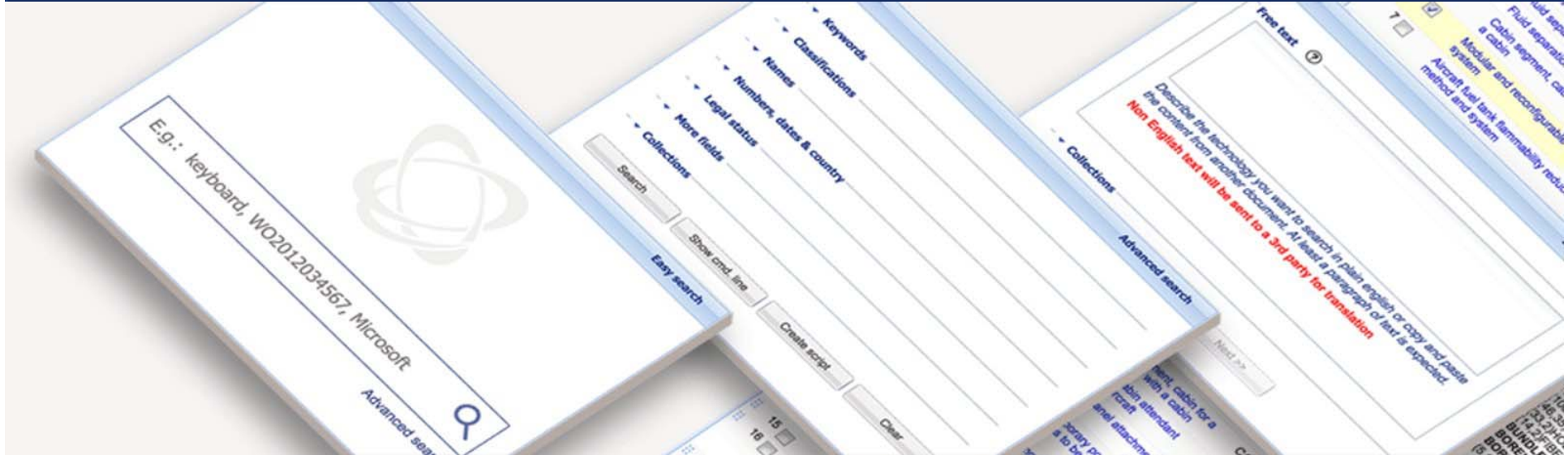


User seminar – 28 February – Moscow

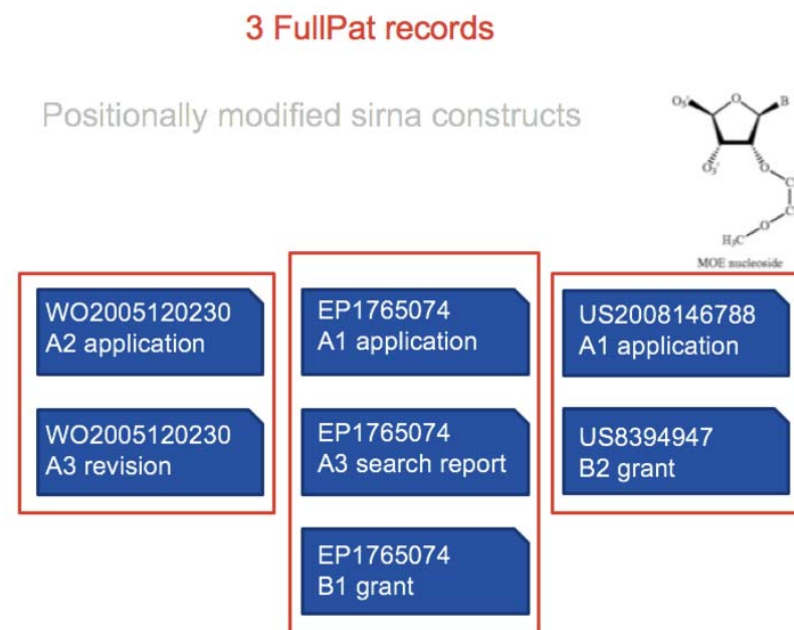
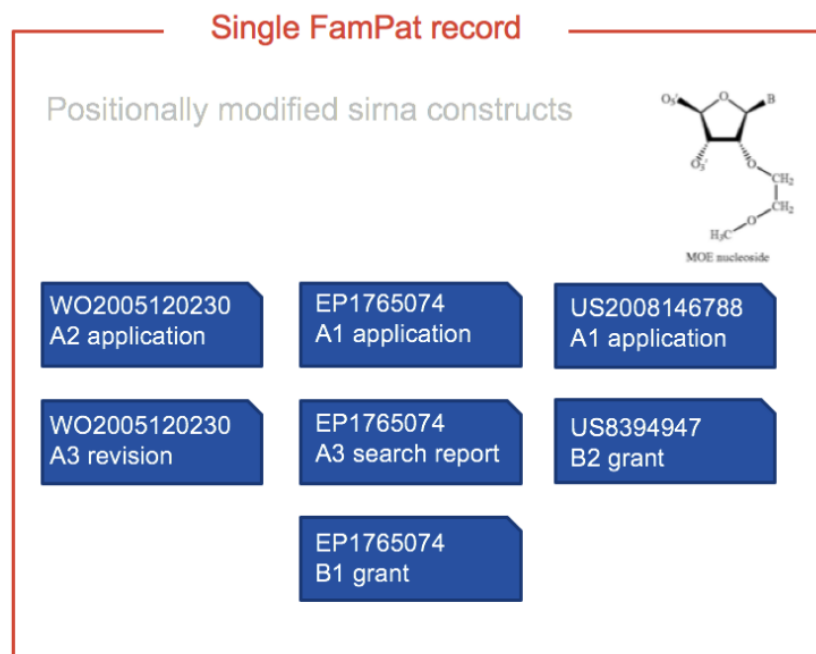
---

# Orbit intelligence training

# Search session



# Patent Families vs. Patents

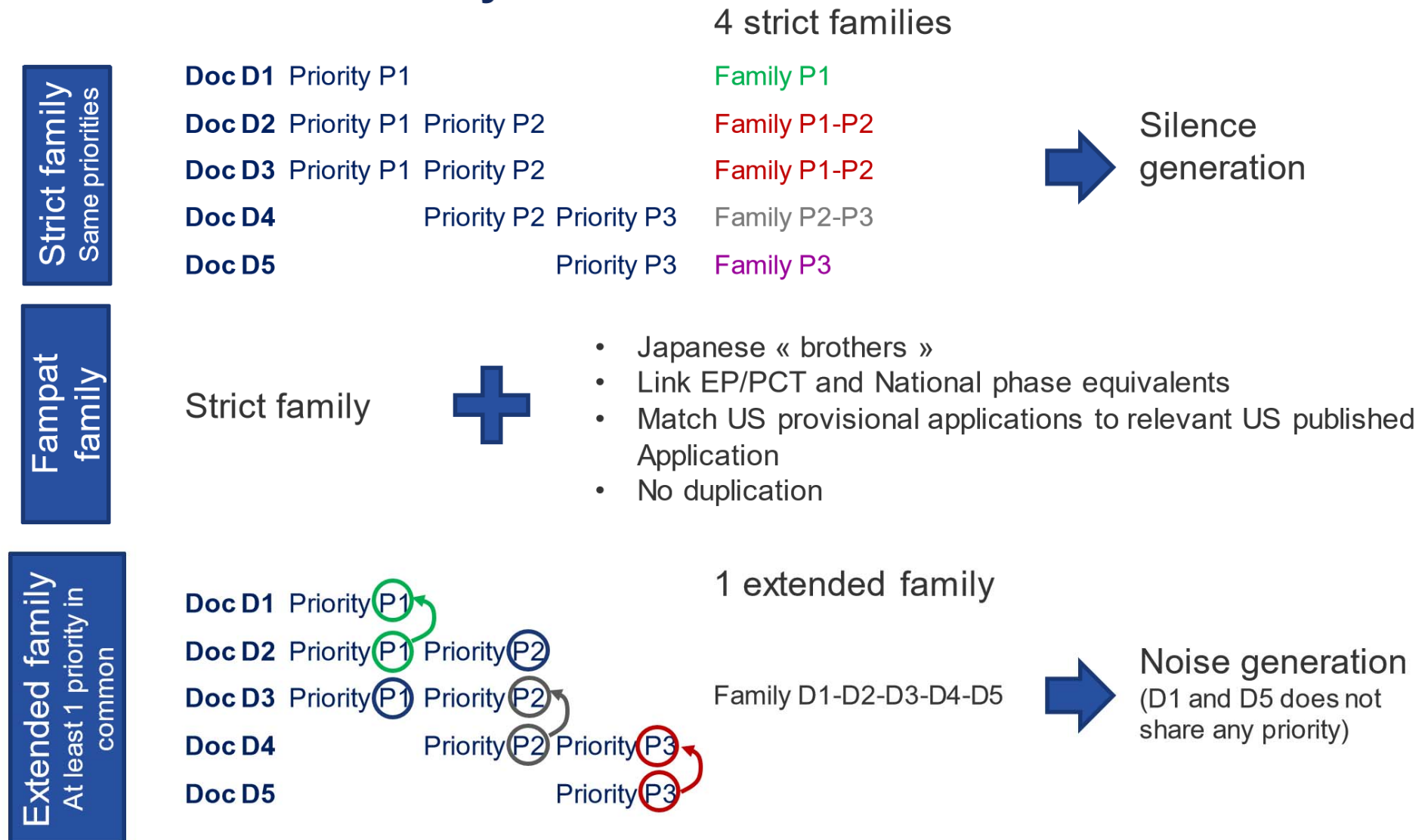


**FamPat:** Patents protecting the same invention in different countries are grouped in a **family**

**FullPat:** Patents protecting the same invention in different countries are **individual records**



# Fampat family: the best compromise between strict family and extended family



# FTO search

## Preferred database: **FullPat**

- Better to focus on individual countries
- Native language when possible

## Limitation:

- **Legal status:** Only alive patents can block you
  - Advice: choose “**Alive**” (but be careful with lapsed publications)
- **Validity date of the patents:** if the patent is lapsed/dead/expired, you are typically free to operate
  - Advice: choose “**Priority date**” and search “**21 years ago to present**”
- **Specific geographic areas:** where you are trying to determine FTO
  - Advice: consider searching by country level for clearance in a particular country
- **Field:** claims characterize and limit the scope
  - Advice: choose “**Claims**”





Field Limitation:  
Claims

Patent validity limitation:  
Preceding 21 years

Legal State and  
geographic limitation:  
Alive and a specific  
country

Search by publication:  
FullPat database

Advanced search

Keywords

Claims

☐ Title

☐ Abstract

☒ Claims

☐ Description

☐ Object of invention

☐ Advantages over prior art drawbacks

☐ Independent Claims

☐ Concepts

☐ Full Text

Pub. number:

Date: Priority  1997-12-31

Patents published in (patent authorities):

Legal status

Status: Alive  in selected countries: Any country E.g.: US, EP

Legal events: None

Expiration date: No Restriction

More fields

Collections

Search in: ☐ world patents (full text & biblio) grouped by invention-based families (FamPat)

☒ world patents (full text & biblio) displayed by individual country (FullPat)

☐ 23 authorities (full text only) displayed by individual country (Full Text)

Limit to recent publication:



# Patentability search

Preferred database: **FamPat**

→ faster review: no duplicates

Limitation:

- No **date limit**: any prior art can block you
  - Advice: choose “**Alive or Dead**” and search “**All publications**”
- No **geographic limit**: any prior art can block you
- No **Field limitation**: any prior art disclosed in the description is sufficient to destroy novelty, does not need to be in claims to block you
  - Advice: use “**Full Text**”



No field limitation:  
Full Text

No geographic  
limit

No date limit:  
All publications, Alive  
or Dead

Search by  
invention:  
FamPat database



Advanced search

☒ Full Text ☐ Title ☐ Abstract ☐ Claims ☐ Description ☐ Object of invention ☐ Advantages over prior art drawbacks ☐ Independent Claims ☐ Concepts ☒ Full Text

E.g.: Telecom+ OR phone

Representative: E.g.: Baker Botts

Numbers, dates & country

Publ. number: E.g.: EP0980063

Date: No Restriction

Patents published in (patent authorities): E.g.: US, EP

Legal status

Status: No restriction (alive or dead)

Legal events: None

Expiration date: No Restriction

More fields

FamPat family number

Collections

Search in: ☒ world patents (full text & biblio) grouped by invention-based families (FamPat) ☐ world patents (full text & biblio) displayed by individual country (FullPat) ☐ 23 authorities (full text only) displayed by individual country (Full Text)

Limit to recent publication: Search all publications



# Operators



<b>OR</b>	Finds records containing at least one of the words (in the case of a FamPat record, at least one of the members will have one or more of your terms)	sulfur or sulphur
<b>AND</b>	All words	plutonium AND isotope
<b>NOT</b>	The first term without the second term	suv NOT vesicle
<b>F</b>	The terms in the same field	sodium f chlorine
<b>S</b>	The terms in the same sentence	sodium s chlorine
<b>P</b>	The terms in the same paragraph	sodium p chlorine
<b>D</b>	The terms adjacent in any order	redundancy d check
<b>nD</b>	The terms adjacent, regardless of the order, separated by a maximum of n words (n value between 1 and 99)	conduct 2d electric 2d adhesive
<b>=nD</b>	The terms adjacent, regardless of the order, separated by exactly n words (n value between 1 and 99)	electric+ =2d conduct+ =2d adhesive
<b>W</b>	The terms adjacent in the order specified; treatment applied by default for two terms entered without operator	smart w card? smart card?
<b>nW</b>	The terms adjacent in the order specified and separated by a maximum of n words (n = value between 1 and 99)	friction 9w pad?
<b>=nW</b>	The terms adjacent in the order specified and separated by exactly n words (n = value between 1 and 99)	friction =9w pad?
<b>–</b>	The underscore allows for simultaneous searching of terms that may be written as one or two words. It will also retrieve results where there is a hyphen between terms. It can also be used in chemical formulas	air_bag +ethylen+_+carbonate+
<b>Parentheses</b>	Parentheses (nesting) are necessary when combining different operators	((wireless w application w protocol) or wap) not (dna or transgenic) (hair 2d (dye or dyeing)) and oxidate +

# Truncations and Numeric Operators

=	Equal (default)	6
>	Greater than	>3
<	Less than	<5
>=	Greater than or equal to	>=2
<=	Less than or equal to	<=4
:	Date ranges	2000-01-01:2000-03-31

+/*	Truncation replacing any number of characters	bicycle-shed+ *inflammatory
?	Truncation replacing zero or one character Up to nine ?s may be used in a term	bicycle? alumin?um
#	Truncation replaces exactly one character Up to nine #s may be used in a term	polymeri#ation



# Legal status

## Search

### - Status :

Status:  in   
Legal events:  selected  
Expiration date:  countries:

### - Legal Events :

Status:  in   
Legal events:  selected  
Expiration date:  countries:

### - Expiration Date:

Expiration date:  in   
 selected  
 countries:  
Expiration date:  From



# Legal status

## Display



12

### - Legal Status tab:

Preview	Image	Claims	Description	Concepts	Citations	Legal status
Unfold All  Fold All						
Date	Desc	Details				
 <b>LEGAL DETAILS FOR CN101881255</b> Actual or expected expiration date=2030-05-07; Legal state=ALIVE; Status=GRANTED						
2010-05-07	CN/APP Positive Examination events	Application details Application country=CN CN201010209817 Application date=2010-05-07 Standardized application number=2010CN-0209817				
2010-11-10	CN/A Positive Examination events	Published application Publication country=CN Publication number=CN101881255 Publication stage Code=A Publication date=2010-11-10 Standardized publication number=CN101881255				
2010-11-10	CN/C06 Positive Event indicating In Force	Publication				
2012-04-25	CN/C10 Examination events	Request of examination as to substance				
2015-07-22	CN/B Positive Event indicating In Force	Granted patent for invention Publication country=CN Publication number=CN101881255 Publication stage Code=B Publication date=2015-07-22 Standardized publication number=CN101881255B				
2015-07-22	CN/C14 Positive Event indicating In Force	Granted Grant of patent or utility model				
 <b>LEGAL DETAILS FOR US2016169200</b> Actual or expected expiration date=2030-04-30; Legal state=ALIVE; Status=PENDING						

Link to the IP register



### - Timeline:


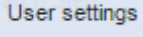


# Collections

## FamPat, FullPat, Fulltext

Available collections are **FamPat**, **FullPat** and **Fulltext**

Check your user settings to ensure that you can search all available collections

Go to account menu:  then  and


: choose the option YES

Display the list of databases to search on the search page:

YES	?
NO	
YES	

then Confirm.

### ▲ Collections

- Search in: ☒  world patents (full text & biblio) grouped by invention-based families (FamPat)
- ☐ world patents (full text & biblio) displayed by individual country (FullPat)
- ☐ 23 authorities (full text only) displayed by individual country (Full Text)

3 collections are now available in the advanced search.



Exercise 1  
Select collection  
and search

How many patents contain the phrase Artificial Intelligence in the Title or abstract in Fullpat?





Exercise 2  
Combine  
keywords,  
country and legal  
status

How many alive patent families  
contain the phrase Artificial  
Intelligence in the Title or  
abstract and have been  
published in Russia?



Exercise 3  
Combination of  
search steps

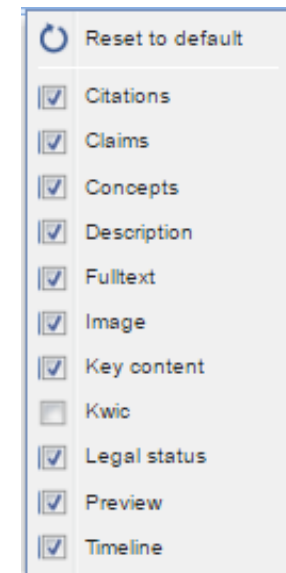
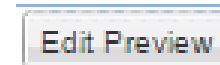
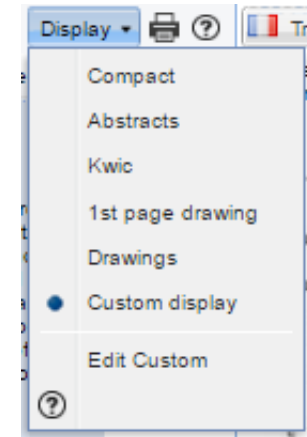
How many patent families  
contain the word LiFePO<sub>4</sub> in  
the object of the invention but  
NOT in the abstract of patent  
families?



