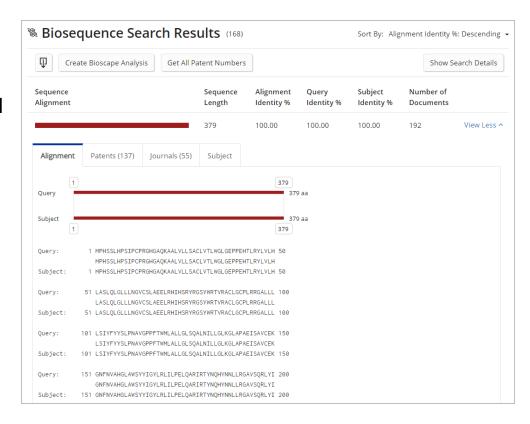
CAS Sequences

Comprehensive collection

- CAS REGISTRY® sequence data and extracted patent sequences from major patent offices
- Over 600 million patent-sequence relationships from more than 1.1 M patents and 60+ patent authorities
- NCBI sequences (>540 million) are now included in biosequence searches
- Manually curated sequences

New search interface

- Easy access to search modes and parameters
- Sequence search results including alignments and related literature
- Dynamic sorting and filtering
- Crossover results to bibliographic STN databases, e.g., CAplus
- Export to Excel, Download subject sequences in .fasta format
- PatentPak coverage added for CAS-indexed biosequences







Prior Art Analysis

Patent automated similarity engine (PaSE)

PaSE tool predicts related prior art:

- Based on a single patent document as the starting point for an Al-search
- Originally developed as a stand-alone tool for the Brazilian INPI to reduce their 9-year backlog in examining patent applications
- Uses CAplus concepts, indexed substances, IPC codes and additional full-text to generate a list of previously known patent and non-patent documents
- Use HELP PRART to explore online assistance



Click on PN and start Prior Art Analysis





Patent Status Events

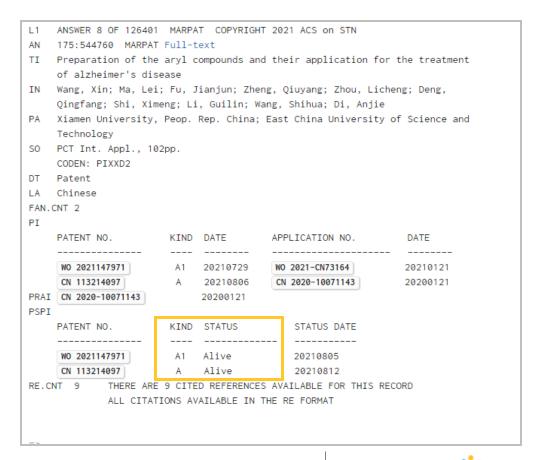
Available in INPADOC and CAplus

Four different flags are available as patent status (/STI):

- Alive
- Dead
- Indeterminate
- Transitional

Flags are dynamic:

- Change as new events occur, or to reflect end of patent lifetime
- Only latest flag is retained, all other flags are overwritten







CAplus Claims

New search and display fields available

	Corresponding
Search fields	display fields

Search claim text/CLMCLM

Search exemplary claim text /ECLM ECLM

Search number of claims /CLMN CLMN

Search for availability of claims CLM/FA

 Use /BIEX to search just the Claims, use /BI,BIEX to search both basic index and claims, analogous to DWPI





CAplus Claims: for 88% of all Patent Records

Claims text for basic patents has been added to CA/CAplus databases

Current coverage

- CN coverage from 1985
- DE coverage from 1997
- EP coverage from 1979
- GB coverage from 1927
- JP coverage from 1983
- KR coverage from 1999
- RU coverage from 1994

- US coverage from 1906
- WO coverage from 1979
- AU coverage from 2000
- BR coverage from 2000
- CH coverage from 1975
- IN coverage from 2007
- TW coverage from 2000
- Non-English language claims are machine translated

Claimed chemical structures and mathematical formulas may be displayed





Extended Patent office coverage in CAplus

We added patent data from more patent offices

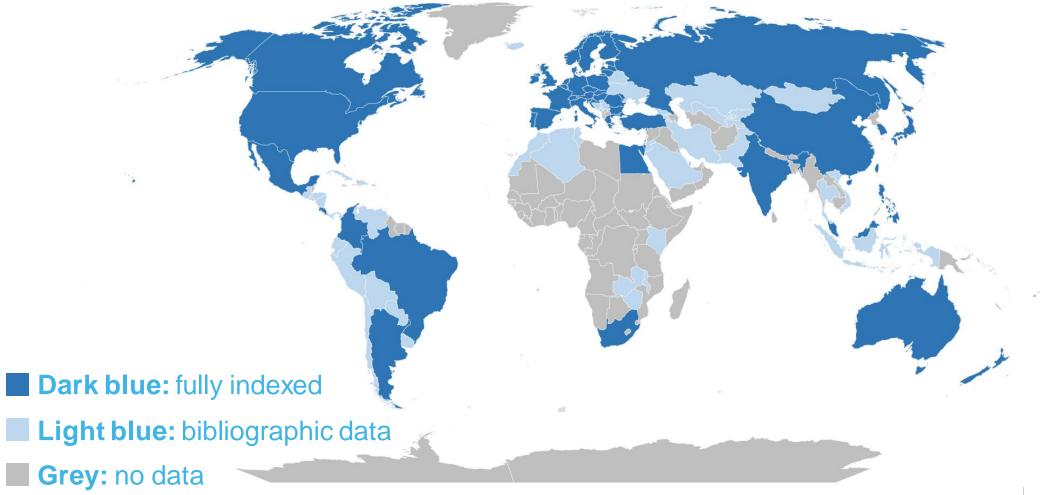
- CAplus goes from 64 to 109 patent offices
- One may already see additional family member data for:
- AM, BO, BY, CL, CU, CY, DO, EC, ID, GE, GT, HN, IS, JO, KE, KG, KZ, MA, ME, NI, PA, PE, PY, RS, SA, SV, TH, TN, TT, UA, UY, UZ, VE, VN, BA, IR, MN, MW, MT, PK, SM, TJ, YU, ZM, ZW

