Common Citation Document (CCD)

Handbook

User documentation and online help

Version 4.0
https://ccd.fiveipoffices.org/CCD-2.2.5/html

European Patent Office
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Introduction and Concepts of the Common Citation Document

This section gives background information about the Common Citation Document application. It helps you to understand the use of the application, and it supplies you with legal and technical information.

Common citation document (CCD)

The Common Citation Document (CCD) application provides single-point access to citation data supplied by more than thirty patent offices.

It consolidates the prior art cited by all participating offices for the family members of a patent application, thus enabling the search results for the same invention produced by several offices to be viewed on a single page.

The creation of the CCD application is part of an ongoing process of technical harmonisation at the international level aimed at establishing an appropriate infrastructure to facilitate greater integration of the global patent system.

Benefits of CCD

CCD is a quick and easy citation search and analysis tool, that allows insight into prior art searching and the methods used by patent authorities to search and examine patent documents. It contains simple patent families, extended families and citations in one view making it easier to identify and analyse certain patterns of cited documents, company filings and patent authority procedure.

In particular CCD is used to:

- Identify the geographical areas targeted by the applicants/companies
- Identify potential markets or areas of protection for your inventions
- Identify the patent strategy of an applicant by viewing the gap between the filing dates of applications for the same invention
- Easily identify whether there are more family members (divisional applications or continuations in-part)
- Identify patent search/examination procedure of the patent authorities
- Anticipate the outcome of your applications or those of your competitors in the early stages of the procedure.
- Identifying the success of patent documents by viewing the amount of times it has been cited in other areas.

Patent documents

Patent documents are documents published by patent offices that contain information about inventions for which a patent application has been filed or granted, or for which a utility model has been registered.

Each year, more than a million patent documents, based on approximately half as many inventions, are published worldwide. Only a small number of inventions are described in sources other than patent documents. This makes the information in these documents invaluable for an understanding of the status of both technology and innovation processes.

Patent documents mainly consist of patent applications and granted patents, along with the search reports, amendments to these documents, and translations when available. The type of publication is indicated by a code affixed to the document number.
A patent document consist of:

- a first page comprising basic information such as the title of the invention and the name of the inventor
- a detailed description of the invention indicating how it is constructed, how it is used and what benefits it brings compared with what already exists
- claims containing a clear and concise definition of what the patent legally protects
- drawings

Non-patent literature

In addition to patent literature, the EPO's search documentation includes any other printed or non-printed material that may be technically relevant for the patent grant procedure. This documentation is called non-patent literature.

Non-patent literature can be an important source of information on the state of the art. It primarily consists of articles from scientific magazines, conference reports, books, internet pages, etc. The latest developments emerging from scientific publications and conferences are usually found in these sources first. This is especially true for research results from universities or scientists, who often tend to publish their results in scientific publications or within the context of conferences and do not necessarily protect their inventions with patents.

Patent families

A patent family is a group of patent documents that are linked directly or indirectly to one or more priorities. There are two definitions of patent families, the simple patent family and the extended patent family.

Simple patent family

A simple patent family is the collection of patent applications that have been filed for the same invention in different countries / regions and are claiming the same priority or same combination of priorities.

In some cases more than one patent family can be displayed. This occurs when various patent office's cite different patent documents (citations) for the same invention.

Synonyms for the Simple Patent Family:

- Also published as
- Equivalent(s)

Continuations and divisions are considered to cover the same technical content as the parent application. Continuations and divisions will always be in a simple patent family with the parent application, regardless of the priorities that they claim.

Extended patent family

An extended patent family is a collection of patent documents that are directly or indirectly related to one particular priority document.

Complex structures of the extended patent family occur when patent applications are filed in several different countries/regions and when much earlier applications (older than 18 months) are cited as the priority. This has the result that the same or similar inventions are indirectly connected by a priority or combination of priorities.

Synonyms for the Extended patent family:

- INPADOC Patent family

More information can be found about Patent families on the EPO website.

Priorities

A priority is the first filing of a patent application that seeks protection for a single invention in one country. When protection is sought for the same invention in other countries, the first filing is claimed as the prior art or priority by indicating the application number and date in the succeeding application.

More about priority rights:

https://www.epo.org/en/legal/guidelines-epc/2025/f_vi_1.html

https://en.wikipedia.org/wiki/Priority_right#:~:text=In%20patent%20law%2C%20industrial%20design,of%20the%20right%20of%20priority.

Data quality

Accuracy of the data retrieved by the CCD web application engine relies on the extent to which data is exchanged between the participating offices. In particular, delays in bibliographic data delivery can vary depending on the country and the time period involved. Before relying on the completeness of a common citation document,

One should check where there are gaps or if there are delays in certain areas. This information is available in the statistics of the world wide bibliographic database (DOCDB) and the worldwide legal status database (INPADOC) which provide indications of missing or delayed document series, (updated weekly). In addition, particular attention should be given to European patents which have entered into the national phase. In these cases completeness of a document series and its data accuracy can vary significantly between countries.

Weekly updates | epo.org

Data coverage

Please find information on data coverage as well as citation origin in the document named Overview of citation data in the EPO's citation database (REFI), which can be downloaded from the webpage Useful tables and statistics > Updated regularly on the EPO website.

> i It is important to consult this information on a regular basis to check for gaps in the coverage.

Tasks

This section provides a step-by-step guide to the use of the CCD application and helps user to achieve specific results and goals.

1. Accessing the common citation document

There are different routes to accessing the Common Citation Document service.

1.1. Access via the official IP5 Website

The common citation document application can be accessed via the official IP5 wsite.

Enter www.fiveipoffices.org in the address line of your browser.

On the landing there is a section dedicated to the ***Common Citation Document (CCD)*** application.

→ Click on the ***Common Citation Document*** link to open the application.

Figure 1: Showing the landing page of the IP5 website.

1.2. Access via Espacenet

In Espacenet you can open the CCD application from the panels ***Cited and Citing documents*** and ***Patent family (Simple, INPADOC any Latest legal events)***.

→ Click on the CCD link in the upper command line to open the document and the family members on the current page.

The CCD application opens with the root document in the header, the family members and their citations are displayed in the CCD viewer. The patent applications in the CCD Viewer are sorted by the rule of: *first-in, last-out* i.e. the last application to enter the database is the one displayed at the top of the list.

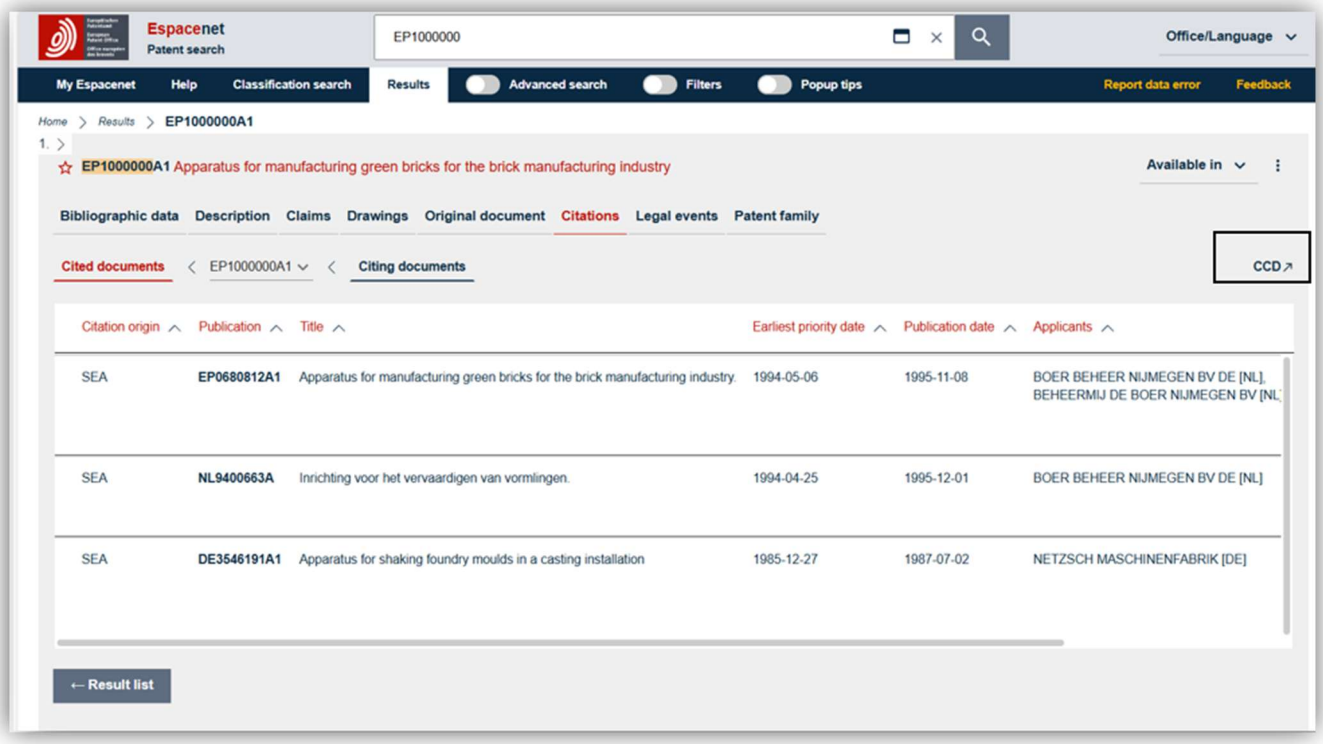


Figure 2: Showing the CCD link from the Cited documents panel. It is positioned the same in the Patent family panel and its subpanels.

2. Setting CCD interface

The CCD application has three sub-windows, the ***CCD Viewer*** and the ***Inspector*** and the ***Timeline***. The CCD Viewer and Inspector windows are opened by default on accession to the application. The third window, the ***Timeline***, has to be opened manually by clicking on the ***Timeline*** toggle button.

CCD Viewer - displays a list of the simple patent family and corresponding citations.
Inspector – displays detailed information of the patent documents listed in the CCD Viewer,
Timeline – displays the patent family(ies) in the ***CCD Viewer*** in a graphical timespan.

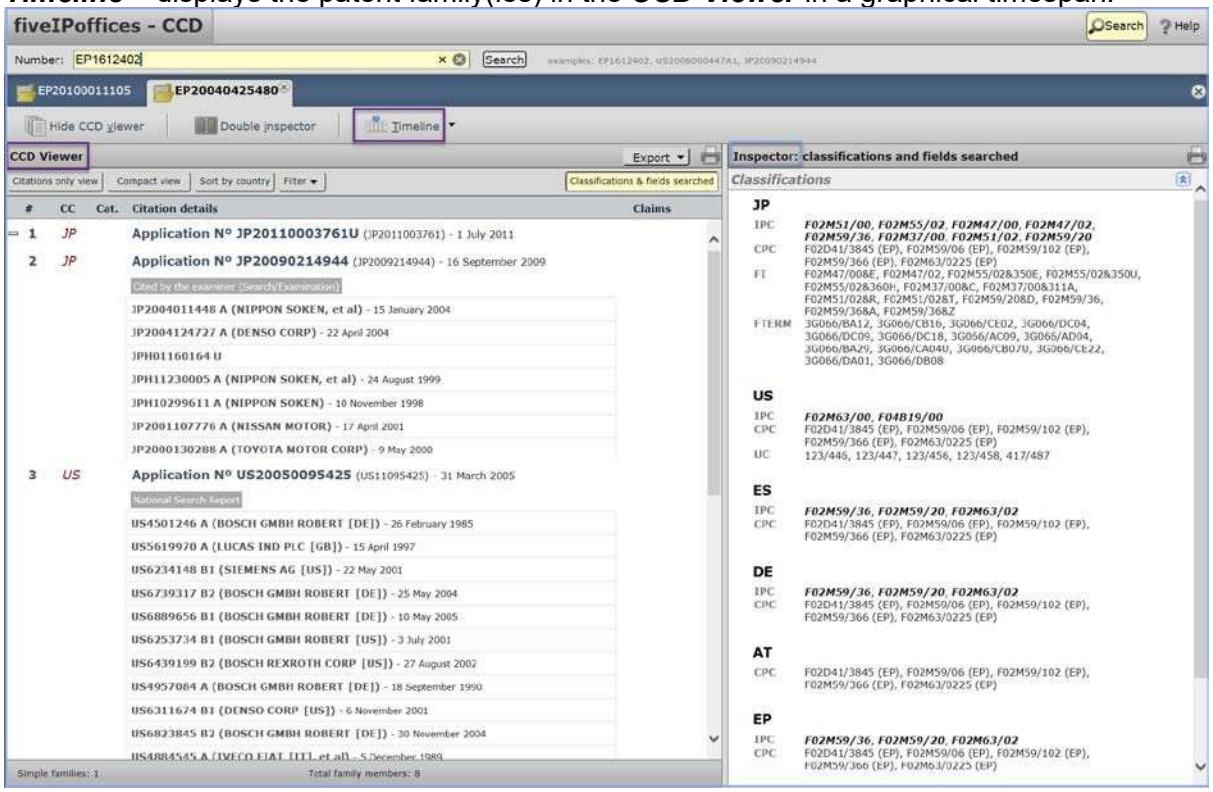


Figure 3: Showing the CCD Viewer and Inspector and the toggle button to open the Timeline.

2.1. Using the Show/Hide CCD viewer

The toggle button ***Show CCD viewer/Hide CCD viewer*** opens and closes the CCD viewer window. This useful function maximises (or minimises) the Inspector window for easier reading of documents.

→ To hide the CCD viewer click on the toggle button ***Hide CCD Viewer***.

The CCD viewer is temporarily hidden.

→ To re-open the viewer click on the same button now displayed as ***Show CCD viewer***.

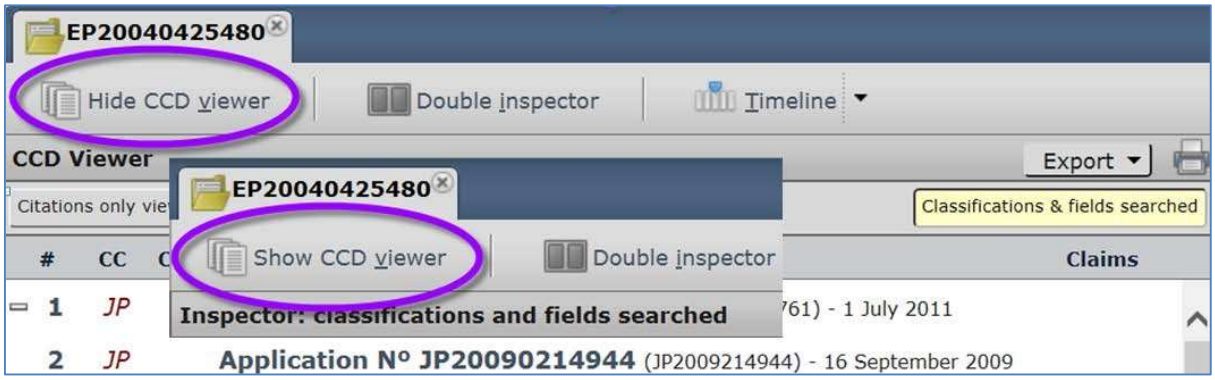


Figure 4: Showing the Hide CCD viewer and Show CCD viewer toggle button.