# Results Display

## Customization

- Customize hitlist display
- Display the Preview tab to customize
- Selection the tabs to display
- Automatic sorting of results by relevance
- Representative member  
(from user settings)



Preferred language for text of records:

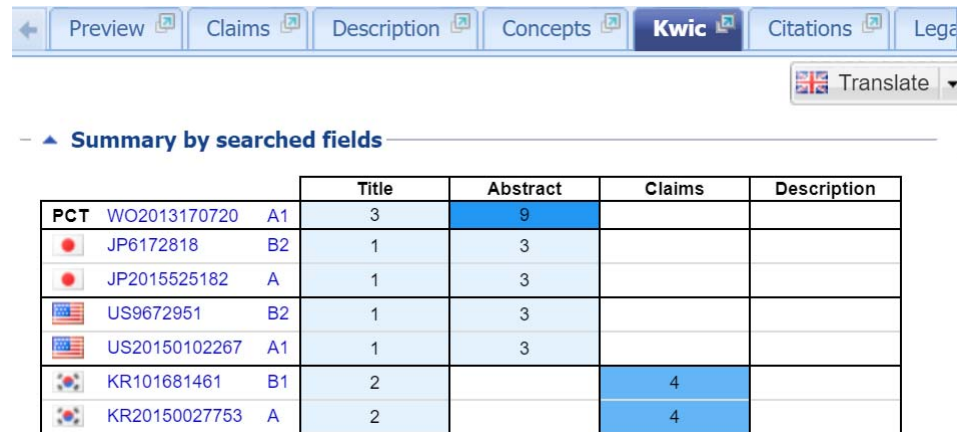
Preferred Patent authority from which fields should be displayed:









# Results Display

## KWIC, highlight

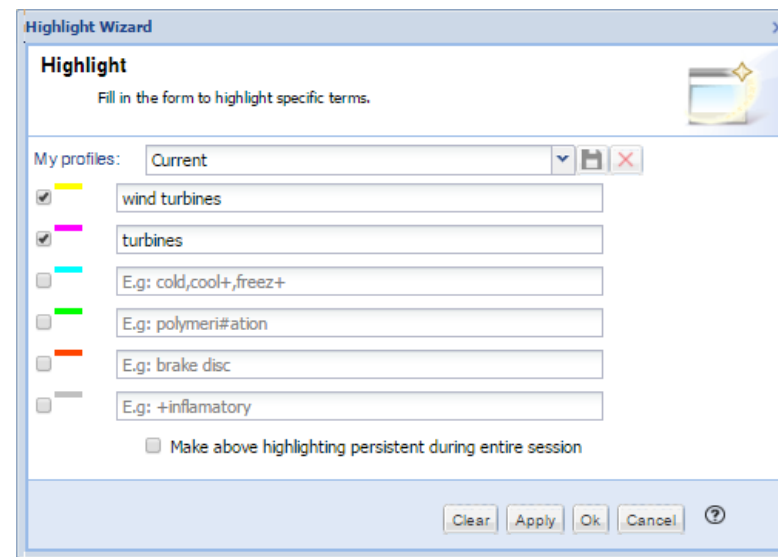
- **Tab KWIC (Key Word In Context)** : to display the distribution in the family of terms searched on the basis of the search fields 









The screenshot shows the 'KWIC' tab selected in a software interface. Below the tab bar, there is a 'Translate' button with a flag icon. A section titled 'Summary by searched fields' contains a table with the following data:

			Title	Abstract	Claims	Description
PCT	WO2013170720	A1	3	9		
	JP6172818	B2	1	3		
	JP2015525182	A	1	3		
	US9672951	B2	1	3		
	US20150102267	A1	1	3		
	KR101681461	B1	2		4	
	KR20150027753	A	2		4	

- **Highlighting** :navigate through the tabs, possibility of adding highlighted words, ability to save the highlight.



The screenshot shows a 'Highlight Wizard' dialog box. It has a title bar 'Highlight Wizard' and a close button. The main area is titled 'Highlight' and contains the instruction 'Fill in the form to highlight specific terms.' Below this, there is a 'My profiles:' section with a dropdown menu set to 'Current' and buttons for saving and deleting profiles. A list of terms to highlight is shown, each with a colored checkbox and a text input field:

- ☒  wind turbines
- ☒  turbines
- ☐  E.g: cold,cool+,freez+
- ☐  E.g: polymeri#ation
- ☐  E.g: brake disc
- ☐  E.g: +inflammatory

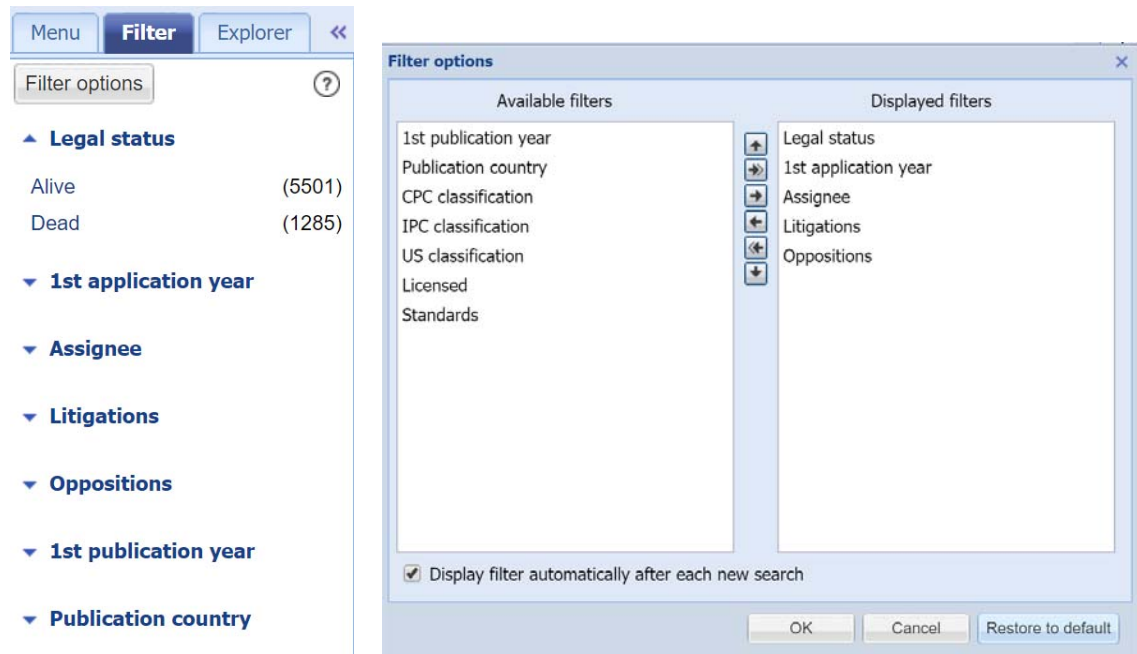
At the bottom, there is a checkbox labeled 'Make above highlighting persistent during entire session' and buttons for 'Clear', 'Apply', 'Ok', 'Cancel', and a help icon.



# Results Display

## Filter and view document

- **Filter:** three options by default, possibility to add others, allows to filter the result of a search



- **View document:** allows clicking on the title to view a particular family and focus on claims of a member, for example.
- [Back to list](#) allows to view again the result list



Exercise 4  
Identify litigated  
patents

Search for Driverless vehicles in Titles, Abstracts, objects and claims (Fampat).

How many patent families are litigated in the Driverless vehicles domain?

Identify two litigated patent members in the patent family owned by Waymo





## Litigations & oppositions

Litigations

Oppositions



US

Authority content

Premium content

US5910382

Not available

[2104](#) - [2715](#) - [33087](#) - [67138](#) - [6901](#) - [69687](#) - [90370](#)  
[461045](#) - [467440](#) - [471802](#) - [510916](#)

US6514640

Not available

[2104](#) - [2715](#) - [67138](#) - [6901](#)  
[461045](#) - [510916](#)

US7955733

Not available

[72003](#) - [72009](#) - [76416](#)  
[247328](#) - [273521](#) - [278142](#)

US7960058

Not available

[72003](#) - [76416](#)

US7964308

Not available

[72003](#) - [76416](#)

US7972728

Not available

[72003](#) - [76416](#)

US7998617

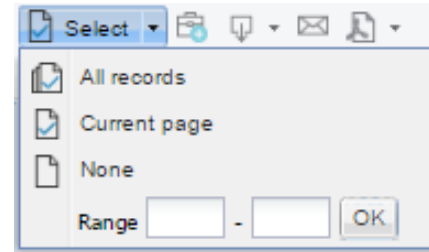
Not available


[72003](#) - [76416](#)



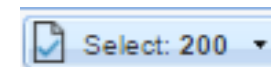
# Selection

## Selection button:



- Click all records button to select the entire families
- Check box at the top of the results list selects the current page 

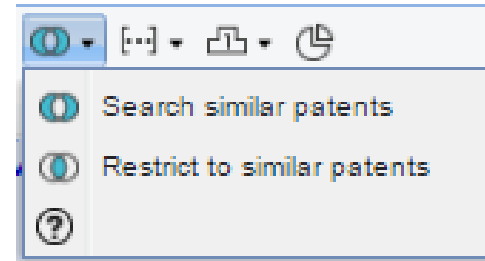
- Number of selected families indicated



# Research Tools

## Similarity

**Selection** of one or several families (up to 10 000)



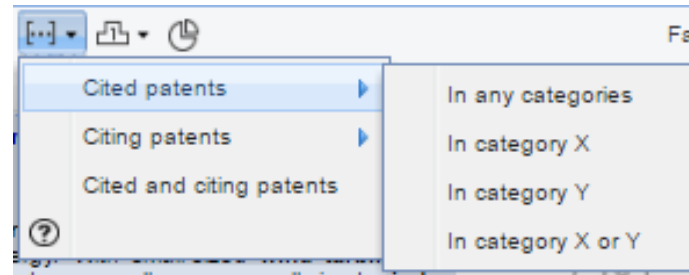
- **1<sup>st</sup> option** : to find similar patents in all database
- **2<sup>nd</sup> option** : to find similar patents only in the results of the selection list
- List organized by relevance: **relevance score** display
- Using the KWIC tab to determine similar values of each families
- Used to define new keywords, new classes...
- Cross with other questions to refine
- Similarity calculated on: similar concepts, similar classifications and citations.




# Research Tools

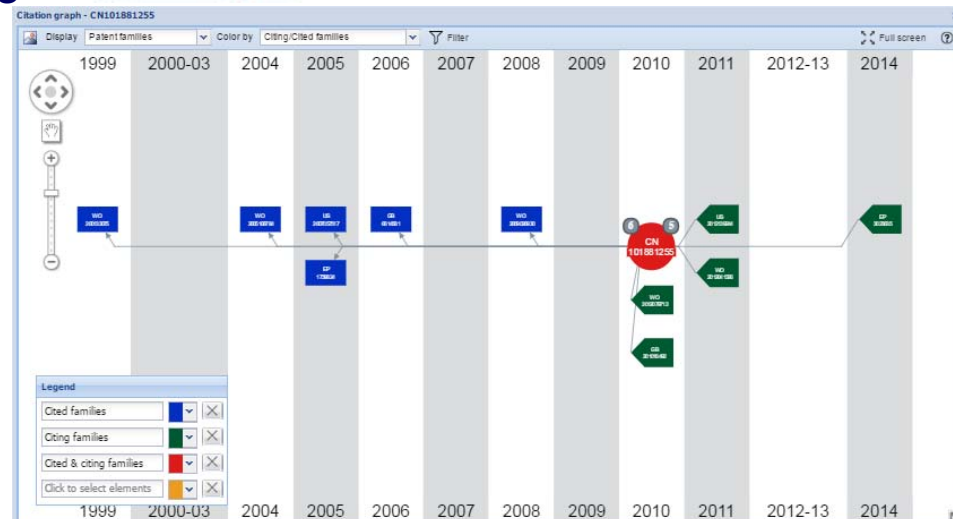
## Citations

- **Selection** of one or several families (up to 10 000)



Allows to find the cited families (prior art) /cited (applications) on the basis of the categories of relevance (examiners and applicants)

**Citations Tab:** display of citations (citing, cited) examiners and applicants, literature cited for a family. Possibility to display this information graphically by clicking on  Citation graph



# Save

## Export Menu

### XLSX

**Export options**

**Data**

Profiles: Last unsaved profile [Save] [Close]

**Available fields**

*Numbers*

- Priority
- Application
- Publication
- Family

*Dates*

- Priority
- Application
- Publication
- Grant
- Expected expiry

*Biblio*

- Title

Filter on category / field name / field code

**Selected fields**

Images

- Publication numbers (all, kind)
- Publication dates (all)
- Original document
- Priority dates (1st)
- Titles (orbit display)
- Abstracts (orbit display)
- Inventors (current)
- Assignees (latest standardized)
- Grant dates (all)

Filter...

Advanced options

Download Email



Save

New Export  
Menu

XLSX



**Export options**

Profiles: Last unsaved profile

**Available fields**

*Numbers*

- Priority
- Application
- Publication
- Family

*Dates*

- Priority
- Application
- Publication
- Grant
- Expected expiry

*Biblio*

- Title

Filter on category / field name / field code

Advanced options

**Advanced options**

1 line for each

- ☒ Family
- ☐ Patent
- ☐ Publication

Publication number content

- ☒ All
- ☐ As displayed in hitlist

Column headers

- ☒ Long
- ☐ Short

Others

- ☒ Apply highlighting
- ☒ Compress download file

OK Cancel

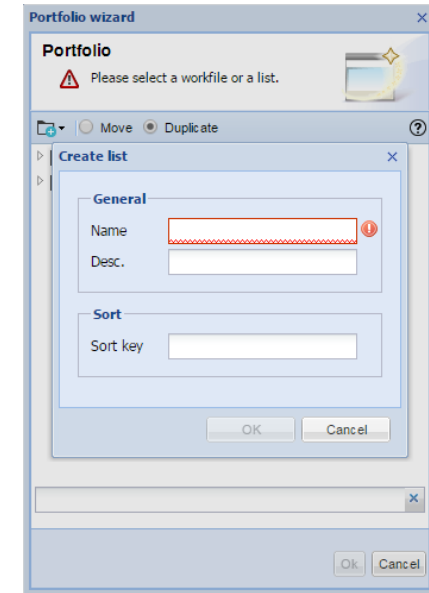
Download Email



# Save

## Lists

- **Related to the search module**
- Allows to save the results of one or more searches.



- No limit on number of lists
- **Automatic update** of families when the list is opened
- **Ability to cross the contents** of a list with another question



Lists should not be confused with workfiles  
Directories are the only ones that can be shared and evaluated.  
Workfiles are linked to the folders module



# Save

## Save search

- **From the search history or the results list:** ability to save search script

 Save

or

Save entire strategy

- Script executed **manually**
- No limit on saved searches
- Stored in  My searches  
My saved searches



## Exercise 5

### Citation tree

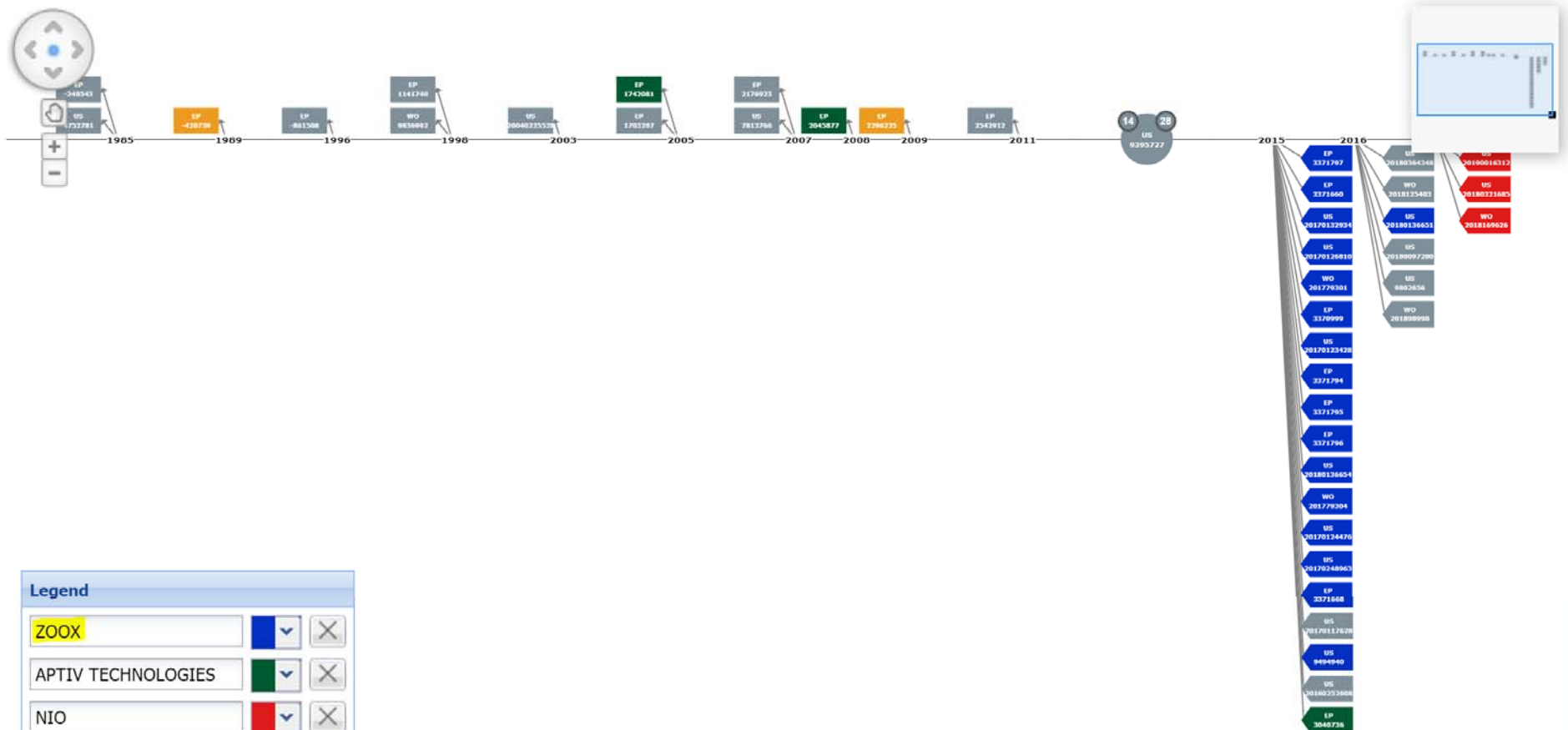
Display the citation tree of the patent US9395727

Who is the company citing this document the most?



# Citation graph - US9395727

Display Patent families Color by Top assignees Filter Full screen ?



## Exercise 6

Who is the parent company of Google?

What is the company revenue of Alphabet?



