Patent Search For Engineers And Lawyers
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Lecture - 32
Analytical tools for Patent search and analysis (contd.)

Welcome to the search in relation to Analytical tools for the GPI tool.

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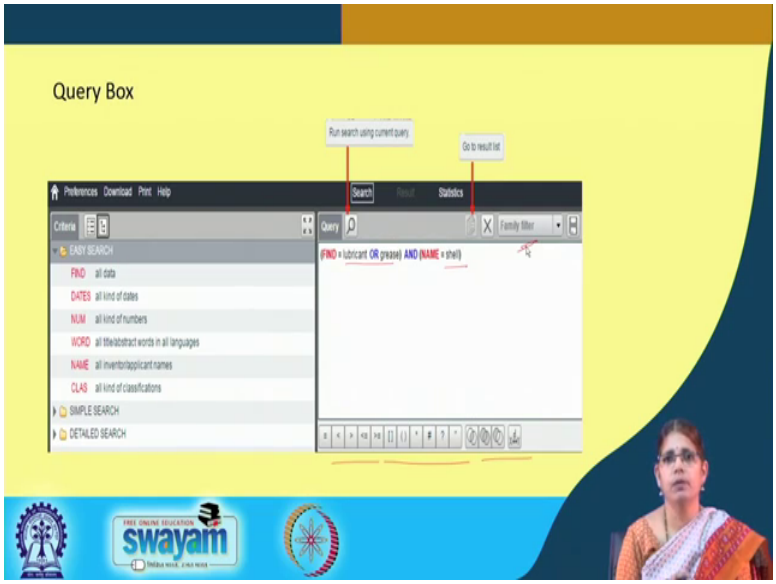

In the earlier lecture we talked about the interruptery aspects of analytical tools and how they are useful from the point of view of doing advanced analytical options. So, once you identify the area of search that you would like to undertake you will need to input that in the query box. For instance here we are looking at finding the data in relation to lubricant or grease for the applicant shell.

So, we pick from the keyword index find option provide the keywords lubricant or grease and we want this data in relation to the name shell. So, this is how we are combining it and once we put this into the query window you see the option near the query window this lens when you quick click on that you are actually running the search. So, once you click on that the search is running in the background and the results will be displayed based on the search that is combined.

There are several tools available under the purview of the GPI which help you to add these different combinations and wildcards. It also helps you to look at overlapping analysis one can use a family filter and look at the filtering option in relation to single families or multiple families. And it also provides you options for saving the data that is exporting the data out downloading it and also printing it as it is, one can also set up different preferences with respect to the query.

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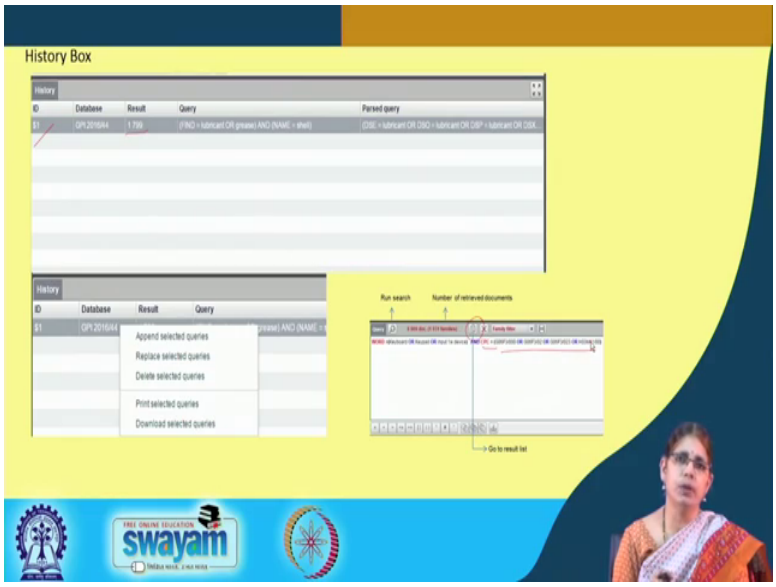

So, once we run the search on the database so, what happens the history box is populated with the very first query which is given the ID 1, here you have the query as it is lubricant or grease name of the applicant and then it throws up the results which are 1799 hits and the background databases. So, far as the queries are concerned one can actually make a log of these queries using this history window and print them to review them at a later stage so depending on the number of it is.

