BEST PRACTICES FOR SEARCHING CLAIMS TEXT IN CAS STNEXT

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Agenda

- Overview of Patent Claims information in CAS STNext
- Best practices for searching patent claims text in CAS STNext
  - Value-added databases
  - Full-text files
- Numeric Property Searching within claims text
- Case Studies

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What we'll learn today…

- Overview of patent claims and their significance in intellectual property research.
- Introduction to CAS STNext, a powerful tool for patent data searching.
- Best practices for conducting comprehensive searches of patent claims across multiple patent databases.

- **Why This Matters:**
  - Patent claims represent the legal scope of an invention.
  - Accessing accurate and relevant patent claims data is critical for innovation, patent prosecution, competitive intelligence, and R&D.

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Claim text contains important information

- Patent claims define the boundaries of the protection granted by a patent. They describe what the patent does or covers, specifying the scope of rights.
- **Types of Claims:**
  - **Independent Claims:** Stand alone and outline the core invention.
  - **Dependent Claims:** Reference other claims, providing additional details or limitations.
- **Why Claims Matter:**
  - Critical for determining patent infringement.
  - Help in patentability assessments.
  - Aid in freedom-to-operate (FTO) analyses.

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Why searching claim text matters…

- Claim text in chemical patents clearly delineates the boundaries of the invention, specifying the precise chemical compounds, formulations, or processes that are protected.
- The claim language is used to assess whether another product or process infringes on the patent. Courts and patent offices compare the claims with existing technologies to identify potential overlaps and violations.
- Strong, well-crafted claims provide a solid foundation for enforcing the patent against infringement. Clear and precise language makes it easier to prove ownership and defend the patent in litigation or disputes.

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Databases with claim search fields

Full text files

AUPATFULL
CANPATFULL
CNFULL
DEFULL
EPFULL
FRFULL
GBFULL
IFIALL
IFICLS
INFULL
JPFULL
KRFULL
PCTFULL
USPATFULL
USPATOLD
USPAT2

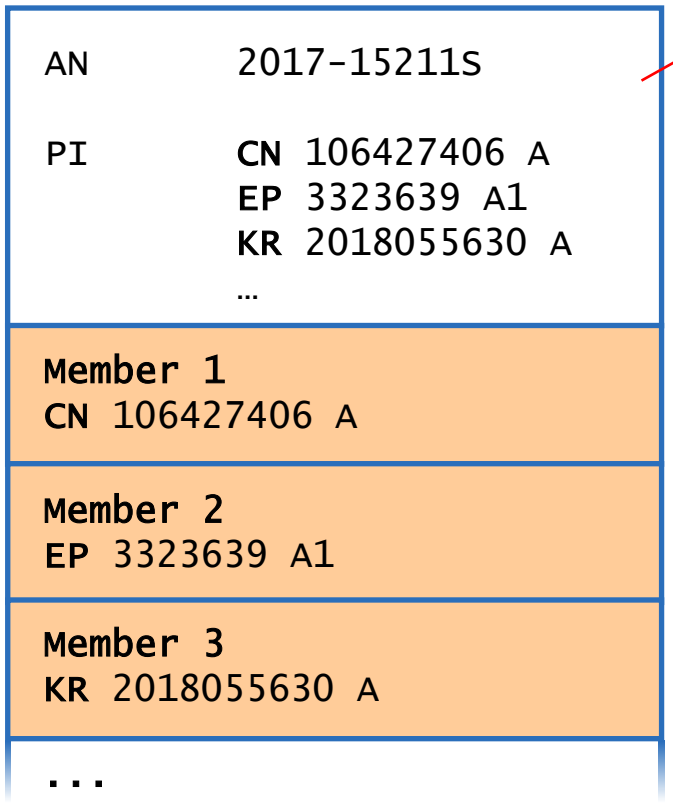
Patent family databases

CAplus – Claims for the basic patent
WPINDEX / WPIDS / WPIX – All claims for CN and KR, main claim for 12 authorities

Further files

USGENE - Main claim searchable; all claims can be displayed

Derwent World Patents Index: claims in rewritten TI & AB



INVENTION **Basic Index /BI**

- Patent family data
- Value added data
  - Enhanced title and abstract(s)
  - Proprietary classification and indexing
  - Deduplicated and standardized data

The title is based on claim 1

Structured abstract, e.g.
NOV covers main claim
DETD summarizes additional independent claims
TECH describes dependent claims

