

Tableau Software v. iCharts LLC

IPR2024-01387

U.S. Patent No. 8,271,892



Petitioner's Demonstratives

February 10, 2026

Tableau EX1078

IPR2024-01387

U.S. Patent No. 8,271,892 1

Obviousness Grounds

Becerra Grounds

1, 2, 4, 5, 7-9	Becerra (EX1005)
3, 10, 11, 13-16	Becerra, Couckuyt (EX1006)
10, 11, 13-16	Becerra, Couckuyt, Keys (EX1034)
6	Becerra, Moyer (EX1010)
7	Becerra, Jou (EX1007)
12	Becerra, Couckuyt, Keys, Jou

QlikView Grounds

1, 2, 5-9	QlikView Manuals (EX1008, EX1009)
3, 10-16	QlikView Manuals, Couckuyt
10-16	QlikView Manuals, Couckuyt, Keys
6	QlikView Manuals, Moyer

Agenda

The '892 Patent

Becerra Grounds

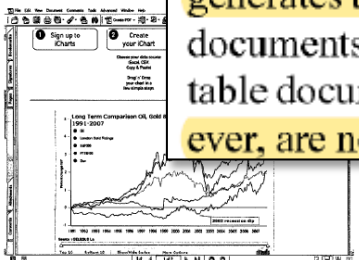
- Independent Claim 1
- Becerra and Couckuyt (Claims 3, 10, 11, and 13-16)
- Becerra, Couckuyt, and Keys (Claims 10, 11, and 13-16)
- Becerra and Jou (Claims 7 and 12)
- Becerra and Moyer (Claim 6)

QlikView Manuals

- The '892 patent's priority date
- Public availability of the QlikView Manuals
- Independent Claim 1
- The QlikView Manuals and Couckuyt (Claims 3 and 10-16)
- The QlikView Manuals, Couckuyt, and Keys (Claims 10-16)
- The QlikView Manuals and Moyer (Claim 6)

The '892 Patent

(12) United States Patent		(10) Patent No.: US 8,271,892 B2
Duncker et al.		(45) Date of Patent: Sep. 18, 2012
(54) CREATION, SHARING AND EMBEDDING OF INTERACTIVE CHARTS (75) Inventors: Seymour Duncker, Heidelberg (DE); Tyron Montgomery, Munich (DE) (73) Assignee: Icharts, Inc., Sunnyvale, CA (US) (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 504 days. (21) Appl. No.: 12/205,802 (22) Filed: Sep. 5, 2008 (65) Prior Publication Data US 2010/0005008 A1 Jan. 7, 2010 Related U.S. Application Data (60) Provisional application No. 61/077,728, filed on Jul. 2, 2008. (51) Int. Cl. G06F 3/048 (2006.01) G06F 17/30 (2006.01) (52) U.S. Cl. 715/765; 715/733; 715/760; 715/781; 715/202; 345/440; 707/805 (58) Field of Classification Search 715/716; 715/719; 727, 733, 748; 751, 753, 760, 764; 715/765, 769, 781, 804, 810, 835, 202; 345/440; 707/705, 805 See application file for complete search history. (56) References Cited U.S. PATENT DOCUMENTS 5,859,641 A * 1/1999 Cave 715/835 6,304,272 B1 * 10/2001 Schanel et al. 345/676 6,757,573 B1 * 6/2004 Leloux et al. 700/946 7,080,070 B1 7/2006 Gavarrini		



BACKGROUND

1. Field

The subject invention relates to interactive charts and, in particular, to the creation, sharing and embedding of interactive charts.

2. Related Art

Microsoft Excel is typically used to enter data into spreadsheets and sometimes make charts or graphs from that data. Users typically enter the data into a spreadsheet in columns and rows. Users can then highlight the data that they want to use to make a chart and then select a chart type. Excel then generates the chart, which can be copied and pasted into other documents (e.g., Microsoft Word documents, web pages, portable document format files (PDFs), etc.). These charts, however, are not interactive.

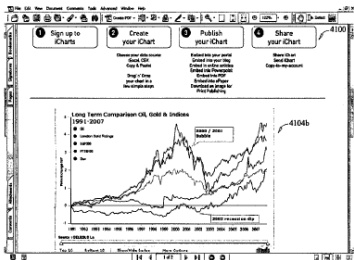
EX1001, 1:13-27.

Google offers an online service that allows users to create interactive charts using an interactive chart widget. Users enter data in an online spreadsheet having a look and feel similar to the Excel spreadsheet. Users can then highlight the data they want to use to make a chart and select a chart type. The widget generates the interactive chart. The interactive features include a zoom feature and a mouse over pop-up window of data. These interactive charts can be embedded in online pages; however, the data in these charts is not secure because the widget fetches data when the screen is refreshed. Any HTML programmer can easily intercept the data stream from the Goggle spreadsheet. In addition, when the charts are copied into other documents (e.g., Microsoft Word documents, PDFs, etc.), the charts are no longer interactive. In addition, other users cannot access the data associated with the interactive chart or copy the interactive chart for their own use.

EX1001, 1:28-44.

The '892 Patent

(12) United States Patent Duncker et al.		(10) Patent No.: US 8,271,892 B2
		(45) Date of Patent: Sep. 18, 2012
(54) CREATION, SHARING AND EMBEDDING OF INTERACTIVE CHARTS	7,398,281 B2 7/2008 Atchison et al. 7,409,634 B2 8/2008 Davis et al. 7,667,582 B1* 2/2010 Waldorf 340/440 7,737,970 B2 6/2010 Roberson et al. 7,837,247 B2 11/2010 Waldorf et al. 7,840,937 B1* 11/2010 Chilver et al. 717/106 7,961,188 B2* 6/2011 Tolle et al. 345/440	
(75) Inventors: Seymour Duncker , Heidelberg (DE); Tyron Montgomery , Munich (DE)	2002/0156806 A1* 10/2002 Cox et al. 707/501.1 2002/0169975 A1* 11/2002 Good 713/200 2004/0164983 A1* 8/2004 Khoozi 345/440 2004/0264697 A1* 12/2004 Gavrilescu et al. 380/255 2005/0232055 A1* 10/2005 Coackuyt et al. 365/227 2006/0136819 A1* 6/2006 Tolle et al. 715/523 2007/0203845 A1 8/2007 Louis 2008/0134059 A1* 6/2008 Kumar et al. 715/760 2008/0195930 A1* 8/2008 Tolle 715/227	
(73) Assignee: Icharts, Inc. , Sunnyvale, CA (US)	(Continued)	
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 504 days.		
(21) Appl. No.: 12/205,802		
(22) Filed: Sep. 5, 2008		
(65) Prior Publication Data	OTHER PUBLICATIONS	
US 2010/0005008 A1 Jan. 7, 2010	"Adobe Flex," from Wikipedia, http://en.wikipedia.org/wiki/Adobe_Flex .	
Related U.S. Application Data	"Flash Charting Software List," from Wikipedia, http://en.wikipedia.org/wiki/Flash_charting_software_list .	
(60) Provisional application No. 61/077,728, filed on Jul. 2, 2008.	(Continued)	
(51) Int. Cl.	Primary Examiner —Xiomar I. Bautista	
G06F 3/048 (2006.01)	(74) Attorney, Agent, or Firm —Foley & Lardner LLP;	
G06F 17/30 (2006.01)	George C. Beck; Alex Y. Nie	
(52) U.S. Cl. 715/765 ; 715/733; 715/760; 715/781; 715/202; 345/440; 707/805	(57) ABSTRACT	
(58) Field of Classification Search 715/716; 715/719, 727, 733, 748, 751, 753, 760, 764, 715/765, 769, 781, 804, 810, 835, 202; 345/440; 707/705, 805	Systems and methods for generating and sharing interactive charts are described. The interactive charts are generated in an online portal that allows users to customize the interactive features of the chart. An exemplary interactive feature includes an interactive audio feature. The interactive chart can be shared by, for example, embedding the interactive chart in an external electronic document, such as a .ppt or PDF document, that can be shared with other users. The interactive chart and/or the data associated with the interactive chart may also be purchased through an online store environment or otherwise shared with other users.	
See application file for complete search history.		
(56) References Cited	16 Claims, 51 Drawing Sheets	
U.S. PATENT DOCUMENTS		
5,859,641 A * 1/1999 Cave 715/835		
6,304,272 B1* 10/2001 Schanel et al. 345/676		
6,757,573 B1* 6/2004 Ledoux et al. 700/94		
7,080,070 B1 7/2006 Gavarrin		



The interactive chart may be a flash object.

EX1001, 1:65.

The interactive charts that are downloaded are self-contained flash files that can exist independent of the web portal. The user only requires Adobe Reader (containing Adobe flash player) to execute the code in the flash file. Any electronic document that can play flash can show the interactive charts. It will be appreciated that although the interactive chart 300 has been described as a flash chart other files having similar features may be used. An exemplary program that is configured to create such a file is Microsoft's Silverlight.

EX1001, 10:7-15.

The '892 Patent: Independent Claims

1. A **computer system** comprising:

- [1A]** a data module configured to store **data**;
- [1B]** a chart template module configured to store **chart templates**;
- [1C]** a generation module configured to generate an interactive chart on a **generation interface**,
- [1D]** wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
- [1E]** a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,
- [1F]** wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

10. A **computer-implemented method** comprising:

providing a **generation interface** having a data pane and a chart pane;

receiving a user selection of **data** in the data pane;

receiving a user selection of a **chart template** in the chart pane, wherein the chart template is stored in a **chart template module located on a remote server**;

allowing the user to drag and drop the selected data into the chart pane on the generation interface;

automatically generating an interactive chart using data dropped into the chart pane and the chart template from the chart template module selected by the user; and

publishing or embedding the interactive chart as a self-contained and independent electronic document,

wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactive features when published or embedded.

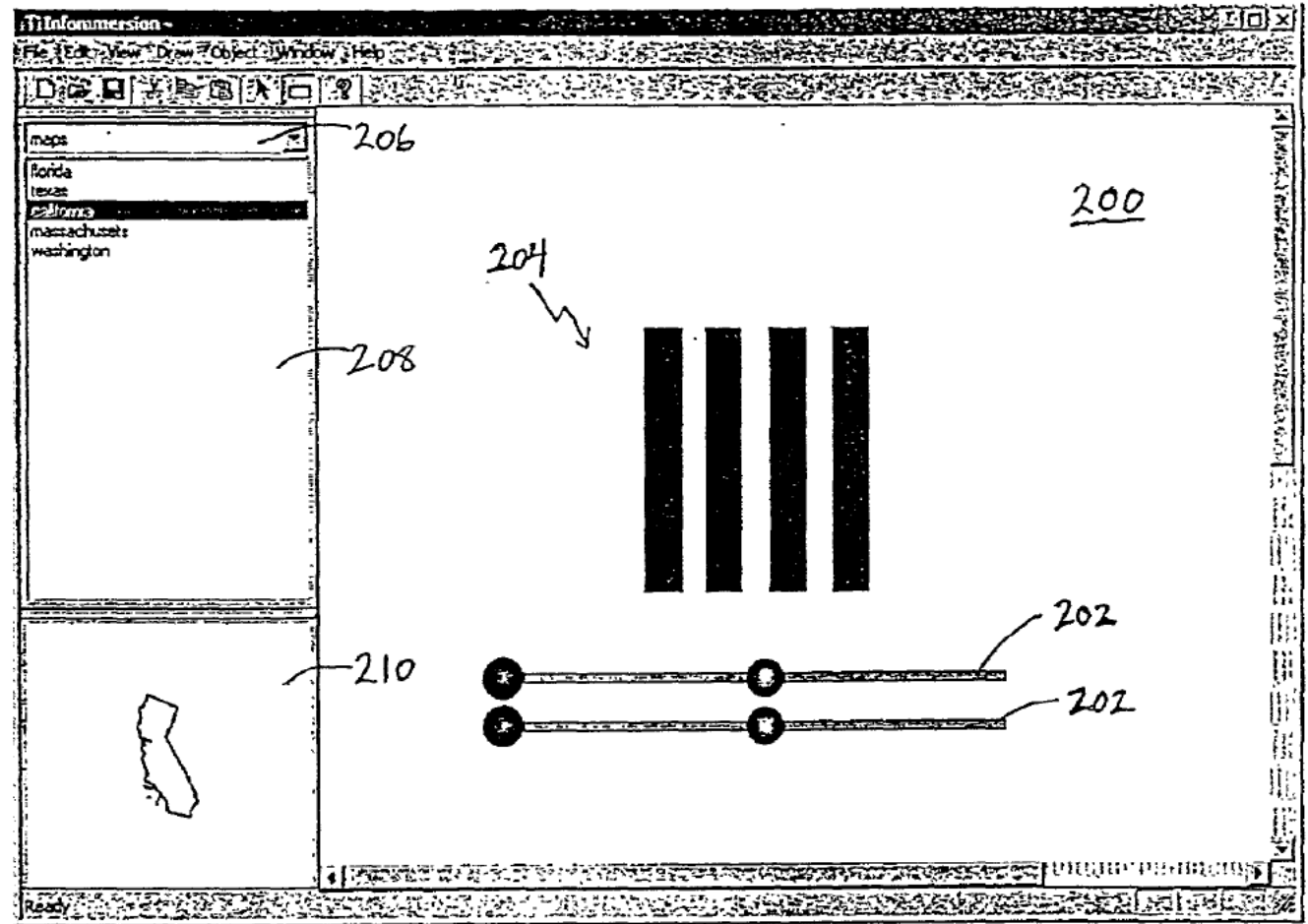
Ground 1: Becerra
(Claims 1, 2, 4, 5, and 7-9)