2.2. Using the Double inspector

The double inspector function allows you to have two inspectors (document content) open simultaneously.

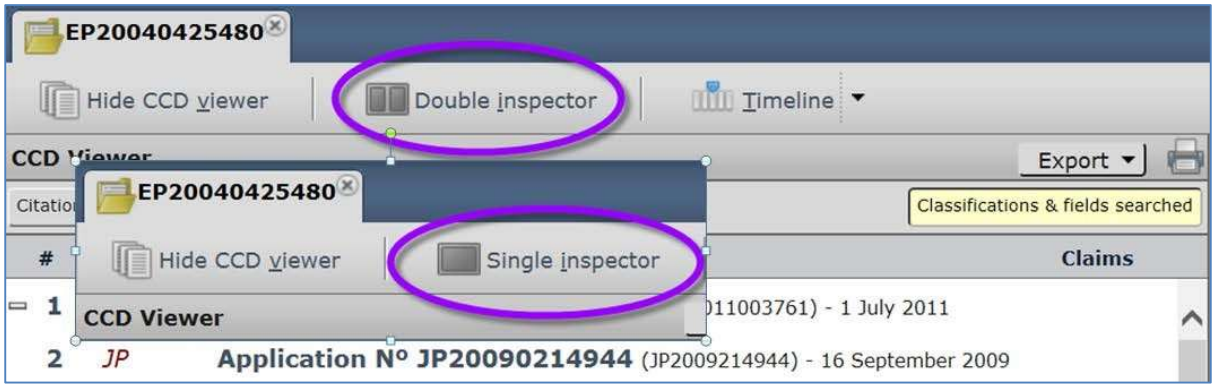


Figure 5: Showing the Double inspector and Single inspector toggle button.

→ To open the second inspector click on the ***Double inspector*** toggle button.

Two inspectors are now open alongside the CCD viewer.

You can choose which document is displayed in which Inspector when you right click on a document in the CCD viewer a tooltip appears where you can select from ***Inspector 1*** or ***Inspector 2***.

→ To close the double inspector click on the same button now displayed as ***Single inspector.***

The information in the second (double inspector) is closed.

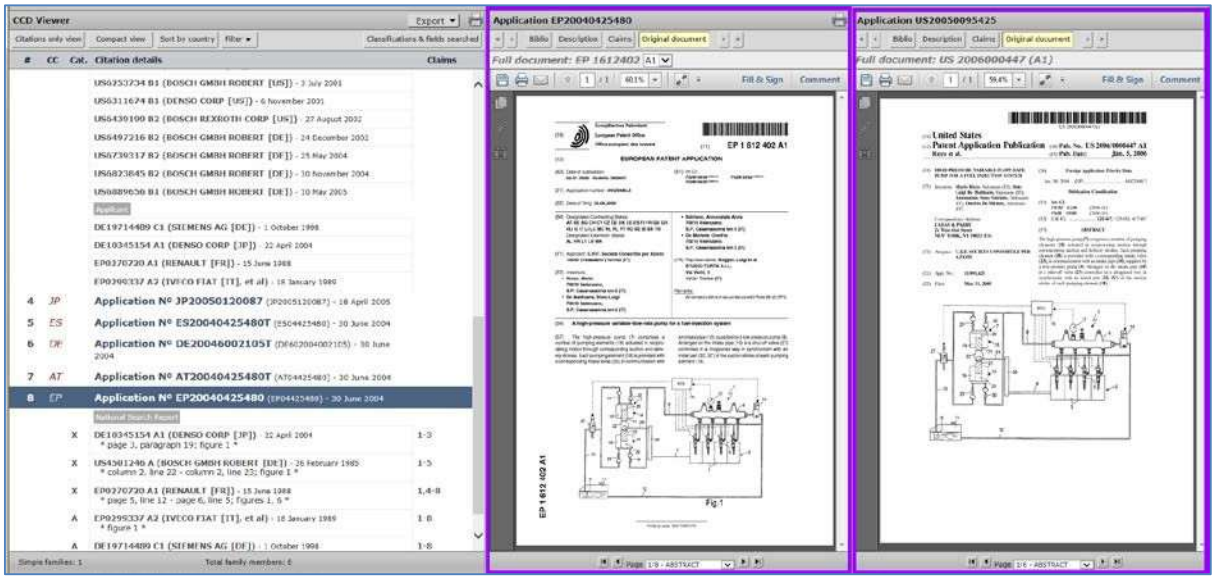


Figure 6: Example of two inspectors open simultaneously alongside the CCD viewer.

Tip! Click on Hide CCD Viewer to maximise the single or double inspector(s) for easier reading of document details.

2.3. Activating the Timeline

The ***Timeline*** button opens an additional window in the lower part of the ***CCD viewer***. It displays the timespan of applications, citations, publications and priorities in a graphical type format.

→ Click on the ***Timeline*** toggle button to show or hide the timeline window.

The Timeline appears in the lower part of the ***CCD Viewer***.

When the CCD viewer is hidden the ***Timeline*** is temporarily disabled. To enable, you must click ***Show CCD viewer***.

Find more information in Chapter *12. Timeline*.

3. Getting help

In this section you can find out what type of help is available to you when using the CCD application.

3.1. Online help

In top right-hand corner of the CCD application there is a ***Help*** button that opens the CCD handbook, which is a step-by-step guide on how to use the CCD application and its individual features.

When the CCD application is opened for the first time from the Official IP5 website (www.fiveipoffices.org), the CCD handbook opens by default.

→ To close the Handbook click on the **X** in the top right-hand corner of the handbook mask.

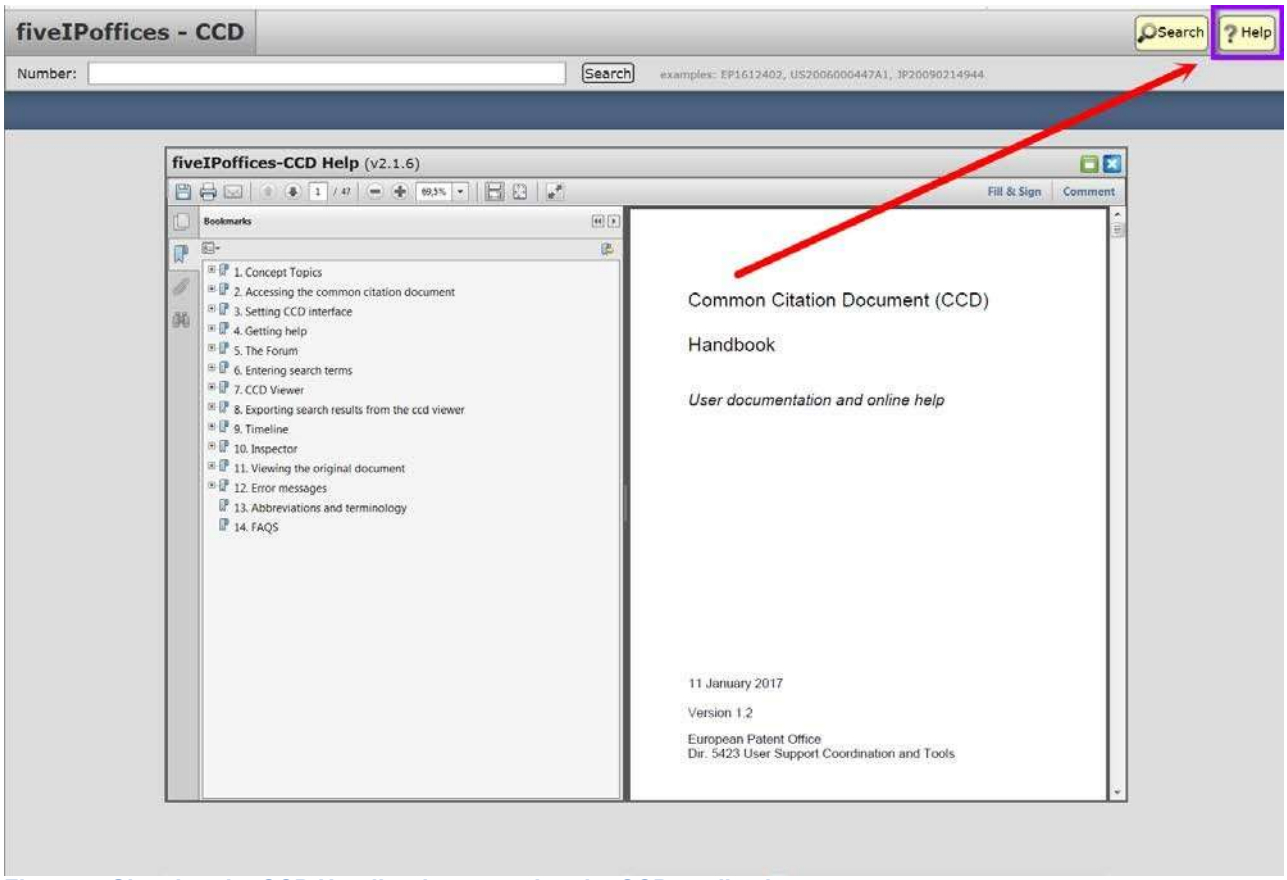


Figure 7: Showing the CCD Handbook on opening the CCD application.

3.2. Contact EPO customer support

Write to Customer services using the EPO web form or call our customer service desk. All Contact details can be found on the EPO Contact us.

4. Entering search terms

Search terms can be entered in the ***Number*** field in the command line. Search terms can be entered in number and keyword format.

To start a search

→ enter your search terms in the ***Number*** field and click on the ***Search*** or hit the ***Enter*** (return) key.

The CCD viewer opens to display the simple patent family or families and their citations. By default the ***Classifications and fields searched*** opens automatically in the Inspector when CCD is opened for the first time.

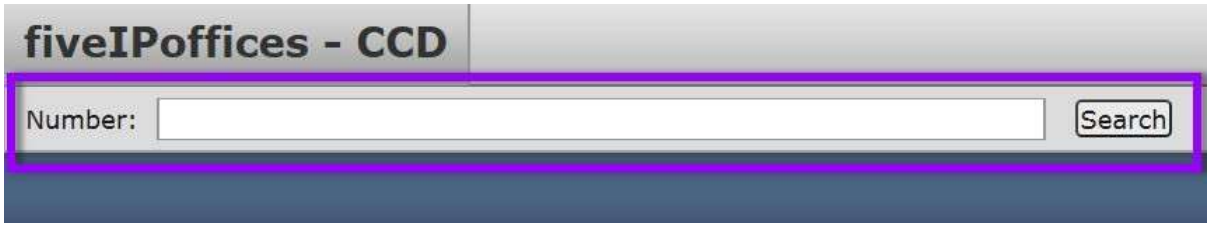


Figure 10: Showing the Number search field.

4.1. Search by numbers

Patent document numbers are unique IDs that are assigned to the patent document at the time of filing and publication, thus clearly identifying a specific document.

The following patent document number formats can be used to search in CCD.

Description	Compatible number formats
Application number national	09/667,353
Application number international	PCT/US2005/035078
Publication number with country code	WO2011018055 or WO 2011 018055
Publication number (without country code)	2011,018,055 or 2011018055
Publication number with kind code	EP1002935 A1 or EP1002935A1
Priority document (international)	WO2007JP73287 or WO,2007,JP,73287
Priority document (national)	JP20070041489 or JP 2007 004 1489

See also *Chapter 6.2 Field identifiers.*

4.2. Search by date

You can search by the publication date using any one of the following formats.

YYYYMMDD or DDMMYYYY or YYYYMM or MMYYYY

YYYY/MM/DD or DD/MM/YYYY or YYYY/MM or MM/YYYY

YYYY-MM-DD or DD-MM-YYYY or YYYY-MM or MM-YYYY

ℹ It is not possible to search with date ranges.

4.3. Search by name

Names of representatives, inventors, companies can be searched in CCD. Field identifiers must be used to acquire a valid result.

Example

Enter ***in="smith thomas***". CCD retrieves applications with this name stated as at least one of the inventors.

As a rule names are entered in the order of *last name, first name, middle name* separated by commas in the EPO databases, however varying this order may help you to find the application searched.

Note: Names are not case sensitive.

See Chapter: *6.2 Field identifiers* for more information.

4.4. Searching by keywords

Keywords can be used to search for words in the title of patent documents with the field identifier ***ti*** (title) in the languages English French and German.

Example

ti=motor this search query will search for the word motor in the title of English and German documents.

4.5. Opening multiple tabs

It is possible to have more than one patent document open at the same time on the CCD interface.

To open a new tab enter a new search term in the ***Number*** field, a new tab is then created.

Figure 11: Example of multiple tabs opened.

→ To select a tab, click within the tab area. Only one tab can be opened at a time.

4.5.1. Resetting/Deleting search queries and tabs

To clear the ***Number*** field of entered search terms,

→ click on the cross symbol *(**X**)* to the far right of the field.

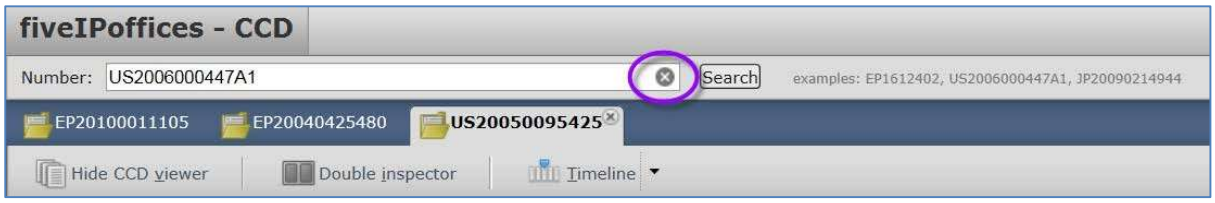


Figure 12: Indicates the position of the cross symbol in the input field.

To close a tab,

→ click on the cross symbol (**X**) within the tab field.

> ℹ The **X** symbol only appears in the tab area when the tab is selected.