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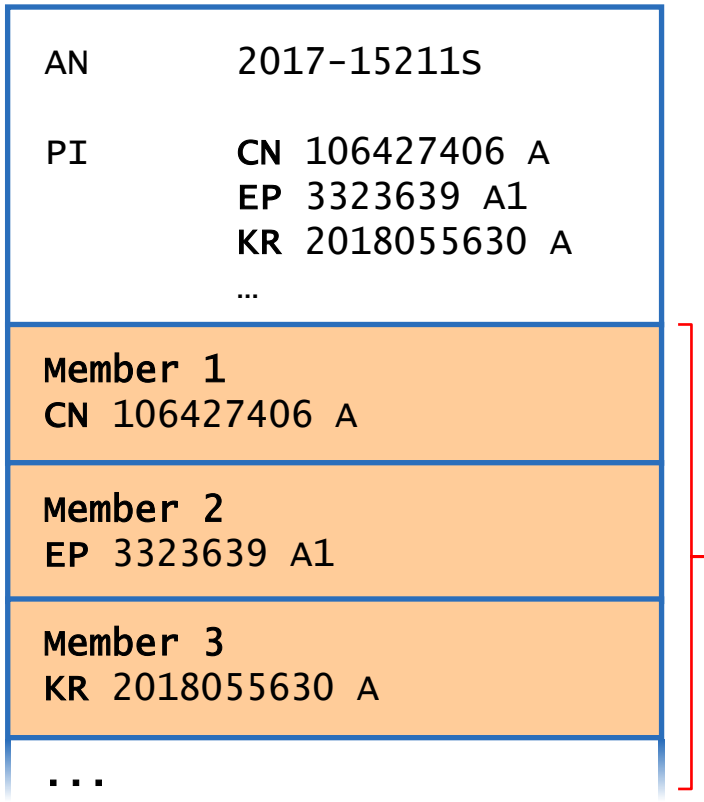
DWPI: Claims in the publication level: S …../BIEX



PUBLICATION Basic Index Extension /BIEX

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

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Claim Text in CAplus

- CAplus now also includes the full text of the claims
- Currently full text from WO, US and CN basics are available, with additional offices planned
  - CN and non-English WO documents are available in English through machine translation
- Claim text can be searched in the /CLM or the /BIEX field
  - Number of claims can be searched in the /CLMN field
- Paragraphs from the claims will be part of the CLM, KWIC and HIT

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Implementation of Caplus claim text

- The CLM field contains the text of all claims for the Basic Patent
- Proximity operators (nW), (nA), (nS) allow for combining terms within a number of words or sentences
- As an additional display format ECLM will display just the first exemplary claim
- Embedded chemical or mathematical formulas are available for display
- WO claims are complete back to 2004, US back to 1999, CN back to 1999
  - Older years have partial claims coverage
  - Claims are available 2 weeks after the publication date of the patents

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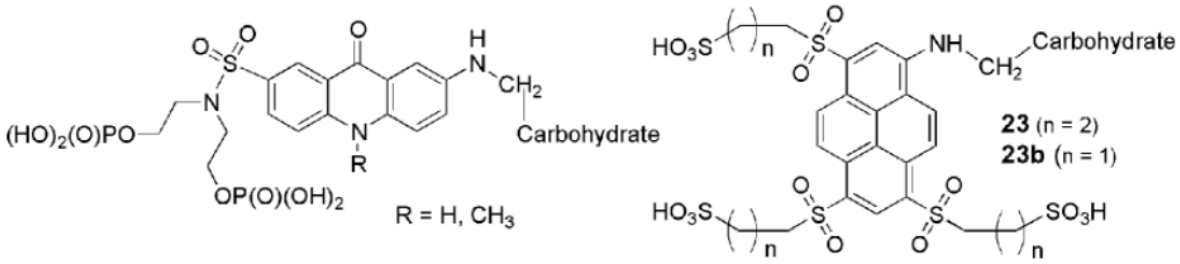
Chemical and mathematical formulas are displayable

CLM What is claimed is:

10. A method for calibration of a multi wavelength fluorescence detection system, in particular, a capillary-gel electrophoresis system, with acridone and/or pyrene based fluorescent dyes which may optionally be present as conjugates with a substrate moi ety including carbohydrates,whereby the method includes the detection of at least one of the compounds accord ing to Formula A or B as defined in claim 1 together with additional fluorescent dyes and their carbohydrate conjugates emitting at different wavelengths, preferably in cluding at least one of the compounds: APTS, 6-R, 8-H, 15, 19, 20, 23 or 23b, as shown in the following scheme:

8-H-carbohydrate: q = - 6 15-carbohydrate: q = - 6



6-R-carbohydrate: q = - 4 23, 23b-carbohydrate: q = - 311. The method according to claim 10 wherein the acridone and/or pyrene based dyes, which may optionally be present as conjugates with a substrate moiety includ-

CLM What is claimed is:

1. I. A global vision-based trajectory tracking control method for mobile robots, which is characterized in that a global camera located in the space above the robot is used to capture images of the mobile robot and the reference robot, and the following process is used to determine the trajectory of the mobile robot tracking reference robot according to the image. Tracking control parameters: The trajectory tracking control parameters of the mobile robot tracking reference robot are the rotational speeds ω L and wR of the left and right wheels of the mobile robot, which are determined by the following formula:

$$\begin{cases} \omega_R = \frac{1}{r}(v + \omega b) \\ \omega_L = \frac{1}{r}(v - \omega b) \end{cases}$$

2b is the distance between the left and right wheels of the mobile robot, 2r is the wheel diameter of the mobile robot, and the speed V and angular velocity ω of the mobile robot are determined by the global asymptotic stability controller:

$$\omega = \omega_r + k_2\left(\tilde{\theta}_e - \alpha_{\tilde{\theta}_e}\right) + \alpha v_r \eta(t) y_e - \alpha \frac{\partial \alpha_{\tilde{\theta}_e}}{\partial y_e} v_r \sin\tilde{\theta}_e - \alpha \frac{\partial \alpha_{\tilde{\theta}_e}}{\partial v_r} \dot{v}_r$$

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Full-text patent files augment searches in value-added files

- CAS STNext contains a wide variety of patent information databases, including those with added value (indexing, etc.) and those consisting of full-text, primary source data
- Value-added files can be searched using keyword or chemical structure data to generate highly relevant answer sets
- Information from the full-text files can be incorporated into structure and other multi-file searches to augment and enhance the types of data that are retrieved for a structure search
- Full-text files have additional features like Key Terms and Numeric Property Searching to gather precise information from within the original source documents in your answer sets

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Best practices for keyword searching

1. Be Specific with Keywords:

Use precise, descriptive terms for technical features.

Avoid overly broad terms, as they may return irrelevant results.

2. Utilize Synonyms and Variants:

Example: “machine learning” vs. “artificial intelligence” – consider synonyms when searching.

3. Use Boolean and Proximity Operators Efficiently:

AND – narrows the search (e.g., “method AND composition”).

OR – broadens the search (e.g., “machine OR system”).

4. Refine by Date Range or Jurisdiction:

Narrow results to a specific timeframe or patent office for jurisdictional relevance.

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Multifile searching is the best approach

- **Why Search Multiple Databases?**
  - Searching across multiple databases ensures a more comprehensive view of prior art.
  - Some patents may be filed in multiple regions (e.g., US, EP, JP), and these filings could contain variations in claims.
- **How CAS STNext Facilitates Multi-Database Searching:**
  - CAS STNext allows searching across different patent offices and multiple value-added databases in one unified interface
  - Duplicates can be identified and removed and results from multiple files combined into a final answer set

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Full text files: Stay within one claim with (S) operator

```
AN      2017007542   CANPATFULL
...
CLMEN   1. Method for production of a thermoelectric component or at least a
        ...
        2. Method according to Claim 1, characterized in that a plurality of
        substrates with inserted green bodies are combined to form a stack,
        wherein the substrates extend within the stack in parallel to one
        another and in each case a substantially planar separation plate is laid
        between two substrates that are adjacent within the stack, which
        separation plate extends in parallel to the substrates and which
        produces an electrically conductive and force-transmitting connection
        between the green bodies of the adjacent substrates, and in that the
        entire stack is arranged between the two electrodes.
        3. Method according to Claim 1 or 2, characterized in that a plurality
        of substrates having inserted green bodies are arranged individually or
        stacked in a plane between the two electrodes.
        4. Method according to Claim 1 or according to one of Claims 2 to 3,
        wherein the electrodes and/or the separation plates consist of graphite,
        characterized in that the green bodies, for contacting, are exposed to a
        ...
```

(S)

(S)

(S)

(S)

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Claim Group allows for more relevant claim searching

- Available in many patent fulltext files
- 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
- Check the availability via **CLM.CG/FA**
- Claim Group search field: **/CLM.CG**