# GOOGLE

Parent company [ALPHABET](#) associated revenue \$ 147 845 M

**21885** patented inventions

**48** Litigated **208** Opposed

**83** Licensed **39** SEPs

## Key inventions



Pending Granted Dead

## Legal status

Audio-visual technology **Computer technology**  
Control Digital communication It methods for management  
Measurement Optics Telecommunications

## Top technical domains



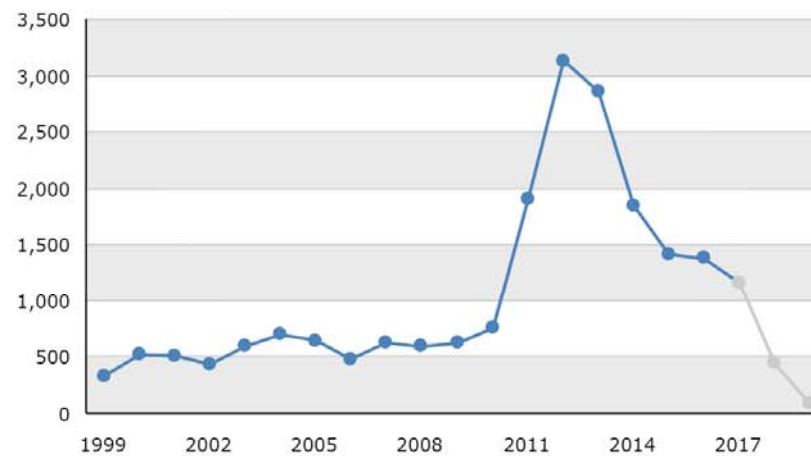
+ **3788**

Inventions containing EP applications

+ **1619**

Inventions containing WO applications

## Market coverage



## Technology investment trend over last 20 years





# Analytics session



# List of features linked to the analysis level

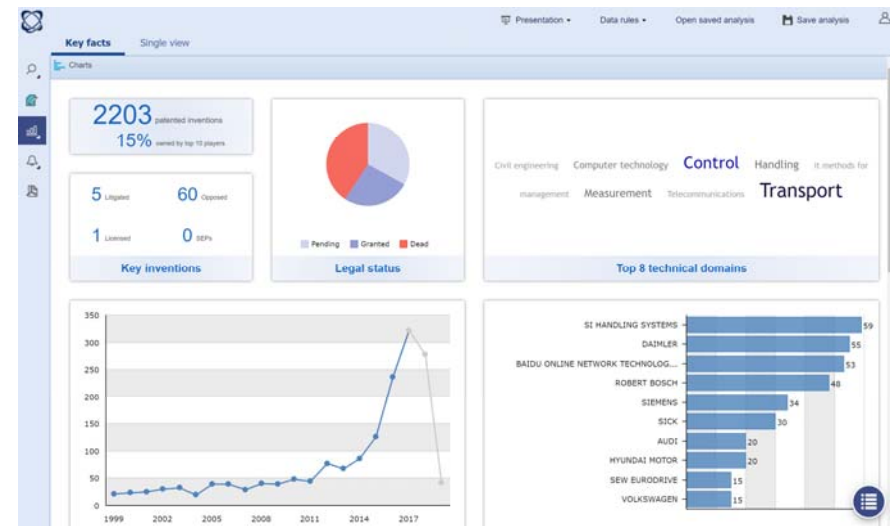
<https://www.questel.com/orbit-intelligence-levels/>

Analysis level	Essential	Advanced	Premium
Max families in live analysis	100 000	300 000	2 000 000
Max families in saved analysis	15 000	20 000	30 000
Metrics in analysis	No	No	Yes
Benchmark's dedicated graphs: plot, tabular, radar	No	No	Yes
Evaluation modules –answer business questions	No	No	Yes
Landscape map	No	No	Yes
Custom axis	No	No	Yes
Export all data	No	No	Yes
Filter	No	Yes	Yes
Browse selection	No	Yes	Yes
Drill down	No	Yes	Yes
Multiple selection	No	Yes	Yes
Color by	No	Yes	Yes
Graph templates	No	Yes	Yes
Concepts analysis	No	Yes	Yes
Cloud chart	No	Yes	Yes
Data rules	Yes	Yes	Yes
Simple selection	Yes	Yes	Yes
One click report	Yes	Yes	Yes

# Analyze patent family instantaneously

2203 results for (driverless)/TI/AB/CLMS/OBJ - Collection: FAMPAT

#	Title	Publication number	1st app. date	Applicant/Assignee
1	Method for checking a collision between two <b>driverless</b> transport vehicles, <b>driverless</b> transport vehicle, and system having a plurality of <b>driverless</b> transport vehicles	EP3475936	2016-06-22	KUKA DEUTS...
2	Method for automatically driving a <b>driverless</b> transport vehicle on a track on a ceiling of a building, and <b>driverless</b> transport vehicle	WO2019/048302	2017-09-06	KUKA DEUTS...
3	Procedure for the feed of loads of a feed corridor on itself relative to a moving assembly belt	DE19906189	1999-02-15	INDUMAT
4	Driver-less rail vehicle and transport system	WO2019/076722	2017-10-16	MONTRATEC
5	A <b>driverless</b> data transfer device	EP2761858	2012-09-23	R F KEEPER
6	<b>Driverless</b> transport vehicle and method for operating a <b>driverless</b> transport vehicle	DE102018207202	2018-05-09	AUDI
7	<b>Driverless</b> transport vehicle and method for operating a <b>driverless</b> transport vehicle	EP3175310	2014-07-29	KUKA DEUTS...
8	<b>Driverless</b> transport vehicle and method for parameterizing a <b>driverless</b> transport vehicle and	EP3439265	2017-08-04	ROE...



## Essential

All users have access to **same quality search and collaboration options**. Orbit Intelligence Essential will help **analyze basics trends**.

100,000



## Advanced

Orbit Intelligence Advanced provides **more customization capabilities** and tools to help **better understand the content** of the analyzed datasets.

300,000



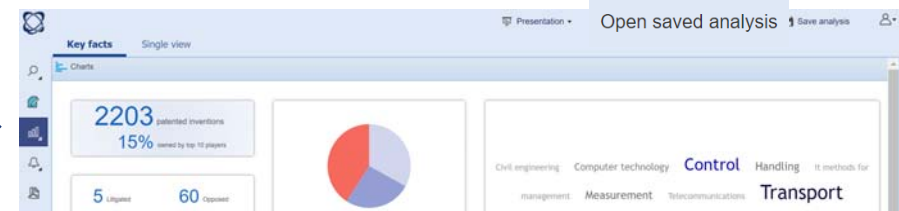
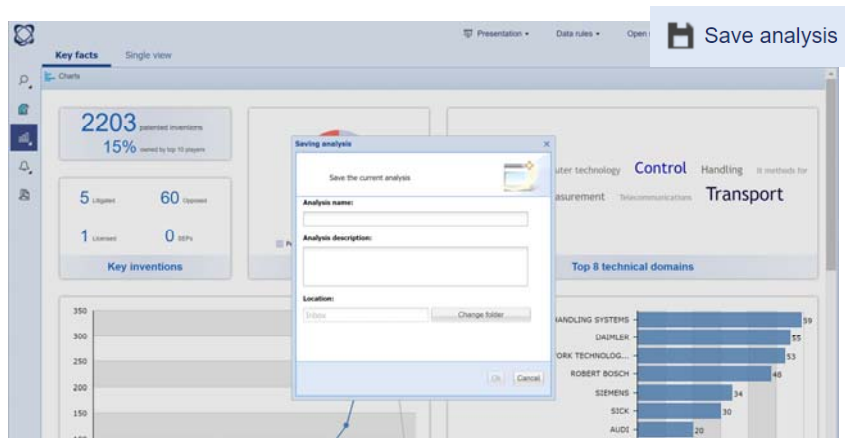
## Premium

Premium access, with **advanced charts and options** allows the differentiation of patent portfolios according to their **qualitative metrics and scores**.

2,000,000



# Save and Archive patent analysis



Saved analysis						
	Name	Description	Date	Folder path	Count	Source
	Inbox - Eugénie Mergaueut (0)	SER test	2019-10-14	Inbox	4262	Patent families (FamPat)
	Bugs (0/0/1)	Hydrogel test	2019-09-27	Presales	712	Patent families (FamPat)
	Cnsp (14/0)	Extended patent RU priority	2019-09-26	User seminars/Russia October 2019	7873	Patent families (FamPat)
	Driverless technology (3/5/1)	driverless WF	2019-06-06	Inbox	2238	Workfile module
	PD1 (0/0/1)	PD1 licensing	2019-05-14	PD1	454	Patent families (FamPat)
	Presales (1/0/2)	driverless alive	2019-04-30	Driverless technology	4990	Patent families (FamPat)
	Starch (0/0/0)	driverless	2019-04-23	Inbox	1934	Patent families (FamPat)
	Training Platinum (0/0/0)	Unilever vs P&G detergent	2019-04-05	Presales	2640	Patent families (FamPat)
	UAV technology (1/0/0)	licensing boeing	2019-04-04	Inbox	1000	Patent families (FamPat)
	User seminars (0/0/0)					



## Essential

All users have access to **same quality search and collaboration options**. Orbit Intelligence Essential will help **analyze basics trends**.

15,000



## Advanced

Orbit Intelligence Advanced provides **more customization capabilities** and tools to help **better understand the content** of the analyzed datasets.

20,000



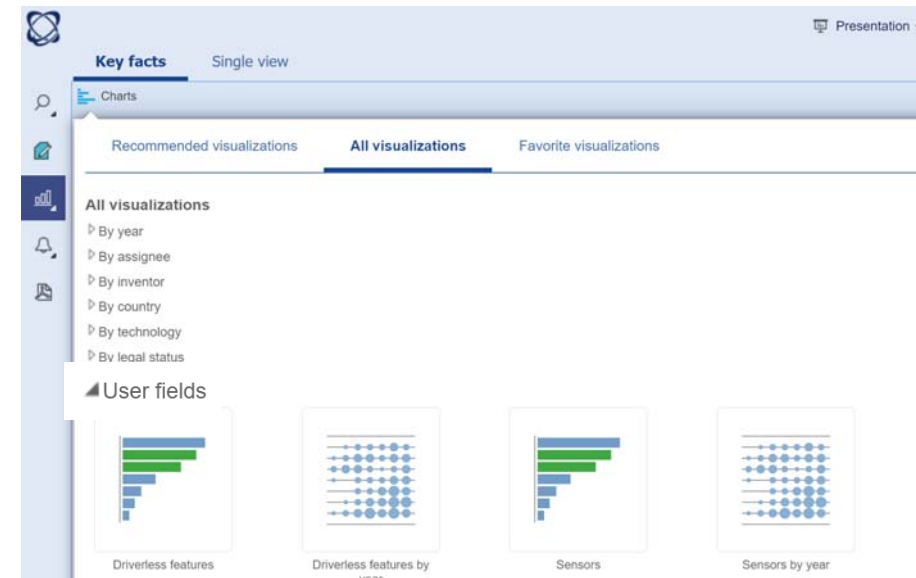
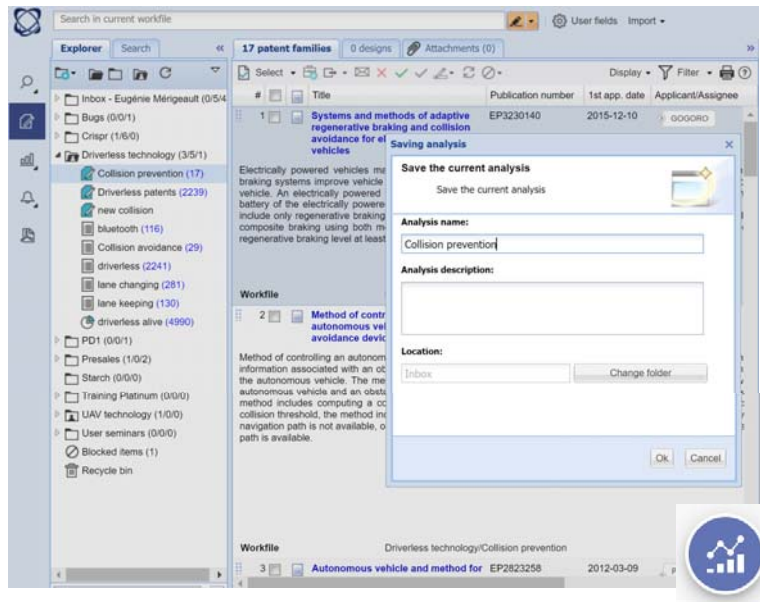
## Premium

Premium access, with **advanced charts and options** allows the differentiation of patent portfolios according to their **qualitative metrics and scores**.

30,000



# Analyze Workfiles, including user fields



## Essential

All users have access to **same quality search and collaboration options**. Orbit Intelligence Essential will help **analyze basics trends**.

15,000



## Advanced

Orbit Intelligence Advanced provides **more customization capabilities** and tools to help **better understand the content** of the analyzed datasets.

20,000



## Premium

Premium access, with **advanced charts and options** allows the differentiation of patent portfolios according to their **qualitative metrics and scores**.

30,000





# Create data rules (saved analysis)

The image shows two screenshots of a software interface. The left screenshot displays the 'Data rules' section with a 'Recommended visualizations' grid containing ten items: 'Key players', 'Key players by legal status', 'Investment trend', 'Investment trend for key players', 'Markets & competitors location', 'Key players by technical domain', 'Key inventors', 'Landscape by technology clusters', 'Technologies & applications', and 'Key inventions by players'. A blue arrow points from this grid to the right screenshot. The right screenshot shows the 'Data rules administration' page with a table of data rules. The table has two columns: 'Name' and 'Occurrences'. The 'Name' column lists various companies and organizations, and the 'Occurrences' column shows the number of occurrences for each. On the right side of the table, there are buttons for 'Corporate tree', 'Group', 'Ungroup', 'Exclude', 'Include', and 'Use filter as rule'.

Name	Occurrences
FORD GLOBAL TECHNOLOGIES	4
BAIDU	1
BAIDU TIMES TECHNOLOGY	1
GOGORO	1
HYUNDAI MOBIS	1
KOLLMORGEN SARO	1
KOREA ELECTRONICS TECHNOLOGY INSTITUTE	1
KOREAN AGENCY FOR DEFENSE DEVELOPMENT	1
NISSAN MOTOR	1
PRAXAIR TECHNOLOGY	1
SHENZHEN ZHAOKEZHONG TECHNOLOGY	1
UATC	1
VOLKSWAGEN	1
WIPRO	1
ZOOX	1



Essential

Yes



Advanced

Yes

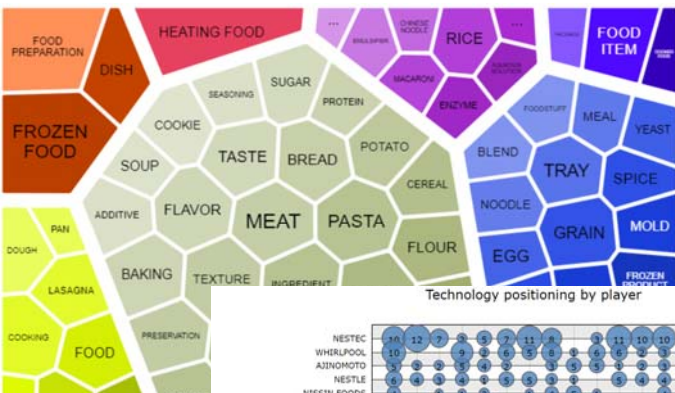
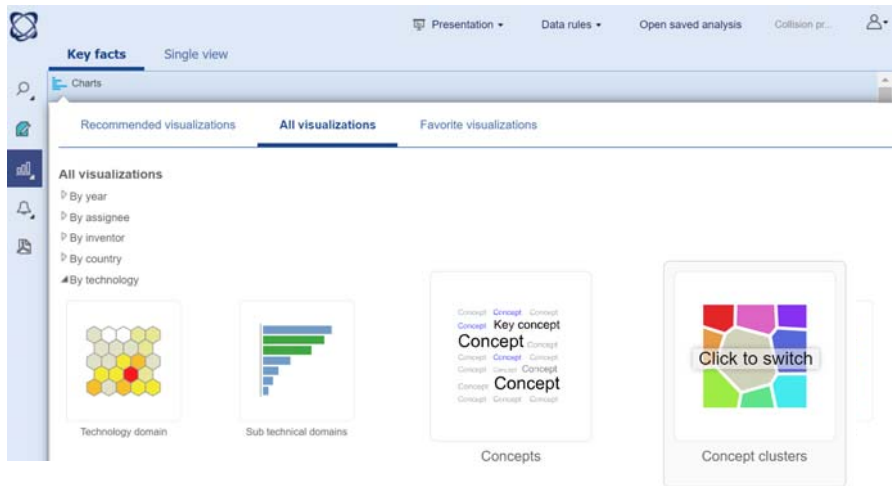


Premium

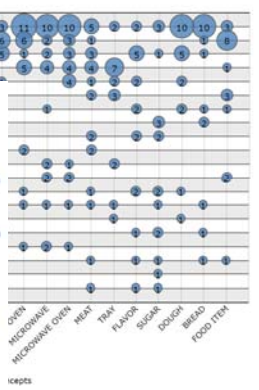
Yes



# Concepts analysis



Food (108) | Food product (52) | Vegetable (49) | Frozen food (48) | Ingredient (48) |  
Lasagna (47) | Consumer (46) | Cooking (46) | Texture (45) | Taste (44) | Oven (42) | Microwave (40) |  
Microwave oven (40) | Meat (39) | Tray (39) | Flavor (38) | Sugar (38) | Dough (36) | Bread (35) | Food  
item (35) | Pasta (35) | Protein (35) | Wheat (34) | Starch (33) | Flour (31) | Cheese (30) | Fat (30) | Additive (29) |  
Fruit (28) | Noodle (28) | Rice (28) | Wheat flour (28) | Cookie (27) | Sauce (27) | Grain (24) | Enzyme (23) |  
Foodstuff (23) | Frozen product (23) | Microwave energy (23) | Potato (23) | Dish (22) | Fish (22) | Soup (22) |  
Baking (21) | Cereal (21) | Chicken (21) | Emulsifier (21) | Seasoning (21) | Cake (20) | Macaroni (20) | Milk (20) |  
Blend (19) | Food preparation (19) | Health (19) | Mold (19) | Package (19) | Refrigeration (19) | Chinese noodle (18) |  
Cooked food (18) | Heating food (18) | Meal (18) | Pan (18) | Refrigerator (18) | Steam (18) | Yeast (18) | Aqueous  
solution (17) | Egg (17) | Impression (17) | Preservation (17) | Spice (17) | Aroma (16) | Baked product (16) |  
Dumpling (16) | Frozen food product (16) | Icecream (16) |