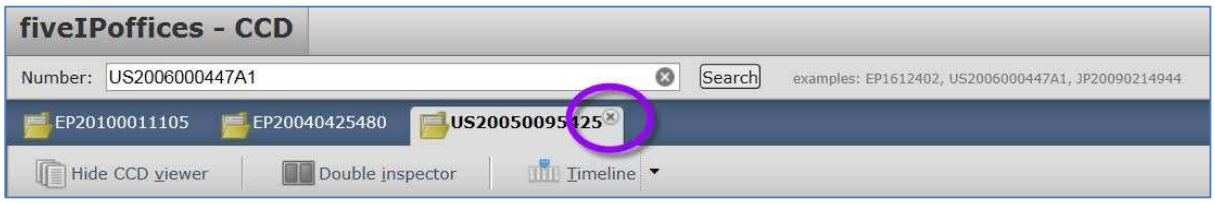


Figure 13: Showing the X symbol within the tab area.

→ To close all tabs click on the **X** to the far right of the tab panel.

When you hover over this **X** symbol the tooltip, ***Close all tabs*** appears as a button that you can click on to close all tabs in one go.

Figure 14: Showing the X symbol to the far right of the tab panel and the tooltip, i.e. button that closes all tabs.

5. Getting results

5.1. Direct result

When an explicit search term is entered, i.e. retrieves a direct result, the CCD viewer automatically opens to display, the results comprising the patent families and their citations.

5.2. Multiple results (ambiguous result)

If your search term retrieves more than one result, CCD will list the possible hits, in the ***Multiple results*** view.

The total amount of documents retrieved is displayed in the navigation bar. The results can stretch over several pages.

→ To navigate through the pages, click on the subsequent number in the middle of the navigation bar.

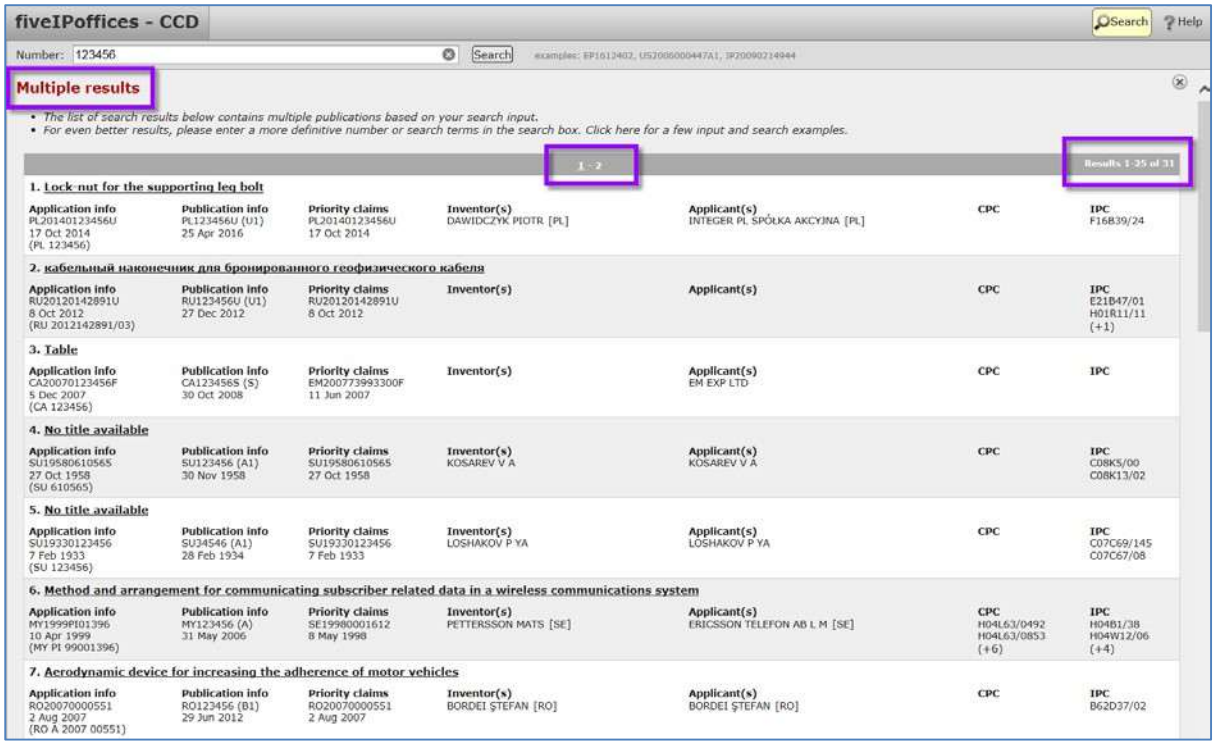


Figure 15: Example of multiple results in the Multiple results window.

You can select a document from the list of ***Multiple results*** by clicking on the title link. This will open the CCD viewer and list the patent family members with their citations as usual.

→ If no results are retrieved, an error message will appear with instructions to check your search criteria again or to try using different search terms.

See also *Chapter 14. Common Error messages*

6. CQL for power users

6.1. Boolean operator

The Boolean operator ***AND*** is the default operator for connecting two search strings; it is the equivalent to using a blank space as part of the input.

6.2. Field identifiers

Field identifiers can be used to enter keywords, names, dates and classifications in the Number field.

The field identifiers in the table below can be used to search in the CCD application.

Description	Field identifier	Search query example
Applicant	pa	pa=johnson
publication date	pd	pd=2010
title	ti	ti=lenses
inventor	in	in=mullis
inventor and applicant	ia	ia=Siemens
cooperative/international patent classification	cpc or ipc	cpc=F16D7/028 or ipc=F16D7/02

→ Field identifiers should be used for all search terms that are not patent document numbers to avoid ambiguous output or too many results.

7. CCD Viewer

7.1. Viewing the search results

The search results are displayed in the CCD viewer window as ***Simple families***, i.e. the simple patent family and extended patent family, with their citations, if available.

In the CCD Viewer the applications and citations are displayed according to the five columns as described in the below table.

#	the counter
CC	country code (e.g. EP for European Patent; US for the USA)
Cat.	Category of relevance attributed by the examiner with respect to the set of claims for which the search has been performed.
Citation details	Information concerning both the patent document input by the CCD web application users, its family members and the cited documents.
Claims	The claims of the family member for which a relevant document has been found by the examiner who performed the search within the respective patent office. This information is only available for searches performed at the EPO, e.g. EP or WO where the EPO has acted as International Search Authority.

The order and positions of the information displayed in the ***Citation details*** column is split into two categories: *applications* and *citations*
The following order of the information displayed for *applications* in the ***Citation details*** is as follows:

Patent application number
Patent publication number (in parentheses)
Publication date

The following order of the information displayed for *citations* in the ***Citation details*** column is as follows:

Patent publication number
Kind code, if available (see Publication, application, priority numbers concordance table) Applicant name and country code (in parentheses) Publication date
Claims if cited (by an examiner in a search report)
Rich citation information (often used for NPL and citations from search reports)

Citations where the ***Citation details*** column remains blank in the ***CCD viewer***, are not available in the database. In such cases, please refer to the corresponding patent authority for further information.

7.2. Citations in the CCD Viewer.

The content of citation documents in the CCD viewer can be opened and displayed in the ***Inspector***.

→ Click in the area of the citation you want to view.

The citation opens in the Inspector.

→ To view two citations simultaneously, right-mouse click in the area of the citation title link and select from the option ***Show in Inspector 1*** or ***Show in Inspector 2.***

> i NPL Non patent literature citations cannot be displayed in the ***Inspector*** due to copyright issues. You have to use the rich citation information available to retrieve further information, i.e. online or directly from the publisher.

7.3. Patent families in the CCD Viewer

The simple patent family is primarily displayed in the ***CCD viewer***. The extended patent family has to be downloaded individually. See also *Chapter 8. Get next family - Extended patent family or families in CCD*

The family members, i.e. applications, are displayed and ordered by the ***publication date***.

The Simple patent family is known as the ***Simple families: 1*** in the CCD application.

By default, the simple patent family is loaded first in the CCD viewer, i.e. is displayed at the top of the list of results.

All consecutive families belong to the extended patent family and are named ***Simple families 2, Simple families: 3*** and so on.

The total amount of simple families and family members is indicated in the lower bar of the CCD viewer.

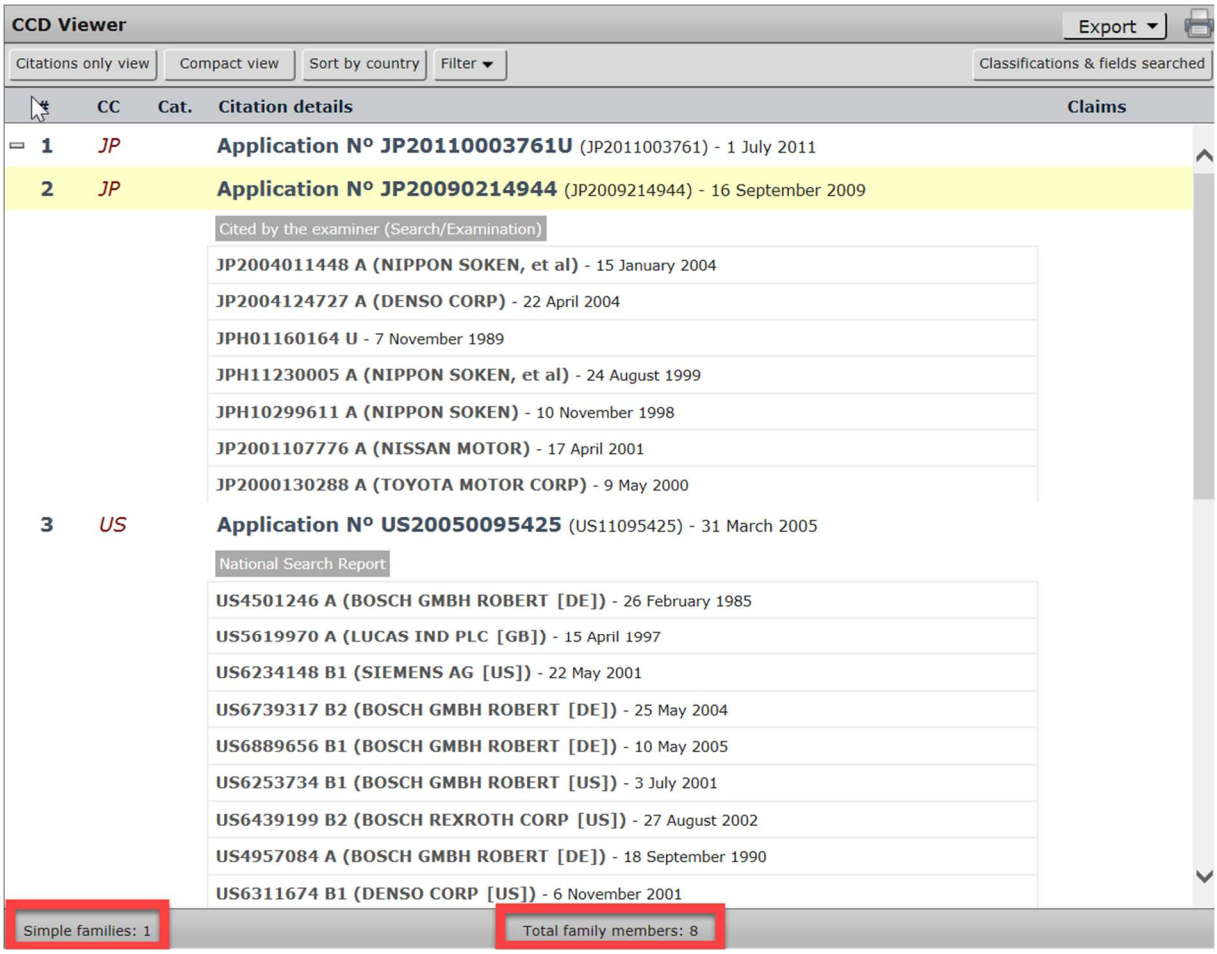


Figure 16: Example of the lower bar of the CCD viewer indicating the amount of simple families and family members. This example shows the Simple patent family (*Simple families 1*) with a total of eight family members.

8. Get next family – INPADOC extended patent family or DOCDB simple families in CCD

When an extended patent family, i.e. simple families 2 and onwards are available you can see the total amount of Simple families and family members in the lower bar of the CCD viewer and a new button ***Get next family*** appears.

The extended patent families are not automatically downloaded to the CCD viewer.

→ To retrieve the Simple families 2 and onwards, click on ***Get next family***.

The next family is opened in the CCD viewer and the information in the lower bar is updated to display which families have been downloaded.

→ The ***Get next family*** button only appears when there is more than one simple family.

Figure 17: example of the lower bar of CCD viewer showing that 3 of 6 simple families and a total of 52 of 55 family members are open in the CCD viewer. The Get next family button indicates that two more simple families can be downloaded.

If there are two or more simple families available you can open them one-by one or in one go, by using the drop-down menu (see arrow) behind the ***Get next family*** button.

You can choose to

→ Click on the amount of families you want to download next from the drop-down menu, e.g. for the next family click in the menu on ***1 family***, or for the next two families click on ***2 families*** (see below figure 18).

OR

→ Click on the simple family with the maximum number of families to download all families at once, e.g. in figure 18 below, click on ***5 families*** to download all of them.

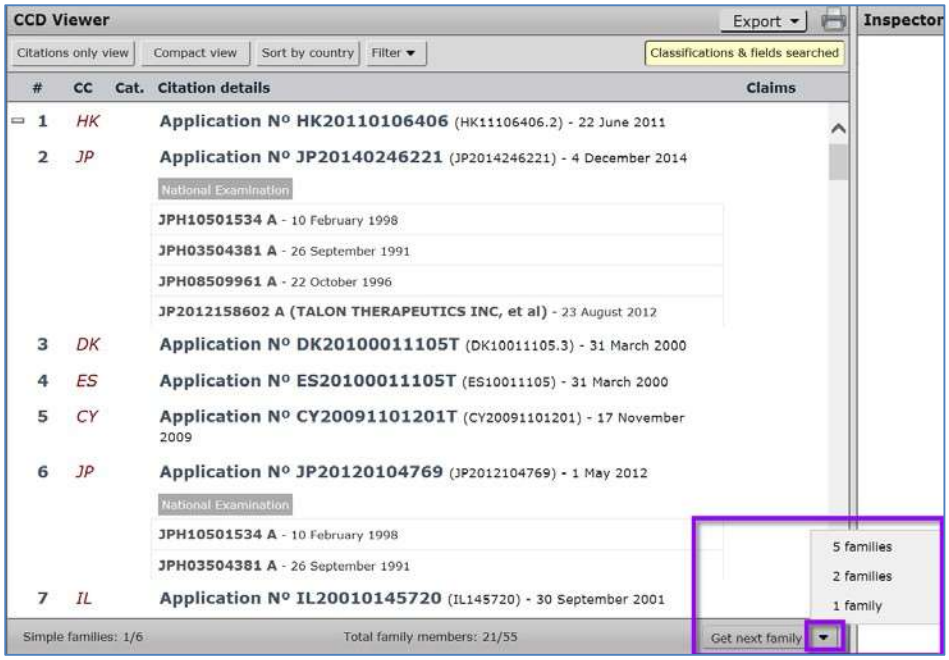


Figure 18: Displaying the drop-down of the *Get next family button*. This example shows that there is a maximum of 5 simple families belonging to the extended patent family.

