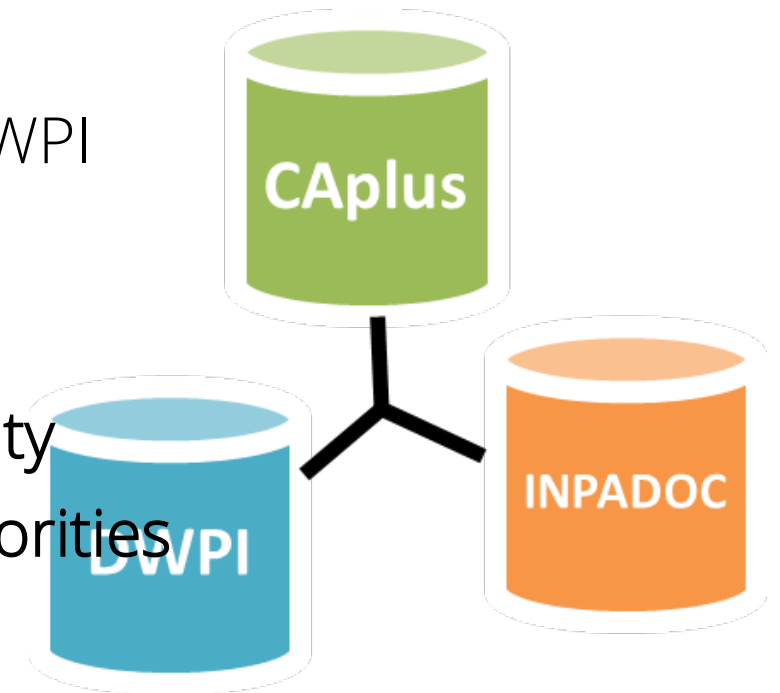




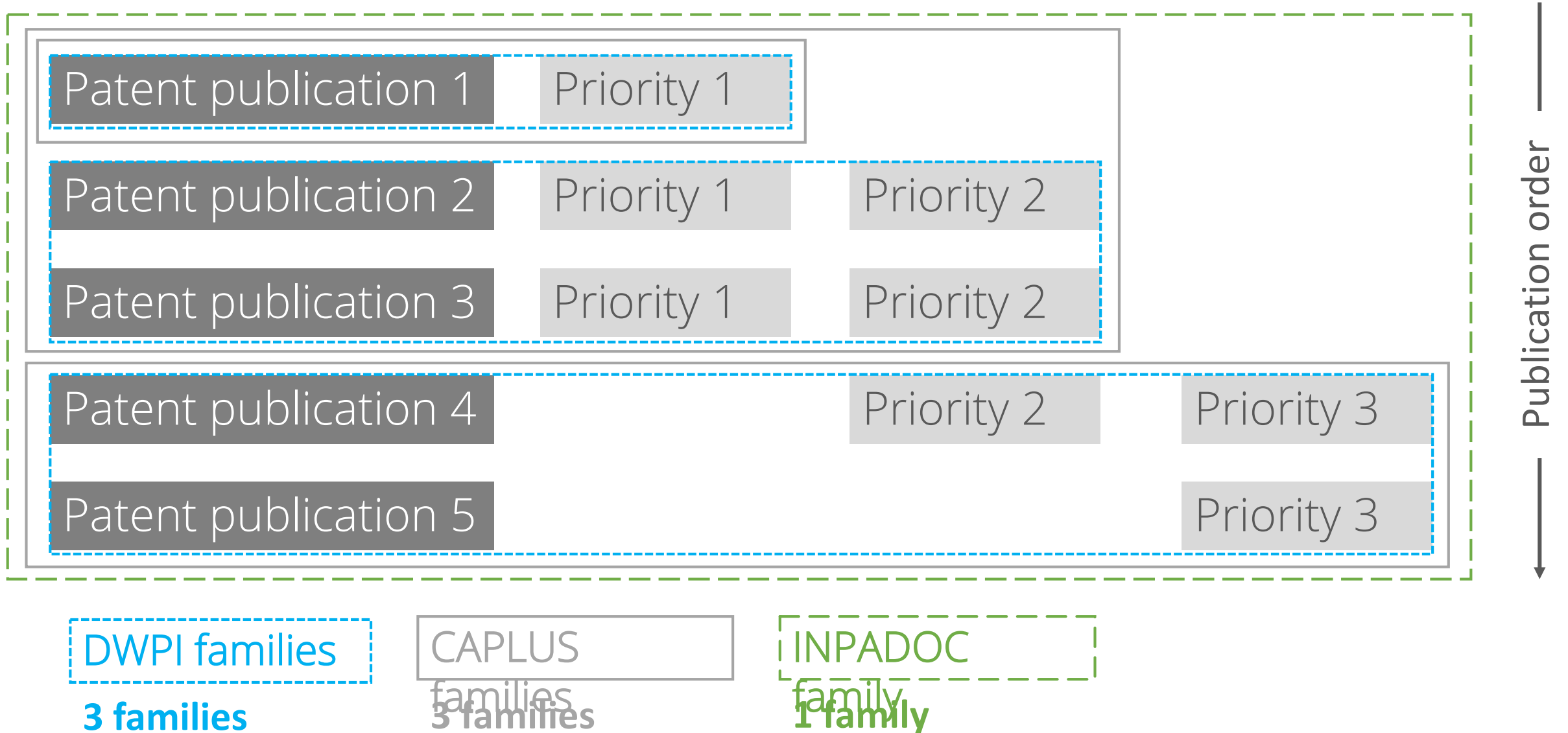
Using the Patent Family Manager in STNext to Increase Efficiency in Patent Searches