Remember in the earlier lectures where we discussed on the type of patent searches, we also discussed that the patent search is an iterative process, when you are embarking for the first time to conduct a search it is possible that you start from a simple search to then looking at how you want to refine the search further. So, these queries from the history box will let you know the search that you have conducted to what extent it is in depth to what extent it represents a wholesome analysis of the patents for a given area.

So, that is how the history box is useful from the point of view of looking at the different queries that are used. Once the query is run, one can click on the document link to retrieve the documents from the database. So, this is typically the option where you can go to the results list once you click on that you get the list of patents that have come out from the search.

So, in this case one can look for the find option using simple search terms one can use combination of the classification code, for instance here you can combine a word with a CPC and one can define the specific CPCs as well and then retrieve the results out of the search.

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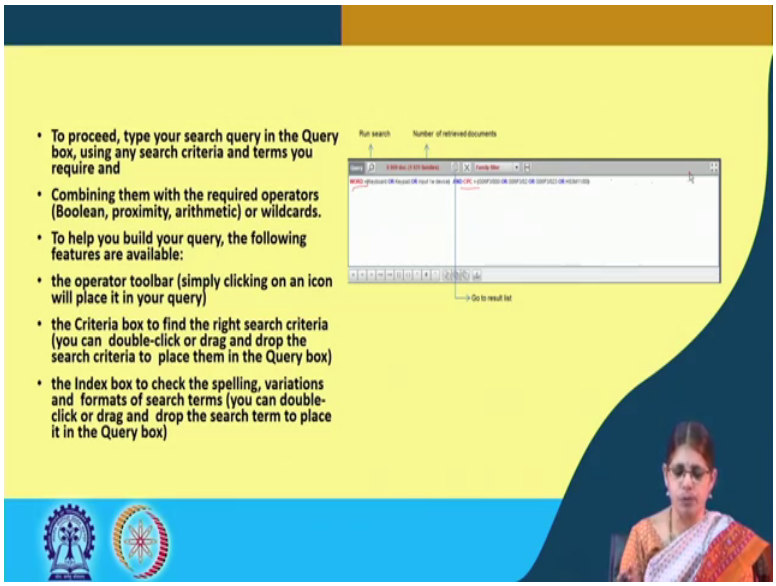

So, there are different search criteria that can be adopted and a combination of the Boolean operators that we discussed in some of the earlier lectures can be very effectively utilized here to build the query. So, this can be a very good way of generating different queries and understanding the relation between the search terms vis a vis the context of where the search term is being used.

The context of a search term in relation to a given applicant, context of a search term in relation to the technology classification in the given area and so on and so forth. So, queries can be built to indicate links between the search to other data points. So, there is an operator toolbar and clicking on that will enable you to place your query in that context of the expanded search.

One can double click and drag the index term and keep adding so, here we have clicked on we have used word as one find from the index option then CPC and so on and so forth one can keep adding and this way one can drag and drop search terms. So, this is how one can find the ease of use with some of these analytical tools. In some of the earlier times in which databases were used it was more of a query being built and the query needed to be copy pasted into the window.

Here on the fly we are able to generate the query you are able to drag and drop into the query too. So, this provides the ease of use with respect to the query itself.