Note: It can take several seconds until the download of further patent families and family members, is complete. This depends on the amount of data to be retrieved.

8.1. Identifying Simple families in the CCD viewer

The plus ⊕ or minus symbol ⊖ next to an application number marks the start of the next simple family in the CCD viewer.

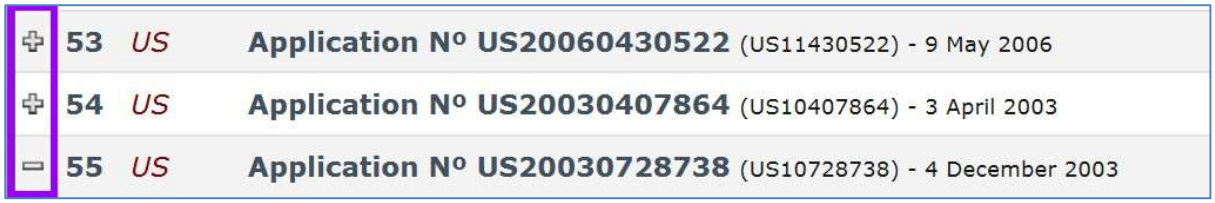


Figure 19: Example of plus and minus symbols next to the simple families in the CCD viewer.

To open all applications (and citations) in a simple family

→ , click on the plus ⊕ symbol.

To collapse the view of all applications (and citations),

→ click on the minus ⊖ symbol.

The downloading of other families can take several seconds before completion. This depends on the amount of data, e.g. family members and citations that that have to be retrieved. After the download the simple families and family members are displayed in the CCD viewer. See also *Concepts: Patent families.*

8.2. Identifying cited documents (citations) and their origin.

Citations are documents brought forward during the search and examination procedure, in the search report, or from other parties, i.e. applicants, opponents. They determine the novelty and inventiveness of an application.

Citations can be made by different parties to the procedure, e.g. third party observations, opposition. They can also be references to patent documents or to non-patent literature, such as magazines or books.

The origin of the citations is indicated in the CCD viewer with one of the following subtitles:

- **European examination**
- **European search report**
- **International search report**
- **International examination**
- **National examination**
- **National search report**
- **Cited by the examiner (Search/Examination)** (for JP citations only)
- **Applicant**
- **Opponent**

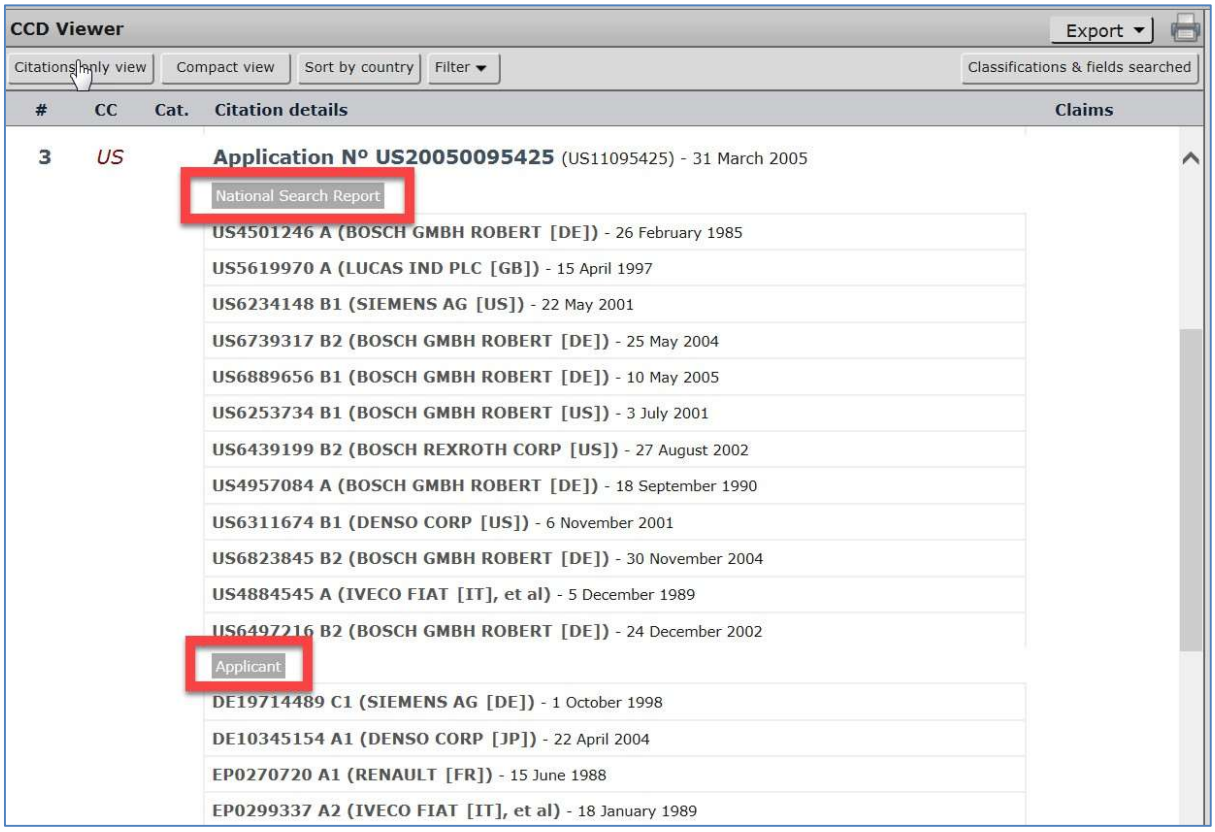


Figure 20: Showing examples of the subtitles for citations cited in the National Search Report and by the Applicant.

8.3. Rich citation information

Rich citation information is additional information that is added to a citation to indicate relevant passages or details in documents, such as page numbers, paragraphs or figures. In cases where a citation is from a website or book, or magazine article the rich citation information can include date, name of the webpage or publisher, so it is easier to find.

Rich citation information is displayed in the Citation details column of the CCD viewer, when available.

ℹ **NPLs** cannot be opened in the ***Inspector***, you will have to retrieve them from the source using the rich citation information given.

Figure 21: Example of rich citation information for five citations in a National Search Report.

ℹ The availability of rich citation information can depend on the procedures of the individual patent authorities. For the availability of citation data please refer to the column ***Enrich search citation from*** of the table ***Overview of citation data in the EPO's citation database (REFI)*** which can be found on the EPO webpage in the section ***Updated regularly***.

9. Modifying the search results

The list of results in the ***CCD Viewer*** can be modified with the toggle buttons displayed in the upper command line of the CCD Viewer. With these buttons you can arrange the list to your own preference.

9.1. Citations only view

The ***Citation only view*** hides all applications displayed in the CCD viewer and shows the citations alone.

To display only the citations in the ***CCD viewer***,

→ click on ***Citations only view*** in the command line.

The patent family applications are temporarily hidden.

To return the view with applications

→ Click ***Citations only view*** again.

By default the citations are ordered in the viewer by the publication date. The citations are also alternately indicated in sections of *grey* and *white*. This is an indicator for citations that belong to the same simple patent family.

When you click on a citation in either the grey or white section, the sections are visually enhanced for easier reading.

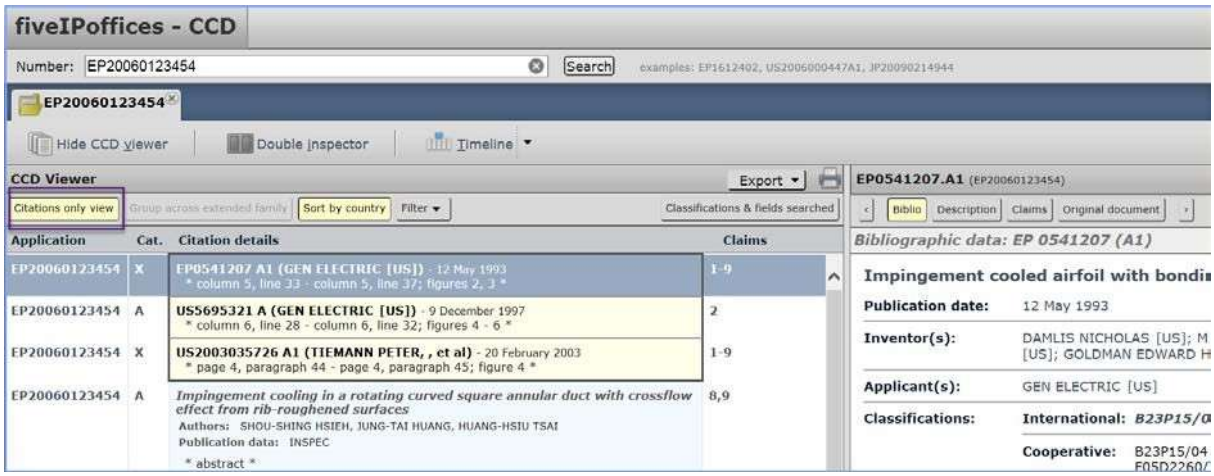


Figure 22: Example of a visually enhanced section of citations belonging to the same simple family.

Citations that have been cited in multiple applications are repeated in the ***Citations only view.***

When you are in the ***Citations only view*** and provided you have opened more than one simple family in the CCD viewer, i.e. the ***Get next family*** button is activated, a new button, ***Group across extended family*** temporarily appears. This button enables you to

a) Group the citations of the extended family, to see in which countries the (same) citations have been cited.

Or

b) You can toggle back to the simple family view with the same button now displayed as ***Group across simple family*** when you are in the Group across extended family view.

The same citations are grouped together in alternating white and grey panels.

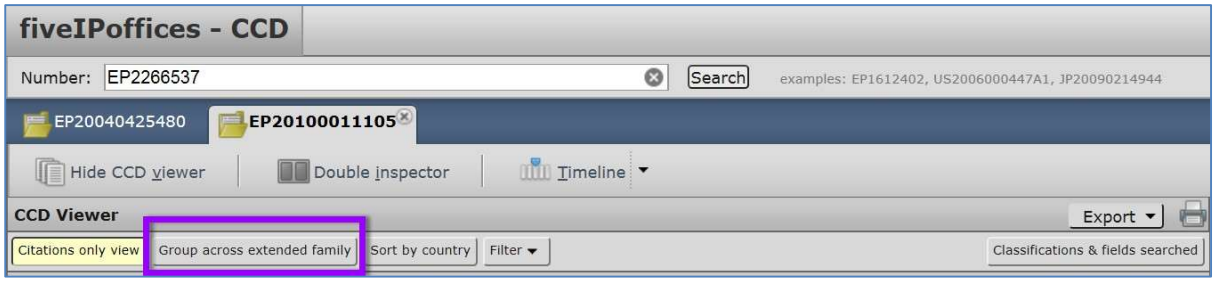


Figure 23 Example of Group across extended family button next to the activated Citations only view.

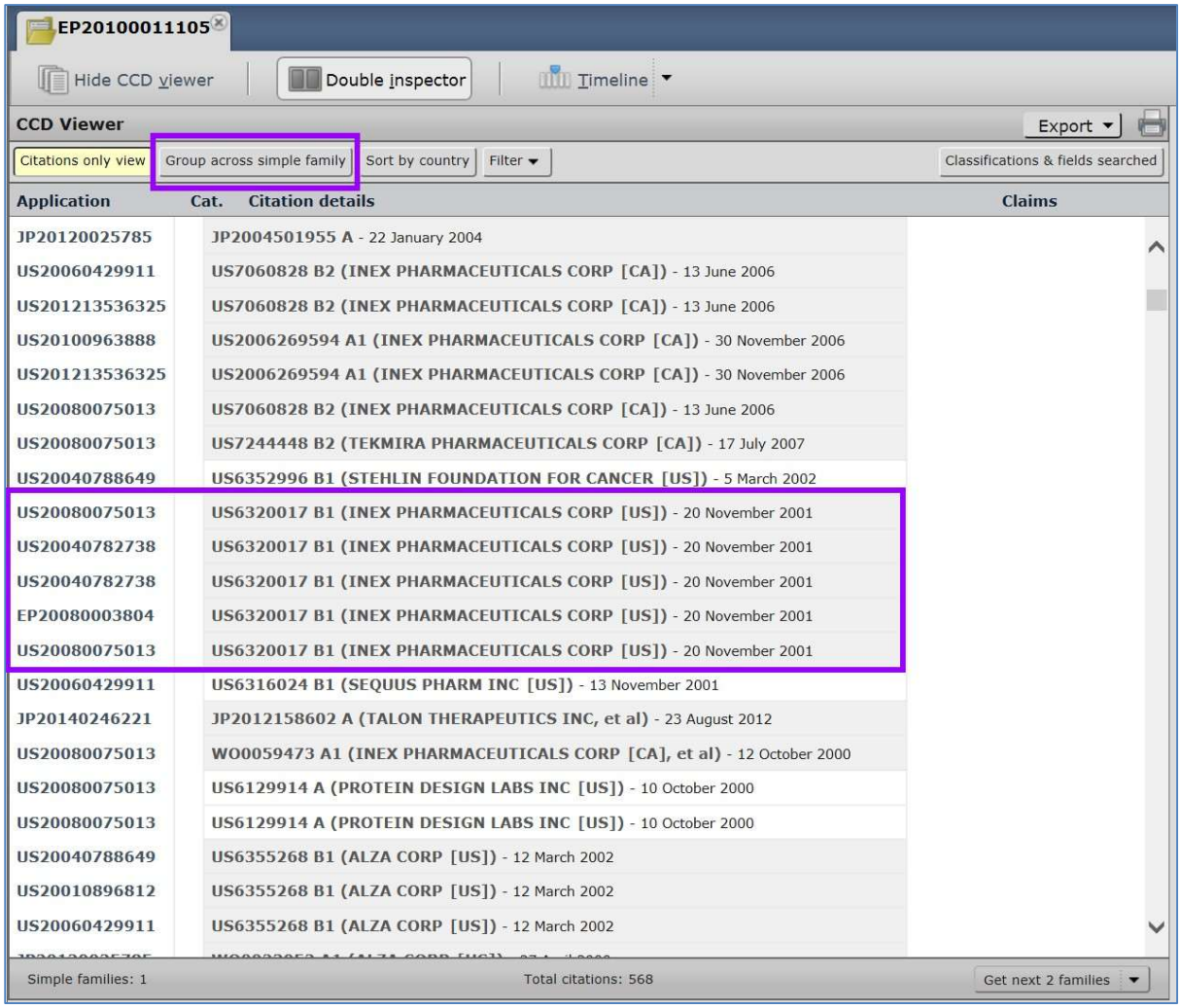


Figure 24 Example of citation US6320017 grouped together and cited in two different US applications and an EP application. The button Group across simple family is visible when you are in the Group across extended family view.

