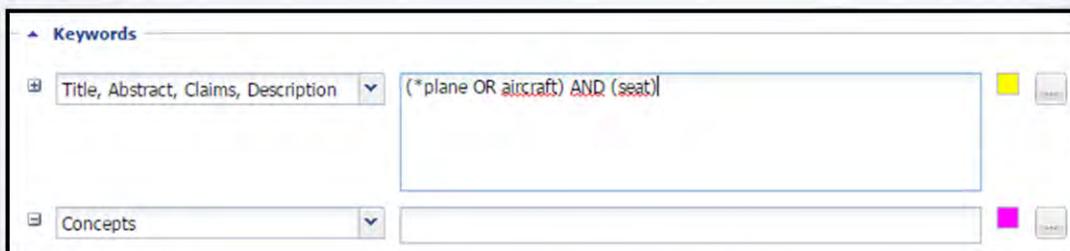


# Methodology booklet for A guided discovery of Orbit

We invite you to follow this short guide to  
discover Orbit basics

## Make a search



The screenshot shows a search interface with two expandable sections. The first section, labeled 'Keywords', is expanded to show a search criteria dropdown menu with 'Title, Abstract, Claims, Description' selected. The search query entered is '(\*plane OR aircraft) AND (seat)'. To the right of the query is a yellow square and a search button. The second section, labeled 'Concepts', is collapsed to show a dropdown menu with 'Concepts' selected. To the right of this section is a pink square and a search button.

- Use operators and truncation
  - The list of operators and truncation is available in the “Annexes” of the help menu 
- Select where to search for designated terms (title, abstract...)
- Multiple search lines is possible

When you are on the search page, Orbit offers you to launch a query based on key words, numbers, dates, inventors names, applicant names ...

Run a search by keyword using Boolean operators and truncation. You can use parenthesis to be more precise. The list of operators and truncation is available in the Help menu.

You can also choose in which field of the patent you want to search those keywords. If you want to search for keywords in a field, and other words in other fields, you can start your search in several lines of keywords. You can open lines clicking on the little +.

## Use our wizards : Corporate tree, related concepts, dictionary...

The screenshot displays the 'General search' interface with several sections and search fields:

- Keywords:** A dropdown menu for 'Title, Abstract, Claims, Description' with the search text '\*plane OR aircraft AND (seat)'. A wizard icon (a small square with a magnifying glass) is circled in orange, with the example text 'E.g. Telecom+ OR phone' next to it.
- Concepts:** A dropdown menu for 'Concepts' with an empty search field and a wizard icon.
- Classifications:** A dropdown menu for 'and' and a dropdown for 'Technology domain' with an empty search field and a wizard icon.
- Names:** A dropdown menu for 'Assignee (original, intermediate, current)' with an empty search field. Below it are fields for 'Inventor:' and 'Representative:'. To the right of these fields are three wizard icons, each with a circled orange box. The first is labeled 'Corporate Tree' with the example 'E.g. Siemens Nivdorf'. The second is labeled 'E.g. Fleming Alexander, Moyer Andrew'. The third is labeled 'E.g. Baker Botts'.
- Numbers, dates & country:** A dropdown menu for 'Publ. number' with an empty search field and a wizard icon. Below it is a 'Date:' dropdown menu set to 'No Restriction' with a wizard icon. At the bottom is a field for 'Patents published in (patent authorities):' with the example 'E.g. US, EP' and a wizard icon.



www.questel.com

To help you in your search, use research assistants that are placed next to search fields.

Among these assistants, you will find a tree mentioning relevant concepts, a corporate tree, dictionaries ...

Try for example the keywords assistant: enter a word in Keywords and run the wizard. Orbit will suggest related terms to add to your search.

Launch a search query to access to hit list.

# Browse and view results

The screenshot displays a patent search results page. At the top, there is a search bar with the query: "US20150117045 (AI/ML/BI/CR/DR/CRAFT) AND (ESAT) (I/I/AR/VR/CPH/USC/DEKS) Collection: IANPA". Below the search bar, there is a table of search results. The table has columns for 'Title', 'Applicant/Assignee', 'Publication number', and '1st Pub date'. The first entry is selected, and its details are shown in a preview pane on the right. The preview pane includes a diagram of a system architecture, a list of publications, and an abstract.

Title	Applicant/Assignee	Publication number	1st Pub date
Systems and methods for providing a virtual assistant	NUANCE COMMUNICATIONS	US20150172463	2015-06-16
Systems and methods for providing a virtual assistant	NUANCE COMMUNICATIONS	US20150172262	2015-06-16
Systems and methods for resin infused harness construction	ROHR	US20150170790	2015-06-16
Insurance applications for autonomous vehicles	TRAVELERS INDEPENDENT	US20150170287	2015-06-16
In-vehicle services for user-provided devices	KMVO	US20150170121	2015-06-16

**Preview pane details:**

- Title:** Systems and methods for providing a virtual assistant
- Diagram:** A network diagram showing a central cloud (106) connected to various devices (100A, 100B, 100C, 100D, 100E, 100F, 100G, 100H, 100I, 100J, 100K, 100L, 100M, 100N, 100O, 100P, 100Q, 100R, 100S, 100T, 100U, 100V, 100W, 100X, 100Y, 100Z) and a server (110).
- List of publications:**

Publ number	Publ date	Document type
US20150172463	2015-06-16	A1 - Application published
- Priority Numbers & Dates:** 2013US-14107022 2013-12-16
- Application Numbers & Dates:** 2013US-14107022 2013-12-16
- Abstract:** A method for conducting a call between a caller and an interactive voice response (IVR) system, the caller using a device to conduct the call, the device configured to evince a virtual assistant, the method comprising using the virtual assistant to conduct the call at least in part by influencing the style of information provided to the caller during the call and/or the content of information passed between the device and the IVR system during the call.
- Inventor(s):** Quast Hojzer, Smith Kenneth W D, Dubois Jason D Jr



www.questel.com

The results list shows all patent families found by your request. A relevancy score is calculated to show you first the most relevant patent families.

You can navigate in the list, and display a preview pane.

It is customizable, and you can choose the preview you want by selecting a tab. You can show or hide tabs by clicking on the small + on the list end.

If you click on Concepts, you access a Cloud of Concepts representing concepts touched by the patent.