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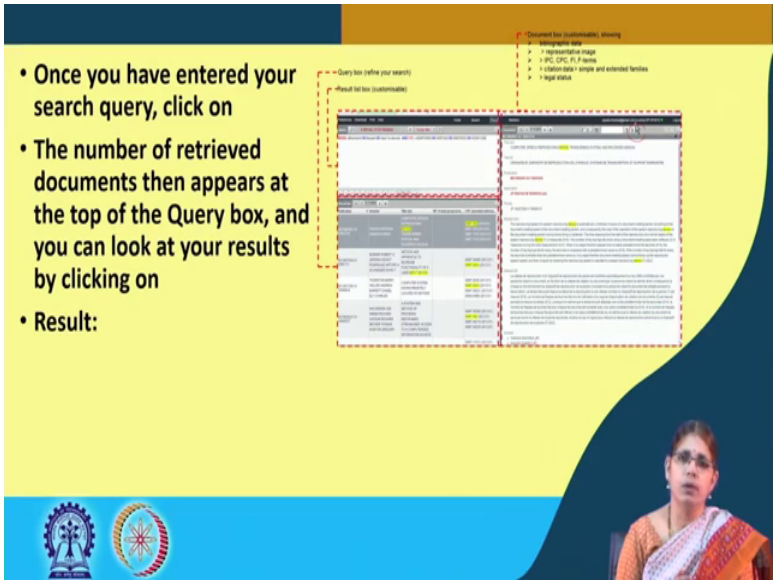

So, once you click on the results option the result list box comes up this is a very customizable window which provides you information which is highlighted in relation to the search term. So, wherever the search term or the classification code comes up you can see that it is highlighted. Now one can click on each individual result to get the further information in relation to that particular result.

For instance if I click on this very first patent I get the entire details of that particular patent from the point of view of the title of the invention, the number, the details of the abstract and the entire patent specification, the entire document is highlighted with this search term. So, this is where one can quickly go through the different pages of the document to look at the relevance of that search term in relation to the search.

One can also download these documents and store them in the computer for an analysis at a later stage. So, using the up and down arrow one can actually go through the different pages of the document to understand the relevance of the data.

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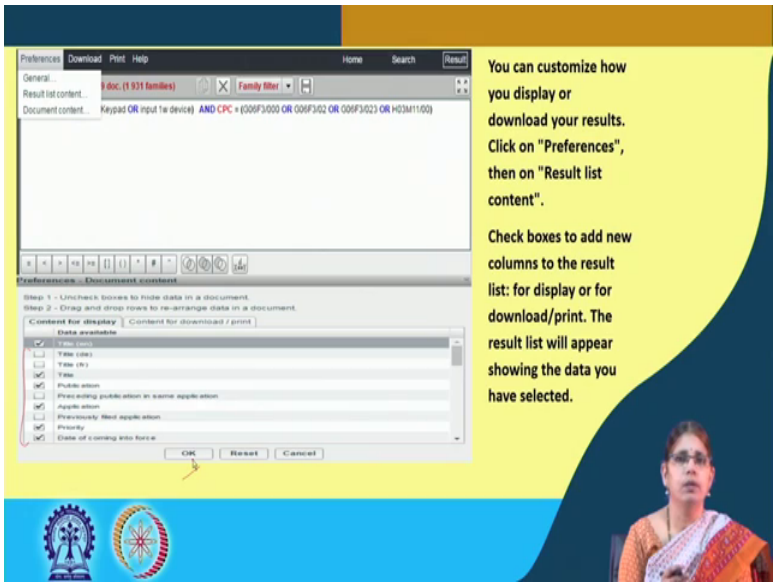

There are certain preference options available in this particular tool, which enable the specific display of content. So, here you have the result list which has come up based on the query then from that result list you can use certain preferences. Now, the preferences can be that you may want only the titles to be listed in which case the queries will be now or the results will be now organized into the titles only, you may want the listing of the applications in relation to priority that is one option.

So, therefore, depending on what is the content you want for display one can actually check the boxes as you can see here and hit the button. So, the results will be displayed according to the preferences that you have selected, this is one option that is available. One can also add new columns to the results list, one can download the content and also print it.