Essential

No



Advanced

Yes

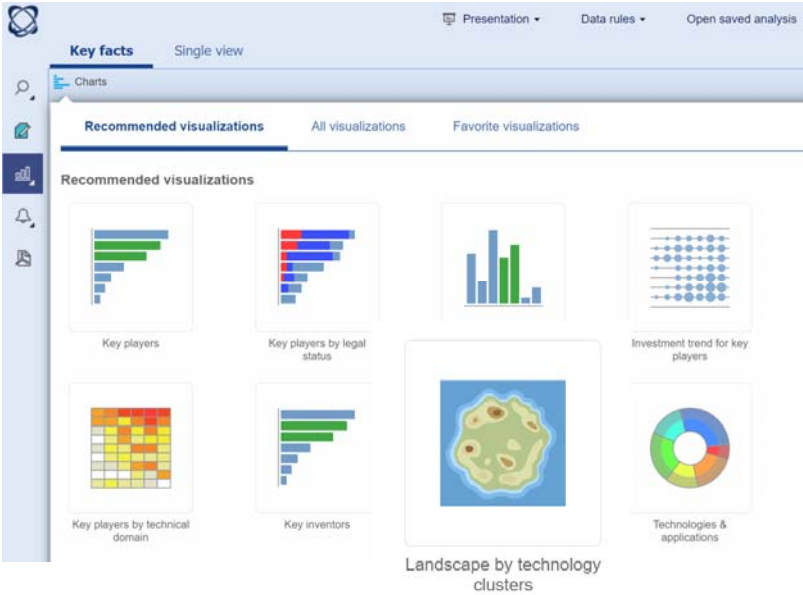


Premium

Yes



# Landscape map



Essential

No



Advanced

No



Premium

Yes





# Simple selection



Essential

Yes



Advanced

Yes



Premium

Yes



# Multiple selection



Essential

No



Advanced

Yes



Premium

Yes



# Drill down



Essential

No



Advanced

Yes

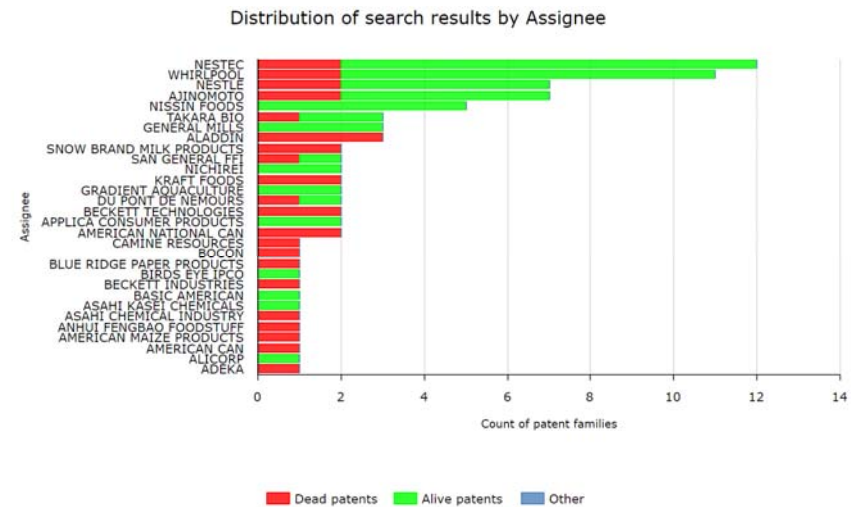
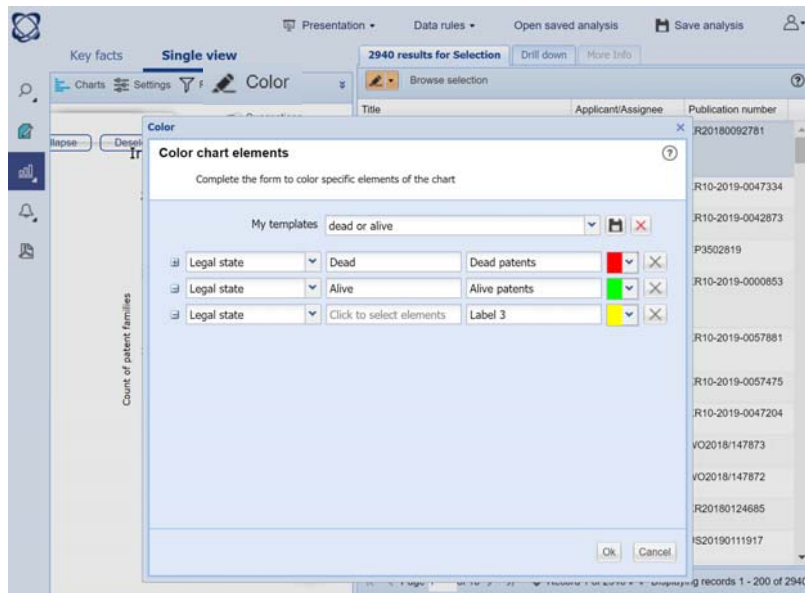


Premium

Yes



# Color by (including lists or workfiles)



Essential

No



Advanced

Yes

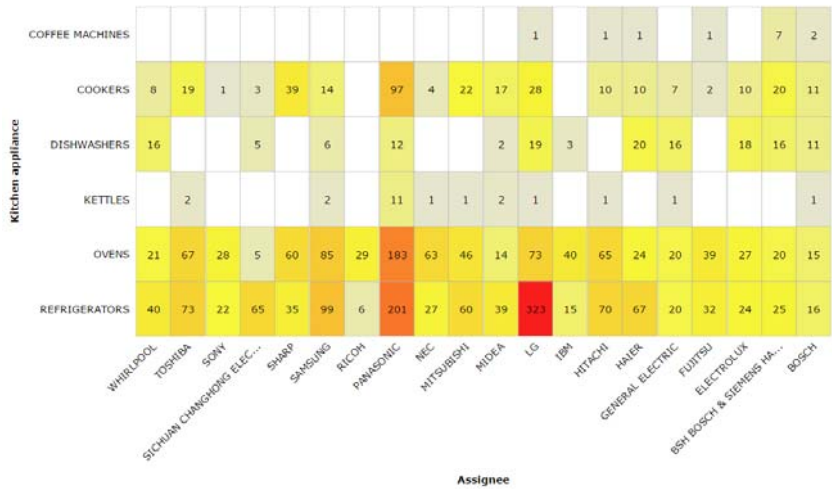
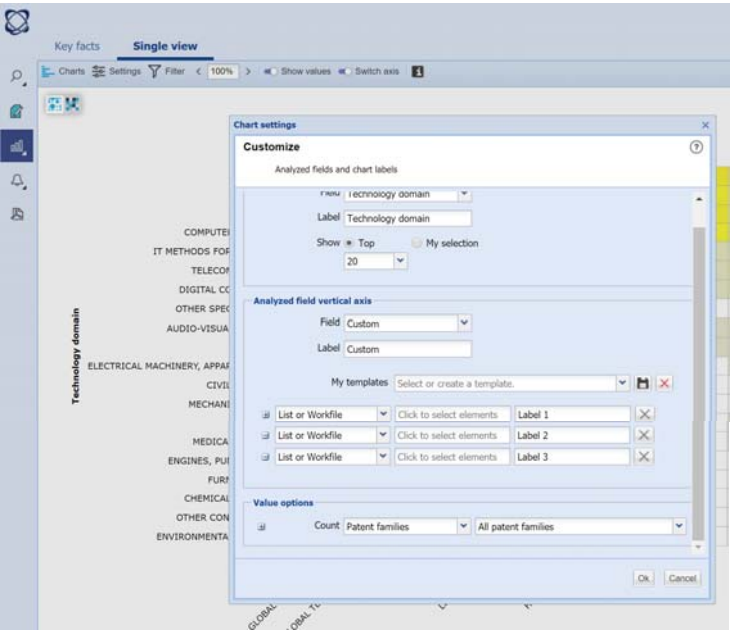


Premium

Yes



# Custom axis



Essential

No



Advanced

No

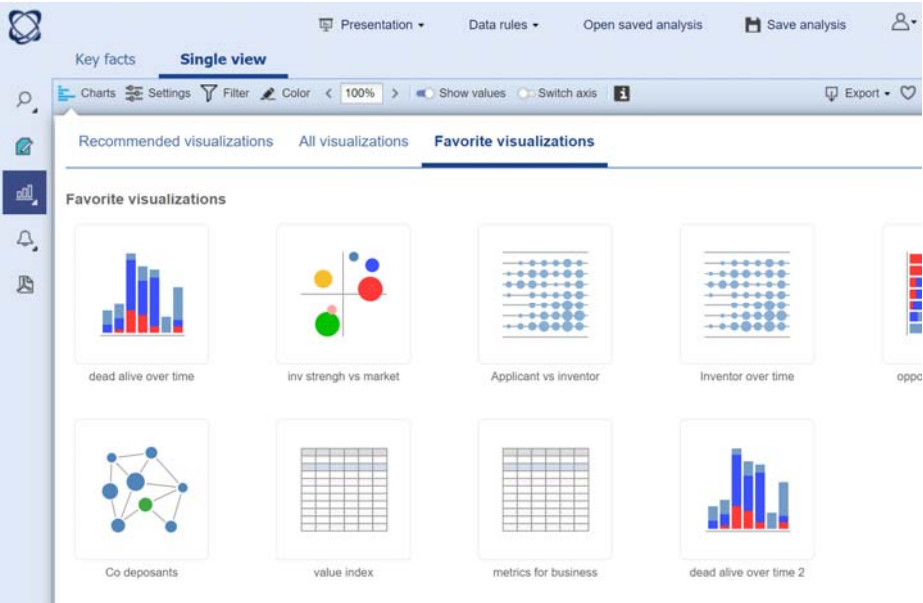
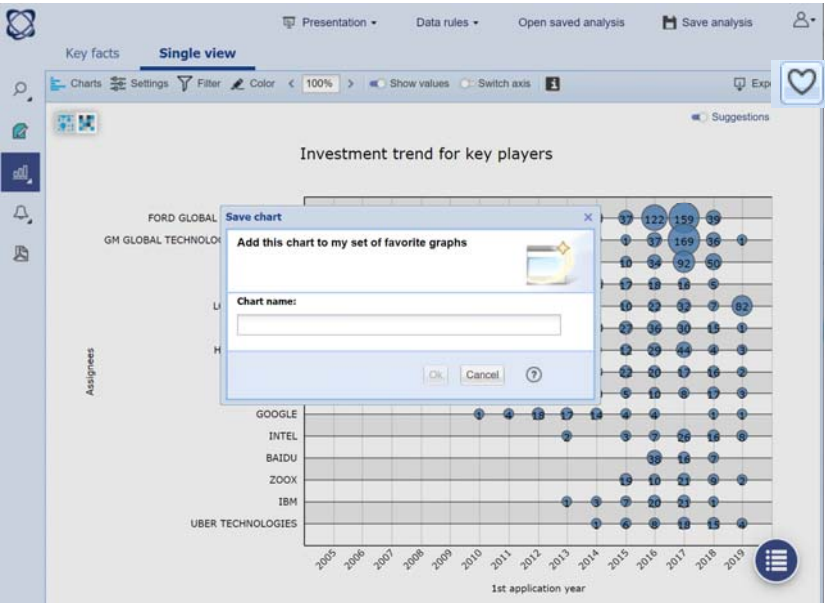


Premium

Yes



# Save chart templates



Essential

No



Advanced

Yes



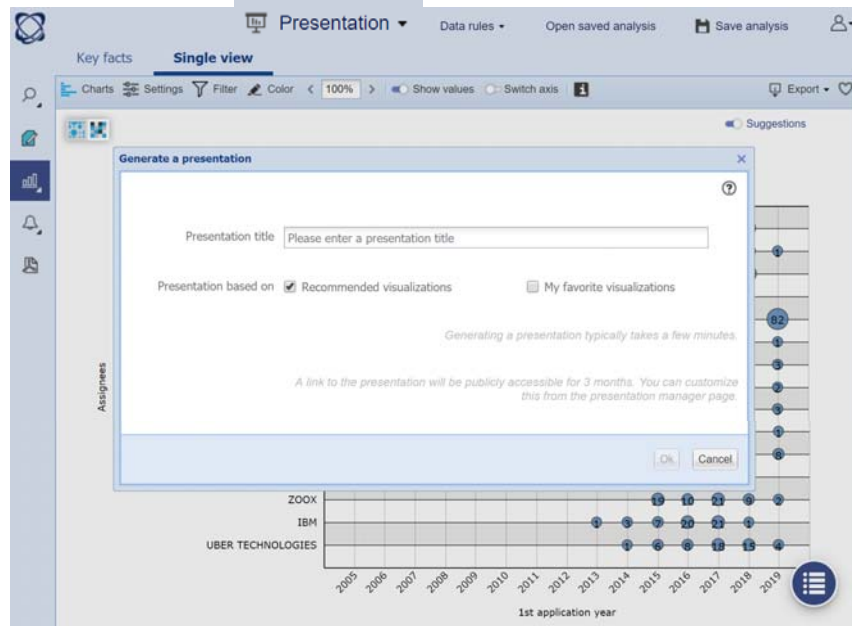
Premium

Yes





# One click report + automatic description



Essential

Yes



Advanced

Yes

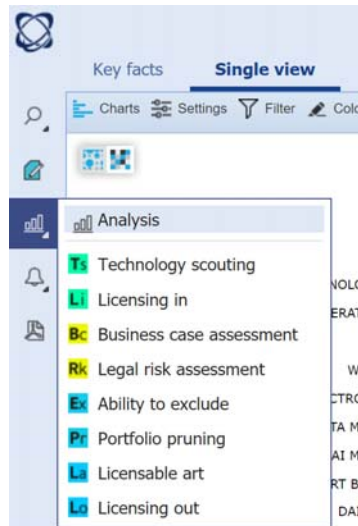


Premium

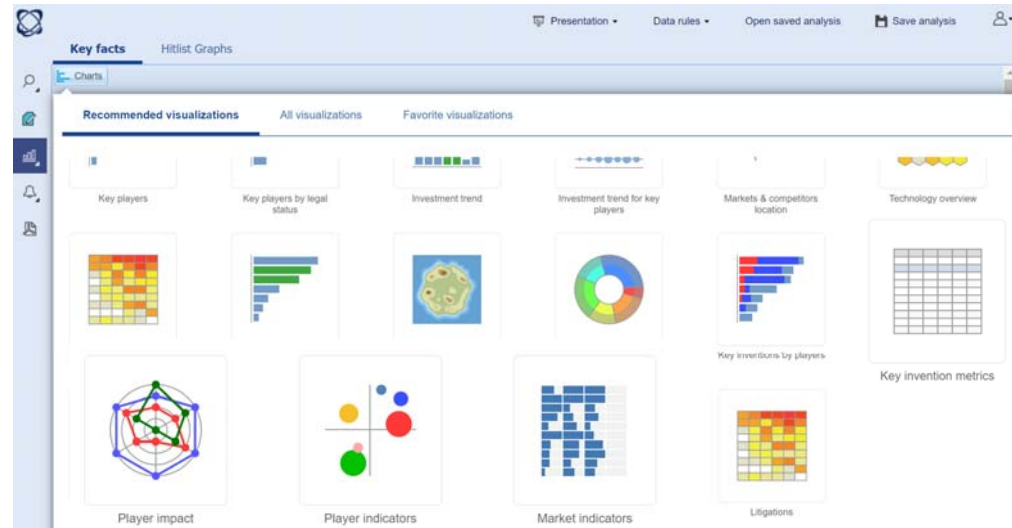
Yes

# Answer business questions

## Evaluation modules



## Metrics in the analysis



Essential

No



Advanced

No



Premium

Yes





# Key metrics in analysis

Settings   Browse selection <span>Export</span>									
Title	Publication number	1st Publ. date	All fwd cit.	Geographic cov.	Generality index	Originality index	Litigated	Opposed	
<input type="checkbox"/> A retail method over a wide area network	EP1031106	1999-02-18	330	3	0.84	0.81	NO	NO	
<input type="checkbox"/> Hybrid card with antenna and manufacturing equipment	EP1331602	1995-08-18	242	1	0.85	0.7	NO	NO	
<input type="checkbox"/> Using a high level programming language with a microcontroller	US9400668	1998-05-07	242	1	0.86	0.84	YES	YES	
<input type="checkbox"/> Self-referenced tracking	US7301648	2001-08-02	238	1	0.93	0.88	NO	NO	
<input type="checkbox"/> Apparatus and method for implementing ipsec transforms within an integrated circuit	US6708273	2004-03-09	214	1	0.74	0.8	NO	NO	
<input type="checkbox"/> Usb securing device with keypad	US7111324	2001-11-22	213	1	0.89	0.78	NO	NO	
<input type="checkbox"/> Secure network file access control system	JP5067771	2004-01-13	212	3	0.73	0.78	NO	YES	
<input type="checkbox"/> Method and arrangement for secure tunneling of data between virtual routers	US6438612	2002-05-23	209	1	0.77	0.64	NO	NO	
<input type="checkbox"/> Usb-compliant personal key with integral input and output devices	JP5014504	2000-07-20	201	2	0.85	0.87	NO	NO	
<input type="checkbox"/> RFID-Transponder with printable surface	EP1035503	2000-07-23	192	4	0.94	0.93	NO	YES	
<input type="checkbox"/> Motion tracking system and method	US7725253	2004-02-19	188	1	0.95	0.88	NO	NO	
<input type="checkbox"/> Intelligent multimedia conference establishment	JP4520690	2003-03-14	167	4	0.85	0.82	NO	NO	
<input type="checkbox"/> Motion-tracking	IL152359	2001-11-01	163	3	0.96	0.87	NO	YES	
<input type="checkbox"/> License management system and method with multiple license servers	US7716348	2001-03-15	155	1	0.77	0.7	NO	NO	
<input type="checkbox"/> Secure file system server architecture and methods	JP4896400	2004-04-22	152	3	0.66	0.76	NO	NO	
<input type="checkbox"/> Method for controlling an in-flight entertainment system	EP1504604	2003-11-16	152	4	0.92	0.91	NO	NO	
<input type="checkbox"/> System and method for preventing identity theft using a secure computing device.	EP1692667	2005-03-31	151	4	0.84	0.84	NO	NO	
<input type="checkbox"/> Fingerprint image optical input apparatus	KR100668361	2000-04-20	145	1	0.89	0.77	NO	NO	
<input type="checkbox"/> Dual mode smart card and associated methods	JP3811750	2002-04-18	141	4	0.84	0.61	NO	YES	
<input type="checkbox"/> High speed data stream pattern recognition	US7240040	2003-03-13	136	1	0.74	0.71	NO	NO	
<input type="checkbox"/> Method for transferring subscription information between terminals	EP2649828	2012-06-06	131	9	0.79	0.87	NO	YES	
<input type="checkbox"/> Method and system for configuration and download in a restricted architecture network	JP4819357	2003-11-06	127	2	0.89	0.73	NO	NO	
<input type="checkbox"/> Kernel mode protection	US6631472	2001-08-28	127	1	0.62	0.63	NO	NO	
<input type="checkbox"/> Aircraft system providing passenger entertainment and surveillance features, and associated methods	US8803971	2003-10-09	123	1	0.93	0.93	NO	NO	
<input type="checkbox"/> Security module system, apparatus and process	US7054162	2001-08-16	122	1	0.93	0.89	NO	NO	