## Use Orbit's toolbox

The screenshot displays the Orbit.com web interface. At the top, there is a search bar and navigation options. A toolbar is visible above the hitlist, containing icons for selection, export, and other functions. The hitlist shows two results:

#	Applicant/Assignee	Publication number	1st Publ. date
201	SEARS AERO SEAT COMM MATERIEL AERONAUTIQUESICM SIGMA AERO SEAT SIT SOCIETE INDUSTRIELLE & COMMERCIALE DE MATERIEL AERONAUTIQUE	WO2007042740	2007-04-19
202	BRITAX AIRCRAFT INTERIORS UK L PREMIUM AIRCRAFT INTERIORS	GB0425323	2004-10-22

The detailed view for patent 201 includes a description: "The invention essentially concerns an aircraft seat (1), comprising control units (17.2, 22.2, 27), at least one node (11-15) to execute a particular action or function, and a display (22.1) for viewing video data. Said node (11-15) and said display (22.1) are capable of being actuated by the control units (17.2, 22.2, 27). A keyboard (17.1) for transmitting a command signal addressed to the control units (17.2, 22.2, 27) is connected to said control units (17.2, 22.2, 27). The control units are shared between the display (22.1), the keyboard (17.1) and the node (11-15). (From US8466579 B2)"

On the right side, there is a technical drawing of an aircraft seat with numbered callouts (18, 19, 20, 21, 22, 23, 4.2, 7, 10, 91).

At the bottom of the page, the Questel logo and the website URL [www.questel.com](http://www.questel.com) are visible.

When you select one or more patents with the tick-box, a toolbox appears at the top of the hitlist offering you multiple functionalities.

You can :

- Move selection to a list or a Workfile (we will deal with it later in the demo)
- Export data to Excel, Word, PDF, Intellixir...
- Send links by mail
- Download official PDF copies of patent selected
- Perform an automatic similarity search
- Search for citations
- Show TOPS : top assignees in your hitlist for example, as well as Top Concepts

Higher in the page you can see a highlight tool, allowing you to highlight keywords, and save highlighting profiles.

## Create an alert

The screenshot shows a patent search interface. At the top right, there are buttons for 'Sauvegarder la recherche' and 'Alerte'. The 'Alerte' button is circled in orange. Below the search bar, there is a table of search results. The first result is for 'Airplane seat assembly having beverage cup holder' with publication number US5954394, application date 1996-12-16, applicant CZYZEWSKI THADDEUS, and a relevance of 100%. The second result is for 'passenger bench, magnetic field resonance system, and use of a device for electromagnetic interaction in an airplane seat or in a passenger bench in an aircraft' with publication number US2006145457, application date 2004-12-06, applicant AIRBUS\*, and a relevance of 100%. The interface also includes a 'Prévisualisation' section on the right showing a technical drawing of an airplane seat assembly (Fig. 1) and a 'Relevances' section at the bottom.

Publication number	1st App. date	Applicant/Assignee	Relevance
US5954394	1996-12-16	CZYZEWSKI THADDEUS	100 %
US2006145457	2004-12-06	AIRBUS*	100 %



www.questel.com

You can create an alert directly from the hitlist page.

By acting like this, you will create an alert for the current search query

## Create an alert

**Généralités**

Nom :

Titre :

Sous-compte :

Exécuter l'alerte chaque :

Semaine  Mois

Documents avec abrégé uniquement

en anglais, soit humain, soit traduit par machine

en anglais, humain uniquement

**Template**

Format :

**Data**

Include:  Key content  Claims  Description  Legal status

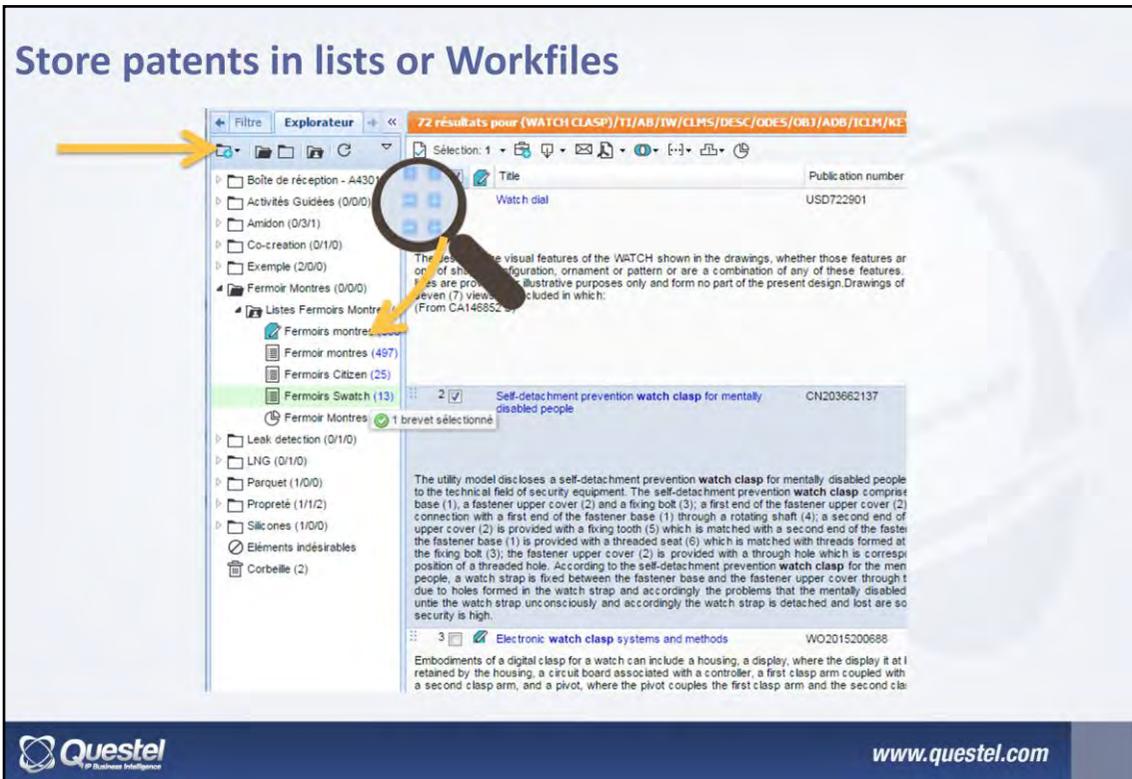
With images

Give a name and a title to the alert, and select periodicity.