Ground 1: Becerra

Becerra

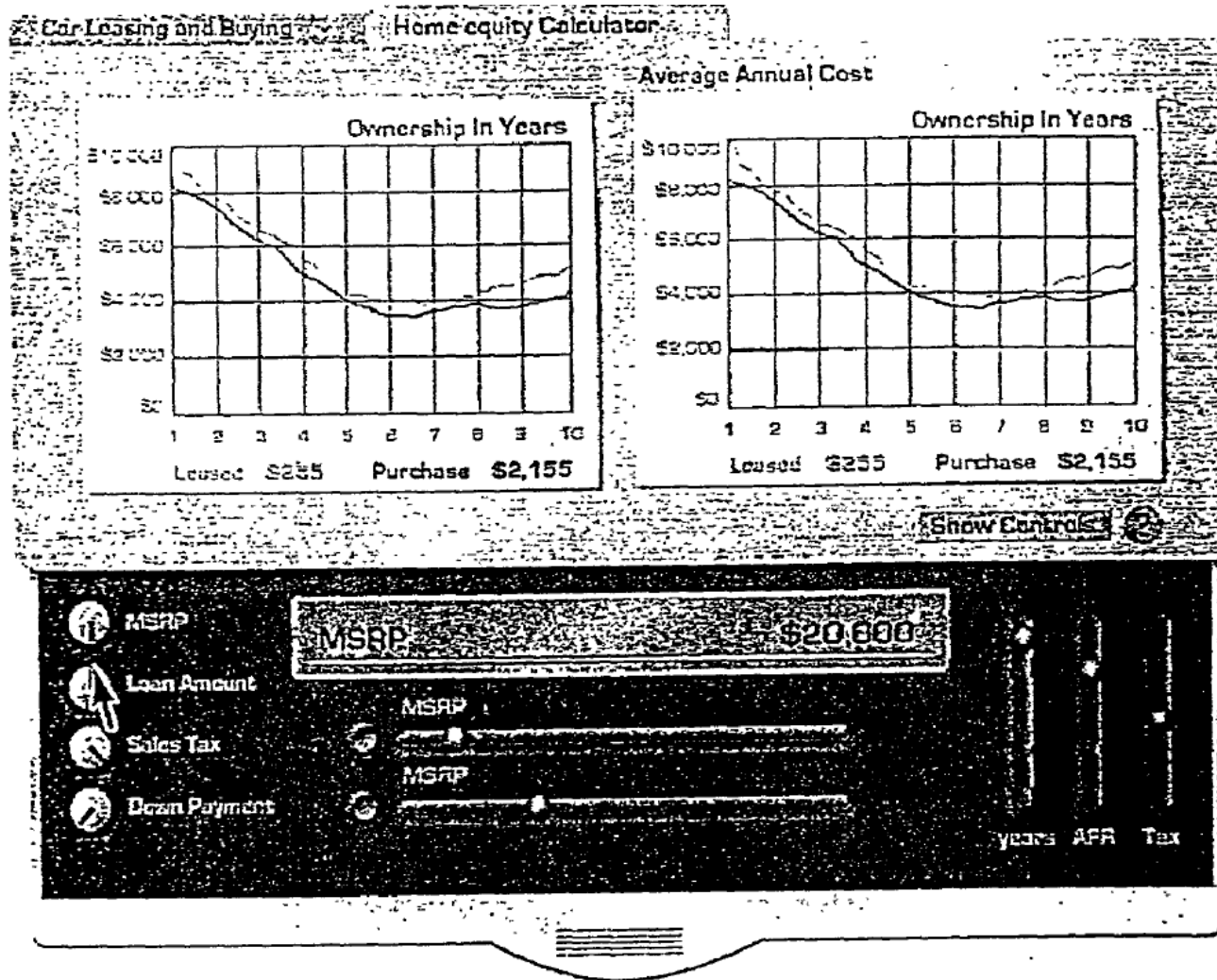
[0010] In one embodiment of the invention, the method includes generating a “control panel” (explained in further detail below) by creating and/or selecting graphic components or objects and placing them on a graphics “canvas.” The components may be created by the user using known graphic development software (e.g., Flash™) or selected from preexisting files or libraries (e.g., Flash™ files). Such components may include, for example, user interface elements (e.g., sliders, buttons, checkboxes), charts, maps, moving characters or objects, “special effects,” etc. The nature and appearance of the components is limited only by the imagination of the user and the capabilities of the graphics development software or files available to the user.

EX1005, ¶10.



EX1005, FIG. 2.

Ground 1: Becerra



EX1005, FIG. 5.

Becerra

[0052] After a control panel is created as described above, it may be exported such that it is no longer dependent in any way on either the tool that created it or the spreadsheet that was used in creating it. FIG. 5 illustrates a computer screen display of an exemplary control panel that may be created in accordance with the present invention. As shown in FIG. 5, various graphic input and output components are provided by the control panel. By manipulating or adjusting input components (e.g., sliders and rotating knobs), output components will dynamically change in accordance with the mathematical model extracted from the spreadsheet used to create the control panel. In this way, a user is provided with a dynamic, creative and visually stimulating representation of input and output data and their relational behavior. In a preferred embodiment, this control panel may be saved as a separate file that is executable by a standalone program (e.g., Flash Player™) that is independent of the layout tool or spreadsheet used to create it.

EX1005, ¶152.

Ground 1: Becerra teaches element [1A]

[1A]: “a data module configured to store data”

Becerra discloses element [1A] in at least two ways:

- 1 The “*computer system*” implementing Becerra’s techniques provides a “*data module configured to store data*,” e.g., a file system storing a spreadsheet file.

Pet., 16-17; EX1003, ¶¶166-68.

- 2 Becerra discloses storing the selected data and an associated mathematical model within an internal data structure

Pet., 17-18; EX1003, ¶¶169-71.

Ground 1: Becerra teaches element [1A]

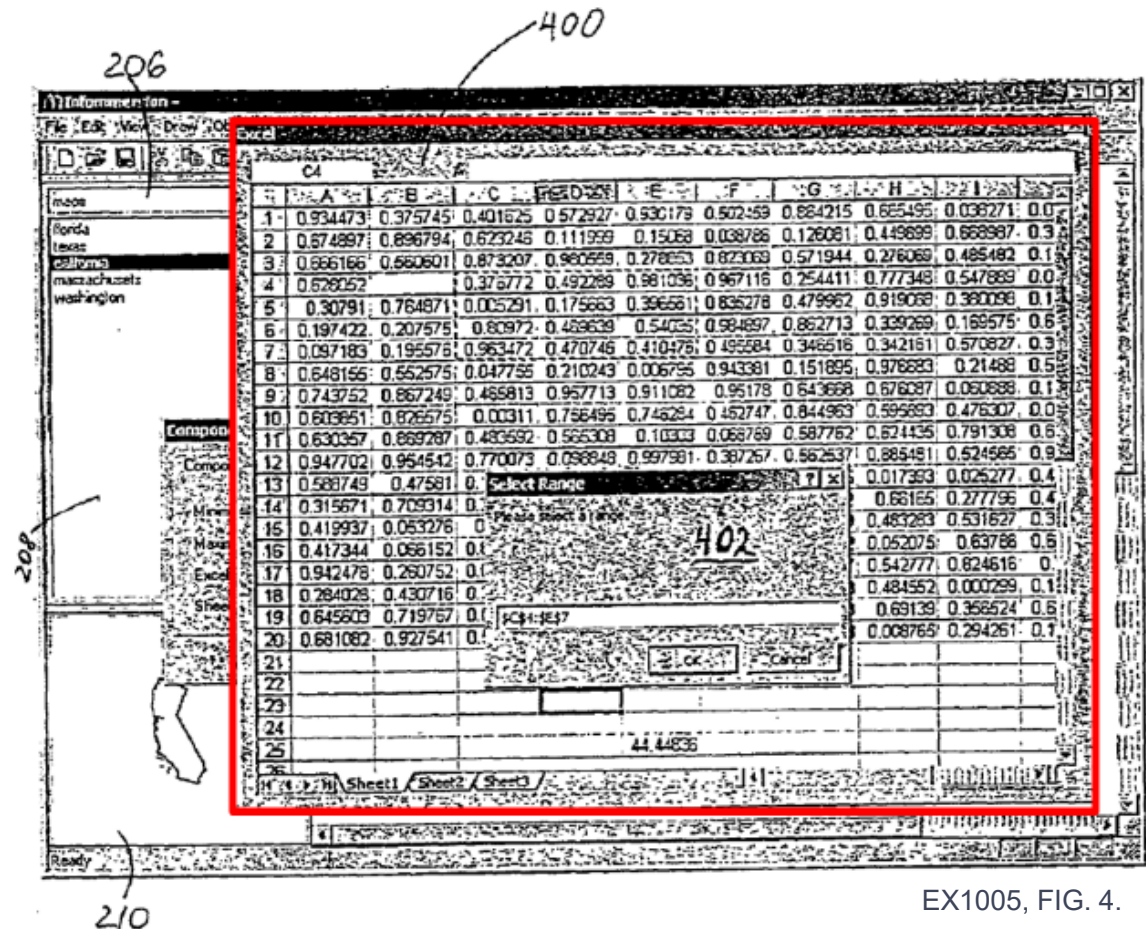
1

The “computer system” implementing Becerra’s techniques provides a “data module configured to store data,” e.g., a file system storing a spreadsheet file.

Becerra

be specified as well. As shown in FIG. 3, the user can select a data source by selecting a valid spreadsheet file (e.g., a file called C:test.xls) and one or more cells (i.e., a range of cells) within the corresponding spreadsheet to associate the one or more cells to a selected component. This functionality, as illustrated in FIG. 3, can be implemented in a straightforward manner using standard MFC controls.

EX1005, ¶138.



EX1005, FIG. 4.

Ground 1: Becerra teaches element [1A]

2

Becerra discloses storing the selected data and an associated mathematical model within an internal data structure

Becerra

[0044] In a preferred embodiment of the invention, a Calculation Engine is provided that takes the necessary formulas (including intermediate cell formulas) from a spreadsheet and generates an internal data structure that can be used to re-create the minimal calculations necessary for selected cells within the spreadsheet. Only the necessary

EX1005, ¶44.

Petitioner's Expert

171. Becerra stores the underlying data selected from the data source:

“After a control panel is created . . . **it may be exported such that it is no longer dependent in any way on either the tool that created it or the spreadsheet that was used in creating it.**” EX1005, ¶52. A POSA would have therefore understood that Becerra’s program stores the selected data and the associated mathematical model for inclusion in the exported control panel.

EX1003, ¶71.

Ground 1: Becerra teaches element [1A]

POR

The data that is stored in the data module 216 can include, for example, dates, years, birthdays, letters, words, and categories in addition to numeric values. EX1001 FIGS. 3, 14, 23, 25, and 26.

In contrast, Becerra's control panel Excel spreadsheet contains only numeric values and formulas dependent on them. EX1005 [0020]:1-17. Thus, Becerra fails to disclose data module configured to store data used to create the claimed interactive charts. EX2001 ¶124.

EX1005, ¶44.

PO's Expert

Column 18. So Claim 1 recites, A computer system comprising a data module configured to store data, right?

A Yes, that's part of the claim.

Q That data could be, for example, numeric values; is that fair?

A Yes. I believe numeric values is a type of data.

Q And looking at the claim, the data module just needs to be part of the recited computer system; is that right?

A This says, The computer system comprising a data module configured to store data.

Q So the data module is part of the computer system, right?

A Yes.

EX1070, 22:1-14.