> i The ***Group across extended family*** button is greyed out (inactive) when only one simple family is displayed in the CCD viewer.

9.2. Compact view

To view only the family members in the CCD Viewer

→ Click on ***Compact view***, to return to previous view click the same button again, now displayed as ***Expand view***.

In compact view only the applications are displayed and in Expand view, i.e. the default view, the applications and citations are displayed

9.3. Sort by country

The list of results in the CCD viewer can be sorted by their country of origin.

→ Click on Sort by country to sort accordingly

The list is sorted alphabetically according to the country code in the column ***CC***.

9.4. Filter

The filter function adapts the results in the CCD Viewer according to two options behind the ***Filter*** button.

→ To open the dropdown menu click on the ***Filter*** button.

You can either

→ Click on ***Hide applicant citations*** to remove all citations that have been cited by an applicant.

OR

→ Click ***Hide applications without citations*** to remove all applications from the CCD Viewer that do not have any citations.

The results are displayed accordingly. Both filters can also be activated at the same time.

Figure 25: Example of Filter drop-down menu.

> ℹ Documents cited by the applicant and included in the examiner's search report are allocated the ***Category D***. These citations are not hidden when the filter ***Hide applicant citations*** is activated.

9.5. Classifications and fields searched

The ***Classifications and fields searched*** button is activated by default when a new search is triggered.

The ***Classifications*** are displayed in the top part of the ***Inspector*** window. The classifications are ordered in correspondence to the order of the patent family members in the CCD viewer.

The information about the ***fields searched*** is in the lower part of the ***Inspector*** window, you may have to scroll down to the bottom page to view this part.

All CPC classifications have hyperlinks to a rich tooltip that appears when you click on a CPC symbol, the rich tooltip displays the definition of the classification you have selected.

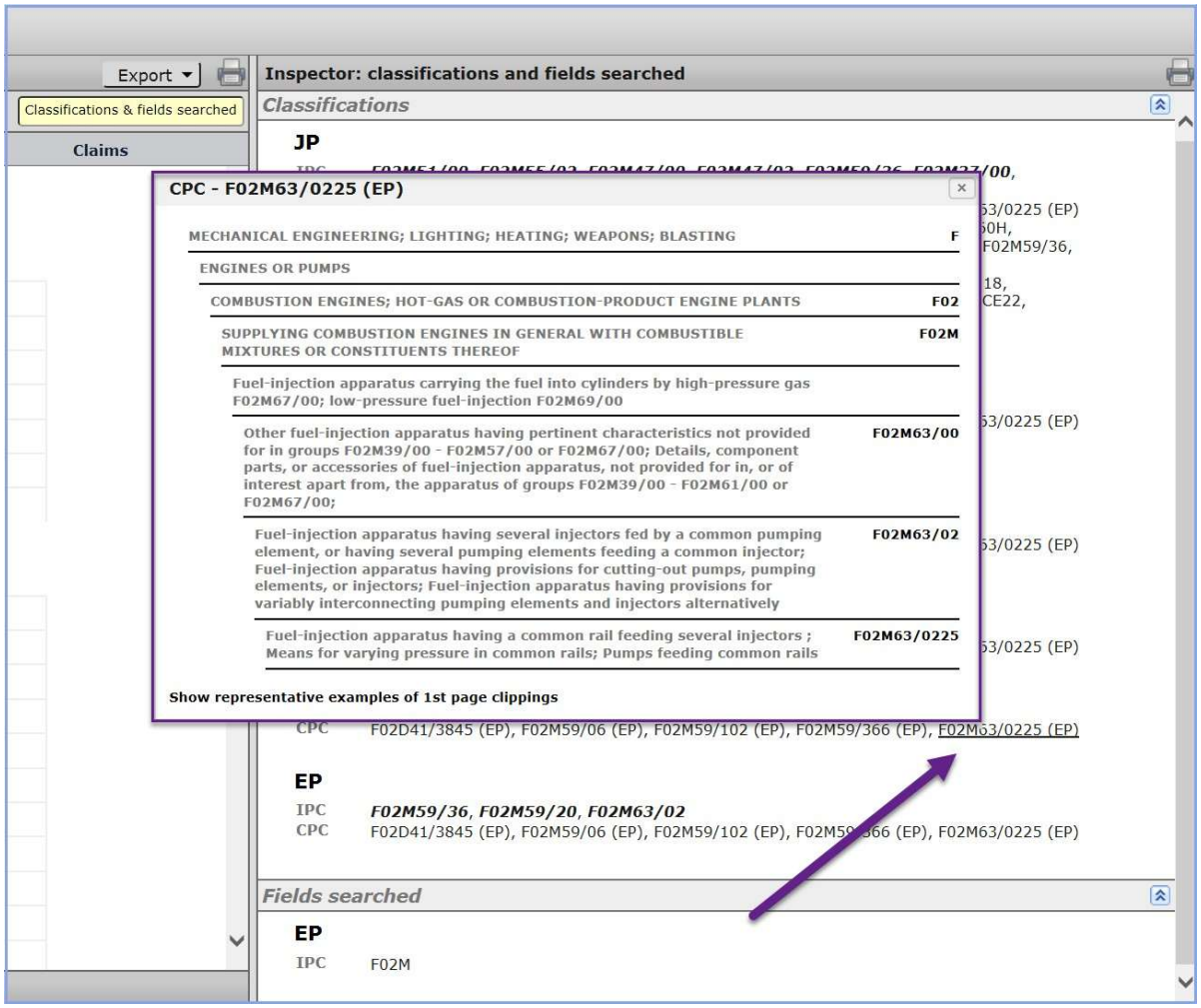


Figure 26: Example of the rich tooltip for CPC classifications in the Inspector.

To open the images,

→ click on ***Show representative examples of 1st page clippings***.

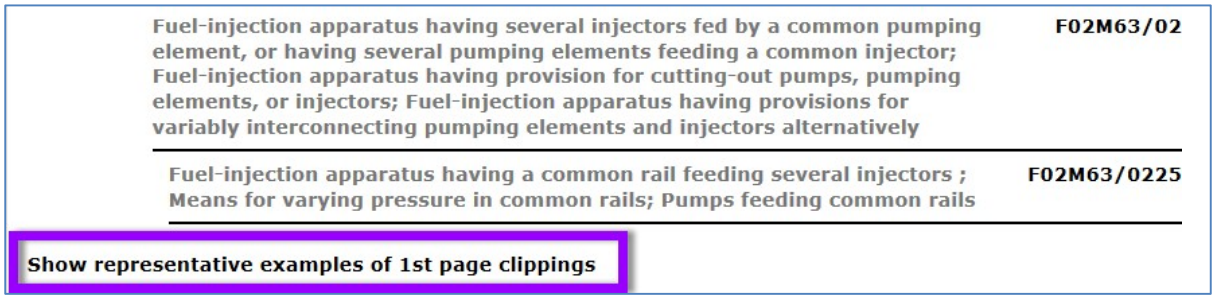


Figure 27: Example of the link to the representative images in the rich tooltip.

A new window opens with the representative images.

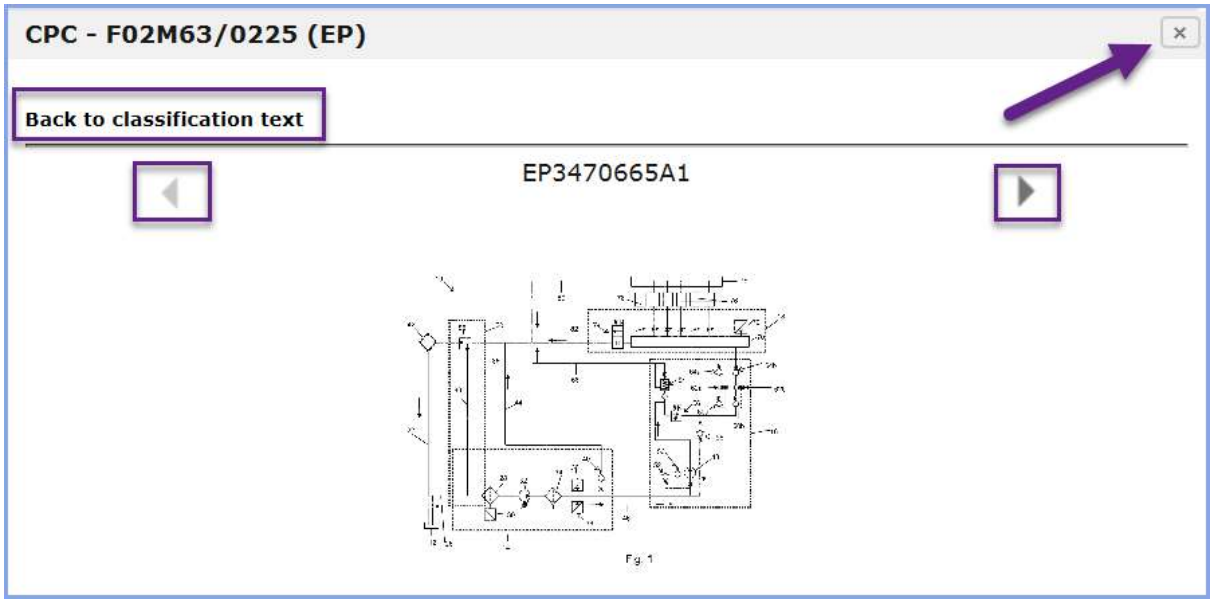


Figure 28: Example of pop-up with representative images of the selected CPC classification.

→ To navigate through the images click on the <u>arrows</u> indicated in the image area.

→ To return to the CCD classification text, click on the link Back to classification text at the top left of the image area. Or you can close the popup by clicking on the **X** in the top right-hand corner.

ℹ To enlarge the image in the popup hover over an area of the image with your mouse.

10. Printing

There are different options to print documents in the CCD application. The function of the printing varies depending from which window you want to print documents.

10.1. Printing in the CCD Viewer

The current list of simple families and patent family members in the CCD viewer are printable.

To print the results,

→ click on the print icon in the toolbar of the ***CCD Viewer***.

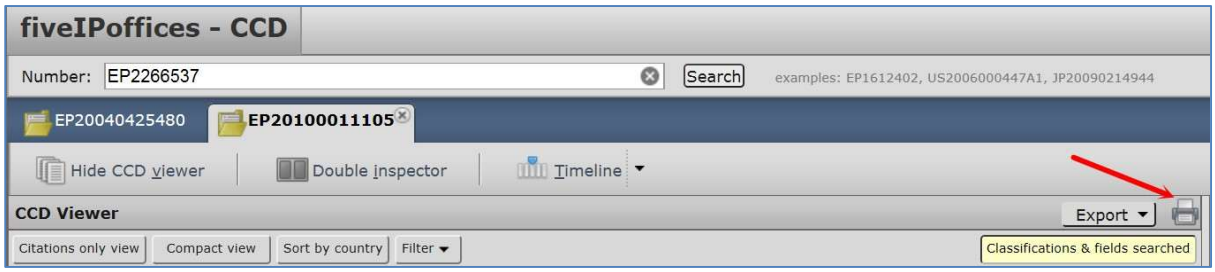


Figure 29: Showing print icon of the CCD viewer

Only what is displayed on the current page is printed.

10.2. Printing in the Inspector

Content displayed in the ***Inspector*** can be printed section-by section, page-by-page or as a full document.

10.2.1. Printing the Bibliographic data (Biblio), Description and Claims

You can print sections of the patent document when you select one of the three tabs available in the command line: ***Biblio, Description*** or ***Claims***

For example,

→ select ***Description*** tab and click on the print icon (see screenshot), to print the description section of the patent document.

This is the same procedure for the ***Biblio*** and ***Claims*** tabs.

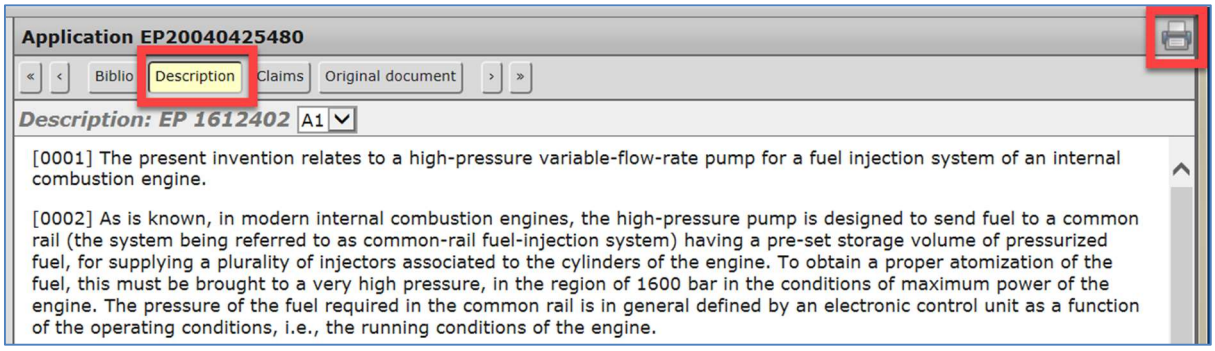


Figure 30: Showing Description tab selected and Print icon in the Inspector

10.2.2. Printing from the ***Original document*** view

When you select the ***Original document*** tab, you can print the complete patent document or single pages of the patent document.

To print the complete ***Original document*** that is displayed in the ***Inspector***:

→ select ***FULL DOC*** (Full document) in the dropdown menu of the navigation bar and then click on the print icon.

All pages of the document are printed.