In template, you can choose the format of the alert: Excel, RSS... If you select Add to a Workfile, all results retrieved by the alert will be stored in an Inbox.

Mention recipient's email address and validate.

## Store patents in lists or Workfiles



You can save patent families that you want to keep in lists. If you want to save patents just to recover your registration later, use the list (black and white icon). If you want to back up patents to work on, add your information and share documents, create a Workfile (Blue icon).

For our tutorial, please create a Workfile. To create it, click on the little folder at the top of the Explorer.

To feed it with patent, you can either drag and drop patent families directly to the list/workfile, or use the dedicated functionality in the toolbox.

Note : To use drag and drop option, click on the 6 little dots on the left of the patent title.

Lists and workfiles can be organized in folders.

## Review documents in workfiles

The screenshot displays a software interface for reviewing patent documents. At the top, a navigation bar shows '503 patent families', '27 designs', and 'Attachments (0)'. Below this is a table of patent entries:

#	Title	Publication number	1st App. date	Applicant/Assignee	Archive date
1	Rotary signal coupler	EP1514219	2000-09-01	ANTHONY LONSDALE & BRYAN LONSDALE TRANSENSE TECHNOLOGIES	2013-07-19
2	Strap clasp	EP1188389	2000-05-22	GARTIER CREATION STUDIO S.A	2013-12-11

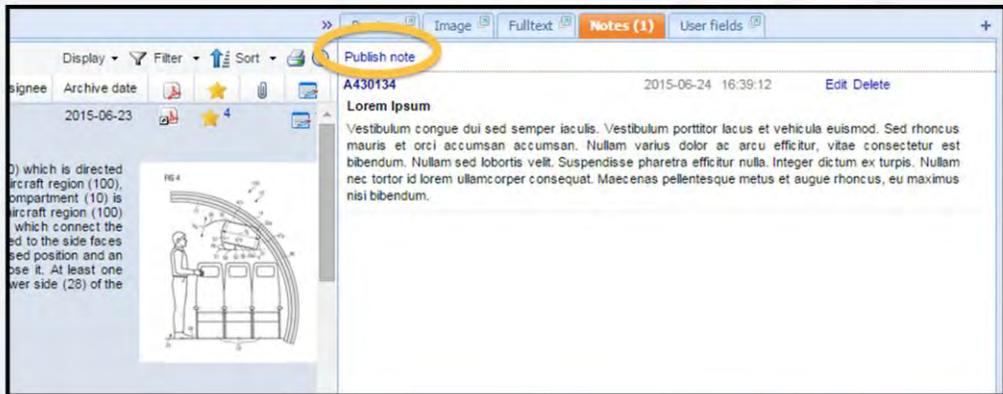
The 'Rotary signal coupler' entry is selected, and its details are shown in a preview pane. The preview includes a technical diagram of the coupler and a detailed description: 'A rotary signal coupler for providing signal coupling to a Surface Acoustic Wave (SAW) device (4) mounted on a shaft (5) includes a first electrically conducting loop (21) mounted on a disc (23) and connected to the SAW device (4), and a second electrically conducting loop (22) mounted on a disc (24) and connected to external electronic circuitry. The disc (23) is fixed relative to the shaft (5) and the disc (24) is fixed relative to the structure in which the shaft (5) rotates so that the loops (21, 22) are inductively coupled. A grounded screen (27), which preferably takes the form of a plurality of radially extending fingers is located on the disc (23) and positioned between the loops (21, 22) to eliminate capacitive coupling therebetween. (From US6864759 B2)'. A star icon with the number '4' is visible next to the applicant name in the table, and a star icon with the number '2' is visible next to the applicant name in the workfile entry below.

You can jump to the workfile by clicking on the dedicated icon in the explorer. You then have access to documents stored in the workfile or found by the alerts.

You can rank patents directly from the hitlist using star ranking.

You can also attach files to a Workfile such as documentation for example.

## Review documents



You can annotate documents by publishing written notes. For this, above the preview pane, click Notes, and then Publish Notes. The name of the reviewer will be mentioned replacing A430134 in this example.

## Create User Fields

The screenshot shows the Irbid.com web application interface. At the top, there is a search bar and a navigation menu. The 'User fields' option is highlighted with a yellow circle. Below the navigation bar, there is a table of patent information. The table has columns for '#', 'Title', 'Publication number', '1st App. date', 'Applicant/Assignee', and 'Archive date'. The first row shows a patent for 'Rotary signal coupler' with publication number EP1314219, first application date 2000-09-01, and applicant ANTHONY LONSDALE & BRYAN LONSDALE TRANSENSE TECHNOLOGIES. Below the table, there is a technical diagram of a rotary signal coupler and a preview of the patent document.

#	Title	Publication number	1st App. date	Applicant/Assignee	Archive date
1	Rotary signal coupler	EP1314219	2000-09-01	ANTHONY LONSDALE & BRYAN LONSDALE TRANSENSE TECHNOLOGIES	2013-07-19



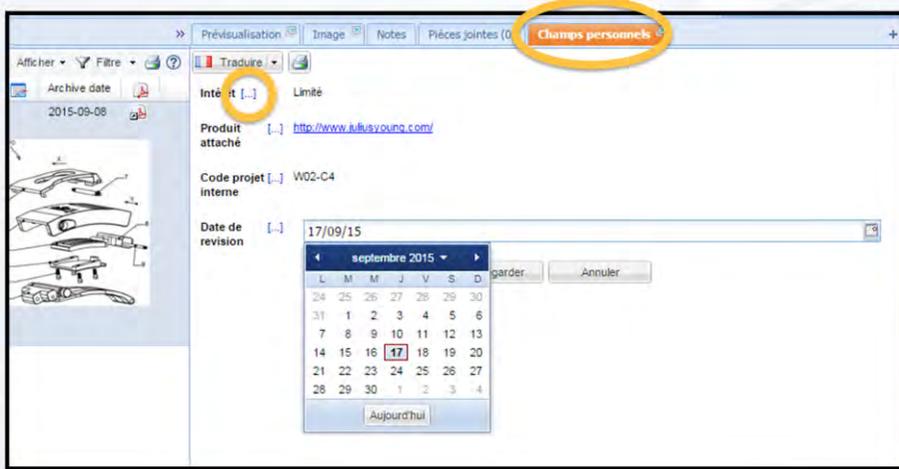
www.questel.com

You can create user fields that will allow you add standardized information to patents you manage.