The concept of patent families is closely related to the Paris Convention of 1883

- The broad INPADOC patent family comprises all patent publications **directly** or **indirectly** linked via priority number(s)
- CAplus and Derwent World Patents Index select the **basic patent** for indexing
 - Usually the first patent received for an invention based on priority application data
- Criteria that define most **equivalents** for CAplus/DWPI
 - Shared single priority application number
 - Shared list of priority applications
 - A patent **referencing the basic as its sole priority**
 - A patent **referencing the basic as one of its priorities**
 - Some shared priorities with the basic



Priority information is key to patent family building



Overview: The Patent Family Manager

Patent Family Manager

Extract the first member basics from each patent family *(limit 5000 answers)*

Include Non-patent Answers

Remove twin multiple basics from patent families in CA/CAPlus *(limit 5000 answers with Chemical Indexing Equivalent tag)*

Custom Display Format *(limit 5000 answers)*

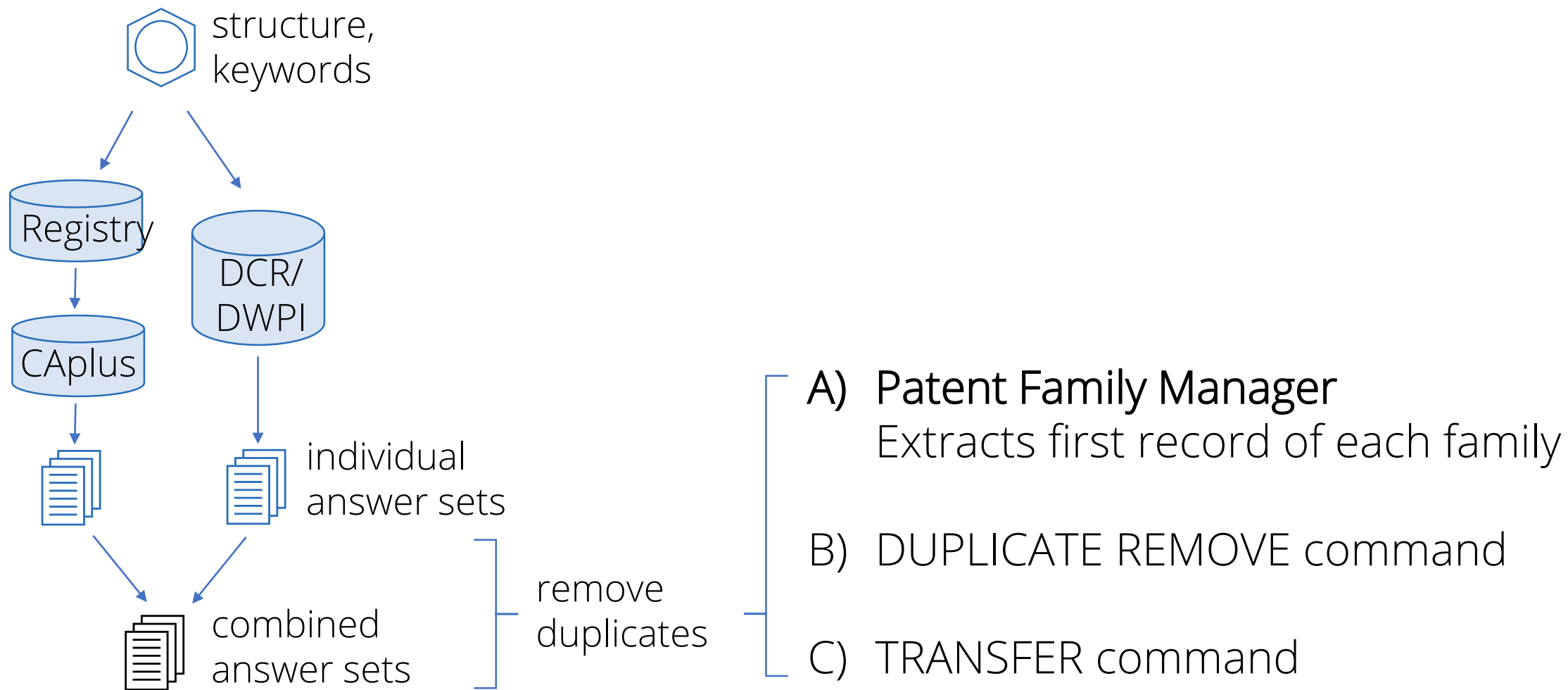
History CAS Lexicon Databases

Entered **Multiple files** 10:36:38 ON 27 NOV 2018

L5 4141 DUP IDE L2 L4
(INCLUDES 2 SETS OF
DUPLICATES)

Create an Alert
Patent Family Manager

One representative per family (Deduplication)



Using the Patent Family Manager...

Extracts the first record from each extended patent family and creates a new L-number.

Can be used with answer sets:

- from one or more databases
- containing up to 5,000 answers
- Non patent literature can be included

The Patent Family Manager starts automatically with an FSORT. The user does not have to type in these commands!