So, the tool will also provide you once you start doing the search with respect to the different queries, it provides you an opportunity to rearrange the data because here you are looking at dragging and dropping certain key terms and looking for patent documents. So, that is how one can look at specifically organizing data remember we mentioned that one of the important aspects of advanced analytical tool is first providing

the ability of organizing data that is customized to the user name. So, this is one option that is available.

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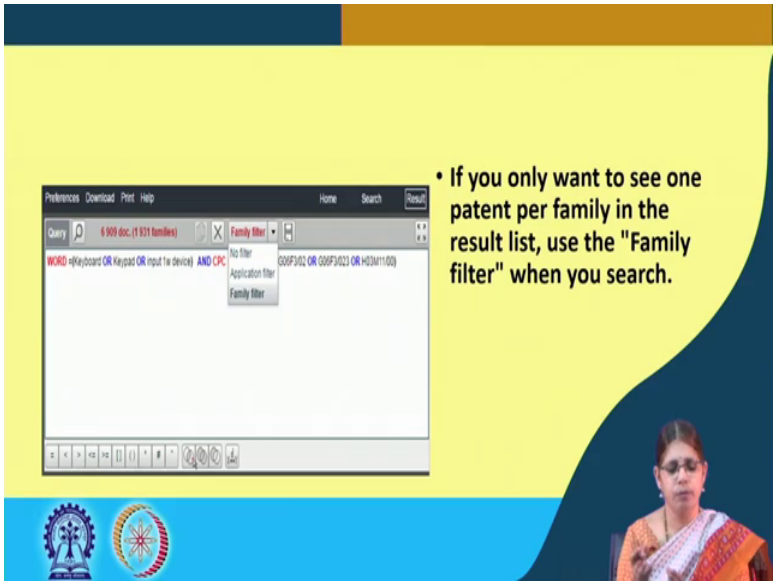

There is a filter that is available from the point of view of using family filter, wherein you can list the patents as per specific patent family and then look for the options. So, this is the basic data organization that is that happens after running the query. So, you can have preferences on one it you can have the filter of the family, filter to organize it as per the family of patents.

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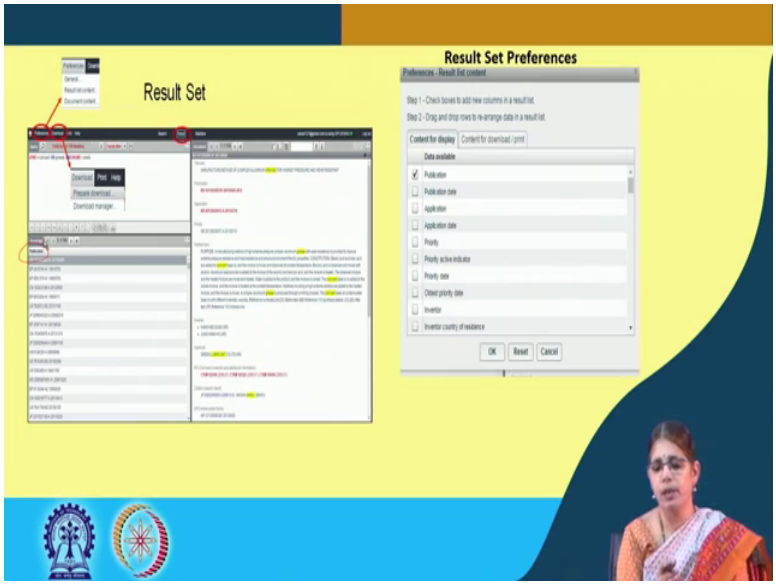

Once that is done you can have the listing of patents as per the customized options, for instance if you can see here this is these are the list of patents as per publication we listed and then you have the window beside showing the patent document of the very first patent. So, one can actually organize the data based on the setting the preferences to that particular data.