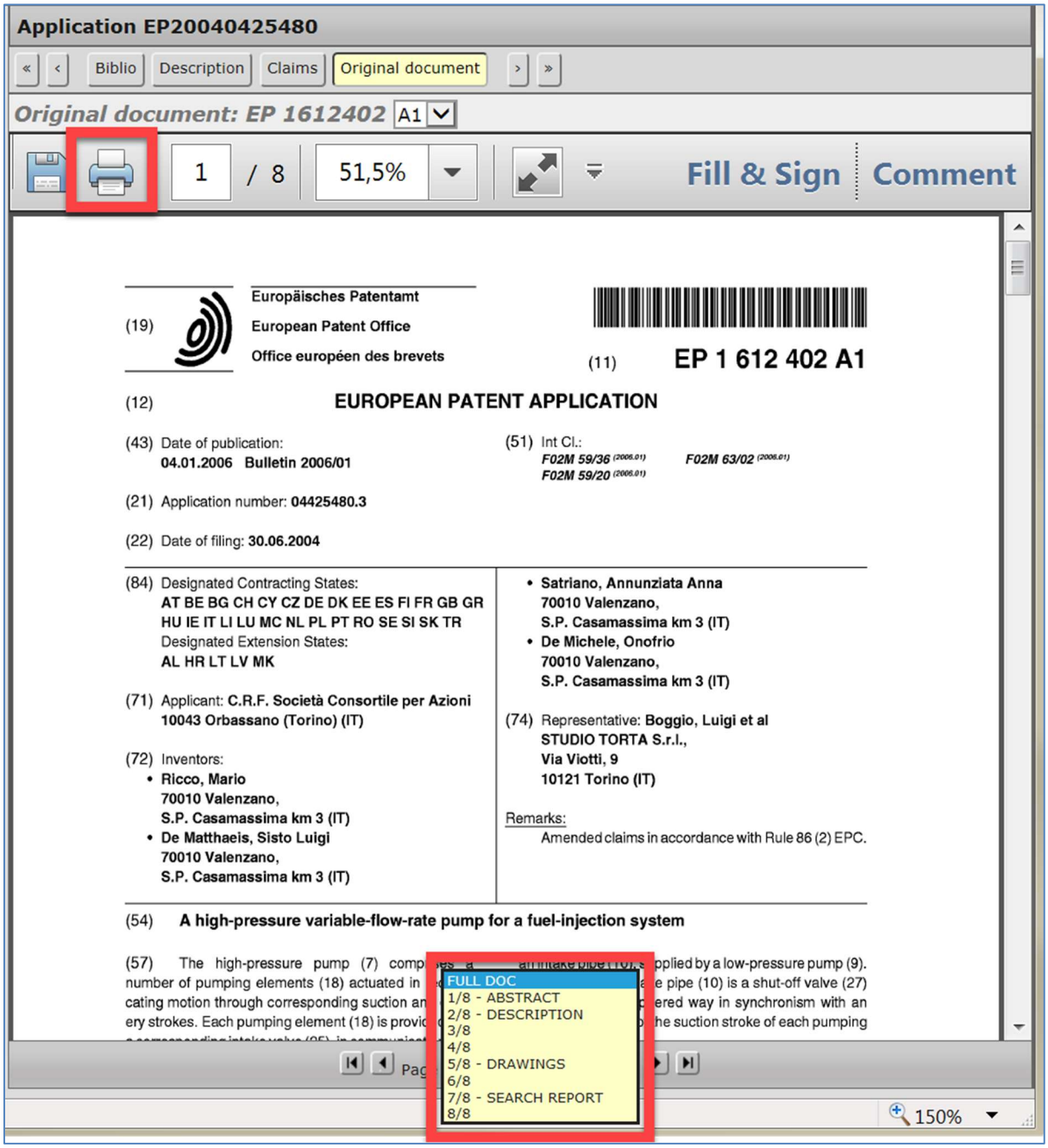


Figure 31. Showing Print icon and FULL DOC option in the drop-down in the Inspector.

In order to print single pages of the ***Original document***, navigate with the navigation arrows to the page you want to print or select the page from the dropdown menu in the navigation bar,

→ click on the print icon in the panel display.

Figure 32: Example of the Original document tab activated and the position of the print icon in the command line.

When the ***Original document*** tab is activated, the print icon is displayed in the command panel surrounding the original document to the top left.

If the print icon is not visible in the command panel, you may have to expand the ***Inspector*** view for it to appear.

> i *Make sure that the FULL DOC option is not activated when printing single pages of the Original document.

11. Exporting

To download the data displayed in the CCD viewer you have to click on the **Export** button in the upper panel of the CCD Viewer, a drop-down menu opens with the ***Export in CSV format*** option

The content downloaded corresponds to the content of the ***Expanded view*** (default view) in the CCD Viewer, i.e. the Compact view button is not activated. Other views are not considered for export. Exception: When the filters ***Hide applicant citations*** and ***Hide applications without citations*** are set, these are respected and the data is exported accordingly.

A maximum of 700 family members can be downloaded for the export functions.

11.1. Exporting to CSV format

Before downloading the data, check that the data you want to download is displayed in the CCD viewer.

→ Click on Export in Excel format to download the data to CSV format

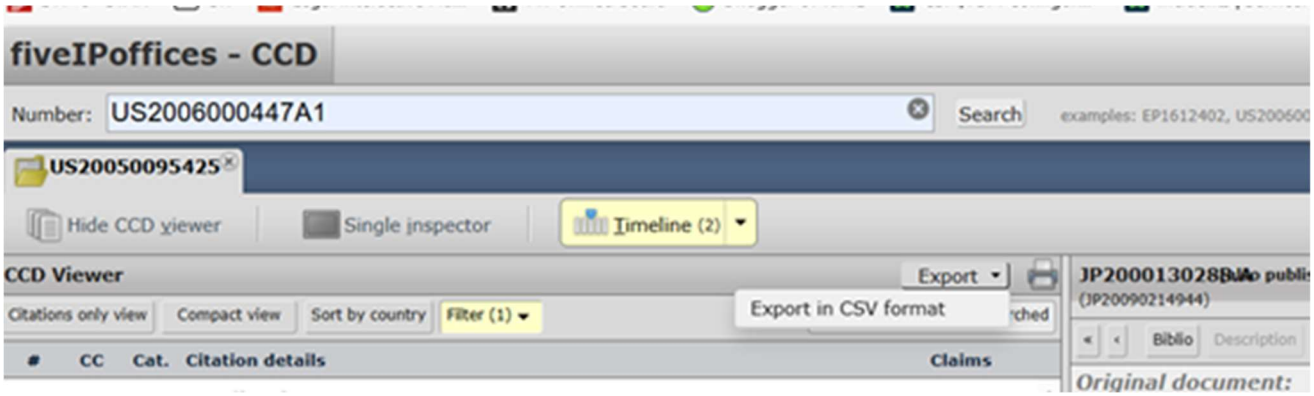


Figure 33: Displaying the Export dropdown menu with Export in CSV format.

Once the download has finished a pop-up window appears with the following options:

→ Click ***Open*** to view the file without saving.

OR

→ Click ***Save*** to store the file on your computer.

OR

→ Click on ***Cancel*** to terminate the exporting and return to the CCD application.

You can now work with the data offline in the chosen format.

Figure 34: Example of pop-up window and the options Open, Save and Cancel.

.

11.2. Viewing the data

1.1. Exporting to CSV

Before exporting, check that the data you want to download is displayed in the CCD viewer.

→ Open the dropdown menu of the ***Export*** icon and select ***Export in CSV format***.

Once the download is finished a popup appears with the options to: ***Open***, ***Save*** and ***Close***.

→ Select ***Open*** to view the exported data without saving.

OR

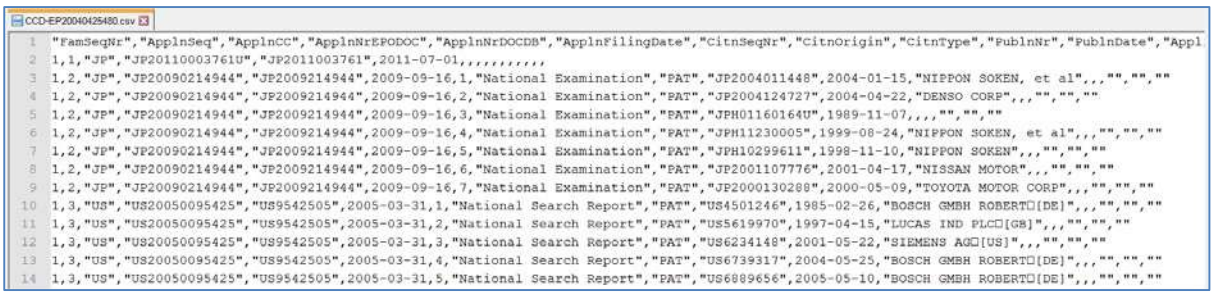
→ Select ***Save*** to store the file on your computer.

OR

→ Click on ***Cancel*** to terminate the exporting and return to the CCD application.

You can now work with the data offline in the chosen format.

The list in CSV format contains the field names in the first row. The other rows contain the data. There is no header in the table when you export to CSV format.



```
CCD-EP20040425480.csv
"FamSeqNr","ApplnSeq","ApplnCC","ApplnNrEPODOC","ApplnNrDOCDB","ApplnFilingDate","CitnSeqNr","CitnOrigin","CitnType","PublnNr","PublnDate","Appl
1,1,"JP","JP20110003761U","JP2011003761",2011-07-01,,,,,,,,,,
1,2,"JP","JP20090214944","JP2009214944",2009-09-16,1,"National Examination","PAT","JP2004011448",2004-01-15,"NIPPON SOKEN, et al",,,"","",""
1,2,"JP","JP20090214944","JP2009214944",2009-09-16,2,"National Examination","PAT","JP2004124727",2004-04-22,"DENSO CORP",,,"","",""
1,2,"JP","JP20090214944","JP2009214944",2009-09-16,3,"National Examination","PAT","JPH01160164U",1989-11-07,,,"","",""
1,2,"JP","JP20090214944","JP2009214944",2009-09-16,4,"National Examination","PAT","JPH11230005",1999-08-24,"NIPPON SOKEN, et al",,,"","",""
1,2,"JP","JP20090214944","JP2009214944",2009-09-16,5,"National Examination","PAT","JPH10299611",1998-11-10,"NIPPON SOKEN",,,"","",""
1,2,"JP","JP20090214944","JP2009214944",2009-09-16,6,"National Examination","PAT","JP2001107776",2001-04-17,"NISSAN MOTOR",,,"","",""
1,2,"JP","JP20090214944","JP2009214944",2009-09-16,7,"National Examination","PAT","JP2000130288",2000-05-09,"TOYOTA MOTOR CORP",,,"","",""
1,3,"US","US20050095425","US9542505",2005-03-31,1,"National Search Report","PAT","US4501246",1985-02-26,"BOSCH GMBH ROBERT□[DE]",,,"","",""
1,3,"US","US20050095425","US9542505",2005-03-31,2,"National Search Report","PAT","US5619970",1997-04-15,"LUCAS IND PLC□[GB]",,,"","",""
1,3,"US","US20050095425","US9542505",2005-03-31,3,"National Search Report","PAT","US6234148",2001-05-22,"SIEMENS AG□[US]",,,"","",""
1,3,"US","US20050095425","US9542505",2005-03-31,4,"National Search Report","PAT","US6739317",2004-05-25,"BOSCH GMBH ROBERT□[DE]",,,"","",""
1,3,"US","US20050095425","US9542505",2005-03-31,5,"National Search Report","PAT","US6889656",2005-05-10,"BOSCH GMBH ROBERT□[DE]",,,"","",""
```

Figure 36: example of data exported in CSV format.

The columns in csv format correlate to those described in the previous *Chapter Exporting to Excel.*

Note: The character encoding will be UTF-8.

For large amounts of data, the system may take several seconds or minutes depending on the amount of data to download. A maximum of 700 family members can be downloaded in the CCD application.

The ***CSV*** table opens once all data is exported. The data is sorted according to the order of

the data in the viewer at the time of download. The data is “de-normalised”, i.e. it can contain repeating information.

To convert a **CSV file to an Excel** spreadsheet, open a blank Excel workbook, go to the Data tab, and select From Text/CSV. Browse to and select your CSV file, then click Import. In the preview window, confirm the delimiter is set to Comma and then click Load. The data will be loaded into an Excel table, which you can then save as a standard Excel file.

Step-by-step instructions for converting CSV to Excel:

1. **Open Excel:** Launch Microsoft Excel and open a blank workbook.
2. **Find the Import Tool:** On the ribbon, click the Data tab.
3. **Select Source:** In the "Get & Transform Data" group, click From Text/CSV.
4. **Browse for the File:** Locate and double-click the CSV file you wish to import.
5. **Preview and Load:** A preview window will appear, showing your data.
    - Ensure the Delimiter is set to Comma to correctly separate your data into columns.
    - Click the Load button to transfer the data into the new Excel worksheet.
6. **Save the Excel File:** Once the data is in Excel, go to File > Save As to save it as a traditional Excel (.xlsx) file.

Alternative Method (for older Excel versions or simpler files):

You can also open the CSV file directly in Excel.

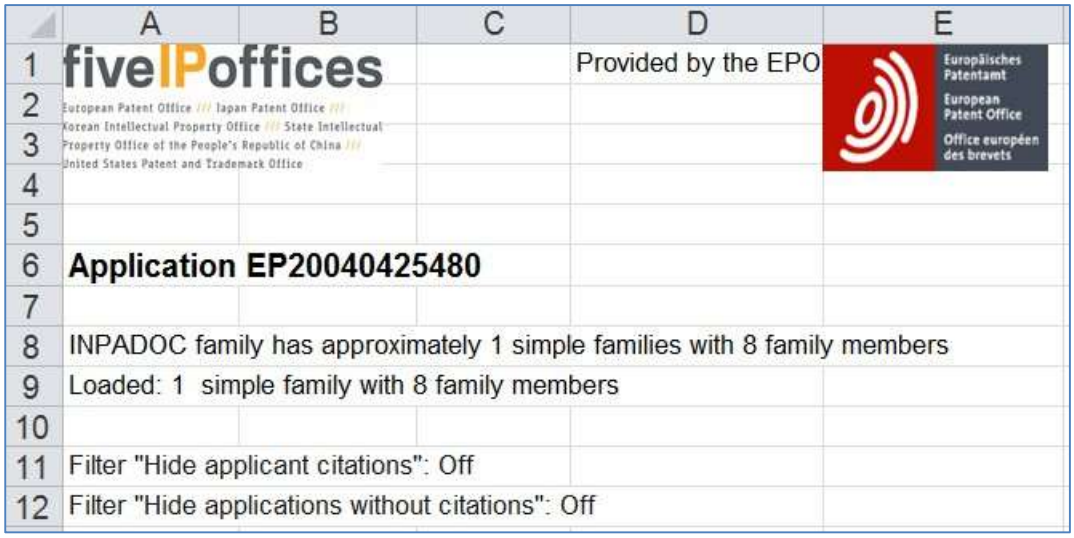
1. Open Excel and go to File > Open.
2. Change the file type dropdown to "Text Files (.prn;.txt;.csv)"* or "All Files" to see your CSV file.
3. Select and open the CSV file, then follow the Text Import Wizard steps to specify delimiters and data formats, similar to the "From Text/CSV" method.