Essential

No



Advanced

No

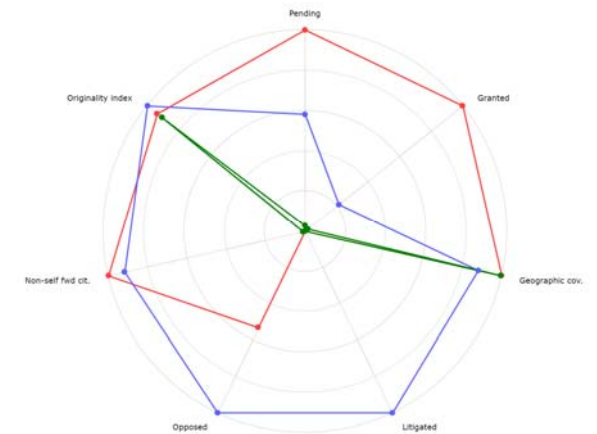
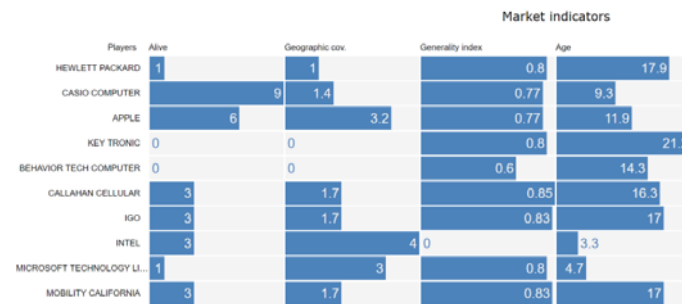
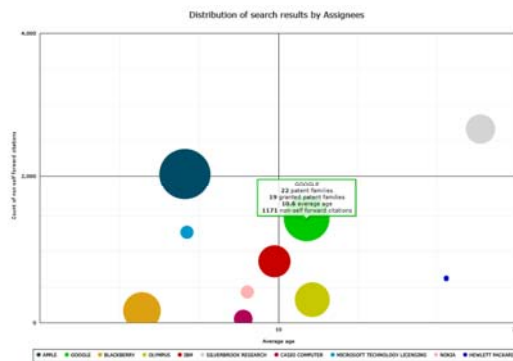


Premium

Yes



# New charts for better benchmarks



Essential

No



Advanced

No



Premium

Yes



# Patent Impact, Portfolio Value, Estimated Cost, Company revenue

Charts Settings										
Title	Applicant/Assignee	Publication number	1st app. date	Impact	Market cov.	Patent value	Estimated cost 2019	Originality	Litigated	Opposed
<input type="checkbox"/> Cable header connector	TE CONNECTIVITY	US8449330	2011-12-08	2.04	2.19	4.83	1.3K	0.33	NO	NO
<input type="checkbox"/> Connector assembly for end mounting panel members	TE CONNECTIVITY	US7387521	2006-12-22	1.42	2.68	4.83	13.1K	0.16	NO	NO
<input type="checkbox"/> Electrical connector assembly with interlocking upper and lower shells	TE CONNECTIVITY	CN1326246	2000-05-31	2.45	1.87	4.83	2.3K	0.45	NO	NO
<input type="checkbox"/> Electrical connector having customizable circuit board wafers	TE CONNECTIVITY	WO200157966	2000-02-03	2.31	1.98	4.83	4.4K	0.5	NO	NO
<input type="checkbox"/> Checkable plug-in connection and method for checking the connection state of a plug-in connection	TE CONNECTIVITY	WO2010012627	2008-07-28	1.51	2.61	4.82	4K	0.24	NO	NO
<input type="checkbox"/> Electrical connector assembly comprising an electrical connector with connector position assurance device	TE CONNECTIVITY	WO2013148296	2012-03-28	2.22	2.04	4.82	726	0.43	NO	NO
<input type="checkbox"/> High speed docking connector	TE CONNECTIVITY	US6540559	2001-09-28	2.78	1.6	4.81	1.2K	0.42	NO	NO
<input type="checkbox"/> Contactless connector	TE CONNECTIVITY	WO2013095940	2011-12-23	1.85	2.34	4.81	2.7K	0.87	NO	NO
<input type="checkbox"/> Storage-stable aqueous solutions of chlorine dioxide and methods for preparing and using them	TE CONNECTIVITY	US20070111612	2006-09-14	1.82	2.35	4.81	10.4K	0.91	NO	NO
<input type="checkbox"/> Header assembly	TE CONNECTIVITY	US20120208400	2011-02-15	1.63	2.5	4.81	2K	0.49	NO	NO
<input type="checkbox"/> Blade and receptacle power connector	TE CONNECTIVITY	CA2676905	2008-09-12	1.44	2.65	4.8	3.8K	0.54	NO	NO
<input type="checkbox"/> Wrap-around cable sleeve assemblies	TE CONNECTIVITY	US20110100671	2010-03-24	1.41	2.67	4.8	3.2K	0.86	NO	NO
<input type="checkbox"/> Arc-less electrical connector	TE CONNECTIVITY	BRP0203036	2001-12-17	2.07	2.15	4.8	7.7K	0.87	NO	NO
<input type="checkbox"/> Contact means for attaching an end of a cable	TE CONNECTIVITY	WO2011011308	2010-02-22	1.62	2.5	4.79	2.6K	0.55	NO	NO
<input type="checkbox"/> Power terminal connector	TE CONNECTIVITY	US8628335	2012-12-07	1.62	2.47	4.76	3.4K	0.79	NO	NO
<input type="checkbox"/> High speed electrical connector	TE CONNECTIVITY	US20030220021	2002-09-25	2.91	1.46	4.76	3.1K	0.54	NO	NO
<input type="checkbox"/> Lighting device	TE CONNECTIVITY	WO2010132099	2009-05-14	1.86	2.28	4.75	6.8K	0.88	NO	NO
<input type="checkbox"/> Electrical plug and method of fitting the plug	TE CONNECTIVITY	WO2006013027	2005-07-22	1.9	2.24	4.74	5.4K	0.46	NO	NO
<input type="checkbox"/> Jumper connector for a lighting assembly	TE CONNECTIVITY	EP2216858	2009-02-06	1.82	2.29	4.73	1.4K	0.92	NO	NO
<input type="checkbox"/> Contact bridge with blow magnets	TE CONNECTIVITY	EP2197009	2008-12-12	1.56	2.49	4.73	3.4K	0.34	NO	NO
<input type="checkbox"/> LED light module	TE CONNECTIVITY	MX2011009021	2010-08-27	1.76	2.34	4.73	2.2K	0.86	NO	NO
<input type="checkbox"/> Battery connector system	TE CONNECTIVITY	WO2013059115	2011-10-21	2.11	2.06	4.72	726	0.7	NO	YES
<input type="checkbox"/> Performance enhancing contact module assemblies	TE CONNECTIVITY	US200909093158	2007-10-09	2.09	2.07	4.72	2.4K	0.24	NO	NO
<input type="checkbox"/> Attachment ring for attaching a shield of an electrical cable to backshell	TE CONNECTIVITY	CA2816730	2010-11-04	1.4	2.61	4.71	3.1K	0.87	NO	NO
<input type="checkbox"/> Electrical connector with pivot block for terminating an electrical wire	TE CONNECTIVITY	US20160087363	2014-09-23	2.06	2.09	4.71	6.7K	0.64	NO	NO
<input type="checkbox"/> High voltage shielded electrical connector assembly	TE CONNECTIVITY	US20080220652	2008-03-05	2.17	2	4.71	1.6K	0.37	NO	NO
<input type="checkbox"/> Electrical connector having poke-in wire contact	TE CONNECTIVITY	WO2013176859	2012-05-25	1.98	2.14	4.7	2.1K	0.49	NO	NO
<input type="checkbox"/> Measuring device for measuring the magnetic properties of the surroundings of the measuring device	TE CONNECTIVITY	WO2013023781	2011-08-15	1.76	2.31	4.7	2K	0.86	NO	NO
<input type="checkbox"/> Electrical connector having floating alignment member	TE CONNECTIVITY	US20090311896	2008-06-17	1.91	2.19	4.7	2.3K	0.27	NO	NO
<input type="checkbox"/> High-density receptacle connector	TE CONNECTIVITY	WO20061894	2002-01-25	2.08	2.06	4.7	4.7K	0.48	NO	NO
<input type="checkbox"/> Electrical connector with crosstalk canceling features	TE CONNECTIVITY	WO2008115422	2007-03-20	2.24	1.92	4.69	2.2K	0.66	NO	NO
<input type="checkbox"/> Steckverbinder mit einer verbesserten Kabelzugentlastung	TE CONNECTIVITY	DE102006049563	2006-10-20	1.72	2.33	4.68	4.4K	0.48	NO	NO
<input type="checkbox"/> Circular cable connector	TE CONNECTIVITY	US20030404733	2001-12-05	1.01	2.18	4.68	6.7K	0.4	NO	NO



Essential

No



Advanced

No



Premium

Yes



# Analytics session

## Metrics explanation



# Orbit Intelligence

## New patent metrics

1. Impact

<< Avg patent now has a score of 1

2. Market strategy

<< Dead countries now included if granted

3. Patent strength

<< Available for dead patent families

4. Patent value

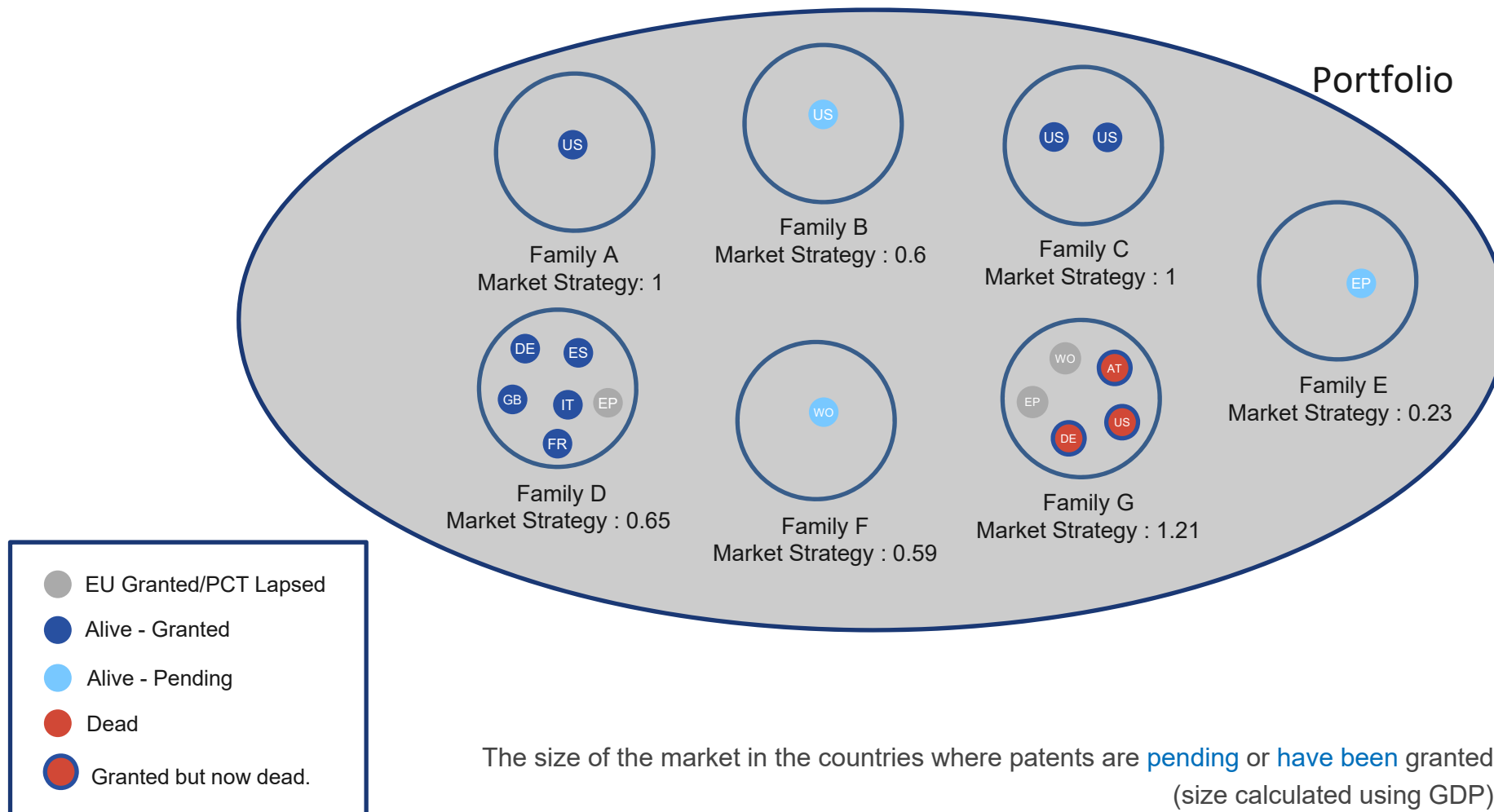
<< Score reduced by remaining life factor

5. Portfolio value

<< Sum of patent value



# Market Strategy Index

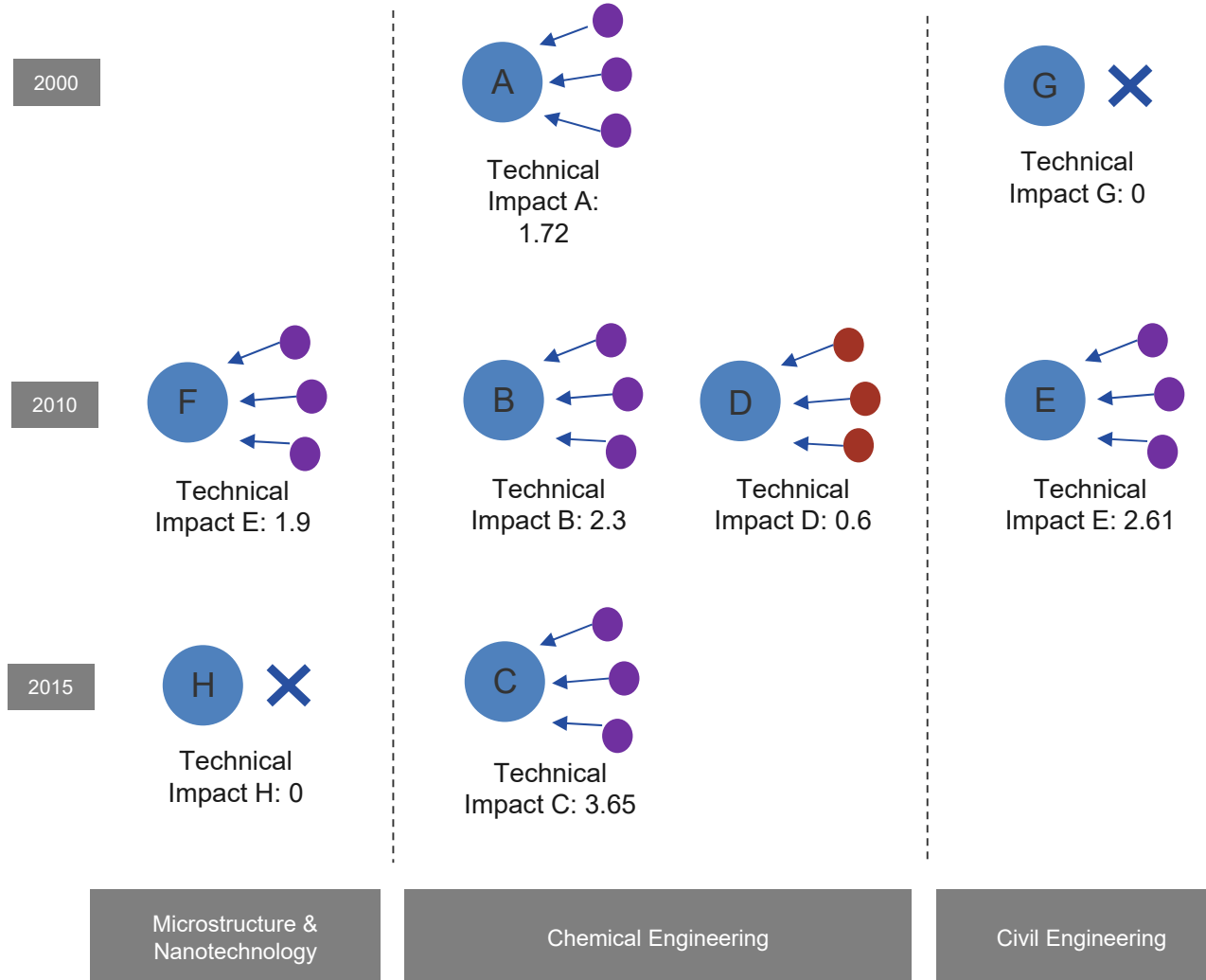


The size of the market in the countries where patents are **pending** or **have been** granted (size calculated using GDP)

- A reduction of 40% is given to pending countries.
- WO/EPs figures are calculated based on the countries where WO/EPs tend to be granted.
  - Countries where patents were granted but are now dead are included.



# Technical impact



## Technology Impact Index

The Technical Impact is based on forward citations which are adapted depending on the nature of the citation (self/non-self), the age, and technical domain of the patent.

**LOG progression** has also been used to model the increase of a patent's impact. In other words, the 1<sup>st</sup> citation increases the impact more than the 101<sup>st</sup> citation.