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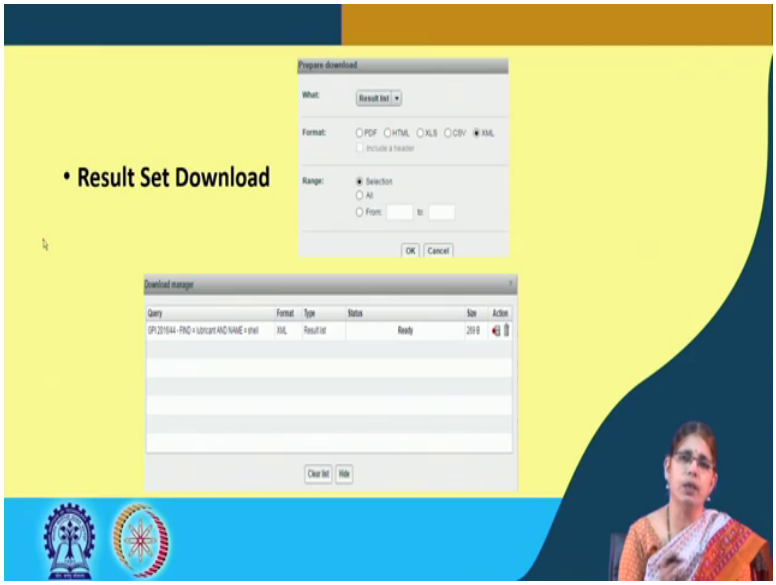

The ability to download data is one important consideration for patent searches, often it is not one single query that you will be running, there are many queries that you would be running at any given point of time. So, it is possible that the a searcher may run several queries and download information for a post search analysis.

So, there are several download options available for the result list either in the form of PDF, HTML, CSV formats, XLS is an XML formats, one can also select the data range. So, that the there is further organization of specific information of the result set and that is how one can look at the download option to be utilized well for the sorting out of the downloadable hits.

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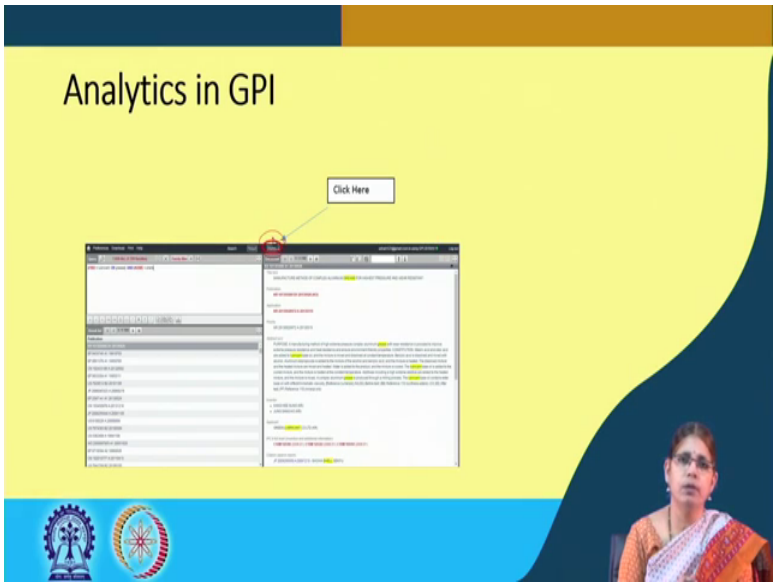

The search part is one part of the patent work, another important part of work for a patent searcher is the analytics. So, once the results are all are listed these results can be analyzed in different ways, there is an option for the analysis as you can see in this particular header this beside the result option. When one clicks on that it moves you to the analytical tool that is available under the global patent index.