FSORT: All patent records will be sorted into extended patent families.



The screenshot shows a dialog box titled "Patent Family Manager" with a close button (X) in the top right corner. It contains three radio button options: "Extract the first member basics from each patent family (limit 5000 answers)" (which is selected), "Remove twin multiple basics from patent families in CA/CAPlus (limit 5000 answers with Chemical Indexing Equivalent tag)", and "Custom Display Format (limit 5000 answers)". There is also a checkbox for "Include Non-patent Answers" which is currently unchecked. At the bottom of the dialog are "Cancel" and "Submit" buttons.



The screenshot shows a command prompt window with the following output:

```
=> FSORT L6  
...  
423 Individual Records      Answers 932-1354  
0 Non-patent Records  
...
```

...to retrieve one representative for each family

```
...  
PROCESSING COMPLETED FOR L8  
PROCESSING COMPLETED FOR L9  
PROCESSING COMPLETED FOR L10  
PROCESSING COMPLETED FOR L11  
PROCESSING COMPLETED FOR L12  
PROCESSING COMPLETED FOR L13  
PROCESSING COMPLETED FOR L15  
L16          827 DUP IDE L8-L15 (INCLUDES 0 SETS OF DUPLICATES)  
              ANSWERS ' 1- 425' FROM FILE WPINDEX  
              ANSWERS ' 426- 827' FROM FILE HCAPLUS
```

L16 contains the first member of each patent family in L6

827 records from initially 1354 patent records retrieved.

Patent Family Manager – Retrieve one record per family:

All records from CPlus and DWPI are sorted into extended patent families. From each family, the first record is extracted into a new answer set (see next slide).

Initial data can be a single-file or multi-file answer set.