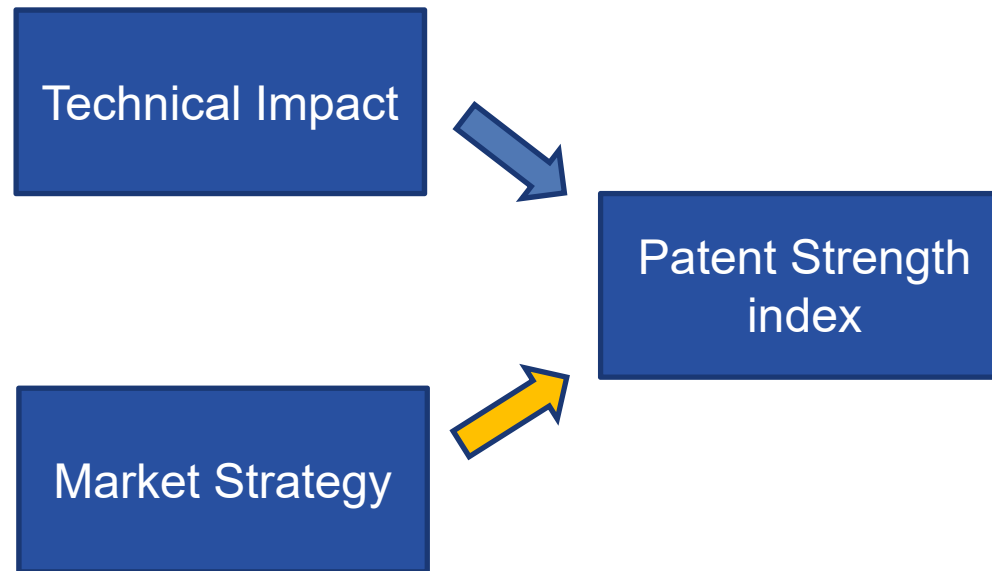
**Results are normalized so that the average patent has a score of 1.**



● Self Citation ● Non-self Citation



# Patent Strength Index



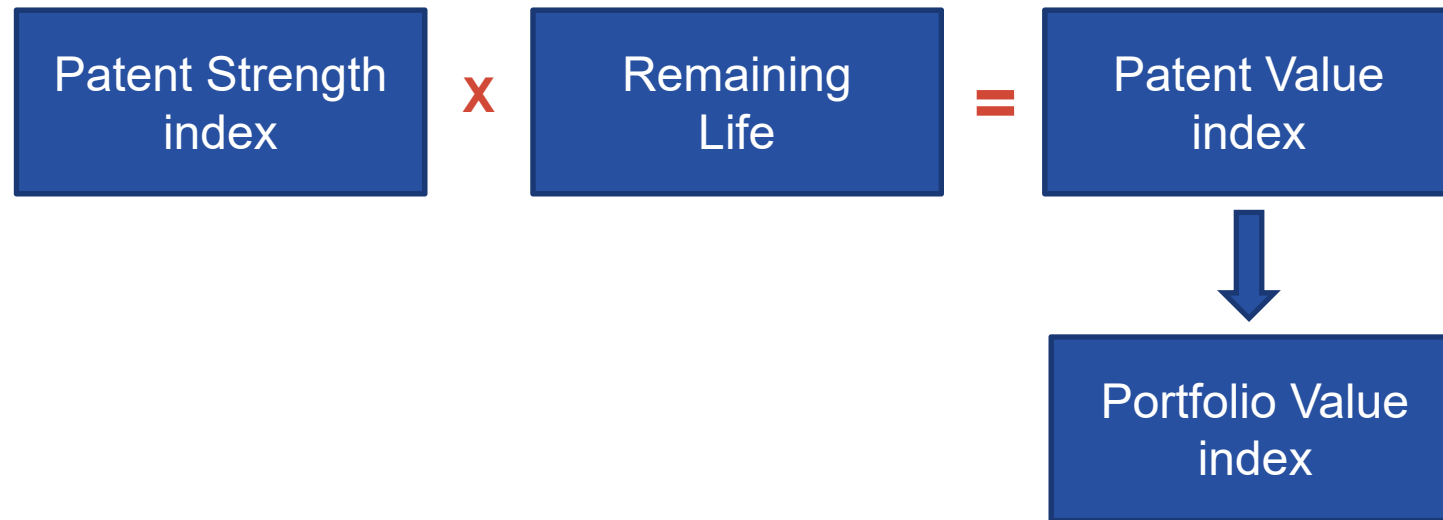
The patent Strength is based on Technical impact and Market strategy. They are weighted and summed. The weight values have been calculated in order to give high scores to patents which have been litigated.

*Patent strength is available for both alive and dead patents.*  
**Results are normalized so that the average patent has a score of 1.**





# Patent Value Index



The patent value is based on the Patent Strength index with a weighting based on the remaining life of the patent.

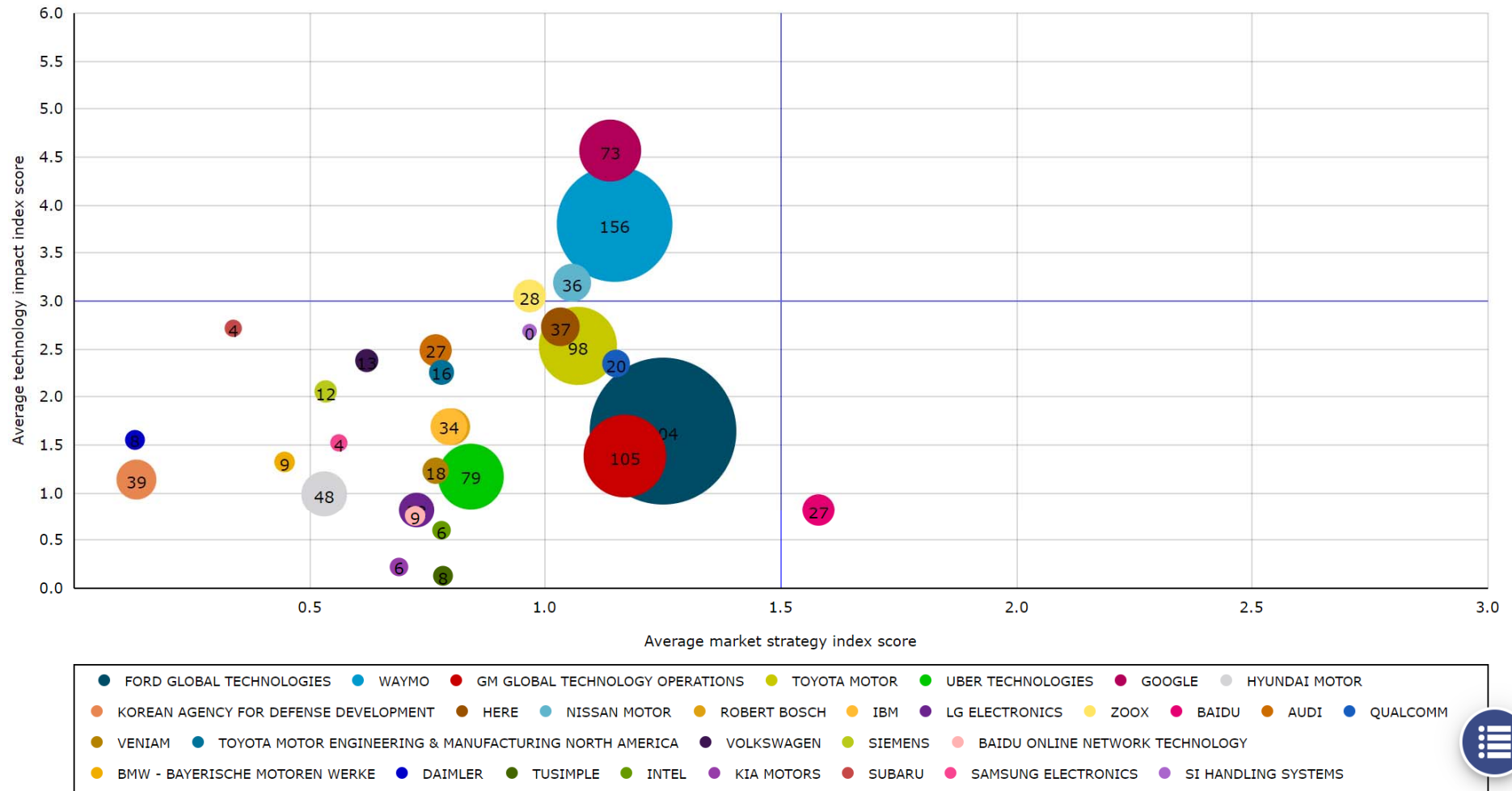
*Patent value is available only for alive patents.*

**The Portfolio Value is based on the sum of Patent Value Indexes.**



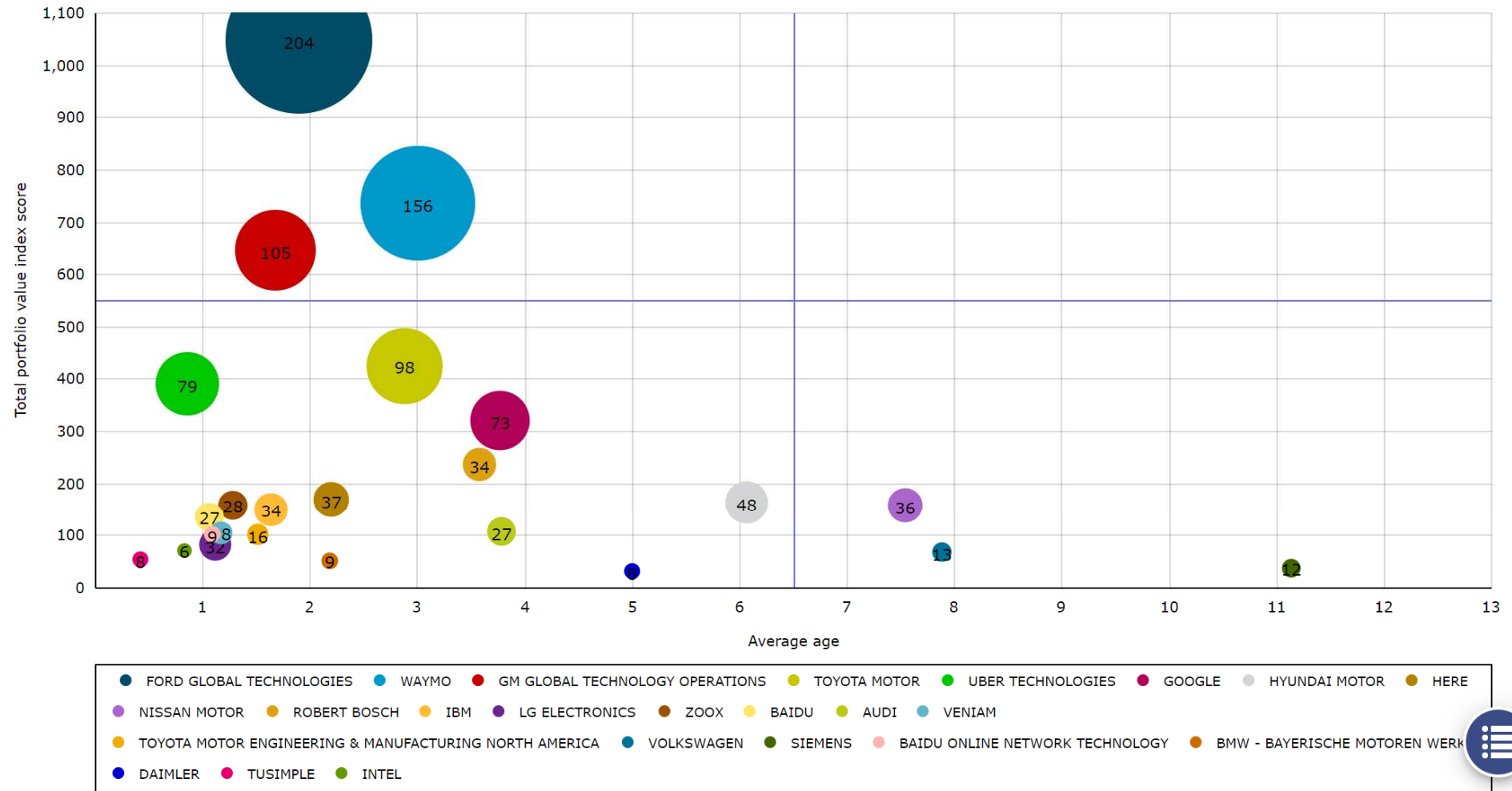
# Examples

by Assignees with value indicators

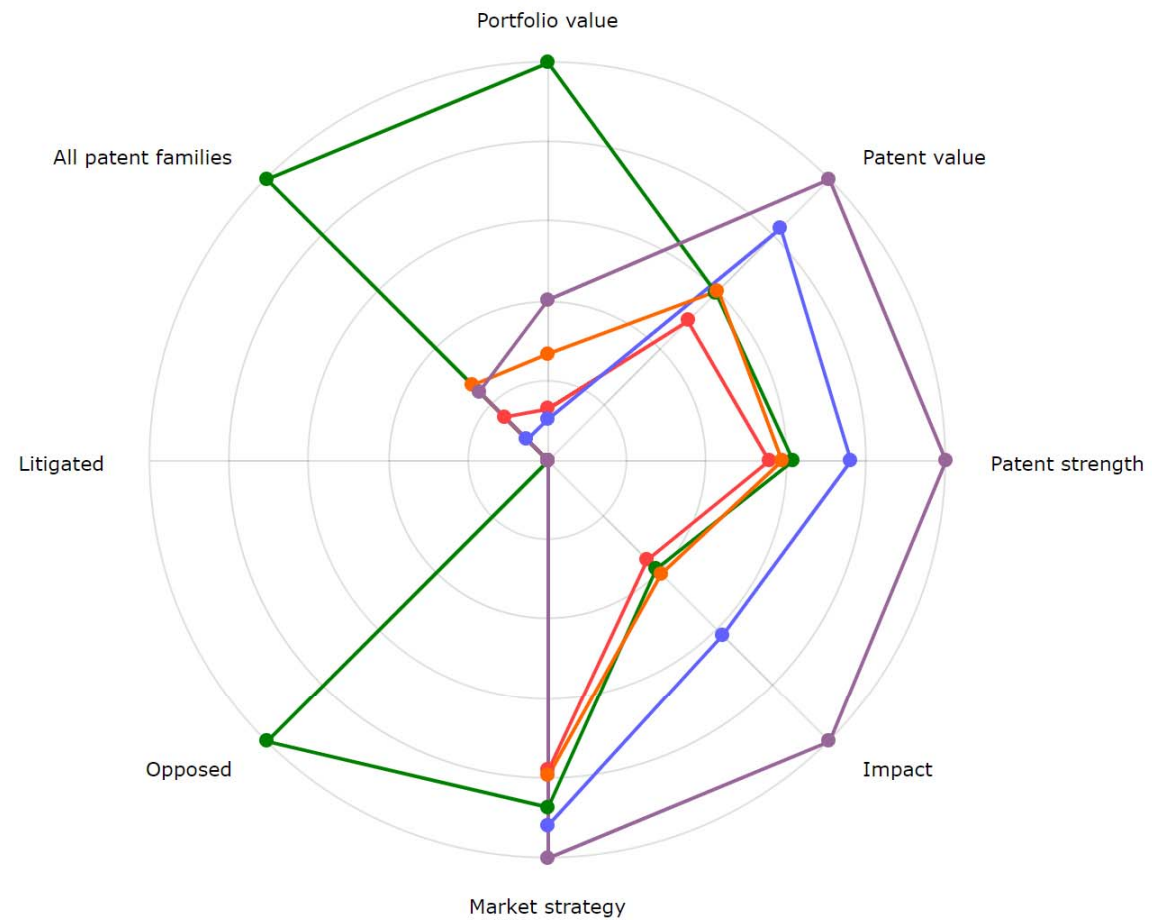


# Examples

by Assignees with value indicators



# Examples



NUTONOMY

LYFT

UBER TECHNOLOGIES

VENIAM

ZOOX

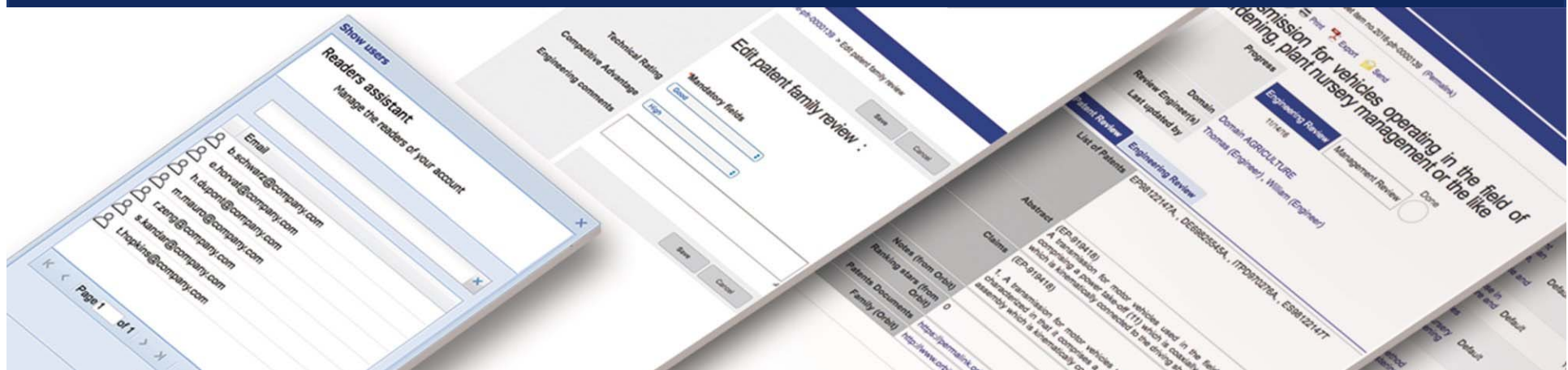
# Examples

## Key invention metrics

<input type="checkbox"/> Title	Applicant/Assignee	Publication number	1st app. date	Patent strength	Patent value	Market strategy	Impact	Originality	Litigated	Opposed
<input type="checkbox"/> Integrated vehicle positioning and navigation system, apparatus and method	CATERPILLAR	JP3560959	1989-12-11	7.21	0	1.51	12.29	0.93	NO	NO
<input type="checkbox"/> Engaging and disengaging for autonomous driving	WAYMO	US10300926	2013-03-11	7.2	8.46	2.45	9.6	0.94	NO	NO
<input type="checkbox"/> Methods and systems for managing shipment of an item using a wireless node network	FEDEX	JP2019075811	2014-07-29	7.06	8.76	2.03	10.46	0.95	NO	NO
<input type="checkbox"/> Headlamp control	GENTEX	DE69937956	1998-09-18	6.99	0.06	2.08	10.18	0.94	NO	YES
<input type="checkbox"/> Multi-code coverage for an autonomous robot	IROBOT	EP2386924	2002-06-12	6.92	2.31	2.06	10.05	0.94	YES	YES
<input type="checkbox"/> Monitoring and automatic equipment control systems	GENTEX	EP1599905	2004-02-12	6.84	4.34	2.42	8.85	0.93	NO	YES
<input type="checkbox"/> Fail-safe speed profiles for cooperative autonomous vehicles	GM GLOBAL TECHNOLOGY OPERATIONS	US8676466	2010-03-30	6.8	7.35	1.85	10.38	0.92	NO	NO
<input type="checkbox"/> Modifying behavior of autonomous vehicles based on sensor blind spots and limitations	WAYMO	US20180032084	2013-01-25	6.57	8.64	2.55	7.86	0.95	NO	NO
<input type="checkbox"/> Controlling vehicle lateral lane positioning	WAYMO	EP3342683	2012-10-30	6.56	8.31	2.48	8.05	0.9	NO	NO
<input type="checkbox"/> Modifying behavior of autonomous vehicle based on predicted behavior of other vehicles	GOOGLE WAYMO	CN104271420	2012-03-15	6.44	7.46	2	9.13	0.91	NO	NO
<input type="checkbox"/> Unlock and authentication for autonomous vehicles	WAYMO	US10261512	2014-08-08	6.44	7.96	1.68	10.02	0.94	NO	NO
<input type="checkbox"/> Traffic signal mapping and detection	GOOGLE WAYMO	JP6494719	2010-06-21	6.39	6.91	2.6	7.31	0.9	NO	NO
<input type="checkbox"/> Systems and methods for mimicking a leading vehicle	MOBILEYE VISION TECHNOLOGIES	US10293826	2014-12-04	6.39	8.35	1.8	9.58	0.93	NO	NO
<input type="checkbox"/> Systems and methods for lane end recognition	MOBILEYE VISION TECHNOLOGIES	US10317910	2015-01-30	6.29	7.68	1.66	9.77	0.93	NO	NO
<input type="checkbox"/> Autonomous vehicle with driver presence and physiological monitoring	FORD GLOBAL TECHNOLOGIES	CN104276180	2013-07-09	6.25	8.2	1.91	8.95	0.91	NO	NO
<input type="checkbox"/> An improved identification system	TEXAS INSTRUMENTS	JP3468827	1993-02-23	6.22	0	2.37	7.58	0.9	NO	NO
<input type="checkbox"/> Method and system for guiding a person to a location	AMERICAN VEHICULAR	US10293714	2006-11-22	6.19	7.71	1	11.39	0.95	YES	YES