Ground 1: Becerra teaches element [1B]

[1B]: “a chart template module configured to store chart templates”

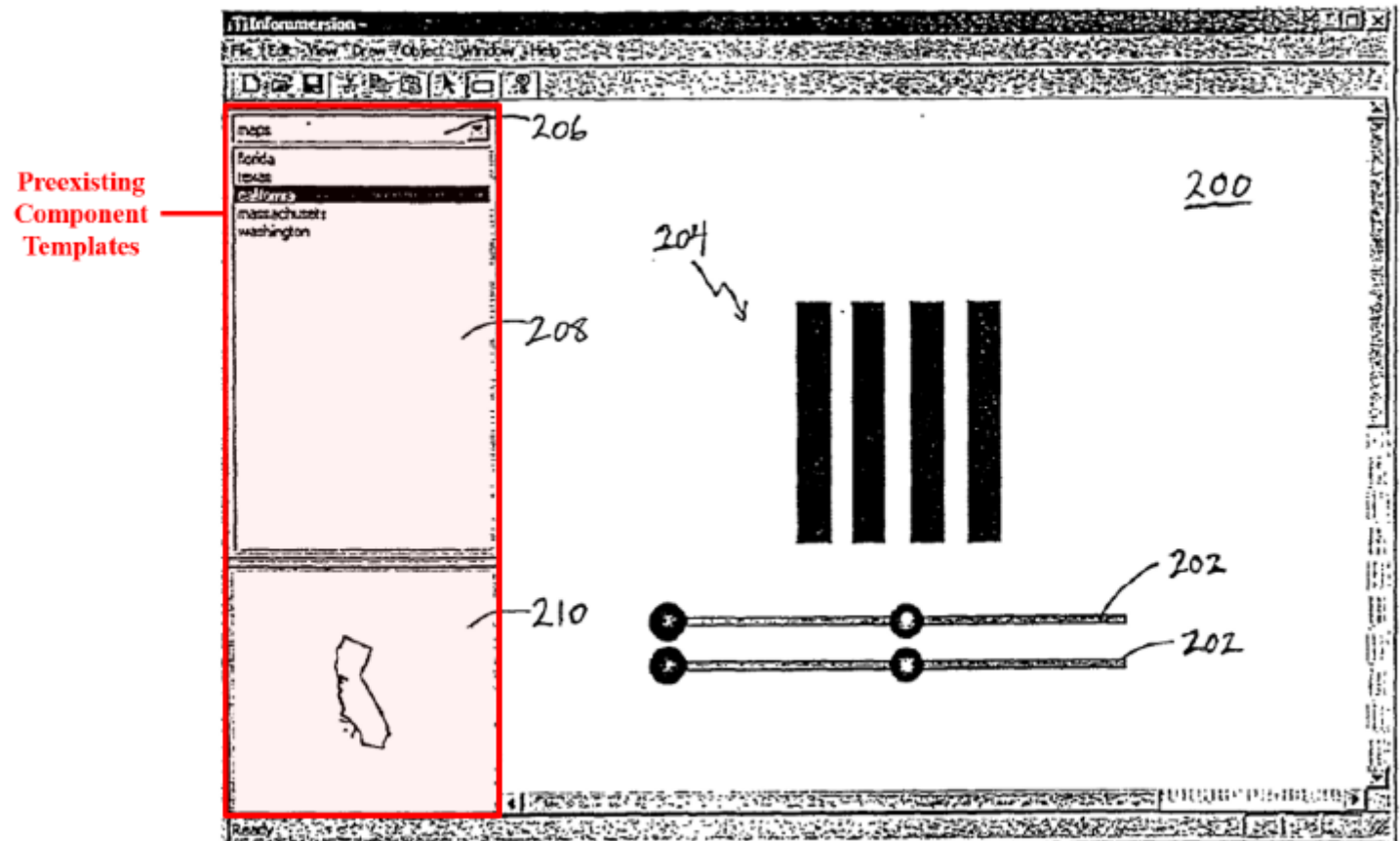
Becerra

[0010] In one embodiment of the invention, the method includes generating a “control panel” (explained in further detail below) by creating and/or selecting graphic components or objects and placing them on a graphics “canvas.” The components may be created by the user using known graphic development software (e.g., Flash™) or selected from preexisting files or libraries (e.g., Flash™ files). Such components may include, for example, user interface elements (e.g., sliders, buttons, checkboxes), charts, maps, moving characters or objects, “special effects,” etc. The nature and appearance of the components is limited only by the imagination of the user and the capabilities of the graphics development software or files available to the user.

EX1005, ¶10.

chart component 204 onto the canvas 200. In the case of the example mentioned above having input cells A1 and B1 and output cells A2, B2, A3 and B3, a user could select a slider component 202, for example, from a pre-created component library and create two instances of it on the canvas, each representing one of the input cells A1 and B1. The user could then select the bar chart component 204 having four bars, for example, and create one instance of it on the canvas to represent output cells A2, B2, A3 and B3.

EX1005, ¶32.



EX1005, FIG. 2.

Ground 1: Becerra teaches element [1B]

POR

EX1001 11:37-41. Becerra does not disclose or teach preset chart templates with formatting settings. EX2001 ¶128. Becerra's system formats the bar chart when it generates the control panel using a mathematical formula. EX1005 [0025]:1-5, [0042]:1-5. Although Becerra discloses bar chart component 204 (*Id.* [0032]:3-5), that bar chart component is not a template; it is part of a control panel. Becerra makes no mention of templates for charts. EX2001 ¶128.

POR, 30.

Ground 1: Becerra teaches element [1B]

Patent Owner's expert and its inventor agree that chart template formatting settings include the type of chart

PO's Expert

Q And in that panel titled, Presets, it shows a number of different chart templates; is that right?

A Yes.

...

Q Some of the chart templates are bar chart templates, do you see those?

A Yes.

...

Q The bar -- let's take the bar chart. One of the bar chart templates, for example, that template is formatted in the form of a bar chart, right?

A Yes.

EX1070, 23:20-24:20.

Inventor

Q So a chart template are formatting settings one of which can be a type of chart?

A Yes.

EX1071, 18:5-7.

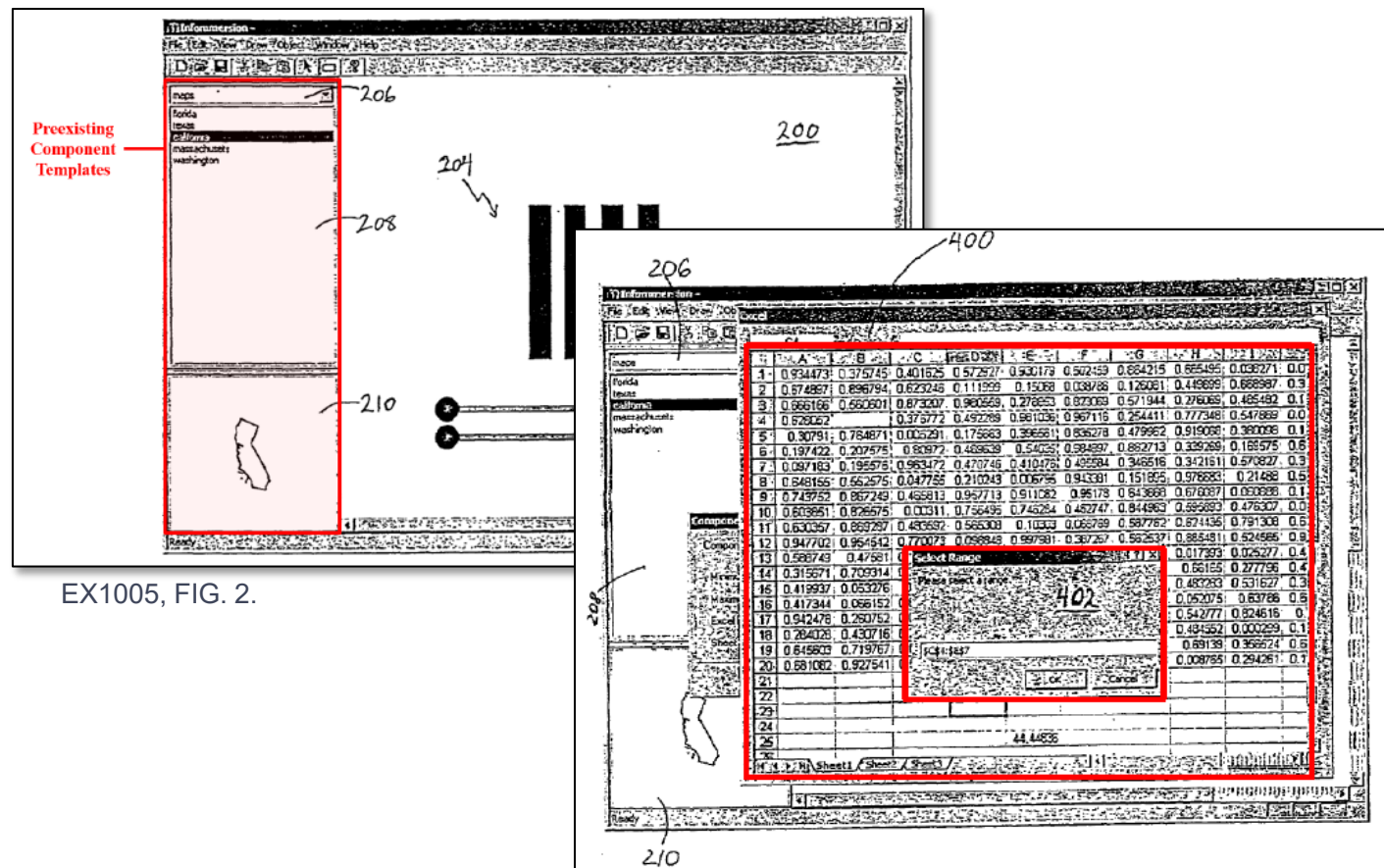
Ground 1: Becerra teaches elements [1C] and [1D]

[1C] and [1D]: “a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module”

Becerra

[0032] FIG. 2 illustrates an exemplary computer screen display of a canvas layout tool in accordance with one preferred embodiment of the invention. As shown in FIG. 2, a user has placed two slider components 202 and one bar chart component 204 onto the canvas 200. In the case of the example mentioned above having input cells A1 and B1 and output cells A2, B2, A3 and B3, a user could select a slider component 202, for example, from a pre-created component library and create two instances of it on the canvas, each representing one of the input cells A1 and B1. The user could then select the bar chart component 204 having four bars, for example, and create one instance of it on the canvas to represent output cells A2, B2, A3 and B3.

EX1005, ¶132.



Ground 1: Becerra teaches elements [1C] and [1D]

POR

In further contrast to the '892 Patent, Becerra does not disclose generating an interactive chart. EX2001 ¶¶129-133. Instead, Becerra discloses generating an interactive graphics simulation of a control panel with a bar chart component.

POR, 30.

and the components are chart templates, which they are not, Becerra does not disclose, teach, or suggest the claimed generation module that generates the interactive chart “from data stored in the data module and a template from the chart template module.” EX1001, cl.1; EX2001 ¶132. Instead of generation based on data and a chart template, Becerra relies on a math model to create Flash movie based on Actionscript code. EX2001 ¶132.

POR, 30-31.

Petitioner Reply

iCharts argues, “Becerra relies on a math model to create [a] Flash movie based on Actionscript code.” POR, 30-32. This argument is illogical. Becerra teaches selection of data from “a data source,” and “the data and associated mathematical model are stored.” Pet., 24 (citing EX1005, ¶¶24, 38, 44); EX1003, ¶188. Both the selected data and extracted associated mathematical model are forms of “data” within the scope of claim 1, and Becerra’s “interactive chart” is created using this “data.” Pet., 17-18, 23-24; EX1003, ¶¶168-170, 187-189. Moreover, the '892 patent similarly uses Flash for its “interactive chart.” EX1001, 1:65; EX1003, ¶¶95-96; POR, 31.

Pet. Reply, 7.

'892 Patent

The interactive chart may be a flash object.

EX1001, 1:65.

Ground 1: Becerra teaches element [1E]

[1E]: “a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document”

Petitioner’s Expert

191. Becerra teaches this limitation. For example, Becerra discloses “a sharing module configured to enable a user to publish” a control panel, including “the interactive chart,” as a “self-contained and independent” Flash file: “After a control panel is created as described above, **it may be exported such that it is no longer dependent in any way on either the tool that created it or the spreadsheet that was used in creating it.**” EX1005, ¶52.

EX1003, ¶191.

Becerra

[0052] After a control panel is created as described above, it may be exported such that it is no longer dependent in any way on either the tool that created it or the spreadsheet that was used in creating it. FIG. 5 illustrates a computer screen display of an exemplary control panel that may be created in accordance with the present invention. As shown in FIG. 5, various graphic input and output components are provided by the control panel. By manipulating or adjusting input components (e.g., sliders and rotating knobs), output components will dynamically change in accordance with the mathematical model extracted from the spreadsheet used to create the control panel. In this way, a user is provided with a dynamic, creative and visually stimulating representation of input and output data and their relational behavior. In a preferred embodiment, this control panel may be saved as a separate file that is executable by a standalone program (e.g., Flash Player™) that is independent of the layout tool or spreadsheet used to create it.

EX1005, ¶52.

Ground 1: Becerra teaches element [1E]

POR

publishing or embedding the control panel. EX2201 ¶21. A POSA would understand that exporting or saving a file is different from publishing or embedding a file. EX2001 ¶136. A POSA would understand that subsequently opening the file is not publishing the control panel. EX2001 ¶136; EX2201 ¶21. As an exemplary embodiment, the '892 Patent discloses that a user can share the chart by publishing the chart by selecting the publish button 1616. EX1001 14:41-43. The Board was not persuaded that Petitioner has explained how exporting the control panel to a separate file is sufficient to teach the publishing aspect of the invention. DI 35. A POSA would understand that embedding requires that the file already exists before you add the interactive chart into it. EX2001 ¶136; EX2201 ¶21. In contrast, Becerra only discloses saving a new file with only the control panel in it. EX1005 [0052]:14-18. Becerra nowhere discloses embedding. EX2001 ¶136. The Board correctly noted

POR, 33.