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Capture patents that do not have claim text available in CAplus and search their claims in full text files

```
=> S L2 AND P/DT NOT CLM/FA
      15904610 P/DT
       8007165 CLM/FA
L7          709 L2 AND P/DT NOT CLM/FA

=> FILE JPFUL KRFUL EPFUL DEFUL FRFUL PCTFUL
=> TRANSFER L7 1- PN.B /PN
L8           TRANSFER L7 1- PN.B :     706 TERMS
L9           71 FILE JPFULL
L10         128 FILE KRFULL
L11          67 FILE EPFULL
L12          51 FILE DEFULL
L13          31 FILE FRFULL
L14          27 FILE PCTFULL

TOTAL FOR ALL FILES
L15         375 L8
L16             QUE  TERMS FROM L8 WITH NO HITS:   358 TERMS
```

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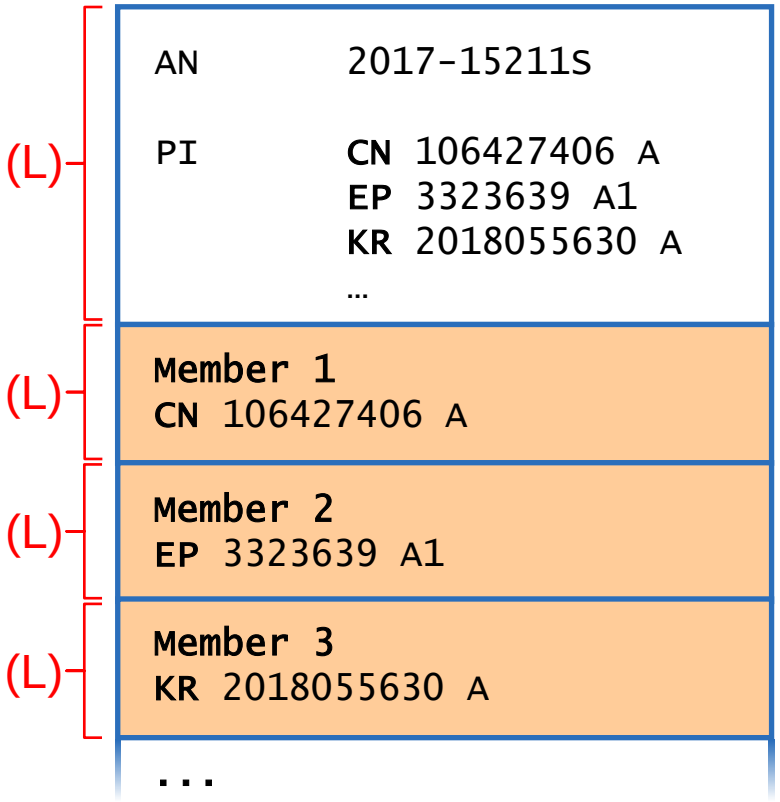
Machine-assisted human translations




```
=> S CN/PC (L) (METALLOCENE (1W) CATALYST?)/CLM

L1          1487 CN/PC (L) (METALLOCENE (1W) CATALYST?)/CLM

=> D MEMBB

Member(0001)
PI     CN 109438594     A  20190308 (201928)* ZH  8[2]
TI     Preparing ultrahigh molecular weight polyolefin involves adding
       solvent to reactor, where solvent is 5-10C alkane and 7-10C
       aromatic hydrocarbon,introducing inert gas above solvent, and
       adding catalyst, and olefin monomer to reactor
TIEN   A method for preparing ultra-high molecular weight polyolefin
...
CLMEN [CLAIM 1] 1. A method for preparing the ultra-high molecular
       ...catalyst is a metallocene catalyst, FI-HRT catalyst, at least
       one Ziegler-Natta catalysts, chromium-based catalysts, late
       transition ...
```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Numeric Property Searching can be used to refine answer sets

- Numeric values play a key role in patents which use chemical and physical properties to set the scope of patent protection
  - Exact values are typically expressed in broad ranges
- Searching numeric data in patents is challenging
  - Standard text searching tools are too limited
  - Great variety of properties and units and a great variation of representation
- Full text and some value-added files allow searching for numeric data extracted from patents