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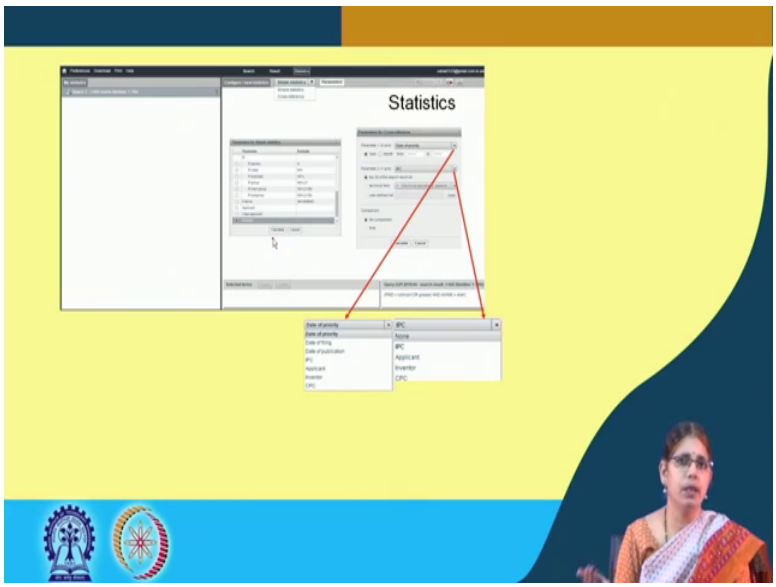

Let us understand, what are the different options available for us to analyze data. Simple analysis can be done based on various different statistics, either by priority or by IPC by

assigning by inventor. Then one can also look at utilizing 2 different fields that is priority and publication, assigning and priority, assigning and country all these different options are available. So, one you go to the analytical option one selects the specific analytical option in order to derive the value out of the result data set.

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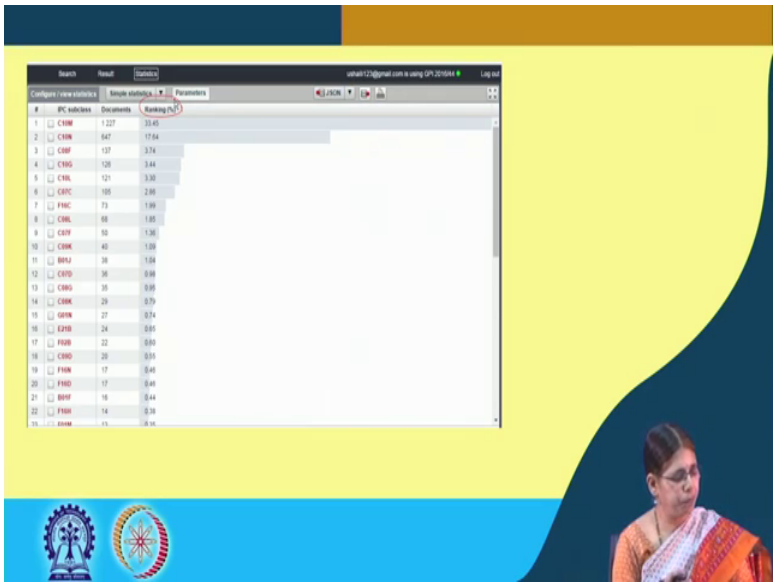

So, here we are looking at the analysis of the data based on the IPC. So, here we have the simple statistics option under which IPC is listed. So, if you are going by the IPC now it gives you for the entire set of documents listed under the result set what is the representation of the patent data in relation to a given IPC and here you can see the ranking based on the percentage of patent documents available under a given IPC sub class.

For instance here c 10 m is listed as the top IPC with 1227 documents with a ranking of 33.45, which indicates a relative strength of that particular area in terms of patent documentation. This is one way in which one can analyze simple statistics in relation to patent data.