For this, the first step is to create user field. For this, click on the dedicated menu on the top of the page, and create user fields you want. It can be value selection, text, dates, numbers...

The user fields are searchable. This means that reader will be able to search documents using it.

## Edit User Fields



Once created, the user fields are shown in the dedicated tab.  
Click on the three dots to edit fields.

## Use workfiles toolbox



www.questel.com

If you select one or more patent families in the Workfile, a different toolbox appears on the top. It features some of the functionality of the hitlist's toolbox, but some others are specific. You can for example:

- Note that a family has been read
- Delete a family
- Edit users edit fields bulk
- Update the patent families data
- Block future changes

## Technical Expert's role – Create readers and share Workfiles

The screenshot displays the Orbit.com web application interface. At the top, there is a search bar and a navigation bar with a 'Readers' button circled in yellow. Below the navigation bar, a table lists patent families. The first entry is 'Rotary signal coupler' (EP1314219) with a star icon and the number 4. The second entry is 'Strap clasp' (EP1188389) with a star icon and the number 2. The detailed view for the 'Rotary signal coupler' patent includes a technical description and a diagram of the device. The diagram shows a cross-section of a shaft (5) with a disc (23) mounted on it, and a SAW device (4) connected to the shaft. A grounded screen (27) is positioned between the loops (21, 22) to eliminate capacitive coupling. The 'Strap clasp' patent view shows a diagram of a clasp mechanism labeled '18'.

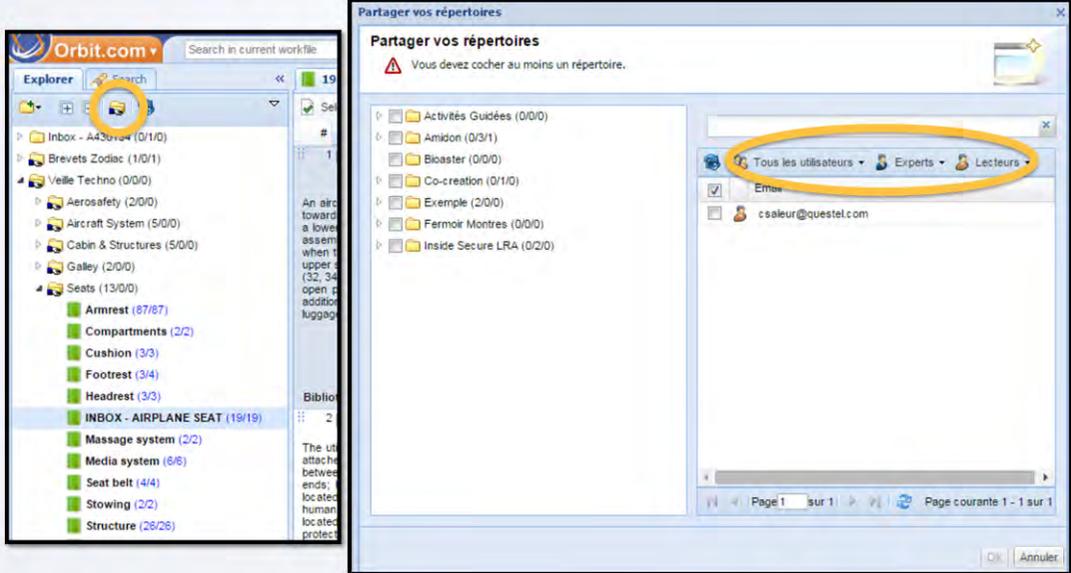
#	Title	Publication number	1st App. date	Applicant/Assignee	Star	Archive date
1	Rotary signal coupler	EP1314219	2000-09-01	ANTHONY LONSDALE & BRYAN LONSDALE TRAN SENSE TECHNOLOGIES TRANSENSE TECHNOLOGIES	★ <sup>4</sup>	2013-07-19
2	Strap clasp	EP1188389	2000-08-22	CARTIER CREATION STUDIO S A CARTIER	★ <sup>2</sup>	2013-12-11

The interest of workfiles is based on the fact that they are shareable. The technical expert and the administrator can designate readers who have access to selected workfiles.

For this, we must create the list of readers. This is done by clicking on the dedicated button on the top of the page.

Orbit asks you to mention an email address and a password to create a profile.

## Create readers



Two methods are available to share the content of workfiles:

1. Make a right click on the parent folder, and click "Share With". Then select the people you want to share your folder with.
2. or click on the dedicated icon (icon with the hand). Select the readers on right and the directories to which they have access on left, and validate.

To avoid having to duplicate this work every time you create a reader, in the second method to share, you can use the Readers drop-down menu above the list of readers: it will offers you a systematic sharing of your workfile.

Note that you can also share with other experts or administrators.

## Reader's role – Search on Workfiles

The screenshot displays the Orbit.com software interface. At the top, there is a search bar with the text 'Search in current workfile'. Below the search bar, the interface shows a list of workfiles. The first workfile is 'Rotary signal coupler' (EP1314219) with a publication number of 2000-09-01 and an applicant/assignee of ANTHONY LONSDALE & BRYAN LONSDALE TRAN SENSE TECHNOLOGIES TRANSENSE TECHNOLOGIES. The second workfile is 'Strap clasp' (EP1188389) with a publication number of 2000-08-22 and an applicant/assignee of CARTIER CREATION STUDIO S A CARTIER INTERNATIONAL CONSEILS & MANUFACTURES VLG RICHMONT INTERNATIONAL RISHMON INTERNATIONAL. The interface also includes a sidebar with a file explorer, a top navigation bar with 'Readers', 'User fields', and 'Import' options, and a bottom status bar with the Questel logo and website URL.



www.questel.com

The reader connects with his email address and password.

It can consult workfiles that were opened to him, and launch a search on them via the dedicated search module. This research module will enable the reader to search by keywords, inventor... but also on the notes given by the technical expert and user fields.

We will now deal with basics of patent analysis  
in Orbit

# Select the data you want to analyze

The screenshot displays the Orbit.com search results for 'ZODIAC SEATS'. A red box highlights the search results header, and another red box highlights a selection dialog box. An orange arrow points from the search results to the dialog box. The dialog box has options for 'All records', 'Current page', and 'None', along with a 'Range' input field and 'OK' and 'Cancel' buttons. The background shows patent details for 'ZODIAC SEATS' with various diagrams and text.