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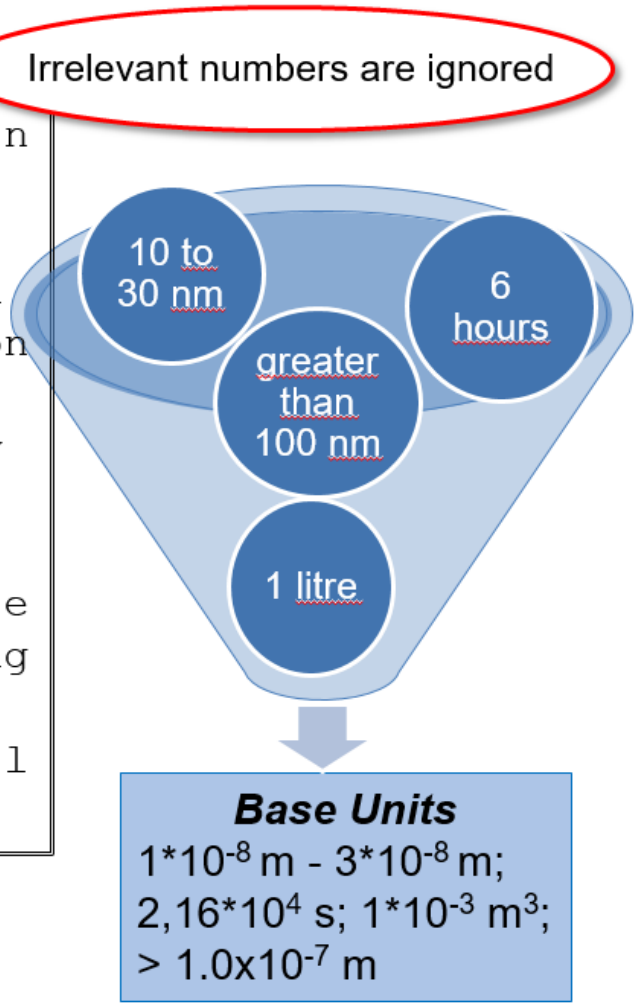
Extracting, normalizing and indexing numeric data

The resulting CeO2 particle size measured by x-ray diffraction were in the range of **10 to 30 nm**.
Fig. 1 shows typical nano particles in a sample milled for **6 hours**. In a second experiment a **1 litre** attrition mill was used for milling the mixture.....In addition it is widely accepted that the existence of a so-called 'limiting particle size' limits the practical minimum particle size that can be attained by grinding to values **greater than 100 nm**, irrespective of the type of ball mill employed.

WO99/59754



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Extracting, normalizing and indexing numeric data

- Numbers and their units within the English-language text are identified
  - About 1,800 property unit variants are identified
  - Numbers are considered from exact values, closed ranges and open ranges
  - Numerals are detected as well
- Identified original data are normalized to base units and indexed for searching
- 59 numeric property search fields with their respective base units are available
- Additional units (CGS-units, imperial and US customary units) are converted to base units

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Case Study – Talc in Anti-foaming Agents

- Find patents with talc particles smaller than 50 microns used in antifoaming agents
- Start with keywords, synonyms, and relevant IPC and CPC symbols for antifoaming
- Search specific claims where talc and particle size are found in the claims in proximity
- Search full-text patent database claims using keywords and numeric property searching
- Search additional value-added databases utilizing keyword and NPS strategies in claims
- Combine sets and review unique hits from each file

Start with keyword/classification strategy to find antifoaming agents

```
=> FILE CAPLUS

=> S (ANTIFOAM? OR ANTI-FOAM? OR DEFOAM? OR B01D0019-02+NT/IPC,CPC)
         94675 ANTIFOAM?
       2098639 ANTI
            64 ANTIS
       2098678 ANTI
                 (ANTI OR ANTIS)
        499353 FOAM?
          3755 ANTI-FOAM?
                 (ANTI(W)FOAM?)
         89255 DEFOAM?
          7147 B01D0019-02+NT/IPC                (2 TERMS)
          4181 B01D0019-02+NT/CPC                (23 TERMS)
L1      136890 (ANTIFOAM? OR ANTI-FOAM? OR DEFOAM? OR B01D0019-02+NT/IPC,CPC)

=> S L1 AND (TALC OR TALCUM OR 14807-96-6)
L2        8419 L1 AND (TALC OR TALCUM OR 14807-96-6)
```

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Add in terms for talc, including RN

```
⇒ S L1 AND (TALC OR TALCUM OR 14807-96-6)

L3       140229 L2
         152157 TALC
            461 TALCS
         152252 TALC
                   (TALC OR TALCS)
          22165 TALCUM
              5 TALCUMS
          22166 TALCUM
                   (TALCUM OR TALCUMS)
L4        12275 L1 AND (TALC OR TALCUM OR L3 )
```

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Adding the concept of particle size

- The effect of searching particle size in the claim text is significant
  - Truncation also allows for particulate size
  - Mesh is a unit to describe the particle size distribution
- The /BIEX field is identical to the /CLM field in CAplus

```
=> S L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)
L5          12259 L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)

=> S L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/BI,BIEX
L6          39691 L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/BI,BIEX
```