# Workfiles session



## Why use the workfiles?

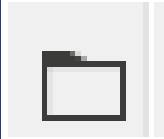
The Workfile is defined by four uses:

- **Archive:** archiving patent families and designs
- **Review:** additions of stars, notes, attachments  
personal fields
- **Share:** creation of Group readers
- **Operate:** integrated module search, analysis module  
available



# Archive

## Directories and folders



A directory can contain subdirectories or folders



A workfile can contain patent families or designs



Sharing is only done at the level of directories



**Inbox** - Inbox: directory by default, can not be shared



Lists should not be confused with workfiles  
Directories are the only ones that can be shared and evaluated.  
Workfiles are linked to the folders module  
Workfiles are static, except manual updates or alert feeds

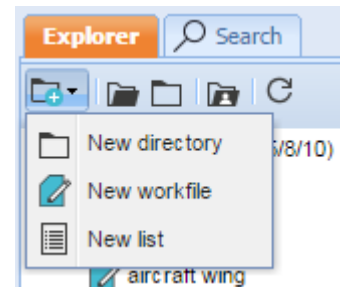




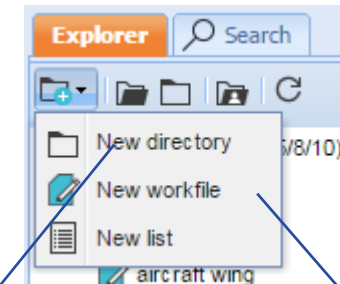
# Archive Directories and folders

Creation of the tree from the search module via Explorer  
or from the workfiles module

Search Module:



Workfile Module:



1<sup>st</sup> step

2<sup>nd</sup> step

General

Parent

☒ Inbox

☐ Portfolio

Name

Desc.

Sort

Sort key

OK Cancel

Under directory

Directory

Optional

General

Name

Desc.

Sort

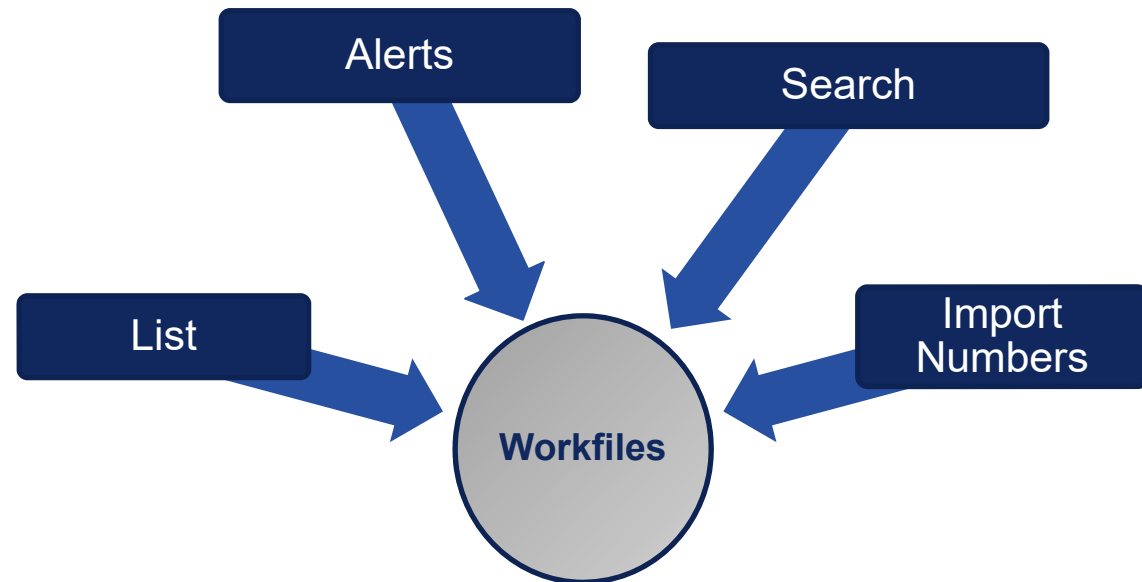
Sort key

OK Cancel

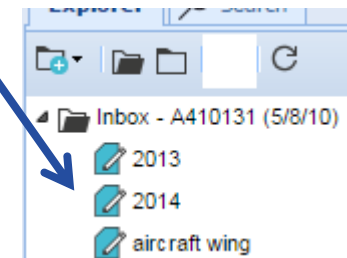
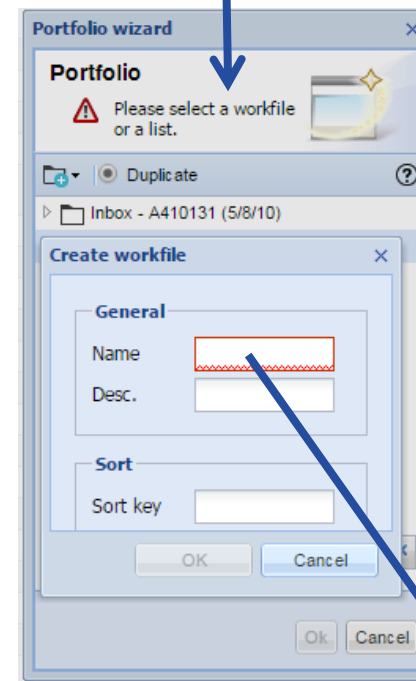


## Archive Feed

Feed of the patent families from the search module  
(search, list or alert) or from Workfile module (import N°)  
Limit number families in contractual records  
A family or a designs can be in multiple folders  
The tag NEW on a family is present for a week.



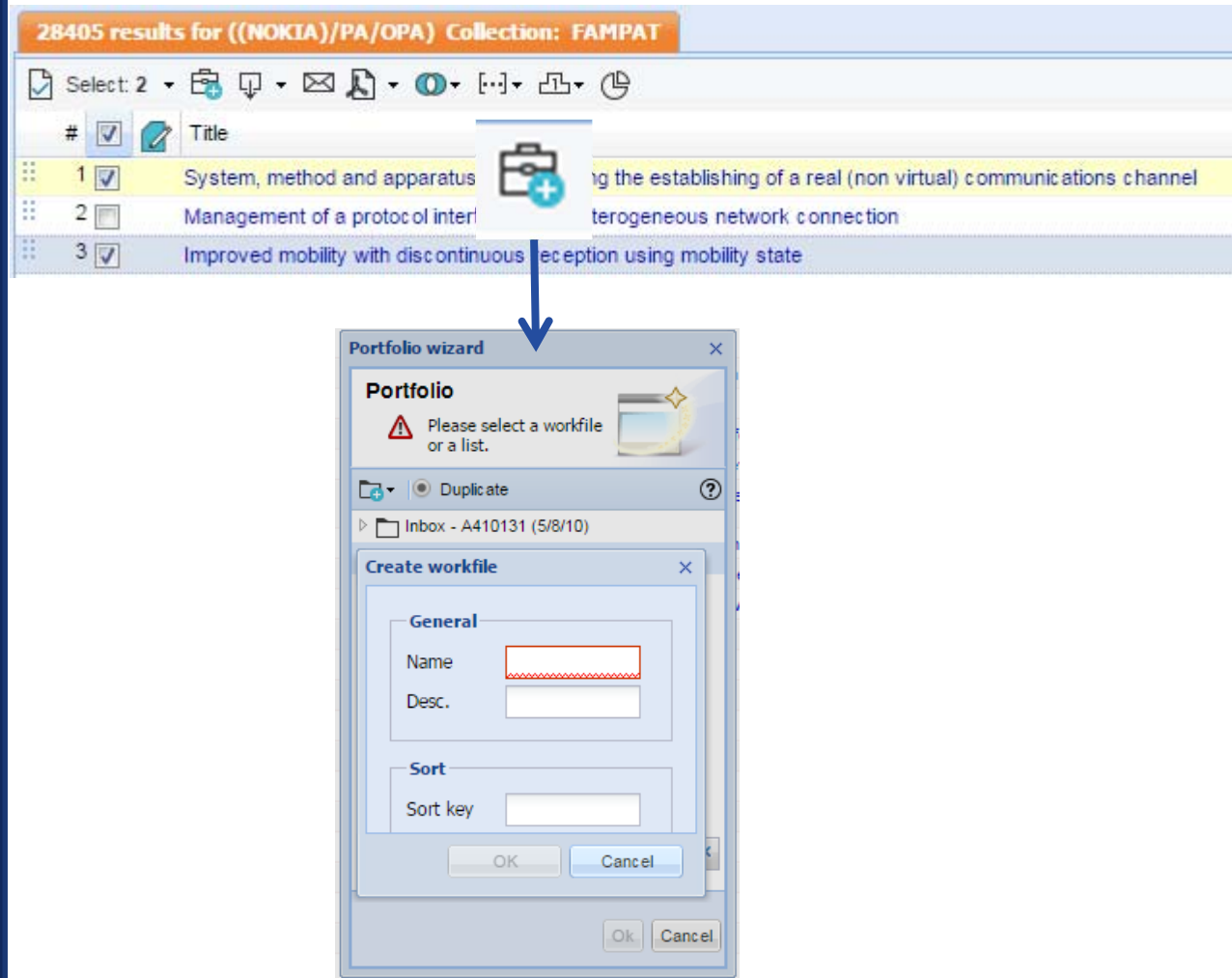
# Archive Search feed



- Feed from an existing folder or create a new folder
- Workfile accessible from Explorer
- Selection of the directory if not Inbox by default



# Archive Feed by list



- Feed from an existing folder or create a new folder
- Workfile accessible from Explorer
- Selection of the directory if not Inbox by default



# Archive Feed by an alert

**Template**

Format: Classical Acrobat (.pdf)

☐ With page break between records

**Data**

Format: Document

Classical  
Classical  
Excel  
XML  
First page style  
Add to workfile  
RSS

Reset script View entire script

**Collections to survey**

- ☒ world patents (full text & biblio) grouped by invention-based families (FamPat)
- ☐ world patents (biblio only) displayed by individual country (PlusPat)
- ☐ 20 countries (full text only) displayed by individual country (Full Text)

**Template**

Format: Add to workfile

Parent Directory:  Select Directory

**Data**

Format: Document

Include: ☐ Key content ☐ Claims ☐ Description ☐ Legal status ☐ With images

**Delivery**

E-mail address(es):  pmangemba@questel.com

**Portfolio wizard**

**Portfolio**

Select a correct target directory.

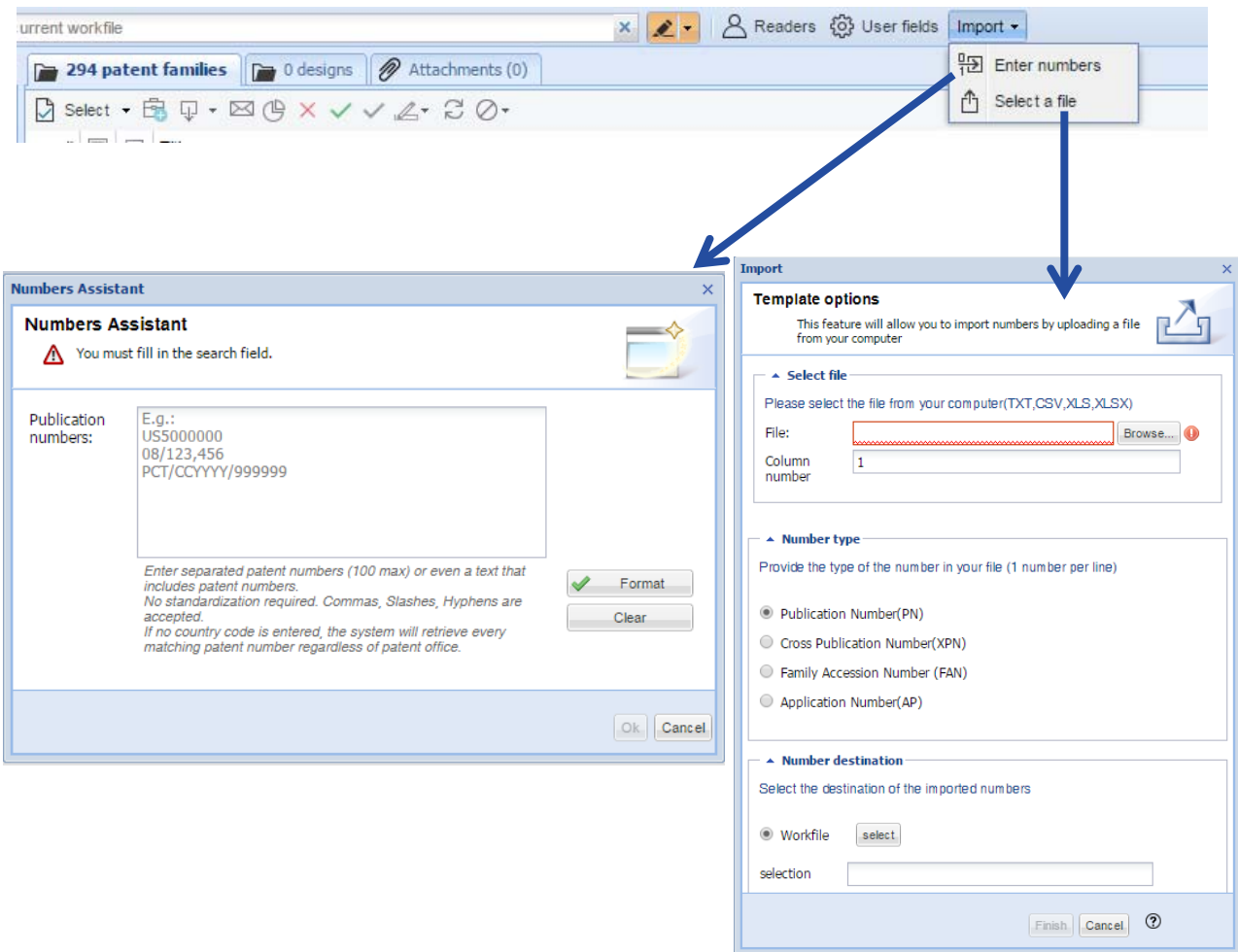
- Inbox - A410131 (6/8/10)
- formation (2/3/0)

Ok Cancel

- Only one directory can be selected.
- The Workfile will be created during the 1<sup>st</sup> run of the alert, the folder will be the name of the alert
- An alert can not be sent in an existing folder.
- Update of the families in a Workfile if monitoring code UE or QW



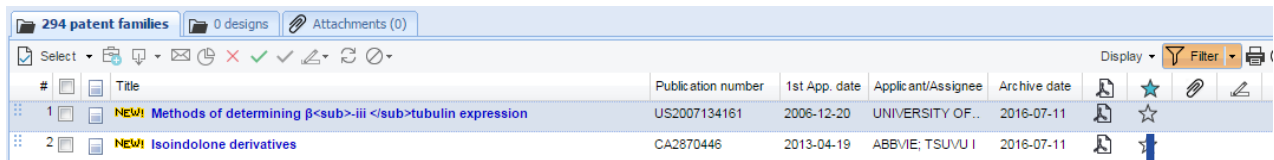
# Archive Feed by Number import



- From Workfile module
- Select a Workfile

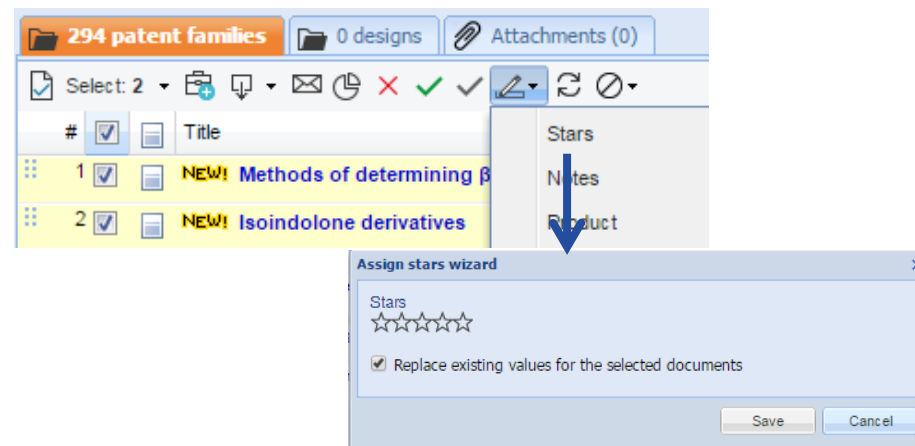
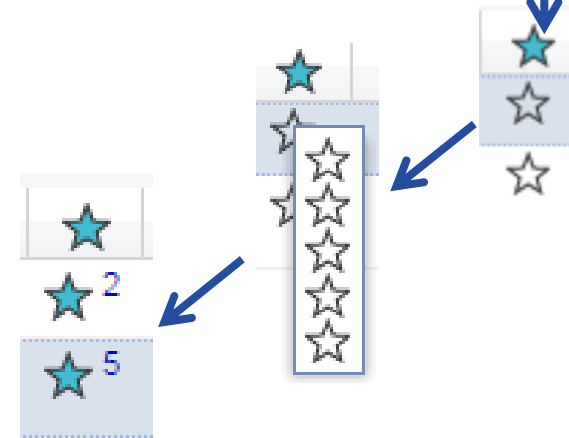


# Review Stars



#	Title	Publication number	1st App. date	Applicant/Assignee	Archive date
1	NEW! Methods of determining β <sub>iii</sub> tubulin expression	US2007134161	2006-12-20	UNIVERSITY OF..	2016-07-11
2	NEW! Isoindolone derivatives	CA2870446	2013-04-19	ABBVIE; TSUVU I	2016-07-11

- From 0 to 5 stars
- Star(s) assigned to a family
- Last distribution of stars displayed



- Allocation of the same number of stars to selected families

**The stars are exportable and filterable.**



# Review Notes

- Note (s) assigned to a family
- Compilation of attributed notes
- Possibility to modify and/or delete

	Title	Publication number	1st App. date	Applicant/Assignee	Archive date			
1	NOUVEAU Data transmission in a radio telephone network	EP0642283	1993-09-06	NOKIA; NOKIA ...	2016-06-23		★ 2	
2	NOUVEAU Improved mobility with discontinuous reception using mobility state	EP2810482	2012-01-30	NOKIA; NOKIA &..	2016-06-23		★ 5	1

#	Title
1	NEW! Methods of determining β
2	NEW! Isoindolone derivatives

- Allocation of the same notes to selected families

The notes are exportable, filterable and searchable.