**Select**

- All records
- Current page
- None

Range:  -

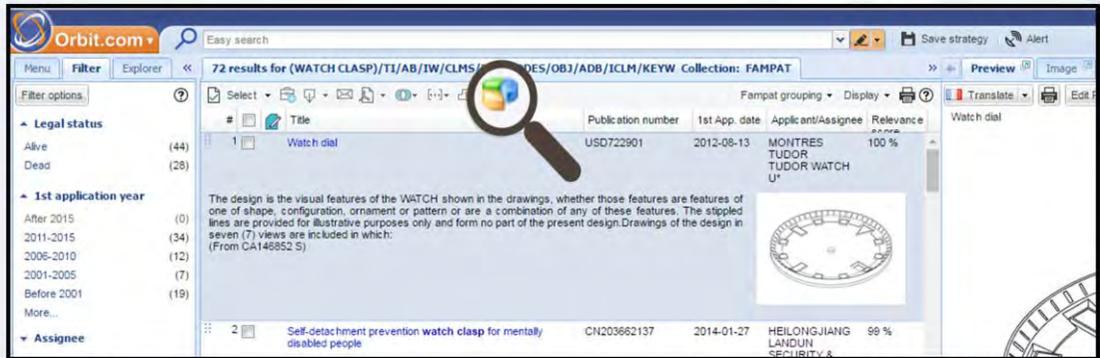
space. In some embodiments, a reversible tray couple with an adjacent tray table with engage

To perform an analysis, you must first select the data to analyze.

You can do so either from the hitlist, from a Workfile, or from a List saved on Orbit.

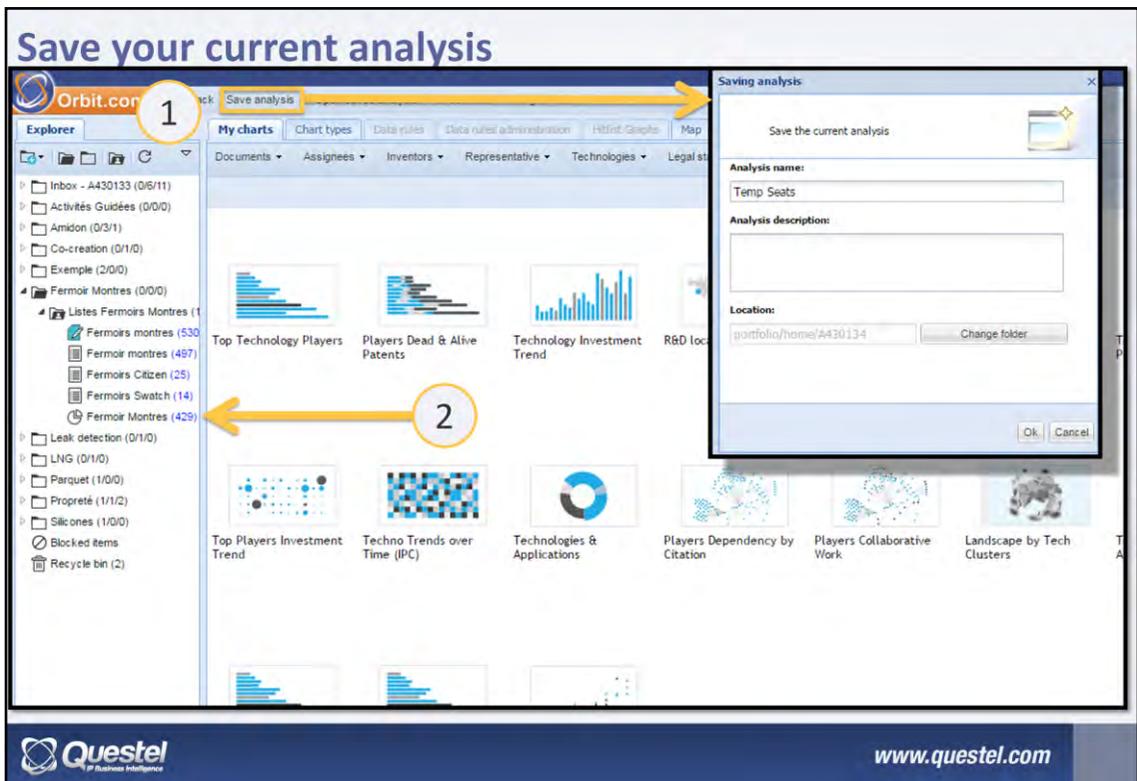
Select the patents to analyze: you can use selection tool to select the whole list, the current page or a range of documents.

## Select the data you want to analyze



Once your selection is made, search and click on this button in the toolbox to launch analysis module.

You may be asked to save the analysis after clicking this link if you have launched an analysis from a Workfile.



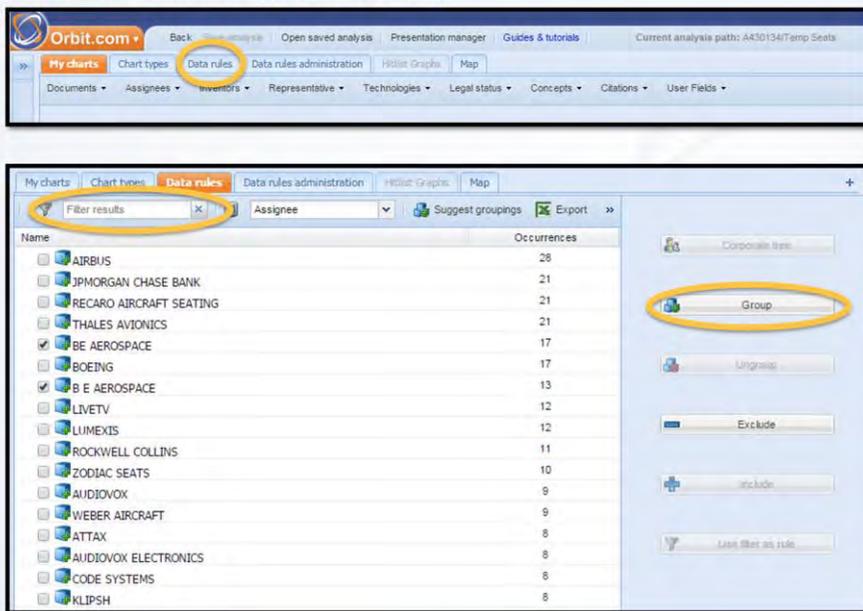
You have two options to work on analysis:

- Live analysis if you want a quick analysis, and if you want to go back and forth to the search module
- Saved analysis if you want to retrieve your analysis in the future, and if you want to normalize assignees, concepts, inventors...