1.1.1. Information about what is downloaded (Header)

The first rows of the exported data in ***Excel*** contain a header indicating the root application number and information about the exported data.

The export information contains details of the data extracted, i.e. the amount of simple families and family members and, in case of deviation, the number of simple families and family members are also indicated in the row: ***Loaded.***

And an indication of whether the Filters Hide applicant citations or ***Hide applications without citations*** are ***On*** or ***Off*** at the time of download.



	A	B	C	D	E
1	fiveIPoffices			Provided by the EPO	
2	European Patent Office /// Japan Patent Office ///				
3	Korean Intellectual Property Office /// State Intellectual Property Office of the People's Republic of China ///				
4	United States Patent and Trademark Office				
5					
6	**Application EP20040425480**				
7					
8	INPADOC family has approximately 1 simple families with 8 family members				
9	Loaded: 1 simple family with 8 family members				
10					
11	Filter "Hide applicant citations": Off				
12	Filter "Hide applications without citations": Off				

Figure 35: Displaying the header of the Excel table with root application number and details of the exported data.

1.1.2. Layout of the downloaded data

After the header the data in ***Excel*** is listed with one or more simple families which each contain one or more applications which in turn contain zero, one or more citations. The columns in the table below are displayed from left to right in Excel.

Field	Description		
FamSeqNr	Sequence number of the simple family, starting with 1		These fields remain empty if an application has no citation
ApplnSeqNr	Sequence number of the application, starting with 1 The number is not reset for each family		
ApplnCC	Country code of application authority		
ApplnNrEPODOC	Application number in EPODOC format		
ApplnNrDOCDB	Application number in DOCDB format		
ApplnFilingDate	Application filing date		
CitnSeqNr	Sequence number of the citation, starting with 1 (number reset to 1 for each application)		
CitnOrigin	Phase where the citations originates (empty if unknown)		
CitnType	PAT: Patent citation NPL: Non-patent Literature citation		
PublnNr	Publication Number of citation, including kind code	Empty if CitType = NPL	
PublnDate	Publication date		
Applicant	Name of the applicant and the country code		
XPnumber	Citation allocated an XP number, if available	Empty if CitType = PAT	
NPLbiblio	Bibliographic data of the NPL		

CitnCategory	Citation category such as “A”,”X” or “XP”;
Passage	Short passage from the citation
Claims	The claims that have been cited.

> i If there is more than one applicant, only the first applicant is specified and et al. is appended to indicate multiple applicants.

> i When you export a large amount of data, e.g. more than approximately 500 applications, the hyperlinks to Espacenet from Excel will not be available.

2. Timeline

The ***Timeline*** is a function that opens a new panel that presents the patent documents listed in the CCD viewer in a graphical way.

2.1. Activate the Timeline

The ***Timeline*** button is in the upper command line.

→ Click on the ***Timeline*** button in the toolbar to activate the panel.

A new window appears at the bottom of the CCD viewer.

→ To close the timeline window click again the ***Timeline*** button.

If a patent document is selected prior to activating the Timeline, this document will appear in the Timeline highlighted in **bold and blue** colour by default.

2.2. Modifying the Timeline

To adjust the way documents are displayed in the Timeline, there are two options in the dropdown menu of the ***Timeline*** button, the ***Single application mode*** and ***Compare mode***.

2.2.1. Single application mode

The ***Single application mode*** allows you to view a single application and its family members in the Timeline.

To activate this option

→ Select ***Single application mode*** from the ***Timeline*** drop-down menu and then click application you want to view.

The selected application is displayed in **bold and blue** in the Timeline.

2.2.2. Compare mode

In ***Compare mode*** you can select up to four documents to evaluate them in the Timeline window.

→ To activate this option select the ***Compare mode*** from the ***Timeline*** drop-down menu.

→ To choose which documents are to be compared, click on the documents you want to compare from the CCD viewer.

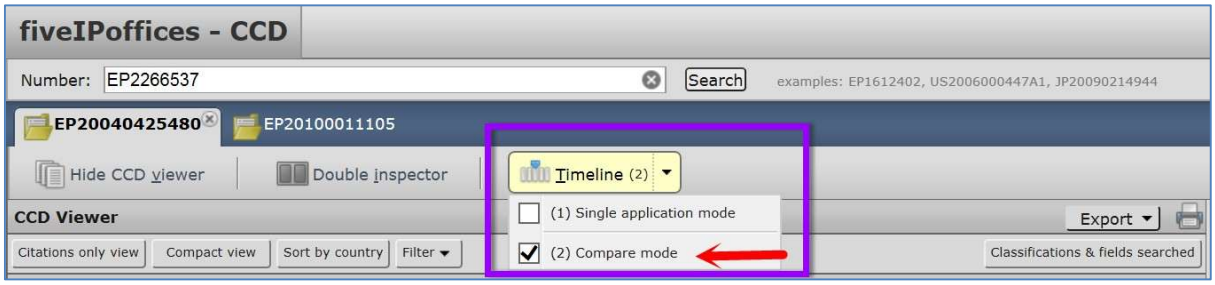


Figure 37: Displaying Timeline drop-down menu with the Compare mode option activated.

The applications and their family members now appear in the Timeline. Each selected application and their family members are highlighted in different colours to help differentiate between them.

> ℹ You can compare up to a maximum of four applications in the ***Timeline***. When you click on a fifth document the first selected patent application is replaced by the newly selected document.

Good to know! When the Timeline button is deactivated the mode selection(s) remain active.

2.3. Identifying the different types of documents in the Timeline

The different types of patent documents displayed in the ***Timeline*** window have a visual identification with different types of underlining. These help to identify the different types of documents within the Timeline window.

The following “underlining” rules apply in the ***Timeline***:

- Dots > citations;
- Solid lines > applications;
- Striped lines > priorities;

ℹ Greyed patent documents in the Timeline indicate that they are 'inactive' or unselected.

A selected patent document in the CCD Viewer is automatically highlighted in **bold and blue** in the Timeline.

2.4. Timeline and Citations only view

When the ***Citations only view*** is activated selected citations from the CCD viewer are displayed and highlighted in **bold and black**.

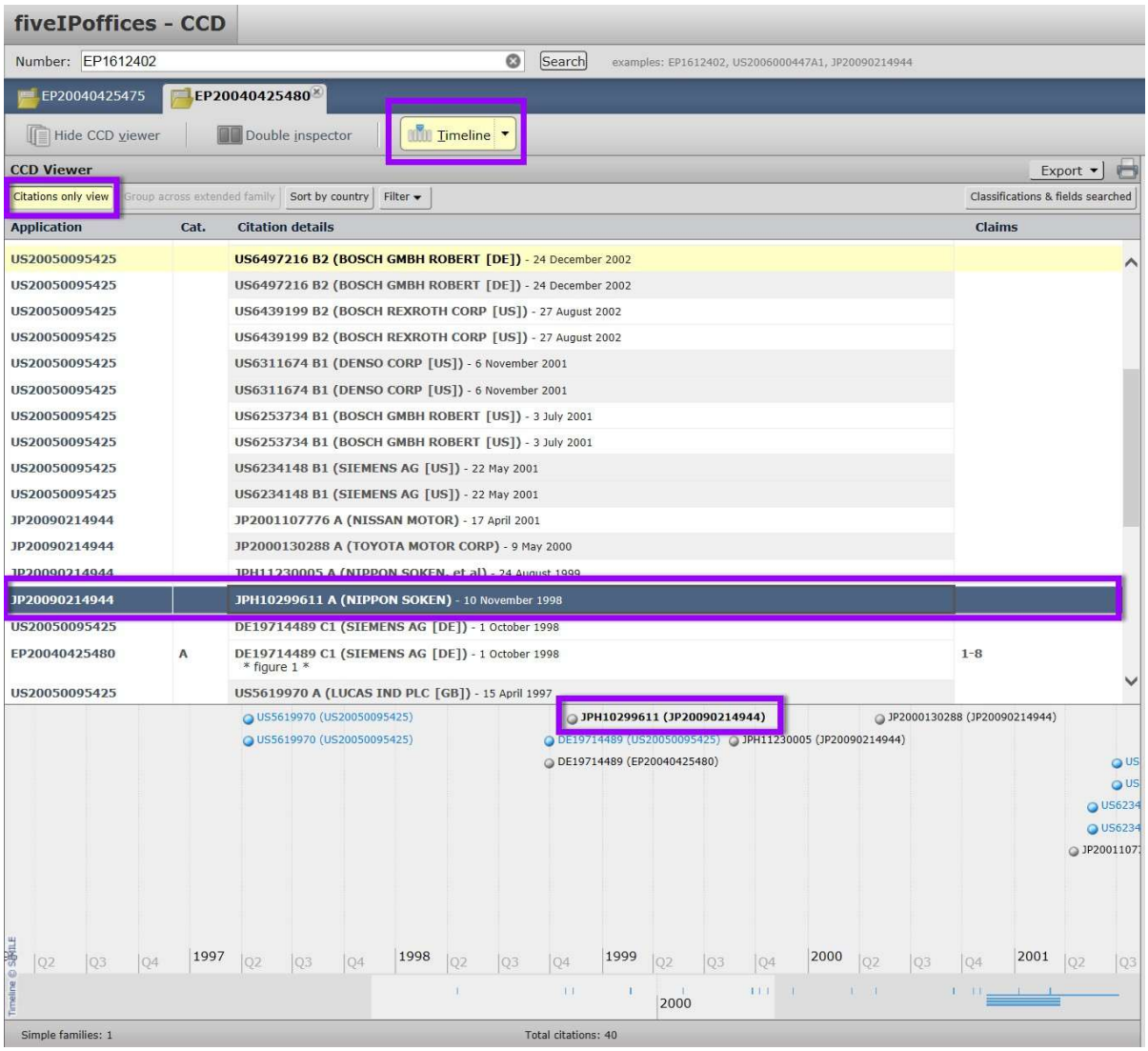


Figure 38: Displays selected citation in CCD viewer and the same citation in the Timeline highlighted in bold and black.

> ℹ Last selected documents prior to the ***Citations only view*** remain in **blue and bold.**

2.5. Opening patent documents from *Timeline*

You can open documents directly from the ***Timeline*** to view them in the ***Inspector.***

→ To open in the Inspector, click on a document in the ***Timeline***.

The original document is then displayed in the ***Inspector***.

2.6. Using the double Inspector for documents in the Timeline

To have two documents opened simultaneously right-click on a document in the Timeline, a pop-up appears with the options ***Show in Inspector 1 - Inspector 2.***

→ Click on one of these options to open the document.

> i By default all documents are opened in ***Inspector 1***.

2.7. Maximising and minimising the Timeline view

Zoom functions can be activated to maximise or minimise the view of the Timeline.

→ To activate the zoom function in the Timeline view right-click in a free space of the Timeline and select ***Zoom mode: on*** in the pop-up window.

→ To deactivate the zoom function, click again in a free space of the Timeline and select ***Zoom mode: off.***

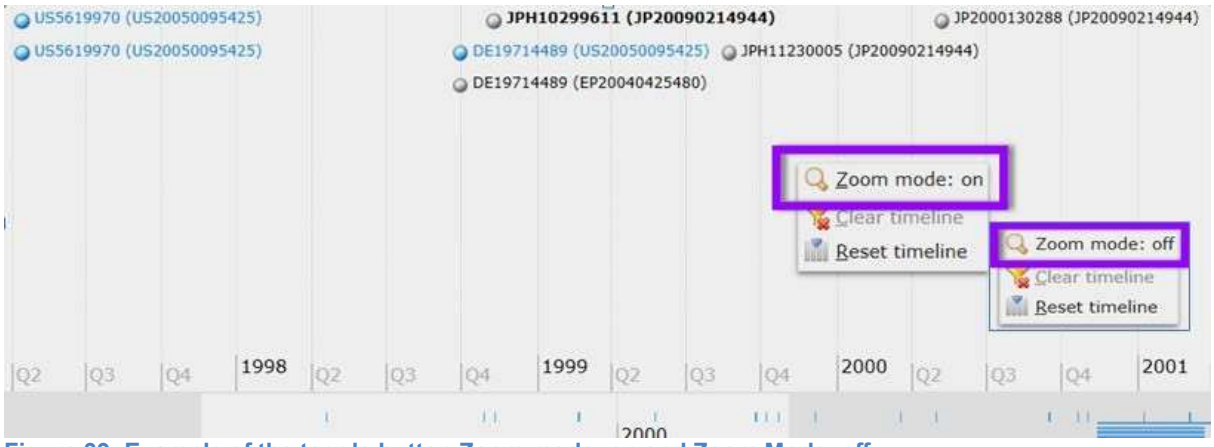


Figure 39: Example of the toggle button Zoom mode: on and Zoom Mode: off.

2.8. Browsing Timeline

There are two possible ways to browse through the Timeline.

→ You can scroll through the Timeline by placing the mouse cursor in a free area of the Timeline and turning the mouse wheel.

OR

→ You can drag through the Timeline by placing the mouse cursor in a free area of the Timeline and holding down the left mouse-click while navigating left or right.

2.9. Re-setting the Timeline

→ To remove all documents in the Timeline, right click in a free area of the Timeline window and select ***Clear timeline*** from the popup window.

No more documents are displayed in the Timeline window.

Figure 40: Example of popup window and the Clear timeline option.

→ To remove all indications, e.g. highlighting, bolded font, of selected documents in the Timeline, right-click in a free area of the Timeline window and select ***Reset timeline*** from the pop-up window.

All highlighted, coloured and bolded fonts are removed from the Timeline.