# Review Attachments

The top screenshot shows the 'Insert file' dialog box with an 'Upload file' sub-dialog. A blue arrow points to the 'File:' input field. The bottom screenshot shows the 'Attachments' table with columns: Name, Description, User, Date, and Time. A blue arrow points to the 'Description' column. Below the table, two patent entries are listed with their details.

Name	Description	User	Date	Time
Orbit training 2016.docx		A410131	2016-07-11	15:13:05

NEW! Methods of determining $\beta$ -tubulin expression	US2007134161	2006-12-20	UNIVERSITY OF..	2016-07-11	4	1
NEW! Isoindolone derivatives	CA2870446	2013-04-19	ABBVIE; TSUVU I	2016-07-11		

- Allocation of the attachment to a family (8 max) or a Workfile (8max)

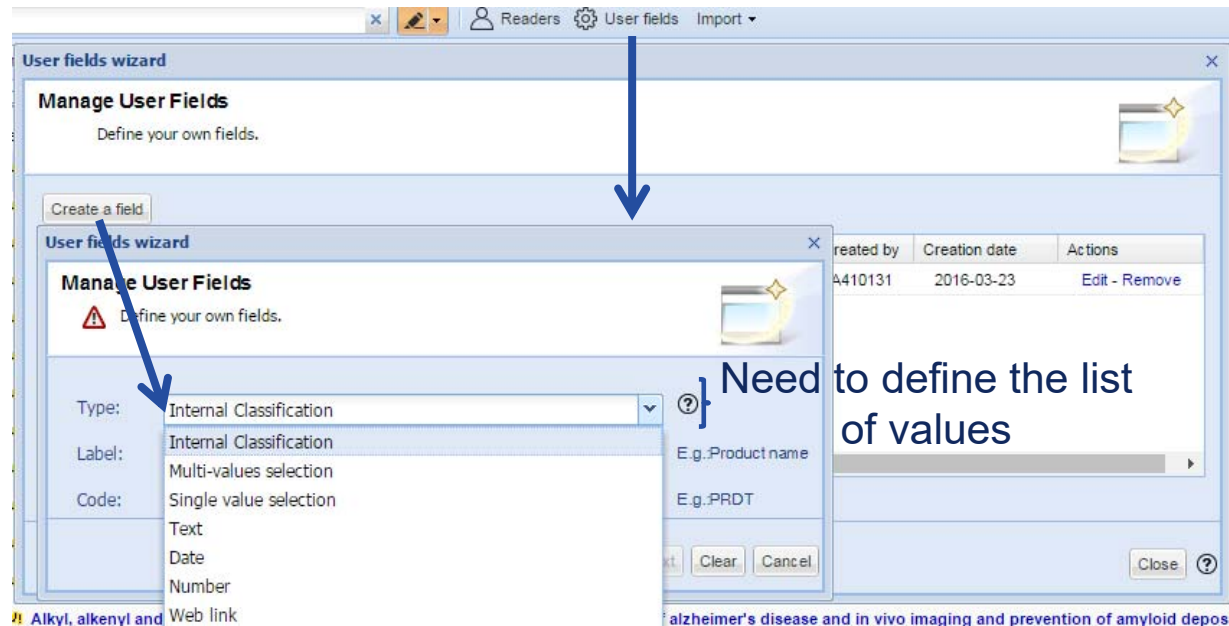
This screenshot shows the 'Insert file' dialog box with the 'Upload file' sub-dialog. It includes fields for 'File:' and 'Desc.', a 'Browse...' button, and 'OK' and 'Cancel' buttons at the bottom.

**Attachments are searchable.**



# Review

## Personal fields: creation



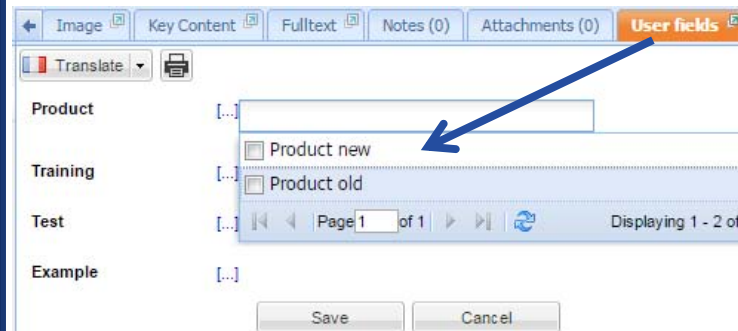
- 100 user fields max
- 1 single type of field internal classification
- Internal classification/ multi-values selector: multiple values per field
- Single value selector: one value per field

**User fields are exportable, filterable and searchable.**

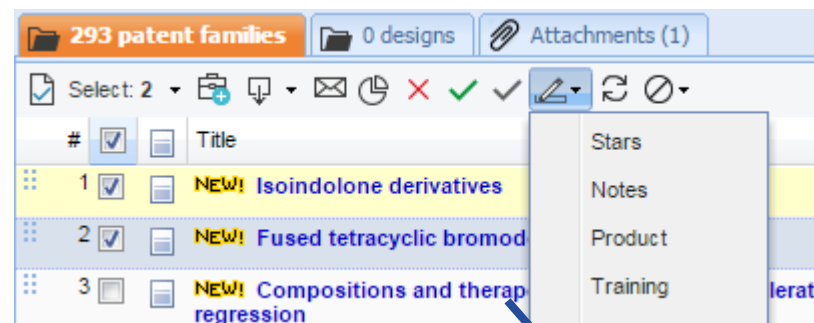


# Review

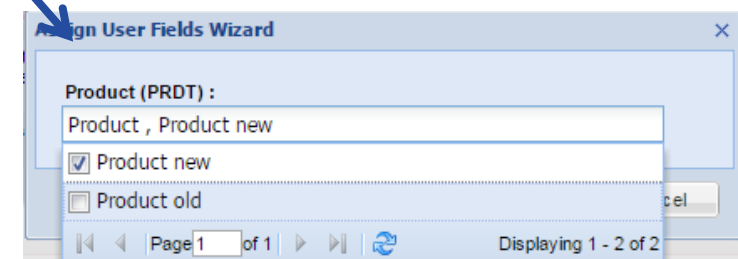
## Personal fields: allocation



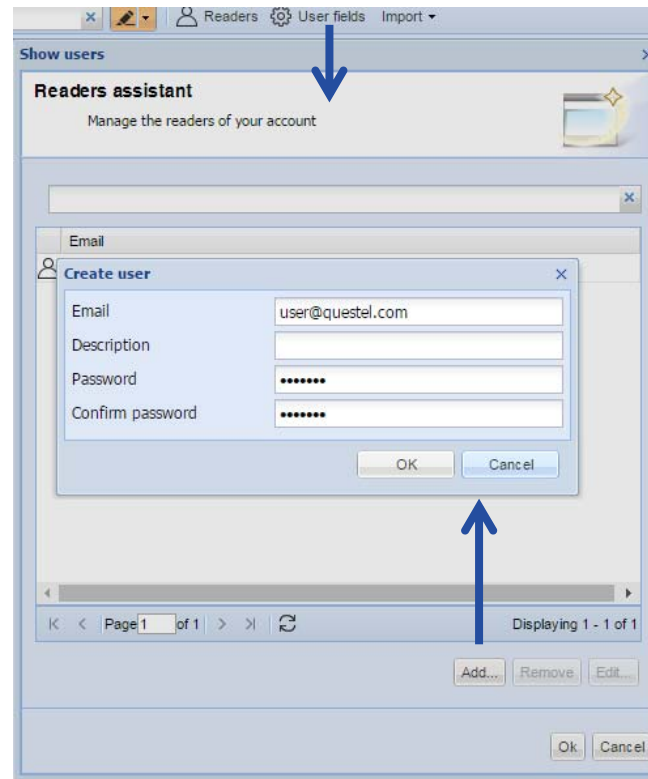
- Allocation of one or more personal fields to a family



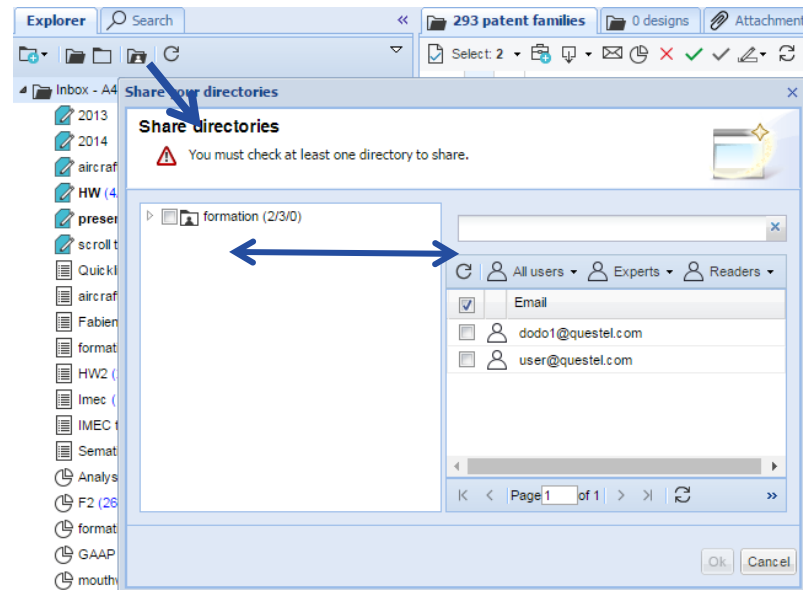
- Allocation of one or more personal fields to a selection of families



# Share Readers and Experts



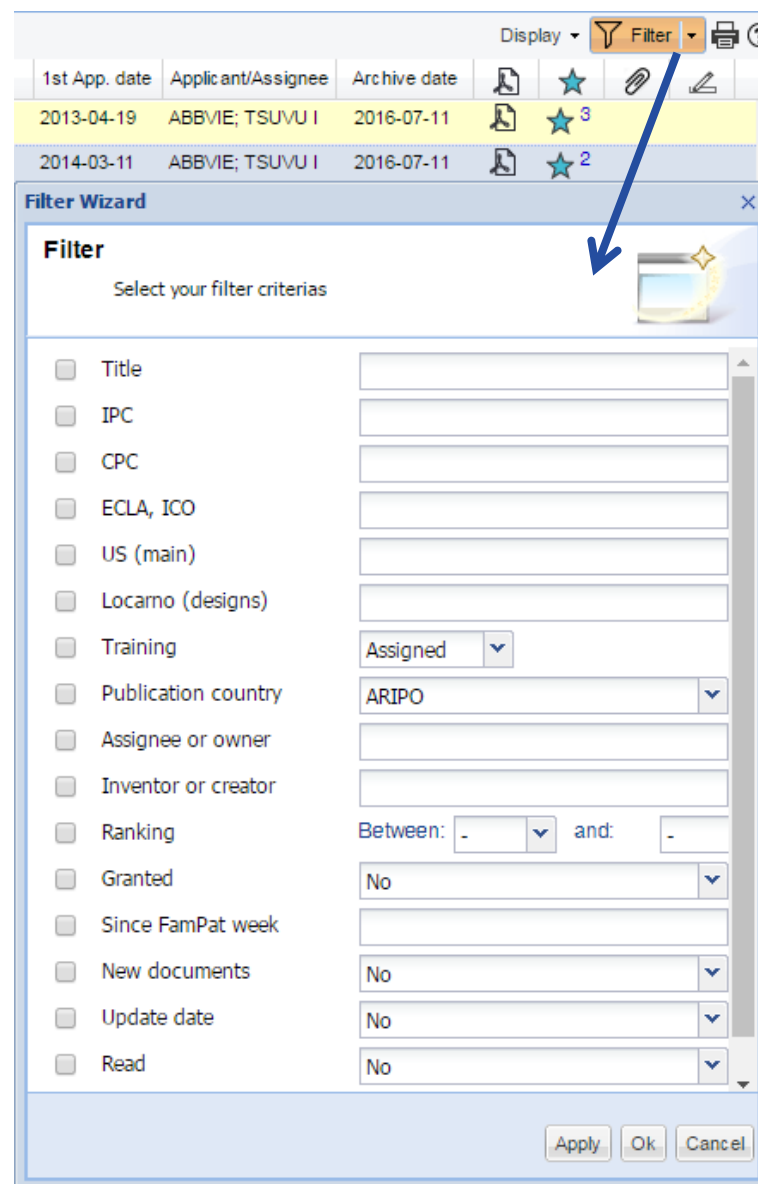
- Email address and password are the identifiers for readers to access to the interface Workfiles and to share documents



- Associate a reader or an expert with a directory



# Operate Filter



**Filter Wizard**

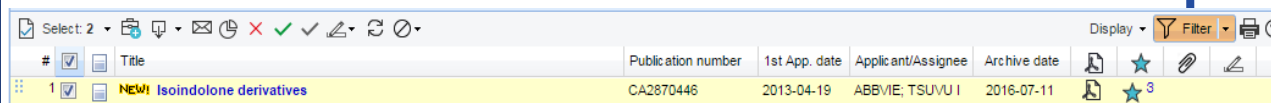
Select your filter criterias

- ☐ Title
- ☐ IPC
- ☐ CPC
- ☐ ECLA, ICO
- ☐ US (main)
- ☐ Locarno (designs)
- ☐ Training: Assigned
- ☐ Publication country: ARIPO
- ☐ Assignee or owner
- ☐ Inventor or creator
- ☐ Ranking: Between: - and: -
- ☐ Granted: No
- ☐ Since FamPat week
- ☐ New documents: No
- ☐ Update date: No
- ☐ Read: No

Apply Ok Cancel

- Filter a folder or directory
- Filter is deleted when viewing another folder

Filter Active

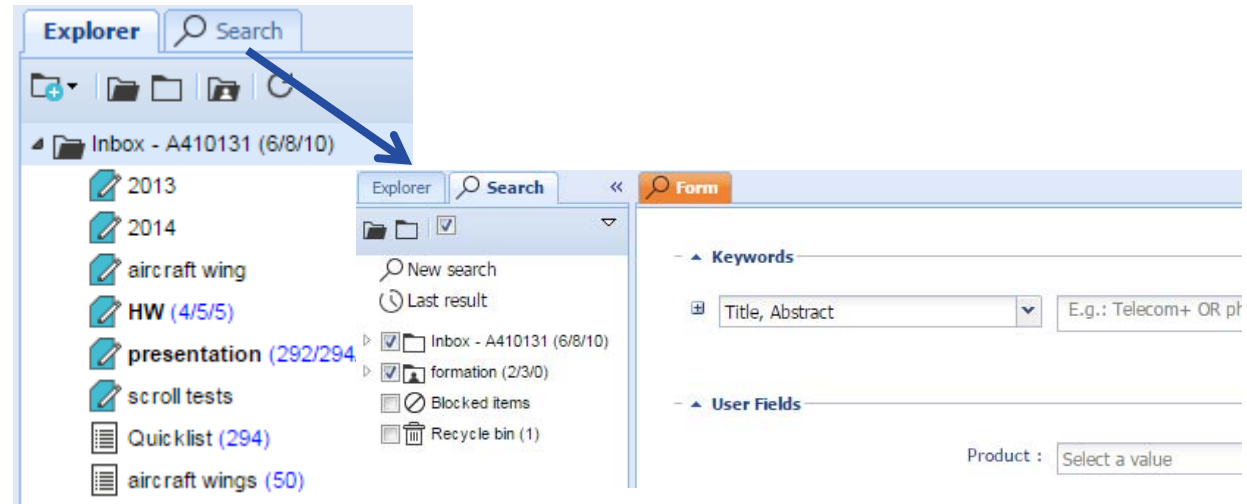


Select: 2

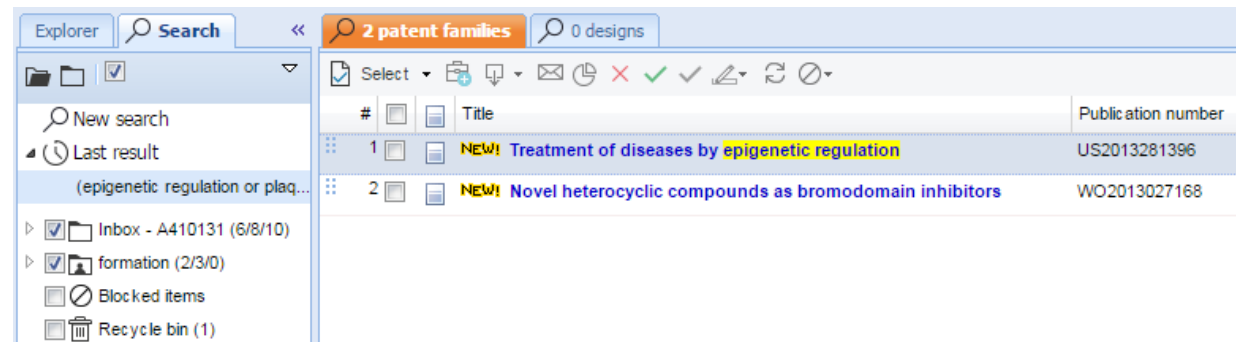
#	Title	Publication number	1st App. date	Applicant/Assignee	Archive date
1	New! Isoindolone derivatives	CA2870446	2013-04-19	ABBVIE; TSUVU I	2016-07-11



# Operate Research



- Selecting a folder, a directory or the entire portfolio
- Different types of data usable for search.
- Unwanted items and trash are searchable only.



# Operate Update

Explorer Search << 2 patent families 0 designs

#	Title	Publication number
1	<b>NEW!</b> Treatment of diseases by epigenetic regulation	US2013281396
2	<b>NEW!</b> Novel heterocyclic compounds as bromodomain inhibitors	WO2013027168

Update

? You are about to update the selected documents, the process will run in background.

Yes No


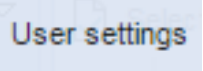
Training Orbit (287/287/287)

UPDATED! Process and apparatus for purifying material of biological origin

- Update of selected families
- Update the contents of the families: new members, new information etc...
- Tag updated is present on the family for a week.



# Settings

- Account button  then 
- Preferences on display include: number of results per page, mail notification, etc...