To save the analysis, click on the dedicated link (1), give a name and select the folder.

Your saved analysis is then visible on the Explorer (2). Use this explorer whenever you are in Orbit to access your saved analysis.

## Normalize the data (Optional)



www.questel.com

Orbit offers you the ability to create data rules to normalize the assignee names for example.

If Orbit finds in the patent list for example “BE AEROSPACE” and “B E AEROSPACE” as assignee names, both names will appear on the charts. It can thus be useful to group all the BE AEROSPACE patents to have good analysis.

To do so, click on the link “Data rules” tab at the top.

The next page shows you all the assignee names with related occurrences. Be careful, if you look at the bottom of the page you will see that there is many pages.

- Select the assignees you want to group. You can use the filter option for help, or the corporate tree if you want to group automatically assignees from a same corporation.
- Once the selection is done, click on “Group”.
- You can choose to apply the data rule for this analysis only or for the next ones too.
- Give a name to the group, and the job is done.

You can create as many groups as you need.

Next to the filter you can see a dropdown list : select here the patent field you

want to normalize (assignee, inventor, concepts...)

You can also use the data rules to Exclude assignee names (academics, banks...)

## Normalize the data (Optional)

The screenshot shows the Questel Orbit interface with the 'Suggest groupings' button highlighted. The main window displays a list of companies and their occurrence counts. The 'Suggested groups' dialog box shows three suggested groups, each with a list of related entities and their counts. Checkboxes are present next to each entity name, and a 'Use this group' checkbox is at the bottom of each group section. The 'Create' button is visible at the bottom of the dialog.

Name	Occurrences
AIRBUS	28
JPMORGAN CHASE BANK	21
RECARO AIRCRAFT SEATING	21
THALES AVIONICS	1
BE AEROSPACE	17
BOEING	17
B E AEROSPACE	13
LIVETV	12
LIIMEXIS	12
ROCKWELL COLLINS	11
ZODIAC SEATS	10
AUDIOVOX	9
WEBER AIRCRAFT	9
ATTAX	8
AUDIOVOX ELECTRONICS	8
CODE SYSTEMS	8
KLIPSH	8

**Suggested groups**  
Groups are suggested based on textual similarity and shared patent ownership.

Group name: JPMORGAN CHASE BANK

- JPMORGAN CHASE BANK 21
- BE AEROSPACE 17

Use this group

Group name: AUDIOVOX

- AUDIOVOX 9
- AUDIOVOX ELECTRONICS 8
- AUDIOVOX INCAAR SYSTEMS 2

Use this group

Group name: WEBER AIRCRAFT

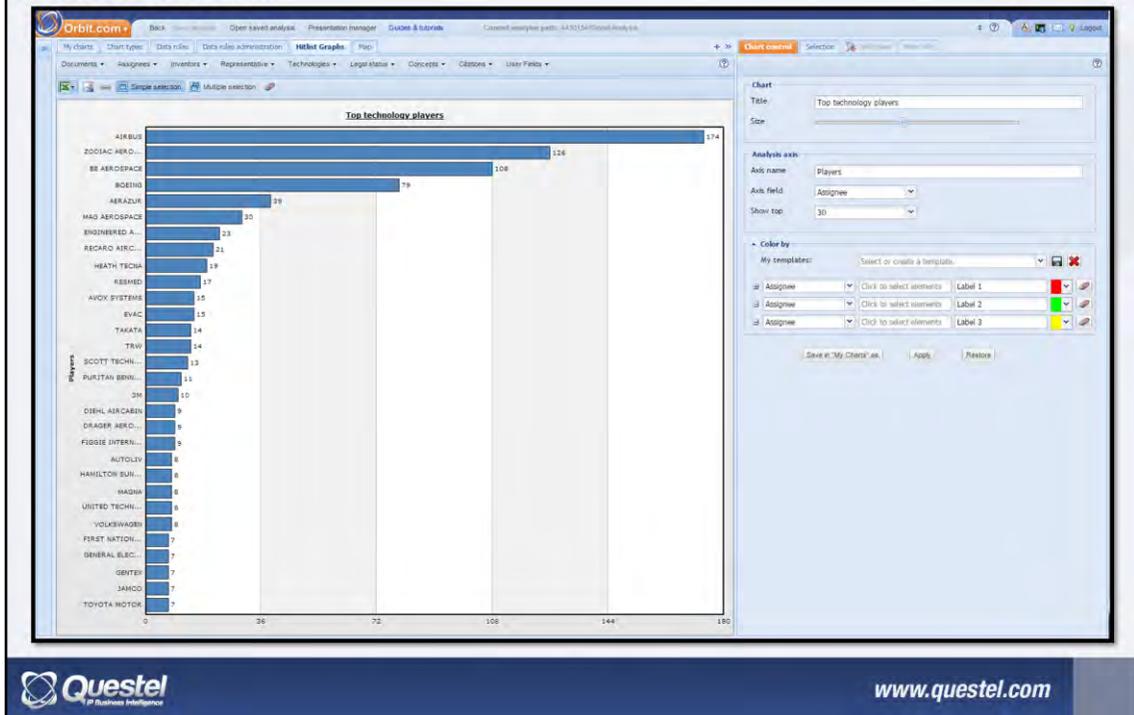
- WEBER AIRCRAFT 9
- AIRCRAFT PROTECTIVE SYSTEMS 3
- PREMIUM AIRCRAFT INTERIORS 2
- BAKER MARTIN AIRCRAFT 1
- S AIRCRAFT 1
- MARTIN BAKER AIRCRAFT 1
- HUGHES AIRCRAFT 1
- UEEBAA AIRCRAFT 1

Scope: Analysis scope

As you can see on this image, Orbit can suggest groupings and help you in this task by detecting textual similarity and shared ownerships for patents.

If you agree with the group just tick the corresponding check box. You can rename the group, remove names... Then click on "Create" at the bottom of the window to validate the groupings.

## Create a chart



You can now create a chart.

To do so, click on the "Chart types" tab, and select for example the first one.