PFM: easily retrieve one representative per family

Family 1

WPINDEX 201801138M *New substituted...*
HCAPLUS 201824994 *Preparation of ...*

Family 2

WPINDEX 2018780260 *Improving compliance...*
WPINDEX 201747475W *Solid oral dosage for...*
HCAPLUS 2018173877 *Single solid oral...*
HCAPLUS 20171147323 *Single solid oral...*

Family 3

HCAPLUS 2018994691 *New D configured...*
HCAPLUS 2018954662 *Protective effect of...*

New Answer Set L_x

WPINDEX 201801138M *New substituted...*
WPINDEX 201747475W *Solid oral dosage for...*
HCAPLUS 2018994691 *New D configured...*

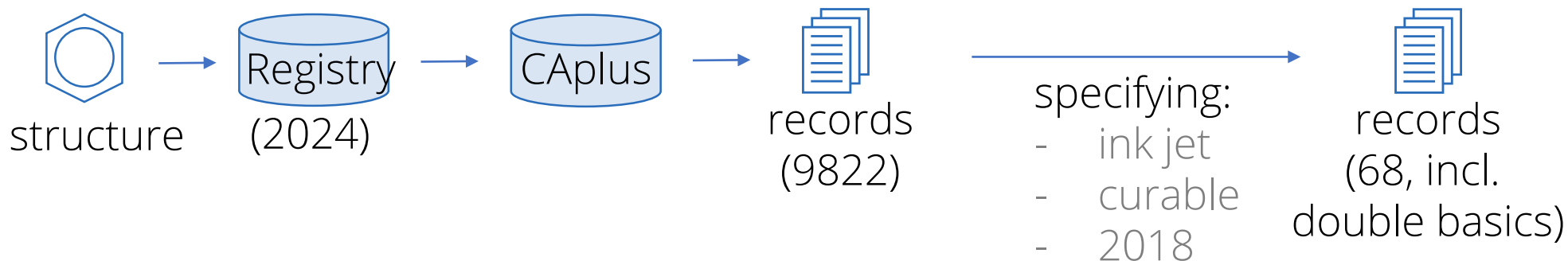


Display results with file-specific display formats

=> **D L_x FULLG 1- FROM WPINDEX**

=> **D L_x BIB ABS HITIND 1- FROM HCAPLUS**

...to remove double basics from CA/CAplus



PFM removes automatically one record of twin multiple basics

Patent Family Manager ✕

Extract the first member basics from each patent family *(limit 5000 answers)*

Remove twin multiple basics from patent families in CA/CAplus *(limit 5000 answers with Chemical Indexing Equivalent tag)*

- Keep National Office Equivalents
- Keep Oldest Application Date

Custom Display Format *(limit 5000 answers)*

Cancel **Submit**

Retains just one of those CAplus records which have an identical Registry number indexing, i.e. either:

National publication

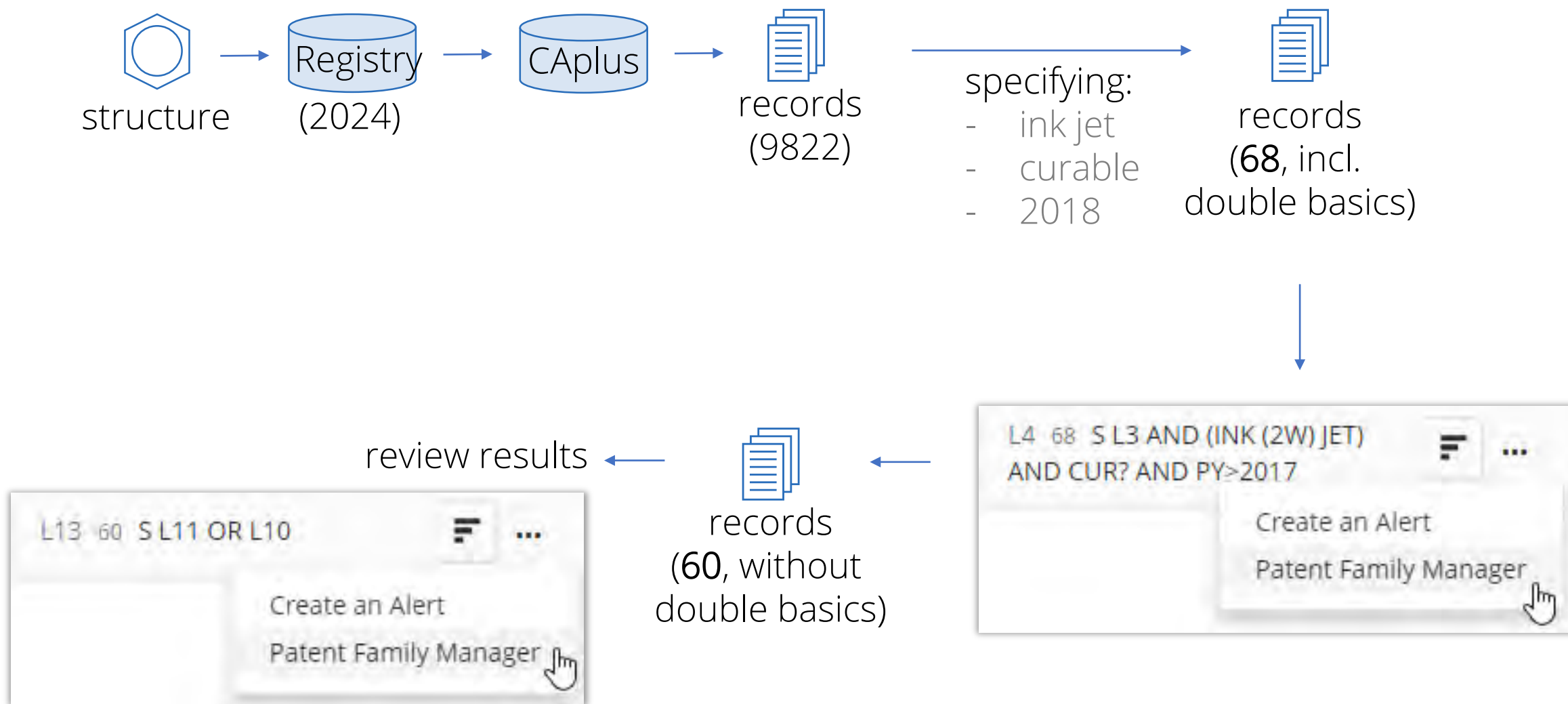
WO publication

Oldest application date

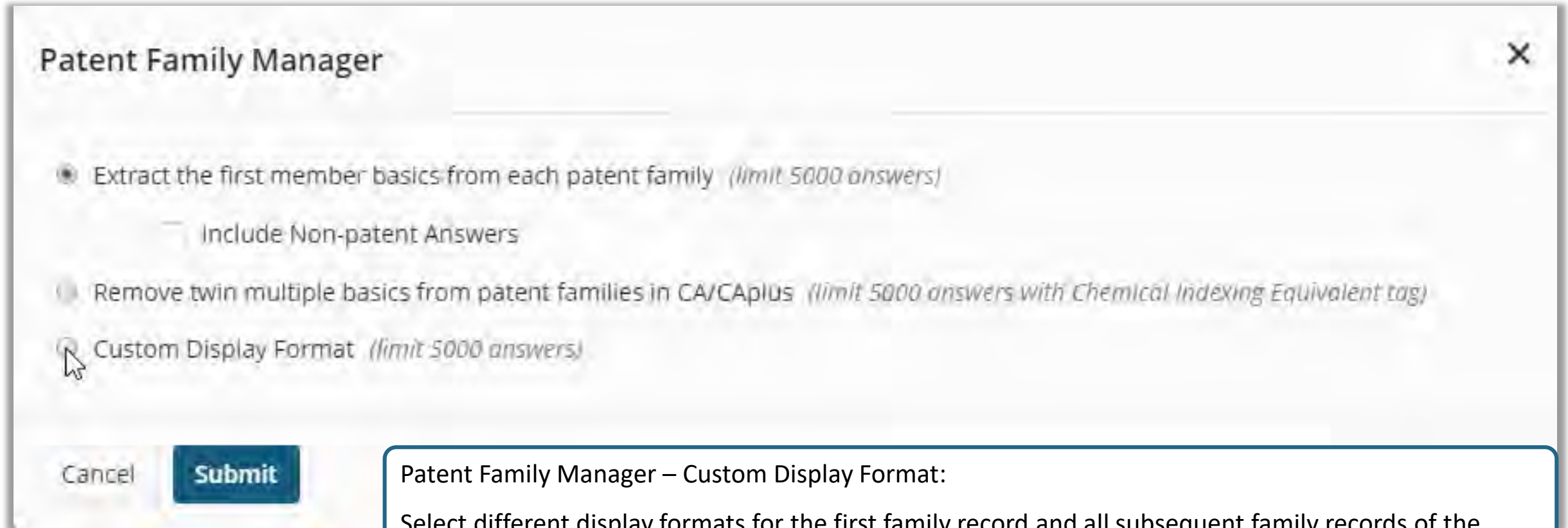
Oldest publication date

Creates a separate L-number.