These additions enhance the patent family data. Deep indexing will not be performed for these additional authorities.





Extended Patent office coverage in CAplus







Ultimate Owner Fields in CAplus

Identification of the current owner of a patent

- Company name changes, mergers, acquisitions can often complicate an organization-based IP search
- Ultimate owner added to over 70% of CAplus records for search, display and analysis of IP ownership data (also in CASREACT and Marpat)
 - -/UO Ultimate owner
 - –/UOS Ultimate owner standardized
- Data obtained from PatentSight through their manual and algorithmic curation of IP ownership and M&A analysis
 - Significant effort to reduce spelling errors and further standardization
 - Does not provide historical changes or date of transfer of IP rights
- Available to all STN users





Acquisition of Patent Rights

Which patents not originally assigned to PIERRE FABRE did they purchase?

L4	63	S	PIERRE	FABRE/UO	NOT	PIERRE	FABRE/PA

TI	Pharmaceutical comp	ositio	on comprisin	g glycerol, white	soft paraffin and			
	liquid paraffin for	the t	reatment of	uremic xerosis an	d/or pruritus			
IN	Dupuy, Patrick							
PA	Orfagen, Fr.							
UO	PIERRE FABRE PARCIPATIONS							
UOS	Laboratoires Pierre Fabre							
ΡI								
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
	US 20120035273	A1	20120209	US 2011-13264653	20111014			
	EP 2241351	A1	20101020	EP 2009-305325	20090416			
	WO 2010119132	A1	20101021	WO 2010-EP55066	20100416			





CNFULL Reload

Database has been reloaded

- Contains more than 45M family records, updated weekly
- 3M additional design patents, searchable with the Locarno classification (/LCL)
- Original information in Chinese displayable: TIZH, PAZH, INZH, AGZH, ABZH
- TI and AB first machine translated into English, later replaced by human translations
- Two new search fields
 - /CLM.IC Independent claims
 - /CLM.CG
 Claim group (independent claim and its related dependent claims)
- Up-to-date Numeric Property Search feature
- Key Terms (/KT), are now available for nearly all CNFULL records.





Claim Group allows for more relevant claim searching

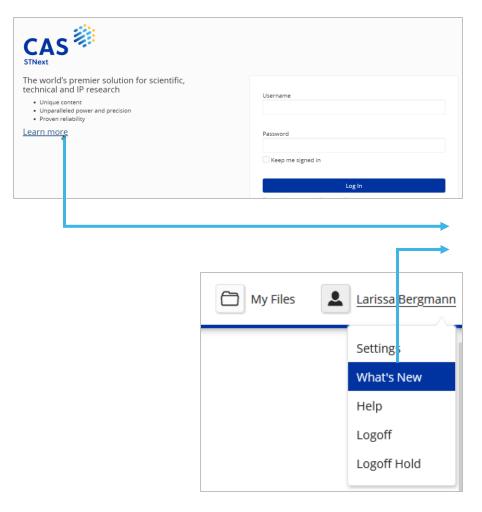
Available in PCTFULL, EPFULL, JPFULL, CNFULL and TWFULL

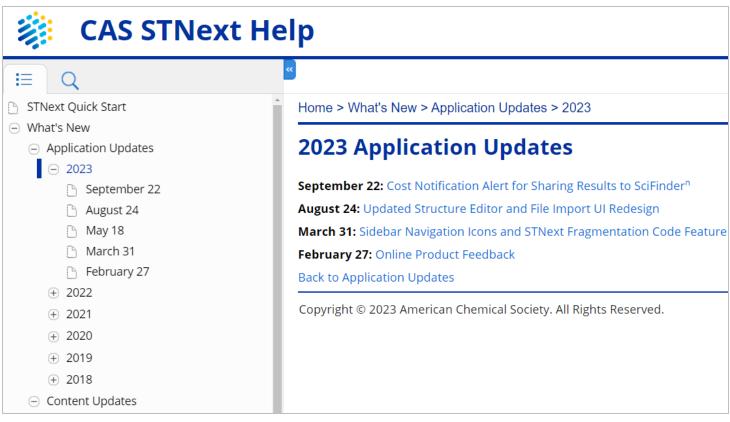
- Search index comprised of claims belonging to the same group of an independent claim and its dependent claims
- Adds comprehensiveness and precision to your search results:
 Less noise compared to a search in all claims, more relevant results compared to a limited search in just a single claim
- Claim Group search field: /CLM.CG





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