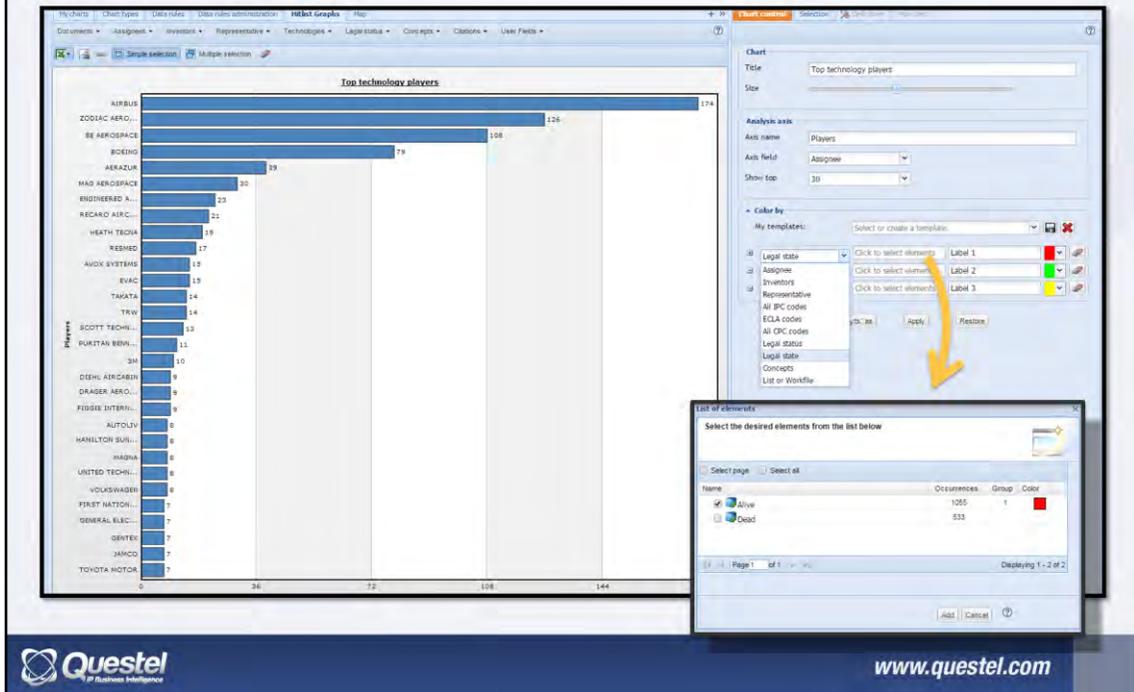
In a second the chart appears, in this example showing you the top assignees.

In the right hand side of the screen, a Chart Control tab allows you to :

- Give a name to the chart
- Select chart size
- Rename the axis
- Choose which info to show in the axis (inventor, assignee, concepts, IPC Codes...) If you make an analysis from a Workfile, you can select the user fields you have given to the patent families (CF page 16 of the previous Booklet)
- Choose the top you want to analyse
- Use the color by option (details on the next page)

After modifying things in the chart control tab, click on Apply to apply changes.

## Color By



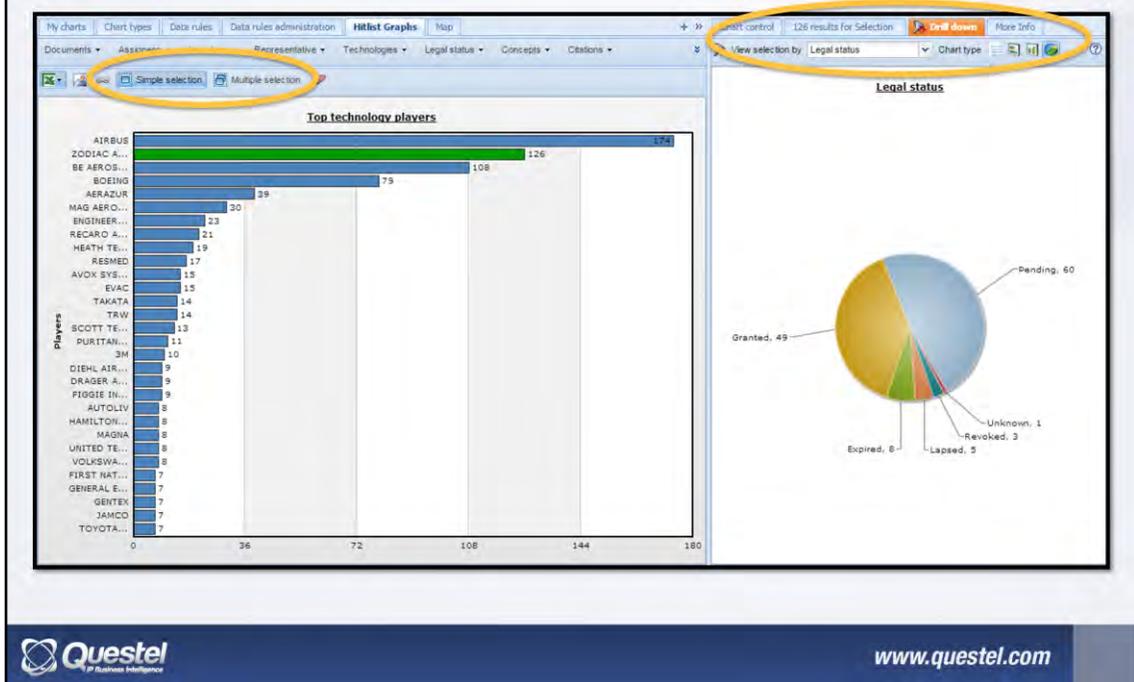
You can apply color in the chart to detail the info shown on the graph.

- To do so, select on the dropdown menu the underlying data, for example “Legal state”
- Then click on the text box just next the dropdown menu, and select the data to colorize. For example “Alive”.
- Give a name to the label (usefull)
- Select a color
- Click on Apply to color your chart.

You can proceed to multiple coloring in one chart. To add a line, just click on the little + at the beginning of each line.

You can save coloring templates: just give a name to it on the textbox just above and chlick the save button

## Explore selection and drill down



You can select a portion of the graph to explore the selection, and to drill down: this means to create a new graph with the selected data.

You have the selection tools just above the chart: single or multiple selection. If you make a multiple selection, don't forget to "apply selection".

Your selected patents appears on the right.

- Click on the drill down tab
- Then use the dropdown menu to select fields to analyze (for example "Legal status")
- Select chart type (tag cloud, bar, column, or pie chart)
- A new graph appears in a second.