Institution Decision

ground at this stage. We do, however, find some merit to Patent Owner's argument that Petitioner does not clearly explain how exporting a control panel as a separate file teaches "enabl[ing] a user to publish or embed the interactive chart" as required limitation [1E]. See Pet. 25. Becerra states that a control panel, as shown in Figure 5, "may be exported such that it is no longer dependent in any way on either the tool that created it or the spreadsheet that was used in creating it," and that the "control panel may be saved as a separate file." Ex. 1005 ¶ 52. Becerra does not, however, appear to disclose aspects related to embedding that control panel anywhere. To the extent Petitioner contends that Becerra teaches enabling publishing the control panel, we are not persuaded, at this stage, that Petitioner has explained how exporting the control panel to a separate file is sufficient to teach the publishing aspect of limitation [1E].

Inst. Dec., 34-35.

Ground 1: Becerra teaches element [1E]

“enabl[ing] a user to publish . . . the interactive chart as a self-contained and independent electronic document”

does not exclude

exporting the chart as *“a self-contained and independent electronic document”* for download

Claim Language

'892 Patent, Claim 1

a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,

EX1001, Claim 1.

PO's Expert

Q That self-contained and interactive electronic document could be, for example, a Flash file; is that right?

A Yes.

EX1070, 28:5-8.

Ground 1: Becerra teaches element [1E]

Specification

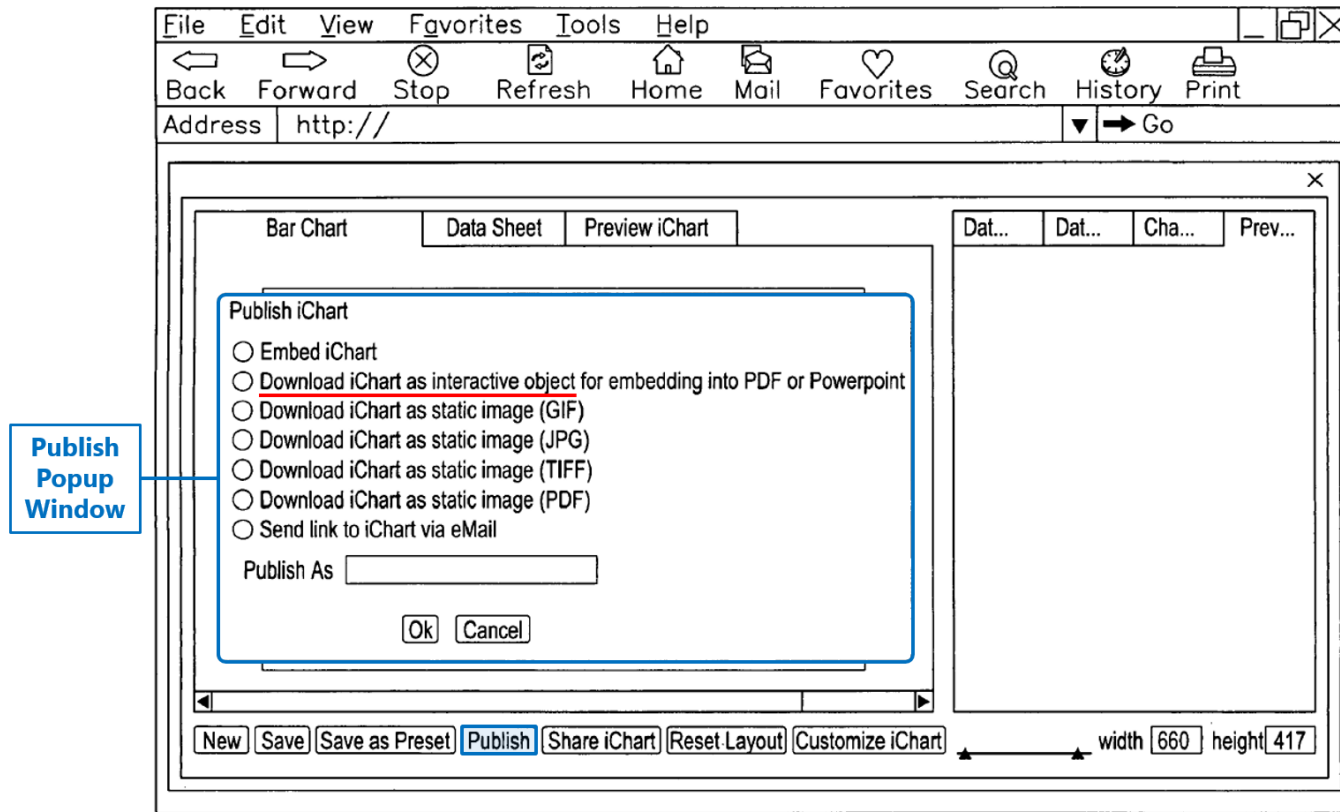


FIG. 30

EX1001, FIG. 30.

'892 Patent

want to share the ichart. The user can also share the chart 1700 by publishing the chart, as shown in FIG. 30, by selecting the publish button 1616. As shown in FIG. 30, a popup window 3000 is accessed when the publish button 1616 is selected. The popup window 3000 includes the following options: embed ichart, download ichart as interactive object for embedding into pdf or PowerPoint, download ichart as static image (GIF), download ichart as static image (JPG), download ichart as static image (TIFF), download ichart as static image (PDF), send link to ichart via email.

EX1001, 14:41-50.

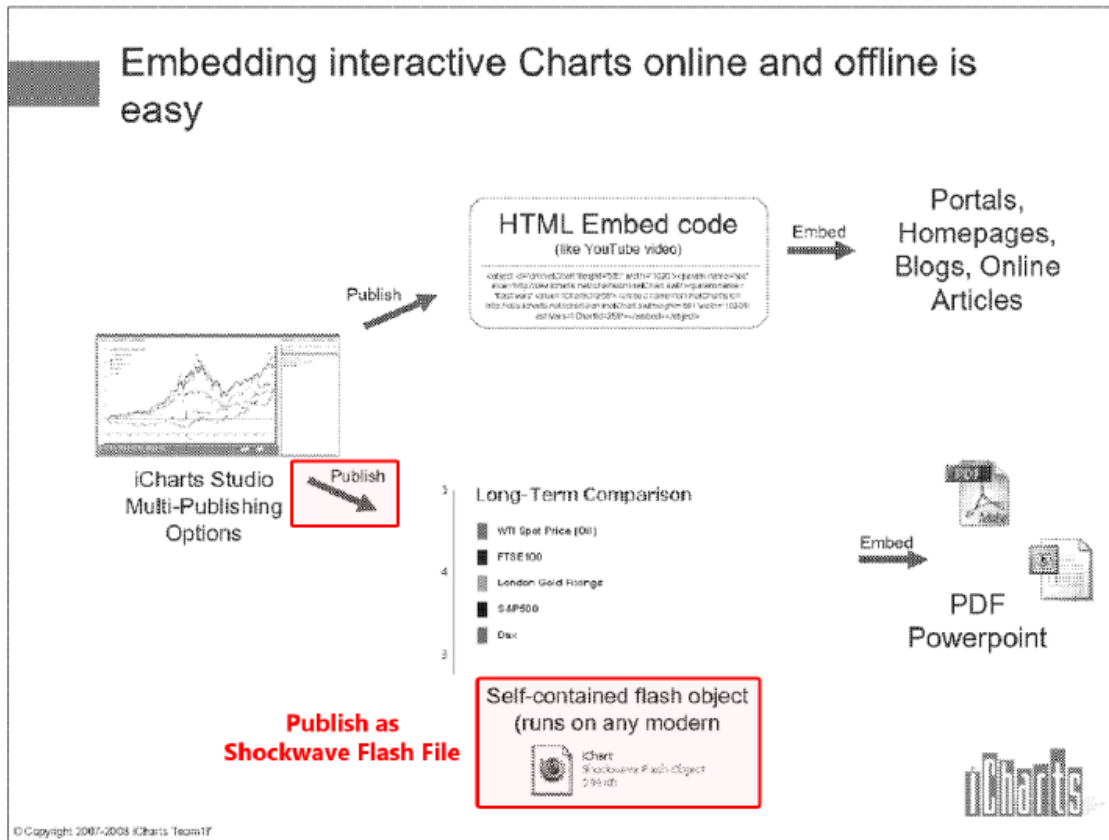
Patent Owner Agrees

publishing the control panel. EX2001 ¶136; EX2201 ¶21. As an exemplary embodiment, the '892 Patent discloses that a user can share the chart by publishing the chart by selecting the publish button 1616. EX1001 14:41-43. The Board was

POR, 33.

Ground 1: Becerra teaches element [1E]

Mr. Duncker's Evidence



EX2015, 17.

Petitioner's Expert

14. According to the diagram above, one path to “Publish” a chart from “iCharts Studio” is to create a “[s]elf-contained flash object.” EX2015, 17. That Flash object could then be embedded into, for example, a “PDF” or “Powerpoint.” EX2015, 17. A POSA, therefore, would have interpreted this diagram as illustrating that creation of a “flash object” is one way to publish a chart.

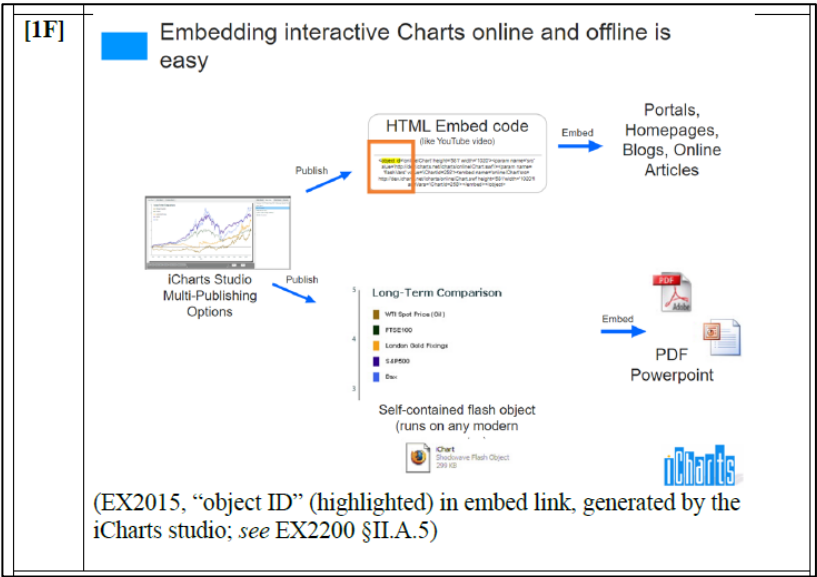
EX1072, ¶14.

Ground 1: Becerra teaches element [1E]

POR

(1) Conception

As charted below, the evidence establishes a conception date as early as June 4, 2008, as that is the date of the most recent document relied upon below for evidence of conception. Even though the inventors conceived of the invention earlier



POR, 56, 61 (citing EX2015).

PO’s Sur-reply

EX2015—a power point presentation concerning the development of the iCharts product—does not support Petitioner. These images are not included in the provisional and have no evidentiary value as to the meaning of the claim terms in the patent. Further, at deposition Seymour Duncker made clear that the Shockwave

PO Sur-reply, 6.

≠

Ground 1: Becerra teaches element [1E]

Under Patent Owner's narrow construction, Becerra still renders obvious element [1E]

Petitioner's Expert

18. Nevertheless, even if exporting a file for download did not satisfy the claim language, it is my opinion that Becerra still renders obvious these limitations. In particular, claim 1 requires “a sharing module *configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document.*” EX1001, 18:43-45 (emphasis added). That is, a POSA would have understood that the recited “*sharing module*” is not required to perform “*publish[ing] or embed[ding]*.” Rather, *the sharing module* only needs to be “*configured to enable a user to*” to perform one of those functions. EX1001, 18:43-45, (emphasis added). Claim 10 similarly requires a “*computer*” to perform the recited “*publishing or embedding,*” which could be initiated by a user. EX1001, 19:13-26.

EX1072, ¶18.

'892 Patent, Claim 1

a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,

EX1001, Claim 1.

Ground 1: Becerra teaches element [1E]

Under Patent Owner’s narrow construction, Becerra still renders obvious element [1E]

Petitioner’s Expert

the time of the patent.”). I agree. At the time of the ’892 patent, programs like Microsoft PowerPoint already included functionality that enabled a user to embed a Flash file. As Elfarssi, which was written in 2006 (prior to the ’892 patent), explains, “Flash allows you to mix sound, animation, and graphics into a single file that can be added to a PowerPoint presentation for dynamic effect.” EX1074, 285. Elfarssi, in fact, provides a detailed guide showing users how to embed Flash files into PowerPoint presentations with example screenshots, as shown below. EX1074, 286.