Efficient reviewing of large patent families



... to create custom display formats for patent families



Patent Family Manager ✕

Extract the first member basics from each patent family *(limit 5000 answers)*

Include Non-patent Answers

Remove twin multiple basics from patent families in CA/CAPLUS *(limit 5000 answers with Chemical Indexing Equivalent tag)*

Custom Display Format *(limit 5000 answers)*

Patent Family Manager – Custom Display Format:

Select different display formats for the first family record and all subsequent family records of the extended patent family

Initial data can be a single-file answer set (e.g. DWPI, CAPLUS) or a multi-file answer set.

Customize display formats for patent families

Patent Family Manager ✕

- Extract the first member basics from each patent family *(limit 5000 answers)*
- Remove twin multiple basics from patent families in CA/CAPLUS *(limit 5000 answers with Chemical Indexing Equivalent tag)*
- Custom Display Format *(limit 5000 answers)*

First Member of Each Family

BIB IT

Ex: bib abs

Additional Member of Each Family

TI AN

Ex: ti an

STNext is unable to provide cost estimates for this action.

Continue without an estimate

Cancel **Submit**

Automatic family sorting and display

Start Patent Family Manager processing for L13:
Customize display of patent families...

=> FSORT L13

...

```
4 Multi-record Families   Answers 1-9
    Family 1               Answers 1-2
    Family 2               Answers 3-4
    Family 3               Answers 5-7
    Family 4               Answers 8-9
51 Individual Records    Answers 10-60
0 Non-patent Records
```

...

=> DIS L14 PFAM=1 1 BIB IT

L14 ANSWER 1 OF 60 HCAPLUS COPYRIGHT 2018 ACS on STN FAMILY 1

TI Uv curable inkjet inks

PA AGFA Graphics NV, Belg.

PI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2017162579	A1	20170928	WO 2017-EP56541	20170320
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,				

...

The Patent Family Manager starts automatically with FSORT. The records are sorted into extended patent families.

In this example:

- 4 families with multiple records
- 51 individual records
- (non-patent records could be included in processing)

First record of each family automatically displayed in BIB IT format

Extended patent family no. 1

Review customized displays directly or after export

...

IT 77-86-1, Tri s(hydroxymethyl) ami nomethane 28961-43-5, M 3130
48145-04-6, SR 339C 57472-68-1, SR 508 64194-22-5, SR 341
86273-46-3, 2-(2'-Vinyl oxyethoxy) ethyl acrylate 402740-81-2, CN 704
(polyester) 515139-51-2, Omni pol TX 1160510-34-8, CN 3755
2089438-12-8, Ebecryl LE0 10101
RL: RCT (Reactant); RACT (Reactant or reagent)

First family record displayed with BIB IT

(UV curable inkjet inks)

RE. CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> DIS L14 PFAM=1 2-TOT TI AN

Further family members automatically displayed in TI AN format

L14 ANSWER 2 OF 60 HCAPLUS COPYRIGHT 2018 ACS on STN FAMILY 1
TI Uv curable inkjet inks
AN 2017:1558072 HCAPLUS
DN 167:445819

First record of 2nd family automatically displayed in BIB IT format

=> DIS L14 PFAM=2 1 BIB IT

L14 ANSWER 3 OF 60 HCAPLUS COPYRIGHT 2018 ACS on STN FAMILY 2
AN 2015:706625 HCAPLUS Full-text
DN 162:578562

Extended patent family no. 2

...

Use The Patent Family Manager...



- to **efficiently** extract **one representative** of each **family/invention** into a new answer set
- to **easily** and **quickly** remove double basics from a CA/CAplus answer sets
- to **customize** the **display** format for **efficient reviewing** of larger patent family data sets

Contact Us



CAS help@cas.org
www.cas.org

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