Refining the results to claims that specifically link the particle size to talc

```
=> S L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(3S)(TALC OR TALCUM)/CLM

        140229 L2
       2201242 PARTIC?/CLM
       1781807 SIZE/CLM
                 ((SIZE OR SIZES)/CLM)
         74826 FINENESS/CLM
                 ((FINENESS OR FINENESSES)/CLM)
        788957 MESH/CLM
                 ((MESH OR MESHES)/CLM)
         61219 TALC/CLM
                 ((TALC OR TALCS)/CLM)
         62309 TALCUM/CLM
                 ((TALCUM OR TALCUMS)/CLM)
         16886 (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(3S)(TALC OR TALCUM)/CLM
L7       14428 L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(3S)(TALC OR TALCUM)/CLM
```

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Refining the results to claims that specifically link the particle size to talc

```
=> S L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(9A)(TALC OR TALCUM)/CLM

        140229 L2
       2201242 PARTIC?/CLM
       1781807 SIZE/CLM
                 ((SIZE OR SIZES)/CLM)
         74826 FINENESS/CLM
                 ((FINENESS OR FINENESSES)/CLM)
        788957 MESH/CLM
                 ((MESH OR MESHES)/CLM)
         61219 TALC/CLM
                 ((TALC OR TALCS)/CLM)
         62309 TALCUM/CLM
                 ((TALCUM OR TALCUMS)/CLM)
          8149 (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(9A)(TALC OR TALCUM)/CLM
L8        7240 L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(9A)(TALC OR TALCUM)/CLM
```

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Example from CAplus

```
=> D BIB KWIC

AN   2024:2808275  CAPLUS Full-text
TI   Composition for producing polyethylene foam, new quick-drying soft
     high-rebound material for home textile and preparation method thereof
PA   Qingdao Vanking Home Furnishings Co., Ltd., Peop. Rep. China
CLM  What is claimed is:
     3. The composition according to claim 1, characterized in that the
     composition comprises 0.5 to 5 parts of talc, preferably the talc has
     a D95 particle size of 1 to 20 microns. And/or the composition
     comprises 0.5 to 5 parts of a foam anti-shrinkage agent.
IT   INDEXING IN PROGRESS
IT   14807-96-6, Talc (Mg3H2(SiO3)4)
     RL: MOA (Modifier or additive use); USES (Uses)
        (prepn. of compn. for producing polyethylene foam, new quick-drying
        soft high-rebound material for home textile)
```

Capture patents that do not have claim text available in CAplus and search their claims in full text files

```
=> S L2 AND P/DT NOT CLM/FA
      140229 L2
      21092312 P/DT
      18617806 CLM/FA
L9         6945 L2 AND P/DT NOT CLM/FA

=> FILE JPFUL KRFUL EPFUL DEFUL FRFUL PCTFUL

=> TRANSFER L9 1- PN.B /PN

SELECT IS APPROXIMATELY 90% COMPLETE
L12           TRANSFER L9 1- PN.B :    6942 TERMS
L13        2430 FILE JPFULL
L14          35 FILE KRFULL
L15         139 FILE EPFULL
L16         609 FILE DEFULL
L17         754 FILE FRFULL
L18         168 FILE PCTFULL

TOTAL FOR ALL FILES
L19        4135 L12/PN
```

Review those records for which no patent claim text is available

Transfer those patent numbers over to a selection of the patent full text files

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Refining these documents with the claims search

```
=> S L19 AND (TALC OR TALCUM OR TALK OR TALKUM)/CLM(3S)(PARTIC?(3A)(SIZE OR TAILLE) OR
PARTIKELGRO? OR GRANULOMET?)/CLM

L20         121 FILE JPFULL
L21           9 FILE KRFULL
L22          18 FILE EPFULL
L23          80 FILE DEFULL
L24          93 FILE FRFULL
L25          14 FILE PCTFULL

TOTAL FOR ALL FILES
L26         335 L19 AND (TALC OR TALCUM OR TALK OR TALKUM)/CLM(3S)(PARTIC?(3A)(S
                IZE OR TAILLE) OR PARTIKELGRO? OR GRANULOMET?)/CLM
```