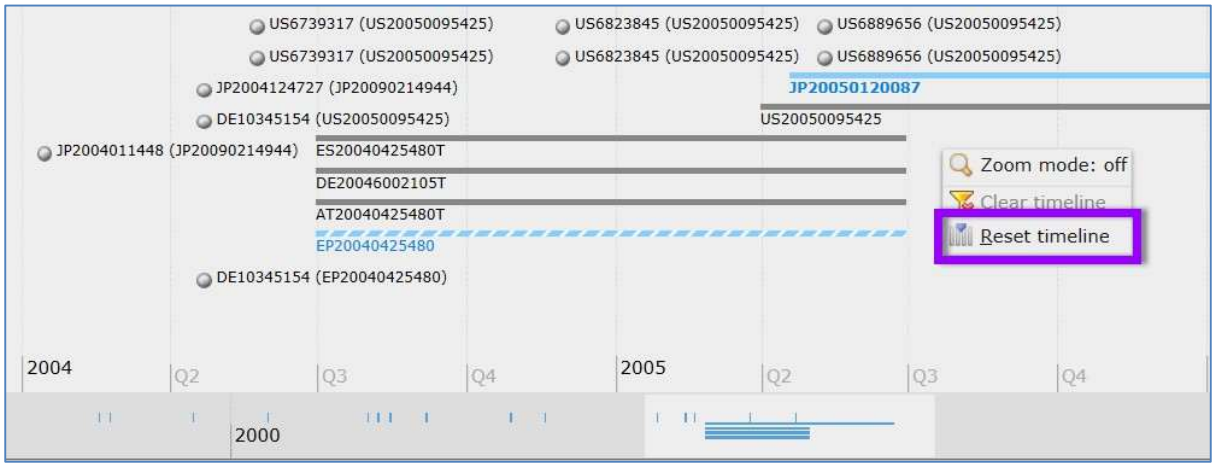


Figure 41: Example of popup window containing the Reset timeline option

2.10. Deleting results in the Timeline

To remove all results from the ***Timeline*** you have to

→ Right-click within a clear space of the Timeline window and select ***Clear timeline***.

All applications and citations are deleted from the Timeline. The Timeline is empty.

3. Inspector

The Inspector window displays classification and patent document details when you select a document from the ***CCD viewer*** or from the ***Timeline***. All document details in the Inspector are displayed in HTML format except for the ***Original document***, which is displayed in pdf.

3.1. Navigating through documents in the Inspector

As soon as document details are open in the ***Inspector*** a set of buttons appear in the command line. They help to navigate through particular parts of a patent document. And help you to navigate through the applications and citations displayed in the CCD viewer.

Figure 42: Indicating the command line in the Inspector

3.2. Navigation arrows

The single and double navigation arrows to the left and right of the command line in the inspector enable you to browse through the list of applications and citations displayed in the CCD viewer document for document.

→ Click on the left double arrow to go up the list of applications or click the right double arrow to go down the list of applications.

OR

→ Click on the left single arrow to go up the list of citations or click the right single arrow to go down the list of citations.

Figure 43: Indicating the single and double navigation arrows.

3.3. Bibliographic details (Biblio)

The bibliographic data is displayed in HTML format. The first time a document is opened in the Inspector, the ***Biblio*** (short for bibliographic data) button is activated by default and the bibliographic details are displayed.

Figure 44: Biblio button activated in the Inspector.

→ Click on the ***Biblio*** button to open details The "Biblio" button is highlighted in yellow.

You may have to scroll in the window to view all content.

3.4. Description and Claims

The description and claims buttons open the dossier content in HTML format.

→ To open the description part of the dossier click on the ***Description*** button.

→ To open the claims part of the dossier click on ***Claims*** button.

Figure 45 Displaying the Description and Claims buttons. The Description button is activated and highlighted in yellow.

You may have to scroll in the window to view all content.

3.5. Opening "also published as" documents from the Inspector

In the Inspector window you can directly access the dossier content of a simple patent family member via the link ***also published as*** in the header next to the patent document number.

To activate the link and open the dropdown menu,

→ click in the area ***also published as***.

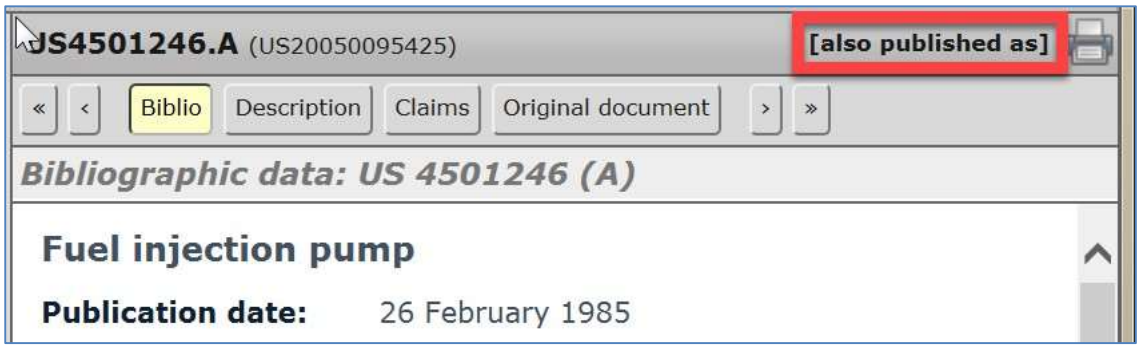


Figure 46: Showing position of the link: also published as.

In drop down menu a list of the simple patent family members appears.

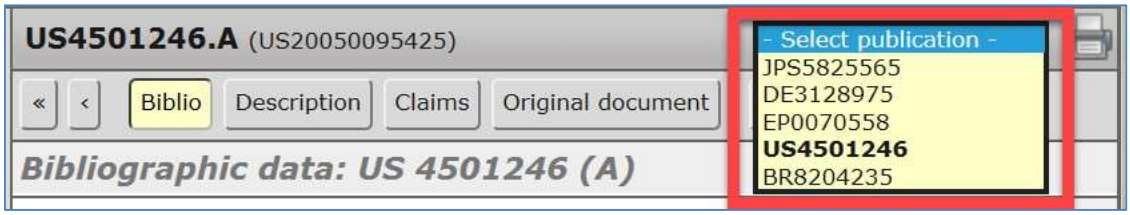


Figure 47: Example of the drop-down menu with a list of the simple patent family members

To open one of the documents,

→ click on one of the publication numbers in the dropdown menu.

The content of the selected document is displayed in the inspector window.

3.6. Viewing the Original document

The ***Original document*** is the patent document as published by the corresponding patent authority.

To open the ***Original document*** in the ***Inspector***

→ click on the ***Original document*** button in the command line

The document is opened in pdf format.

3.6.1. Navigating through the ***Original document***

There are navigation functions in the ***Inspector*** especially to view the pages or sections of the Original document. The navigation functions are in the navigation bar at the bottom of the Inspector view.

To navigate through the document page-by-page,

→ click on the single page navigation arrows to go left (backwards) or right (forwards) in the document.

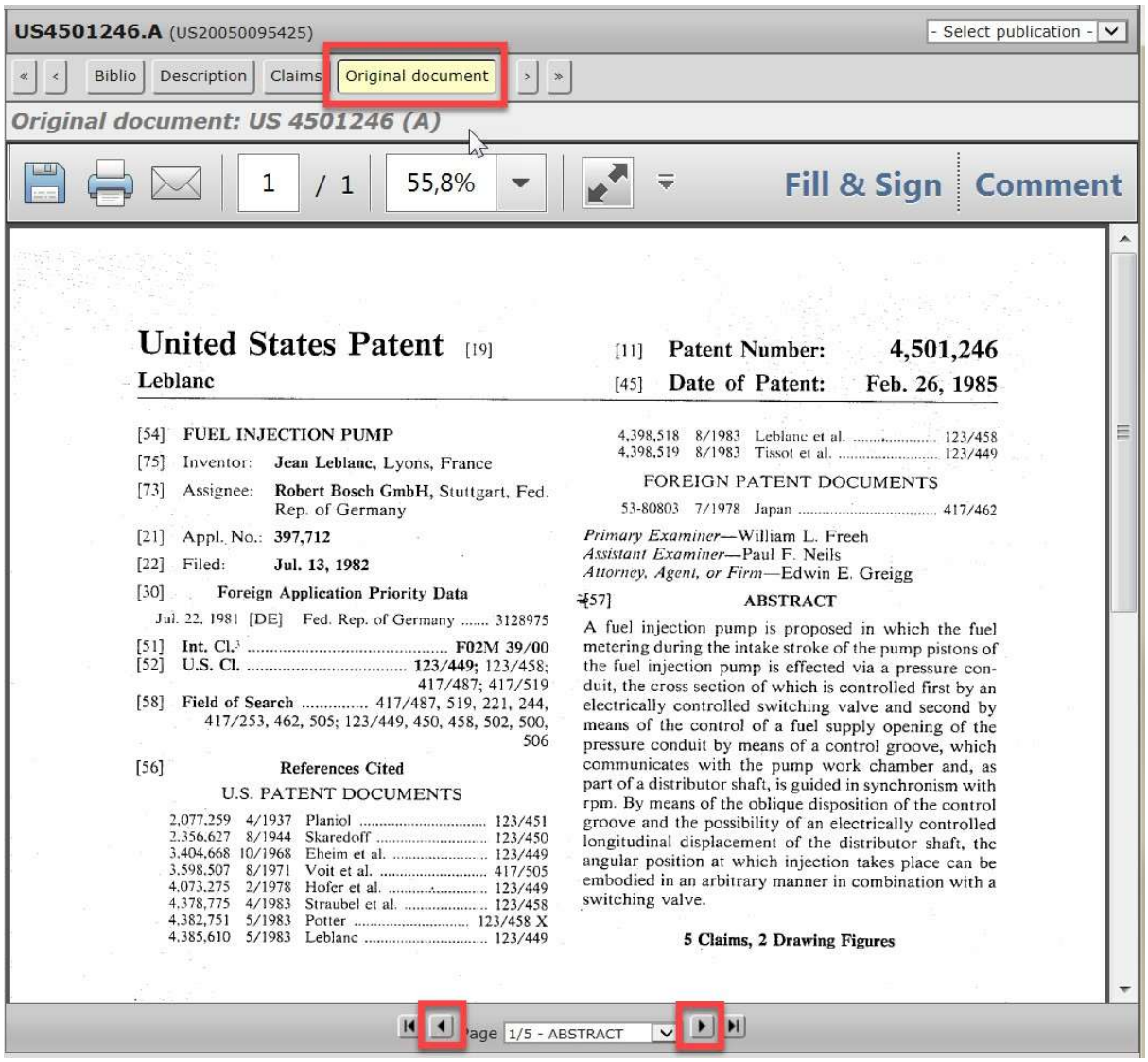


Figure 48: Indicating the page-by-page navigation arrows in the navigation bar.

To go to the beginning or the end of the document you are viewing,

→ click on the <u>left forwarding</u> (beginning of the document) arrow or to the <u>right forwarding</u> arrow (end of the document).

Figure 49: Indicating the forwarding arrows in the navigation bar.

Tip! When you hover over the arrows a tooltip indicates the functionality of them.

In the navigation bar it is also possible to choose which sections of the document you want to view, i.e. ***Abstract***, ***Description***, ***Claims***, ***Drawings, Full document (FULL DOC)*** and if available the ***Search report***, by using the drop-down menu in the navigation bar.

To open the dropdown menu,

→ click on the downward arrow and select the page or section of the document you want to view.

The selected section of the document is opened in the ***Inspector***.

Figure 50: Example of the drop-down menu in the navigation bar

ℹ Make sure that the FULL DOC section is not open, if you want to print single pages.

4. Common Error messages

The following table is an overview of the most common error messages in the CCD application.

Error message	Definition	Solution
! Unable to complete request with empty input	Message appears when no search criteria is entered in the Number field	Check and enter a search criteria
! No results found that match search criteria!	Message appears when no results are found	Enter alternative search criteria
! The following error occurred: Bad Request (400)	Message appears when there is a server availability problem	Wait a short while and/ or refresh the browser. Try to re-connect. If problem persists contact support@epo.org
! The call was stopped and the connection closed!	Message appears when a process/download takes too long. Reasons: server availability, size of data to download.	Refresh browser then re-enter your query.
! Invalid operand to “in”: Object expected.	Message appears when the wrong command has been entered.	Check that the command does not contain special characters or choose a different command.

If a problem persists, you can contact support@epo.org

4.1. Retrieval of large data sets

It can take several seconds to download a large set of data. This can be due to the retrieval of a large number of documents and data content

During the download, you will see the information window ***Searching.*** You can either wait for the result to appear or if the download takes too long you can click on ***Cancel*** in the window. If you want to re-start the download refresh your browser first. Alternatively you can try to minimise the search by using the settings, see *Chapter 2. Setting CCD interface*.

Figure 51: Example of the *Searching* information window.

4.2. Downloading

If a download is taking too long you will see the ticking image ***Fetching data from server***, you can click on ***Cancel process*** to stop the download.
Solution: Refresh your browser and try the download again. Or, if possible, you can minimise the amount of data to download by excluding simple families from the CCD Viewer.

→ To reduce the number of simple families, you have to trigger the same search again and pre-select the simple families from the ***Get next family*** button.

> i It is not possible to de-select simple families that are already displayed in the ***CCD Viewer***.

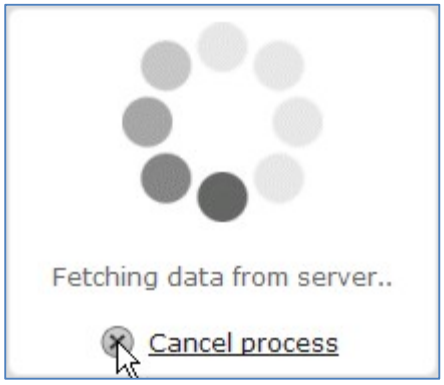


Figure 52: Example of the "ticking" image and the command Cancel process.

5. Abbreviations and terminology

The general terms related to patents used within the CCD application have been selected within the standard nomenclature used in the patent community. For further information there is a glossary in the IP5 Statistics Report available on the fiveIPoffices website.

Also published as is a synonym for the simple patent family or the equivalents

Biblio is the abbreviation of Bibliographic data (in the CCD application only)

Cat. is the abbreviation of Category. Categories indicate the relevance of citations in the search report.

CC an abbreviation of Country code

CCD is the abbreviation of Common Citation Document

CPC is the abbreviation of Cooperative Patent Classification

CQL is the abbreviation of Contextual Query Language

CSV is a format for exporting and is the abbreviation of Comma separated values

DOCDB is the EPO worldwide bibliographic database

EC is the abbreviation of European Classification

EP is the abbreviation of a European Patent

FI is the abbreviation of F-Index, a Japanese classification assigned by the JPO

FT is the abbreviation of F-term, a Japanese classification system assigned by the JPO

INPADOC is the EPO worldwide legal status database

IP5 is the name given to cooperation of the world's five largest patent authorities (SIPO, EPO, JPO, KIPO and USPTO).

IPC is the abbreviation of International Patent Classification

Original document is the patent application as published in pdf.

PCT is the abbreviation of the Patent Cooperation Treaty

NPL is the abbreviation of Non-patent literature