## Export the data

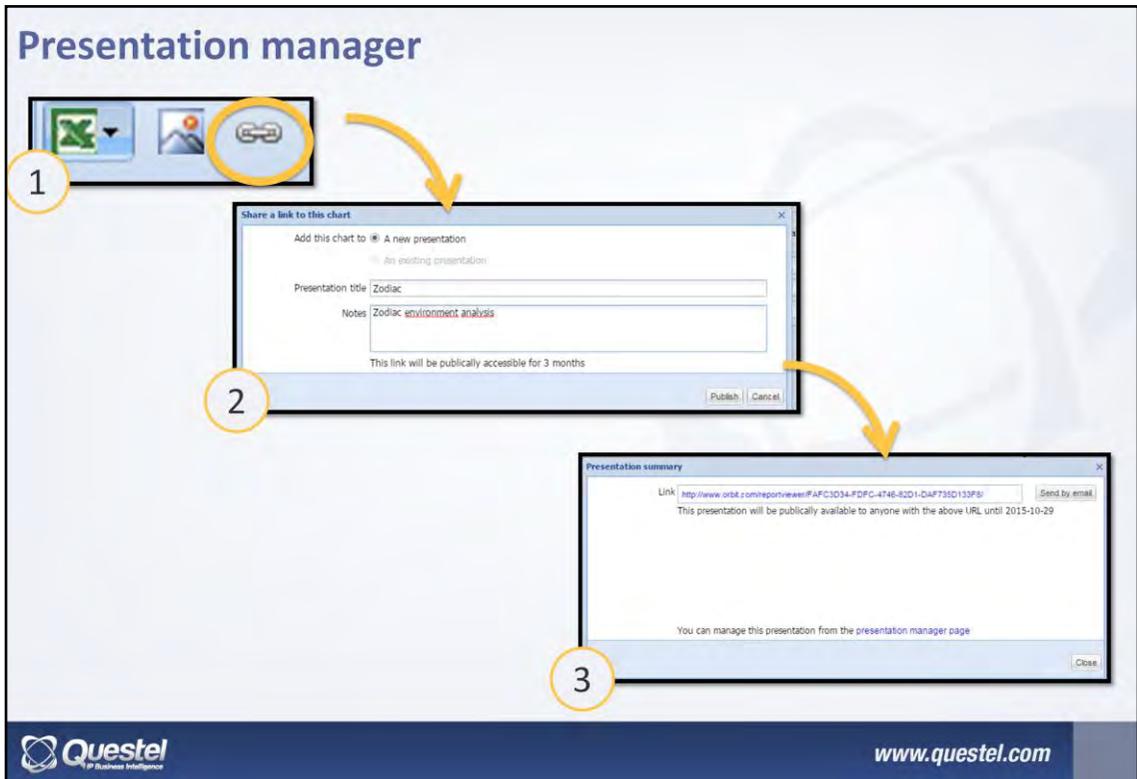
The screenshot displays the Orbit software interface. On the left, a horizontal bar chart titled "Top technology players" lists various companies and their counts. On the right, a pie chart titled "Legal status" shows the distribution of legal statuses. Both charts have a red box highlighting their respective export icons (Excel, Image, and Presentation). A yellow arrow points from the top-left export icons to the bar chart's export icons.

Player	Count
AIRBUS	174
ZODIAC A...	39
BE AEROS...	30
BOEING	23
AERAZUR	21
MAG AERO...	19
ENGINEER...	17
RECARO A...	15
HEATH TE...	15
RESMED	14
AVOK SYS...	14
EVAC	14
TAKATA	14
TRW	13
SCOTT TE...	11
PURITAN...	10
3M	9
DIEHL AIR...	9
DRAGER A...	9
FIGGIE IN...	9
AUTOLIV	8
HAMILTON...	8
MAGNA	8
UNITED TE...	8
VOLKSWA...	8
FIRST RAT...	7
GENERAL E...	7
GENTEX	7
JAMCO	7
TOYOTA...	7

Status	Count
Pending	60
Granted	49
Expired	0
Lapsed	5
Unknown	1
Revoked	3

Orbit offers you the ability to export the charts in multiple formats :

- Excel if you want to reproduce the charts in Office
- Image Format if you want to include it in a presentation for example
- Use the Orbit Presentation tool (More infos on the next page)



You can create and manage online presentations to share with you colleagues, clients or all other interested people.

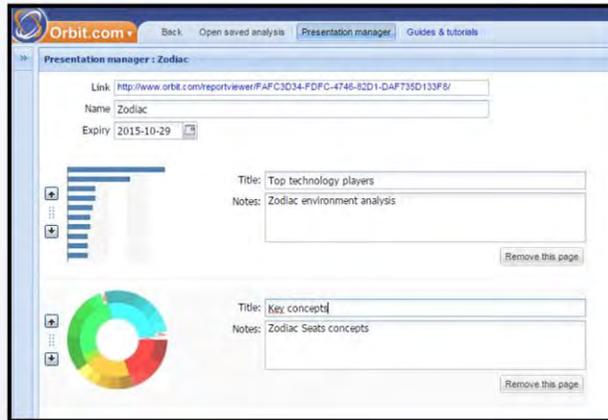
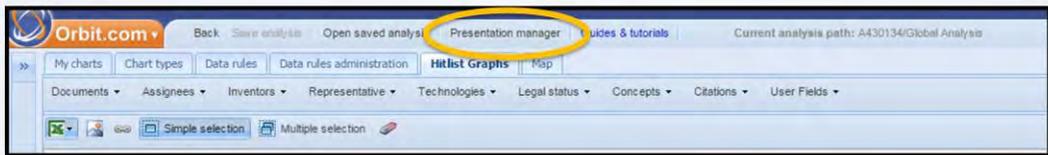
To include an analysis to the presentation :

- Set the charts as you want, including color by if needed
- Click on the little chain link in the export menus
- If it is a new presentation, give a name to it. If not, select the title in the presentation dropdown menu. You can add comments to the chart in "Optional notes".
- Click on Publish

Orbit gives you a weblink to share with the viewers of your choice. They don't need to have access to Orbit.

You can go to another chart type to add it to the existing presentation.

## Presentation manager



Click on the button “Presentation manager” at the top of the page to manage your saved presentations.

On this page you can see all the saved analysis.

You can edit the presentations by clicking on “Edit” at the end of each line. This enables you to add titles and notes to the saved charts, change the order, retrieve the link to share...