EX1072, ¶19.

TECHNO BYTES

Inserting a Flash movie into a PowerPoint presentation

Inserting a Flash movie into a PowerPoint presentation

Said Elfarssi
Nouakchott, Mauritania

Macromedia Flash is a multimedia authoring software that is used to create dynamic presentations for the World Wide Web. Flash allows you to mix sound, animation, and graphics into a single file that can be added to a PowerPoint presentation for dynamic effect. (Am J Orthod Dentofacial Orthop 2007;131:285-7)

When using Flash, you create Flash files (*.FLA). You can export these files as animated GIF (Graphics Interchange Format), QuickTime, AVI (Audio Video Interleave) in bitmapped format, and more. You can

Inserting flash into PowerPoint

There are 2 ways of including Flash in PowerPoint. You can either insert the file as an Active X Control, using PowerPoint’s Control Toolbox, or insert it as an object, which calls the Flash player to play the file.

PowerPoint presentation, you will need to have the Private practice, Nouakchott, Mauritania. Reprint requests to: Dr Said Elfarssi, Service de Stomatologie, Centre Hospitalier National, PO Box 612, Nouakchott, Mauritania; e-mail, elfarssi@

Submitted, January 2006; revised and accepted, February 2006.

285

EX1074, 1.

Ground 1: Becerra teaches element [1E]

Under Patent Owner's narrow construction, Becerra still renders obvious element [1E]

Petitioner's Expert

21. Additionally, a POSA would have recognized the benefits of embedding Flash files into documents such as PowerPoint presentations after downloading them. As I noted above, Elfarssi explains that Flash allows users “to create dynamic presentations for the World Wide Web” and “can be added to a PowerPoint presentation for dynamic effect.” EX1074, 285. As I explained in my original Declaration, Flash was a widely known technology in the timeframe of the '892 patent. EX1003, ¶¶95-99. A POSA would have been motivated to embed Flash files in a PowerPoint document to provide a more impactful presentation, allowing for more customized animation and interactive features. EX1074, 1.

EX1072, ¶21.

Inserting a Flash movie into a PowerPoint presentation

Said Elfarssi
Nouakchott, Mauritania

Macromedia Flash is a multimedia authoring software that is used to create dynamic presentations for the World Wide Web. Flash allows you to mix sound, animation, and graphics into a single file that can be added to a PowerPoint presentation for dynamic effect. (Am J Orthod Dentofacial Orthop 2007;131:285-7)

TECHNO BYTES

Inserting a Flash movie into a PowerPoint presentation

When using Flash, you create Flash files (*.FLA). You can export these files as animated GIF (Graphics Interchange Format), QuickTime, AVI (Audio Video Interleave) in bitmapped format, and more. You can

Inserting flash into PowerPoint

There are 2 ways of including Flash in PowerPoint. You can either insert the file as an Active X Control, using PowerPoint's Control Toolbox, or insert it as an object, which calls the Flash player to play the file.

PowerPoint presentation, you will need to have the Private practice, Nouakchott, Mauritania. Reprint requests to: Dr Said Elfarssi, Service de Stomatologie, Centre Hospitalier National, PO Box 612, Nouakchott, Mauritania; e-mail, elfarssi@

Submitted, January 2006; revised and accepted, February 2006.

create dynamic presentations for the World Wide Web. Flash allows you to mix sound, animation, and graphics into a single file that can be added to a PowerPoint presentation for dynamic effect. (Am J Orthod Dentofacial Orthop 2007;131:285-7)

g installed on your computer: (1) any version of PowerPoint for Windows (97, 2000, 2002, 2003 ...), (2) Internet Explorer, and (3) Shockwave Flash Active X Control.

ActiveX is a Microsoft technology consisting of a set of controls that sit on top of a Windows system called Component Object Model. Active X controls allow you to extend the abilities of Windows and Internet Explorer, adding features such as video playback, and Flash playback. The advantage of Active X is that, although they are generally downloaded and used in Internet Explorer, once they are on your system, any Windows application that understands COM can use the controls to extend its applications. A popular use for this technology is embedding a functionally controlled Flash movie in a PowerPoint presentation. If you have Internet Explorer 4 or higher installed, then the Active X control can be installed from <http://www.macromedia.com/flash/download/alternates/>.

g flash into PowerPoint There are 2 ways of including Flash in PowerPoint. You can either insert the file as an Active X Control, using PowerPoint's Control Toolbox, or insert it as an object, which calls the Flash player to play the file.

first procedure is time-tested, and certain free commercial add-ins are available for PowerPoint that reduce the complicated procedure to just a few clicks. Shyam's Toolbox (<http://skp.mvps.org/toolbox/index.htm>), for example, adds a set of procedures to PowerPoint including an option to insert Shockwave content in PowerPoint.² The free Swift Point Player for PowerPoint (<http://www.globfx.com/products/swiftpoint/>) simplifies the inclusion of Flash Shockwave content in PowerPoint.³

285

EX1074, 1.

Ground 1: Becerra teaches element [1E]

Under Patent Owner's narrow construction, Becerra still renders obvious element [1E]

PO's Expert

Q So now I'm talking about embedding. And would downloading the iChart then in that example as an interactive object, that would enable the user to embed the object in a PowerPoint or PDF?

MR. VINCENT: Objection; form.

THE WITNESS: If the user selected that second option of downloading iChart as interactive object for embedding into PDF or PowerPoint, that would enable them to embed that, that iChart as an interactive object into a PDF or a PowerPoint.

EX1070, 33:11-20.

Mr. Duncker

Q Okay. So you agree that downloading the interactive chart as a shockwave Flash object would enable a user to embed the interactive chart?

A Correct.

EX1071, 48:22-25.

Q And at the time of the invention, would someone knowledgeable in Flash know how to embed a Flash file into a PDF?

A As far as I remember, it was a pretty straightforward insert.

EX1071, 66:21-25.

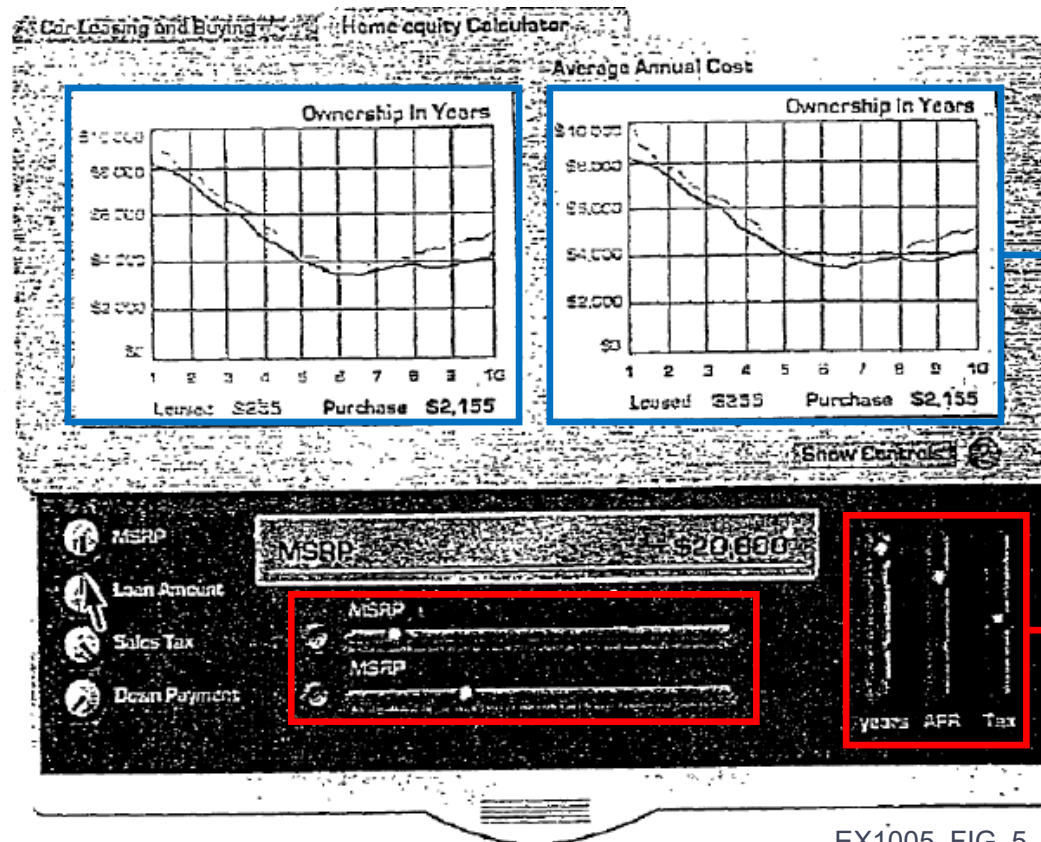
Ground 1: Becerra teaches element [1F]

[1F]: “wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.”

Becerra

[0052] After a control panel is created as described above, it may be exported such that it is no longer dependent in any way on either the tool that created it or the spreadsheet that was used in creating it. FIG. 5 illustrates a computer screen display of an exemplary control panel that may be created in accordance with the present invention. As shown in FIG. 5, various graphic input and output components are provided by the control panel. By manipulating or adjusting input components (e.g., sliders and rotating knobs), output components will dynamically change in accordance with the mathematical model extracted from the spreadsheet used to create the control panel. In this way, a user is provided with a dynamic, creative and visually stimulating representation of input and output data and their relational behavior. In a preferred embodiment, this control panel may be saved as a separate file that is executable by a standalone program (e.g., Flash Player™) that is independent of the layout tool or spreadsheet used to create it.

EX1005, ¶152.



Output
Components

Input
Components

EX1005, FIG. 5.

Ground 1: Becerra teaches element [1F]

POR

Becerra discloses that a control panel may be saved as a separate file that is executable by a standalone program (e.g., a Flash Player) that is independent of the layout tool or spreadsheet used to create it. EX1005 [0052]:14-18. Nevertheless, Becerra does not disclose any ability of the user to render the control panel or re-render the control panel once the Becerra control panel is exported and no longer dependent upon the tool that created it. EX2001 ¶¶137-139. Instead, Becerra shows relational behavior on the control panel once the control panel is exported as a separate file. EX1005 [0052]:12-14. By manipulating or adjusting input components of Becerra (e.g., sliders and rotating knobs), output components of the control panel dynamically change in accordance with a mathematical model within the range of the component. *Id.* [0052]:8-12. In other words, the control panel is playing a different part of the movie based on the Actionscript code, not rerendering a chart.

POR, 34.

Ground 1: Becerra teaches element [1F]

The '892 patent, like Becerra, uses “Adobe flash player” to “show the interactive charts.”

Becerra

[0052] After a control panel is created as described above, it may be exported such that it is no longer dependent in any way on either the tool that created it or the spreadsheet that was used in creating it. FIG. 5 illustrates a computer screen display of an exemplary control panel that may be created in accordance with the present invention. As shown in FIG. 5, various graphic input and output components are provided by the control panel. By manipulating or adjusting input components (e.g., sliders and rotating knobs), output components will dynamically change in accordance with the mathematical model extracted from the spreadsheet used to create the control panel. In this way, a user is provided with a dynamic, creative and visually stimulating representation of input and output data and their relational behavior. In a preferred embodiment, this control panel may be saved as a separate file that is executable by a standalone program (e.g., Flash Player™) that is independent of the layout tool or spreadsheet used to create it.

EX1005, ¶52.

'892 Patent

The interactive charts that are downloaded are self-contained flash files that can exist independent of the web portal. The user only requires Adobe Reader (containing Adobe flash player) to execute the code in the flash file. Any electronic document that can play flash can show the interactive charts.

EX1001, 10:7-11.

Ground 1: Becerra teaches element [1F]

Patent Owner's expert testified that, when executing a "Flash file" containing an interactive chart, numerous interactions can cause rerendering of the chart.

Q So in this example that we just read in the '892 patent, the Flash file contains code that rerenders a chart in response to user input; is that correct?

A Yes, that's correct.

EX1070, 40:8-11.

Q Would zooming in on the chart be another example of what might cause rerendering of the chart?

MR. VINCENT: Objection; scope.

THE WITNESS: Yes, that could cause rerendering of the chart.

EX1070, 41:8-12.

Q Would changing input values, input data values, be an example of something that would cause rerendering of the chart?

MR. VINCENT: Objection; scope.

THE WITNESS: Yes. That could cause rerendering of the chart.

EX1070, 41:14-19.

Q So would receiving an input to perform an animation feature cause rerendering of the chart?

MR. VINCENT: Objection; scope. Objection; form.

THE WITNESS: That could cause rerendering of the chart.

EX1070, 42:13-17.

Ground 2: Becerra and Couckuyt
(Claims 3, 10, 11, and 13-16)

Ground 2: Becerra and Couckuyt

'892 Patent, Claim 3

3. The system of claim 1 wherein the generation interface comprises a data pane and a chart pane and is configured to receive a user selection of data from the data pane and allow the user to **drag and drop** the data into the chart pane and wherein the generation module automatically generates the interactive chart from the data stored in the data module when the user interface receives an indication that the user has dropped the data into the chart pane.