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Example from a full text file

```
AN      2022135253   JPFULL EDP 20231112  ED 20231112 UP 20240324 EDTX 20231112
        DED 20231108 DUPD 20240318 Full-text
TIEN    POWDER SOLID COSMETICS
TIJA    粉末固形化粧料
IN      KOBAYASHI HIDETAKA
PA      PICASO COSMETIC LABORATORY LTD;
PAS     PICASO COSMETIC LABORATORY

MCLMEN.   .   .
        C is 70% by mass or more with respect to the total amount of the
        cosmetic agent.
         Ingredient A: Talc
         Component B: Nylon-12 with an average particle size of 4.0 6.0μm
         Component C: Methyl methacrylate crosspolymer with an average
        particle size of 14 22μm

CLMEN.   .   .
        according to claim 1 or 2, wherein it contains the following component
        D.
         Component D: Silica with an average particle size of 1.0 5.0μm

PI      JP 2023162079          A     20231108
```

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Numeric property searching in full-text files provides incredible precision

```
=> S L19 AND (TALC OR TALCUM OR TALK OR TALKUM) (5A) SIZ < 50000NM

L27         311 FILE JPFULL
L28           7 FILE KRFULL
L29           6 FILE EPFULL
L30          44 FILE DEFULL
L31          34 FILE FRFULL
L32          14 FILE PCTFULL

TOTAL FOR ALL FILES
L33         416 L19 AND (TALC OR TALCUM OR TALK OR TALKUM) (5A) SIZ < 50000NM

=> S L33 NOT L26

TOTAL FOR ALL FILES
L40         333 L33 NOT L26
```

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Numeric property searching in full-text files allows for precise recall

```
L40     ANSWER 3 OF 333 JPFULL COPYRIGHT 2025 LNBIS on STN.
AN      2021217391   JPFULL EDP 20230521  ED 20230521 UP 20240811 EDTX 20230521
        DED 20230518 DUPD 20240806 Full-text
TIEN    CONTAINER FOR SPARKLING DRINK, AND MANUFACTURING METHOD OF CONTAINER FOR
        SPARKLING DRINK
TIJA    発泡性飲料用容器お
        よび発泡性飲料用容
        器の製造方法
PAS     YAMAYOSHI KASEI
UOS     YAMAYOSHI KASEI
PIT     JPA PUBLISHED UNEXAMINED PATENT APPLICATION [FROM 19710716 ONWARDS] or
        PUBLISHED UNEXAMINED PATENT APPLICATION (BASED ON INTERNATIONAL
        APPLICATION) [FROM 19790726 ONWARDS]
AI      JP 2021-180680                  20211104
PRAI    JP 2021-180680                  20211104

DETDEN.   .   .
        eye opening 100 µm, preferably 45 µm, more preferably 5 µm, for
        example. More specifically, the dimension (particle size) of talc may
        be 1 µm   100 µm, preferably 1 µm   45 µm, and more
        preferably 1   5 µm. The beer tumbler 1 may contain calcium.   .   .
PI      JP 2023069079          A     20230518
```

Extending the search to WPIndex

```
=> S (ANTIFOAM? OR ANTI-FOAM? OR DEFOAM? OR B01D0019-02+NT/IPC,CPC)

         10923 B01D0019-02+NT/IPC                (2 TERMS)
          3716 B01D0019-02+NT/CPC                (23 TERMS)
L41     176020 (ANTIFOAM?/BI,BIEX OR ANTI-FOAM?/BI,BIEX OR DEFOAM?/BI,BIEX
OR B01D0019-02+NT/IPC,CPC)

=> S L41 AND (TALC OR TALCUM OR 14807-96-6)

L42      13402 L1 AND (TALC/BI,BIEX OR TALCUM/BI,BIEX OR 14807-96-
6/BI,BIEX)

=> S L42 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)

L43       5362 L42 AND (PARTIC?/BI,BIEX(2A)SIZE/BI,BIEX OR
FINENESS/BI,BIEX OR MESH/BI,BIEX)
```

First, repeat the keyword and classification search previously run in CAplus

Value-added files have unique results due to differing coverage and indexing policies – STNext has them all!

```
=> S L41 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(9A)(TALC OR TALCUM)/CLM
L44         800 L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/CLM(9A)(TALC OR
                TALCUM)/CLM

=> S L41 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/BI,BIEX(9A)(TALC OR TALCUM)/BI,BIEX
L45        1005 L2 AND (PARTIC?(2A)SIZE OR FINENESS OR MESH)/BI,BIEX(9A)(TALC
                OR TALCUM)/BI,BIEX

=> S L31 NOT L29
L32         341 L31 NOT L29

=> S L29 NOT L31
L33         173 L29 NOT L31
```