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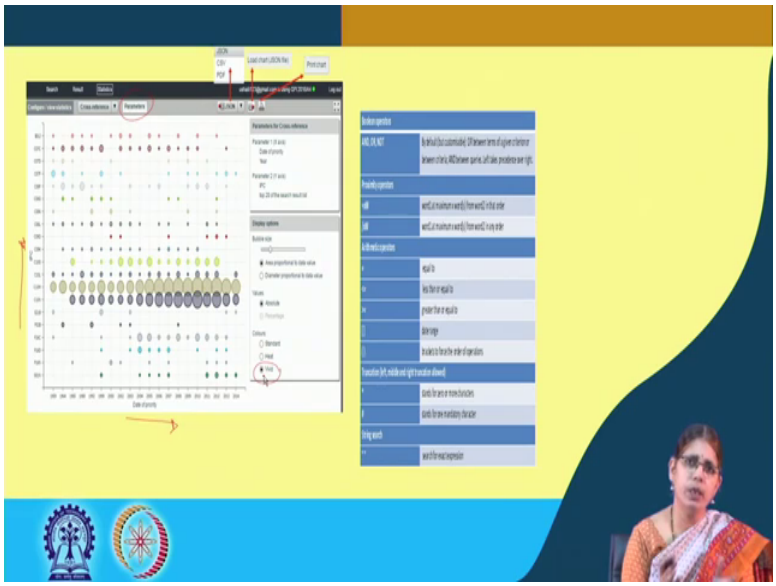

One can go to the extended aspects of analysis by building the different operators, here you are looking at the if you go to the parameters link. It provides you the several options of now looking at correlative information, the results may be organized into priority date versus the IPC. So, here you have on the x axis the date of priority and on the y axis the IPC and one can go for either the top IPCs top 10 only so, one can set that and look at the data spread.

Now here is where the visualization part comes into picture. So, it is not only that we have organization of information where we are looking at correlative data priority versus publication we also want a better visualization of the data. So, if you click on the vivid, it gives you a colour representation a colour coded representation of the data in relation to the data of priority vis a vis IPC.

So, here one can actually at a glance identify, where are the areas represented on a larger scale in relation to certain IPCs, which one would not be able to decipher so well in a normal standard map. So, this is where one can realize the value of visualization tools in relation to data representation. So, this is one way of representing the data. Again these maps can be individually downloaded into separate PDF formats and the other extended formats like CSV, XML.

How does that help, it helps you from the point of view of preparing a patent report whether it is a let us say a simple patent search and analysis report for a given area,

patent landscape report and so on and so forth and this is how one can find the customization of the data. If you want a better clarity in relation to this spread of data, one can also change the proportion of the bubble in this case; that means, the area proportional to the size of the bubble can be altered.

So, that for a given set of classification codes and the priority years one can see even more clearly the proximity of representation of technologies. So, that is how one can make changes from the basic map to the better visualization of the map.

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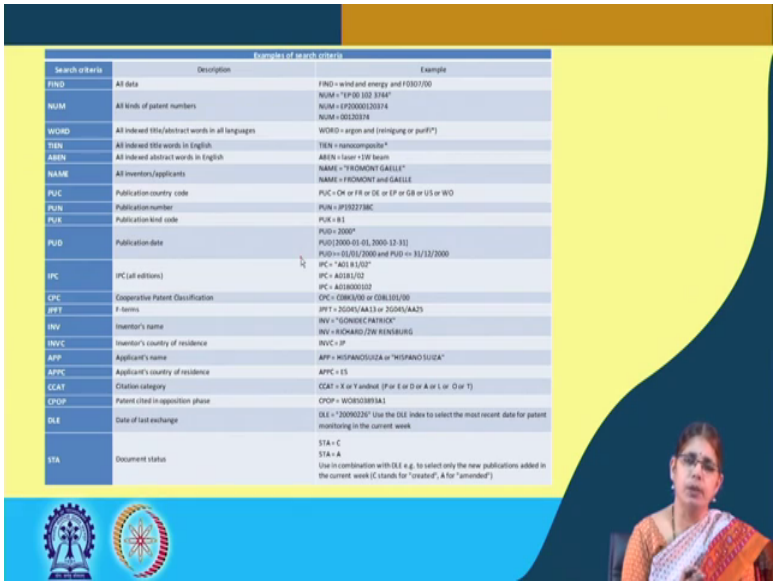

There are several search criteria that can be utilized and as we had discussed in some of the very early lectures on advanced search options in relation to databases. There are these several search criteria as you can see here on the screen which can be utilized for combining in relation to this search.