EX1001, Claim 3.

'892 Patent, Claim 10

10. A computer-implemented method comprising:
...
allowing the user to **drag and drop** the selected data into the chart pane on the generation interface;
automatically generating an interactive chart using data dropped into the chart pane and the chart template from the chart template module selected by the user; and

EX1001, Claim 10.

Ground 2: Becerra and Couckuyt

FIG. 4 depicts an exemplary drag-and-drop user interface (DDUI) for generating a chart report having a single chart. The DDUI 400 can be associated with a data source, such as the two dimensional data source 300 of FIG. 3a. Once associated with a data source, the DDUI can automatically generate a field list 408 that includes both value data and characteristic data. Value data includes data, such as sales

EX1006, 7:10-16.

The DDUI 400 permits the value data fields and the characteristic data fields (collectively, data fields) to be dragged and dropped into drop zones. A Data Field drop zone 402 can accept value data fields (e.g., sales) and will chart that data as described in connection with FIGS. 3a-3c.

EX1006, 7:24-28.

Couckuyt

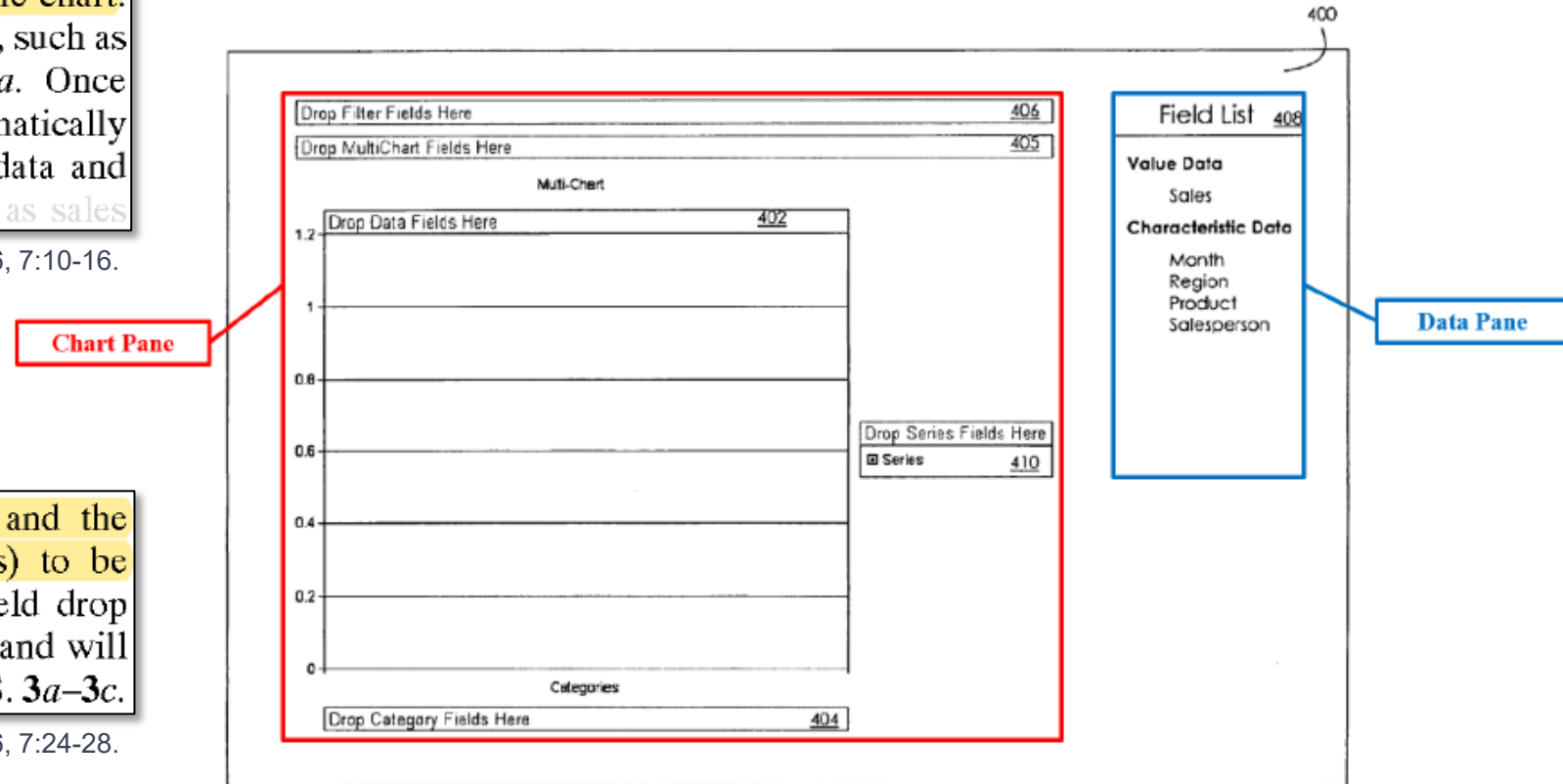


Fig. 4

Ground 2: Becerra and Couckuyt

POR

Petitioner has not shown that a POSA would have been motivated to combine Becerra with Couckuyt. EX2001 ¶¶142-149. Petitioner claims that Couckuyt's dragging and dropping user interface would have enabled the user to quickly assign data to different aspects of a chart. Not so. Couckuyt focuses on selecting a data icon that corresponds to dragging and dropping data *fields*, not dragging and dropping data. EX1004 7:48-52; EX2001 ¶146. Further, Becerra teaches that selecting various

POR, 36.

Further, Couckuyt is directed to the need in the art for a charting drag-and-drop user interface (DDUI) that can generate multiple charts at the same time and support the drag-and-drop method of adding data fields. EX1004 1:66-67, 2:5-8. Becerra, on the other hand, discloses creating a control panel that is an interactive graphics simulation. EX1005 [0011]:1-6. Thus, Couckuyt's ability to quickly change data fields to make display comparisons does not supply a motivation to combine Couckuyt with Becerra. EX2001 ¶148.

POR, 37.

Ground 2: Becerra and Couckuyt

Couckuyt teaches the concept of dragging-and-dropping data into a chart – including a single chart

Petitioner's Expert

228. A POSA would have been motivated to incorporate Couckuyt's drag-and-drop techniques into Becerra's system to enable a user to quickly and intuitively assign data to different aspects of a chart (e.g., different chart axes). As

EX1003, ¶228.

Additionally, when a control panel in Becerra's system includes multiple charts, Couckuyt's techniques would allow a user to drag-and-drop data from a single data source to multiple charts, without the need to individually “right click[] on a component, for example, and select[] a ‘properties’ option on a popup menu,” and then select the data source for each individual component. EX1005, ¶38. Couckuyt's drag-and-drop techniques therefore simplify the process of assigning data to multiple control panel components.

EX1003, ¶228.

Couckuyt

FIG. 4 depicts an exemplary drag-and-drop user interface (DDUI) for generating a chart report having a single chart. The DDUI 400 can be associated with a data source, such as the two dimensional data source 300 of FIG. 3a. Once associated with a data source, the DDUI can automatically generate a field list 408 that includes both value data and characteristic data. Value data includes data, such as sales

EX1006, 7:10-16.

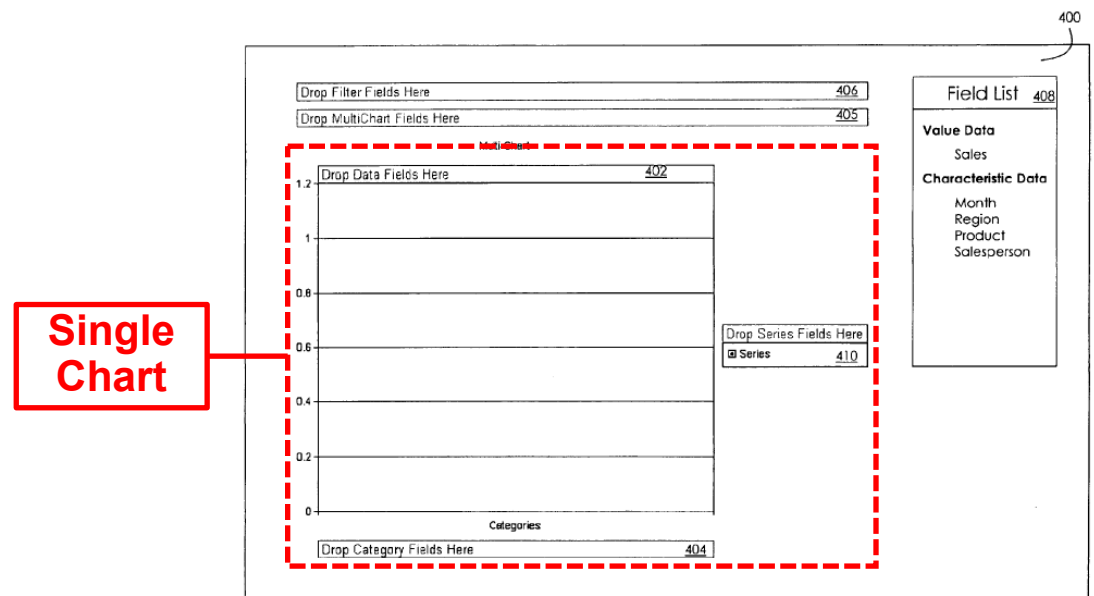


Fig. 4

Ground 3: Becerra, Couckuyt, and Keys
(Claims 10, 11, and 13-16)

Ground 3: Becerra, Couckuyt, and Keys

'892 Patent, Claim 10

10. A computer-implemented method comprising:
providing a generation interface having a data pane and a chart pane;
receiving a user selection of data in the data pane;
receiving a user selection of a chart template in the chart pane, wherein the chart template is stored in a chart template module located on a remote server;
allowing the user to drag and drop the selected data into the chart pane on the generation interface;
automatically generating an interactive chart using data dropped into the chart pane and the chart template from the chart template module selected by the user; and
publishing or embedding the interactive chart as a self-contained and independent electronic document, wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactive features when published or embedded.

EX1001, Claim 10.

Ground 3: Becerra, Couckuyt, and Keys

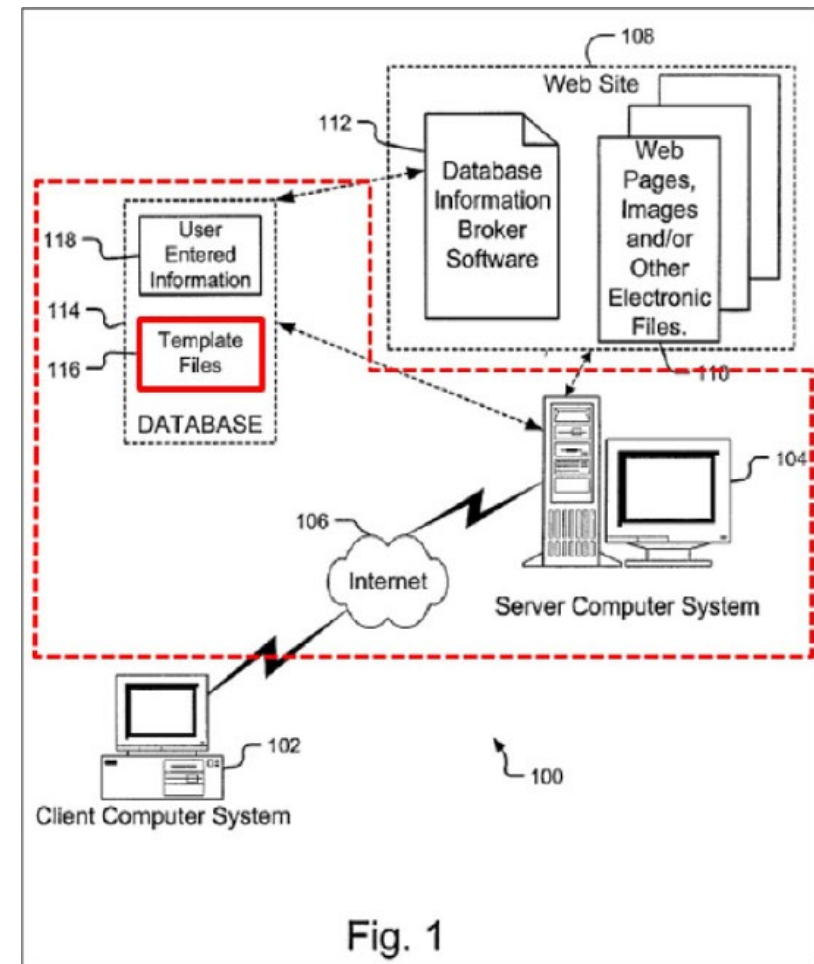
POR

C. Ground 3: Becerra in View of Couckuyt and Keys Does Not Render Obvious Claim 10-11 and 13-16

Keys does not disclose, teach, or suggest claim 10's "chart template module located on a remote server."

POR, 44.