Unique answers in WPIndex

Unique answers in CAplus

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An example from WPIndex

L45 ANSWER 3 OF 539 WPINDEX COPYRIGHT 2025 CLARIVATE on STN
AN 2024-B2155V [2024092] WPINDEX Full-text
TI Environmentally-friendly acrylic paper cup barrier coating composition useful for coating material of disposable paper cup, comprises acrylic acid polymer, modified **talc**, environmentally-friendly solvent, edible grade functional material and coating auxiliary agent
TI . . . Environmentally-friendly acrylic paper cup barrier coating composition useful for coating material of disposable paper cup, comprises acrylic acid polymer, modified **talc**, environmentally-friendly solvent, edible grade functional material and coating auxiliary agent
DETD . . . DESCRIPTION - Environmentally-friendly acrylic paper cup barrier coating composition, comprises 60-70 pts. wt. acrylic acid polymer, 10-15 pts. wt. modified **talc**, 8-12 pts. wt. environmentally-friendly solvent, 5-10 pts. wt. edible grade functional material and **antifoaming** agent, where the acrylic acid.. . . ester monomer, 10-15 wt.% methyl methacrylate, 5-10 wt.% styrene and 2-5 wt.% other functional monomer, the acrylic polymer has a **particle size** distribution of 60-100 nm

Member. . .
cup barrier coating composition, which is mainly composed of the following parts by weight: acrylic acid polymer 60-70 parts, modified talcum powder 10-15 parts…

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Adding NPS creates even further precision and recall

```
=> S L43 AND (TALC OR TALCUM OR TALK OR TALKUM) (5A) SIZ < 50000NM
          2816 (TALC/BI,BIEX OR TALCUM/BI,BIEX OR TALK/BI,BIEX OR TALKUM/BI,BIE
               X) (5A) SIZ < 50000NM

L46        141 L43 AND (TALC/BI,BIEX OR TALCUM/BI,BIEX OR TALK/BI,BIEX OR TALKU
               M/BI,BIEX) (5A) SIZ < 50000NM
```

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Keywords, numeric values, and bibliographic information with hit term highlighting

L46 ANSWER 1 OF 141 WPINDEX COPYRIGHT 2025 CLARIVATE on STN
AN 2024-C61519 [2025002] WPINDEX Full-text
TI Weather-resistant aqueous vehicle body paint, comprises e.g. water, weather-resistant acrylic acid copolymer, dispersant, defoaming agent, anti-rust pigment, carbon black powder, modified talc, …
NOV . . . A includes 15-20 pts. wt. water, 35-40 pts. wt. weather-resistant acrylic acid copolymer, 1.4-1.6 pts. wt. dispersant, 0.08-0.1 pts. wt. **defoaming** agent, 9-11 pts. wt. anti-rust pigment, 1-3 pts. wt. carbon black powder, 7-9 pts. wt. 800-**mesh** sericite powder, 11-13 pts. wt. modified **talc**, 0.15-0.2 pts. wt. wetting agent, 1.5-2 pts. wt. catalyst, 0.3-0.35 pts. wt. thickener, 3-3.5 pts. wt. cosolvent ethylene glycol monobutyl. . .
TECH The modified **talc** is allyl glycine intercalation calcium-aluminum hydrotalcite. The D50 of the modified **talc** is 2-6 μm.Preferred Method: The preparation of weather-resistant acrylic copolymer comprises mixing 0.5 pts. wt. acrylic acid, 2-6 pts. wt. N,N-bis (2,2,6,6-tetramethyl-4-piperidinyl).. . . refrigerator for 12 hours, filtering, and drying in a vacuum oven at 80° for 12 hours. The preparation of modified talc comprises dissolving aluminum nitrate and calcium nitrate in the water with the molar ratio of 1:2 to obtain solution A.. . . .

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What Do I Do Next?

CAS STNext has many options for refining and reporting your results

- Combine answer sets, remove duplicates
- Refine with additional keywords, publication date, or other qualifiers
- Create an alert to run this search periodically and receive new results
- Use the Patent Family Manager to consolidate and simplify display
- Generate reports of results in print or tabular format
- ANALYZE for more insights into your answers
- … and more!

Summary

- Patent claims represent the legal scope of an invention. Accessing accurate and relevant patent claims data is critical for innovation, patent prosecution, competitive intelligence, and R&D.
- CAS STNext includes all major global and national chemical patent databases in a single platform, allowing simultaneous and sequential searching of these valuable resources
- Utilize keyword and property searching within full-text and value-added databases to create a more comprehensive search strategy

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Additional Resources

- STN Coffee Lecture: Numeric Property Searching on STNext®
- STNext Reference Guides, STN Commands, and Keyboard Shortcuts
- What's New in STNext?

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