Keys



EX1034, FIG. 1.

Ground 3: Becerra, Couckuyt, and Keys

Petitioner's Expert

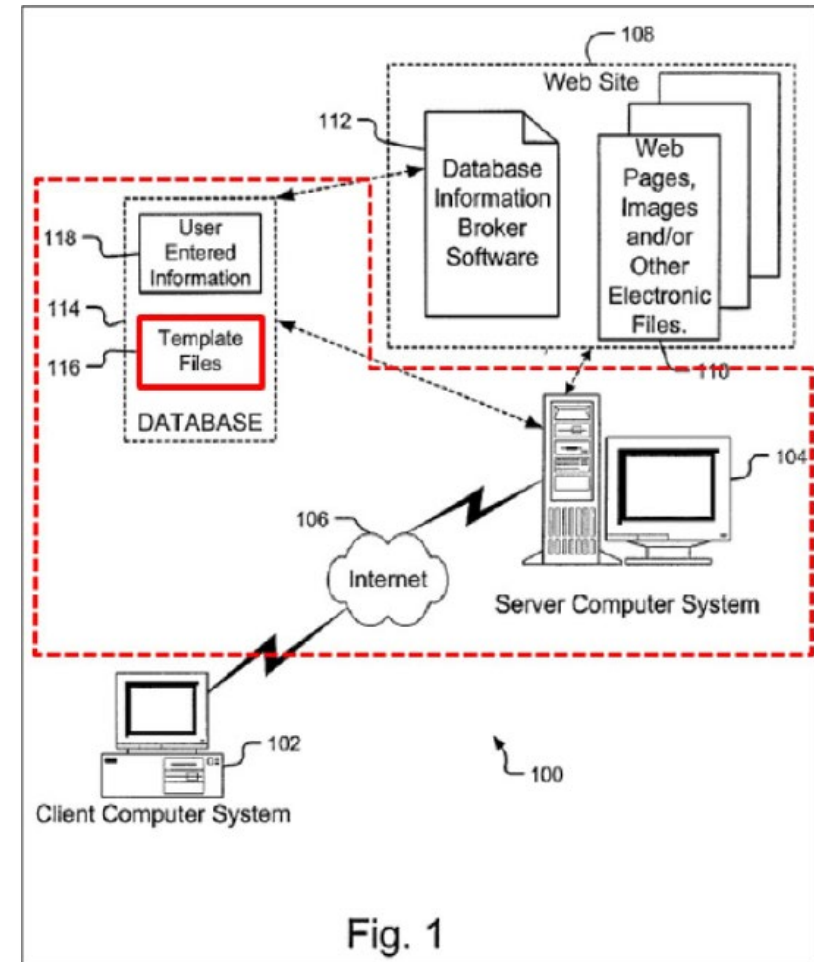
272. In particular, Keys discloses “a client-server environment” including “client computer system 102” and “server computer system 104.” EX1034, ¶¶21-22. Keys further discloses a database “located on the remote computer 104[,]” storing “template files 116, i.e., predetermined data files used to generate a visual indication of a final presentation.” EX1034, ¶25. “[E]ach template is stored in a separate file in the database.” EX1034, ¶42. And templates can include items such as “graphs, etc.,” i.e., “chart template[s].” EX1034, ¶71.

EX1003, ¶272.

274. A POSA would have been motivated to store Becerra's chart templates on a remote server, as in Keys, allowing users access to the same, wide variety of templates. Indeed, Becerra discloses “a need for a method and system that allows users to associate externally-created graphics and/or animations . . . with input and output data of business application software programs.” EX1005,

EX1003, ¶274.

Keys



EX1034, FIG. 1.

Grounds 1, 5, and 6: Becerra and Jou (Claims 7 and 12)

Grounds 1, 5, and 6: Becerra and Jou

'892 Patent, Claim 7

7. The system of claim 5 wherein the interactive features are selected from the group consisting of a zoom feature, a data mouse-over pop-up window, a data hide/share feature, an audio and/or video feature, an animation feature, a drill-down feature, a data gliding feature and combinations thereof.

EX1001, Claim 7.

'892 Patent, Claim 12

12. The method of claim 11 wherein the interactive features are selected from the group consisting of a zoom feature, a data mouse-over pop-up window, a data hide/share feature, an audio and/or video feature, an animation feature, a drill-down feature, a data gliding feature and combinations thereof.

EX1001, Claim 12.

Ground 1: Becerra

Patent Owner does not dispute Becerra's teaching of “*an animation feature*”

Petitioner's Expert

214. For example, Becerra teaches that “Flash™ enables users to generate computer graphics and animations in the form of compressed audio and video files (.swf files) which can be executed by a Flash Player™ program.” EX1005, ¶7; see also EX1005, ¶8 (discussing the need “to create dynamic, interactive and content-rich computer graphics and animations to represent data”). As such, Becerra discloses, “[a]ny desired graphical aids that may be contemplated by a designer, whether they be two-dimensional, three-dimensional, static or dynamic, animations or inanimate graphics, may be utilized in accordance with the present invention.” EX1005, ¶53.

EX1003, ¶214.

POR

POSA. Petitioner argues that Becerra discloses one of these features—animation. But the claim language requires at least two interactive features (“combinations thereof”). “If a patentee desires mixtures or combinations of the members of the Markush group, the patentee would need to add qualifying language while drafting the claim.” *Abbott Lab'ys v. Baxter Pharm. Prods., Inc.*, 334 F.3d 1274, 1281 (Fed. Cir. 2003) (“and mixtures thereof” example of qualifying language). One feature from the list is not a “combination.” Accordingly, Petitioner has not met its burden..

POR, 35-36.

Ground 1: Becerra

Claims 7 and 12 do not require at least two interactive features

Petitioner Reply

iCharts does not dispute Becerra teaches “an animation feature.” POR 35-36; Pet., 30-31. That is sufficient. PO’s argument that “the claim language requires [] two interactive features” is contradicted by its own cited case law. *Abbott Lab’ys v. Baxter Pharm. Prods., Inc.*, 334 F.3d 1274, 1281 (Fed. Cir. 2003) (explaining language like “and mixtures thereof,” when added to “a Markush group,” means “**at least one** member of the group”—not two or more); *see also* EX1070, 42:22-44:6 (iCharts’ expert agreeing).

Pet. Reply, 10-11.

POR

POSA. Petitioner argues that Becerra discloses one of these features—animation. But the claim language requires at least two interactive features (“combinations thereof”). “If a patentee desires mixtures or combinations of the members of the Markush group, the patentee would need to add qualifying language while drafting the claim.” *Abbott Lab’ys v. Baxter Pharm. Prods., Inc.*, 334 F.3d 1274, 1281 (Fed. Cir. 2003) (“and mixtures thereof” example of qualifying language). One feature from the list is not a “combination.” Accordingly, Petitioner has not met its burden..

POR, 35-36.

Grounds 5 and 6: Becerra and Jou

Patent Owner does not dispute Jou's teachings of "*a data hide feature*," "*a drill-down feature*," or "*a zoom feature*"

Petitioner's Expert

287. Jou discloses that its charts include multiple "*interactive features*."

For example, Jou discloses various "filter[s]," i.e., "*a data hide*" feature that shows only a subset of data from a data source. EX1007, ¶¶38-41. For instance, Jou

288. Jou also discloses "*a drill-down feature*," "allow[ing] drilling on the

dimension axis of charts, by moving either up or down the hierarchy of categories of a dimension (drilling up and drilling down, respectively), to obtain a more (down) or less (up) detailed view of the data." EX1007, ¶44. "In a preferred embodiment, this is achieved by double-clicking an axis label, with the direction of the drilling indicated by the form of the cursor." EX1007, ¶44. Jou further discloses a "*zoom feature*" for charts. For example, Jou discloses that "the user can obtain a closer area view of a map or layer (zooming in), [or] obtain a wider area view of a map or layer (zooming out)" EX1007, ¶49.

EX1003, ¶¶287-88.

POR

Becerra and Jou do not provide a basis for modifying the Becerra control panel that is an interactive graphics simulation with the filtering, drilling, and zooming features of Jou. EX2001 ¶¶184-189. Such a modification would involve impermissible hindsight based on the disclosure of the '892 Patent. *Id.* ¶188.

In addition, Becerra and Jou teach away from a combination. *Id.* ¶188. Jou is directed to visualization of business data organized according to a dimensional model, meaning business data organized according to major aspects and measures of the business, such as products, markets, profits, or time periods. EX1007 [0002]:1-4, [0006]:1-9. A dimension of Jou may include several hierarchical levels of categories. *Id.* [0006]:9-13. Becerra, in contrast, discloses a control panel that is an interactive graphics simulation. EX1005 [0011]:1-6.

POR, 47-48.

Grounds 5 and 6: Becerra and Jou

Both Becerra and Jou are directed to visualizing business data

Becerra

[0008] To date, no method or system allows every day users of business application software programs to utilize advanced external computer graphic and animation software (e.g., Flash™) to create dynamic, interactive and content-rich computer graphics and animations to represent data in their business software applications. Thus, there is a need for a method and system that allows users to associate externally-created graphics and/or animations (collectively referred to herein as “graphics”) with input and output data of business application software programs, so as to create a dynamic and interactive graphic representation of the input and output data. There is a further need for a method and

EX1005, ¶8.

Jou

[0010] According to one aspect, the present invention provides an interactive system for visualizing business data organized according to the dimensional model, which system comprises means for retrieving data from at least one dimensional data source, means for converting the retrieved data into a graphical form, and means for presenting the converted data to a user as a graphical visualization.

EX1007, ¶10.

Ground 4: Becerra and Moyer (Claim 6)

Ground 4: Becerra and Moyer

'892 Patent, Claim 4

6. The system of claim 5 wherein the interactive features comprise a copy-to-my-account feature.

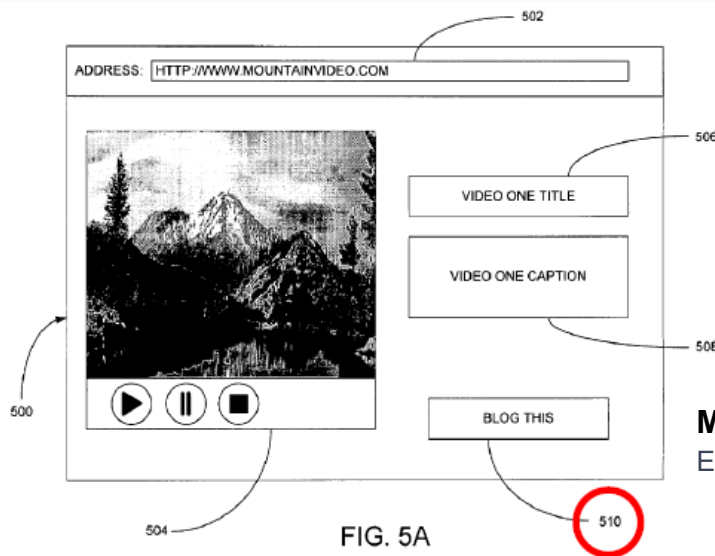
EX1001, Claim 4.

Ground 4: Becerra and Moyer

Petitioner's Expert

279. As shown below, Moyer discloses a website that displays media (e.g., a video and data) with a “‘Blog This’ button 510.” EX1010, ¶37. When a user clicks the “Blog This” button, Moyer’s system copies content and pastes the content to the user’s blog account (e.g., MSN space). EX1010, ¶¶32-37. A POSA would have understood that Moyer’s “Blog This” feature is a “*copy-to-my-account feature*” associated with the displayed media content.

EX1003, ¶279.



Moyer
EX1010, FIG. 5A.

280. A POSA would have been motivated to use a “Blog This” feature (“a *copy-to-my-account feature*”) with interactive charts published or embedded with Becerra’s system to allow users to share and discuss interactive charts with others on the Internet. As was known in the art, interactive charts were intended to be collaborative. EX1039, 0001-02, 0006-07. It was known that a “Blog This” button would further facilitate collaboration, allowing users to share and discuss interactive charts with others. See EX1010, ¶¶32, 35; EX1039, 7 (“Another feature that was targeted specifically at bloggers is a ‘blog this’ button that appears underneath each visualization on the site.”).

EX1003, ¶280.

Grounds 7-10: The QlikView Manuals

The '892 patent has a priority date of September 5, 2008

The '892 patent has a September 5, 2008 priority date

(12) **United States Patent**
Duncker et al.

(10) Patent No.: **US 8,271,892 B2**
(45) Date of Patent: **Sep. 18, 2012**

(54) **CREATION, SHARING AND EMBEDDING OF INTERACTIVE CHARTS**

(75) Inventors: **Seymour Duncker, Heidelberg (DE); Tyron Montgomery, Munich (DE)**

(73) Assignee: **Icharts, Inc., Sunnyvale, CA (US)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 504 days.

(21) Appl. No.: **12/205,802**

(22) Filed: **Sep. 5, 2008**

Prior Publication Data

US 2010/0005008 A1 Jan. 7, 2010

Related U.S. Application Data

(60) Provisional application No. 61/077,728, filed on Jul. 2, 2008.

(51) Int. Cl. **G06F 3/048** (2006.01)
G06F 17/30 (2006.01)

(52) U.S. Cl. **715/765; 715/733; 715/760; 715/781; 715/202; 345/440; 707/805**

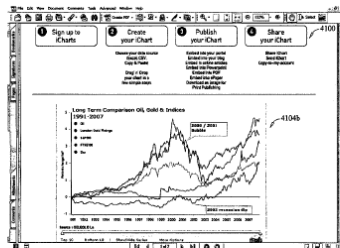
(58) Field of Classification Search **715/716, 715/719, 727, 733, 748, 751, 753, 760, 764, 715/765, 769, 781, 804, 810, 835, 202; 345/440; 707/705, 805**

See application file for complete search history.

References Cited

U.S. PATENT DOCUMENTS

5,859,641 A * 1/1999 Cave 715/835
6,304,272 B1 * 10/2001 Schaal et al. 345/676
6,757,573 B1 * 6/2004 Ledoux et al. 700/94
7,080,070 B1 7/2006 Gavanni



16 Claims, 51 Drawing Sheets

Tableau EX1001
IPR2024-01387
U.S. Patent No. 8,271,892

(22) Filed: **Sep. 5, 2008**

(65) **Prior Publication Data**

US 2010/0005008 A1 Jan. 7, 2010

Related U.S. Application Data

(60) Provisional application No. 61/077,728, filed on Jul. 2, 2008.



When “neither the PTO nor the Board has previously considered priority, there is simply no reason to presume that claims in [an] application are entitled to the earlier effective filing date of an earlier filed application.”

PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1305 (Fed. Cir. 2008).

The '892 patent is not entitled to its provisional filing date

'728 provisional

Embodiments of the invention relate to an on-line service for creating, sharing and embedding interactive charts.

Users enter or upload data. The user can then drag and drop the data into a chart in a special charting pane.

In one embodiment, the chart is automatically interactive. In other embodiments, the chart is not interactive. In still further embodiments, users can select certain interactive features to include with the chart. Exemplary interactive features include a zoom feature, a data mouse-over pop-up window, and a data hide/share feature.

The user can then publish the chart online or download and embed the chart into for example a .pdf, .ppt, etc. file. The chart that is embedded or published can be interactive. The chart can be updated automatically. For example, if the chart is embedded in an online portal, the user can upload additional data to update the chart in the online portal.

In one embodiment, the chart is portable. For example, a first user can create a chart. A second user can then download or copy the chart to their own account.

The charts described herein are searchable. In one embodiment, the charts are flash objects. The flash object contains tags that are searchable. The chart may include a detail page that contains rich tagging. The rich tagging on the detail page is searchable.

The service may include chart templates. Users can store templates that allow them to create charts that all have the same look and feel.

Users upload data or enter data under the data sheet tab. The user then selects the charts tab. From the charts creation page, the user can select the data columns on the right side of the page and drag that data into the chart pane. If the data is drag and dropped onto the x-axis, the data is used for the x-axis, and if the data is drag and dropped onto the y-axis, the data is used for the y-axis. When the data is drag and dropped to the axes, the chart is automatically created using the data.

Rich formatting options are available.

After the chart is created, the chart can be published. The users can select to embed the object as a cold snippet or download or embed as an interactive object. The chart may be part of a portal or script.

In one embodiment, the service is created using a flex engine (e.g. Adobe's flash flex development platform).

One use for the charts described herein is .pdf reports. Typically purchasers of .pdf reports have to rebuild or screen copy a chart in order to include the chart into a presentation (e.g., .ppt) or other document. The quality of that chart tends to be very poor and the chart may not include the

0045

0046

The '728 provisional is substantively different than the '892 patent

- ▶ Different Specification
- ▶ Different Figures
- ▶ No Claims



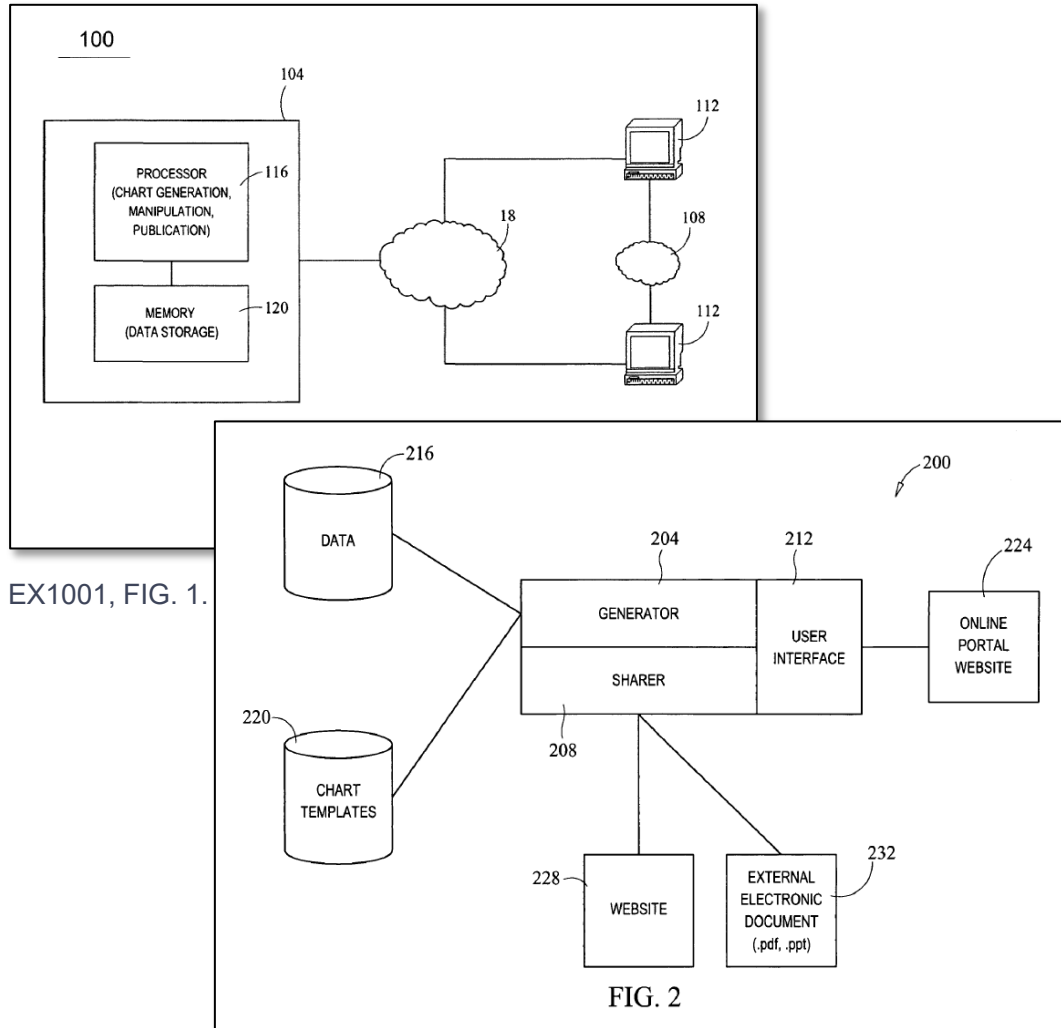
Claims broader than the invention disclosed in an earlier parent application are not entitled to the earlier priority date.

Research Corp. Techs. v. Microsoft Corp., 627 F.3d 859 (Fed. Cir. 2010);
D Three Enterprises LLC v. SunModo Corp., 890 F.3d 1042 (Fed. Cir. 2018);
Anascape, Ltd. v. Nintendo of America, Inc., 601 F.3d 1333 (Fed. Cir. 2010).

The '892 patent is not entitled to its provisional filing date

- ▶ The '728 provisional does not adequately disclose the computer system architecture.
 - ▶ No “computer system comprising ... a data module ... a chart template module ... a generation interface ... [and] a sharing module” (claim 1)
 - ▶ No “computer-implemented method” involving “a chart template module” and “a server” (claim 10)
- ▶ The '728 provisional does not adequately disclose the chart template module elements.
 - ▶ No “chart template module configured to store chart templates” (claim 1) or a “chart template [that] is stored in a chart template module located on a remote server” (claim 10)
 - ▶ No generating a chart from “a template from the chart template module” (claim 1) or automatically generating a chart using “the chart template from the chart template module selected by the user” (claim 10)
- ▶ The '728 provisional does not adequately disclose a “self-contained and independent electronic document” (claims 1 and 10).

iCharts added the computer system architecture in the '892 patent



Mr. Duncker

Q Figure 1 of the '892 patent was a new figure that you added to the nonprovisional, right?

A So it's a new figure that was not in the nonprovisional. Yeah. It's a figure that was not in the nonprovisional.

Q All right. And what is shown in Figure 1?

A A system diagram showing the underlying hardware required to run the system.

Q Okay. So the module diagram, which is Figure 2, was added to the nonprovisional. It was not in the provisional application?

A That's what it looks like.

EX1071, 81:3-10, 82:3-6.

The '728 patent does not adequately describe a “chart template module”

'728 Provisional

Embodiments of the invention relate to an on-line service for interactive charts.

Users enter or upload data. The user can then drag and drop the data into a charting pane.

In one embodiment, the chart is automatically interactive. In other embodiments, the chart is not interactive. In still further embodiments, users can select certain interactive features to include with the chart. Exemplary interactive features include a zoom feature, a data mouse-over pop-up window, and a data hide/share feature.

The user can then publish the chart online or download and embed the chart into for example a .pdf, .ppt, etc. file. The chart that is embedded or published can be interactive. The chart can be updated automatically. For example, if the chart is embedded in an online portal, the user can upload additional data to update the chart in the online portal.

In one embodiment, the chart is portable. For example, a first user can create a chart. A second user can then download or copy the chart to their own account.

The charts described herein are searchable. In one embodiment, the charts are flash objects. The flash object contains tags that are searchable. The chart may include a detail page that contains rich tagging. The rich tagging on the detail page is searchable.

The service may include chart templates. Users can store templates that allow them to create charts that all have the same look and feel.

Users upload data or enter data under the data sheet tab. The user then selects the charts tab. From the charts creation page, the user can select the data columns on the right side of the page and drag that data into the chart pane. If the data is drag and dropped onto the x-axis, the data is used for the x-axis, and if the data is drag and dropped onto the y-axis, the data is used for the y-axis. When the data is drag and dropped to the axes, the chart is automatically created using the data.

Rich formatting options are available.

After the chart is created, the chart can be published. The users can select to embed the object as a cold snippet or download or embed as an interactive object. The chart may be part of a portal or script.

In one embodiment, the service is created using a flex engine (e.g. Adobe's flash flex development platform).

One use for the charts described herein is .pdf reports. Typically purchasers of .pdf reports have to rebuild or screen copy a chart in order to include the chart into a presentation (e.g., .ppt) or other document. The quality of that chart tends to be very poor and the chart may not include the

The service may include chart templates. Users can store templates that allow them to create charts that all have the same look and feel.

purchaser desires. The
at purchasers of the chart

s can be sold. For
e of data. Additional
opping cart-type model
reports.

- ▶ Does not describe how or where “a chart template module” stores chart templates.
- ▶ Does not show how a user generates a chart from “a template from the chart template module.”
- ▶ For claim 10, no disclosure of a “chart template module located on a remote server.”

0045

EX1013, 0045-46.

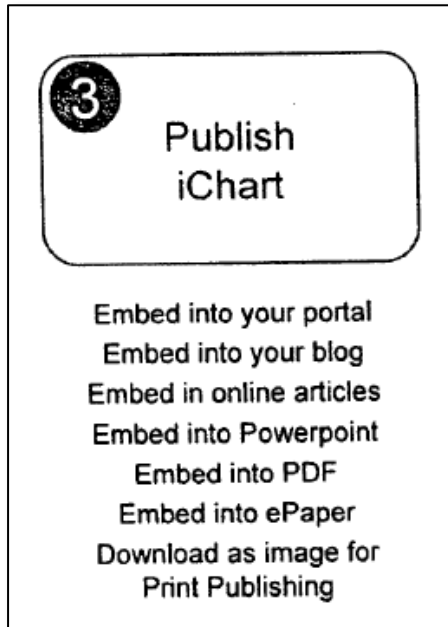
0046

The '728 patent does not describe publishing or embedding a chart as “a self-contained and independent electronic document”

'728 Provisional

After the chart is created, the chart can be published. The users can select to embed the object as a cold snippet or download or embed as an interactive object. The chart may be poart of a portal or script.

EX1013, 0045.



EX1013, 0059.

Petitioner's Expert

63. There are key omissions from the '728 provisional application that were later claimed in the '892 patent. For example, the '728 provisional application does not describe a system or method that “publish[es] or embed[s] the interactive chart *as a self-contained and independent electronic document*” as claimed in the '892 patent. Rather, the inventors added this concept to the alleged invention *after* the '728 provisional application.

EX1003, ¶63.

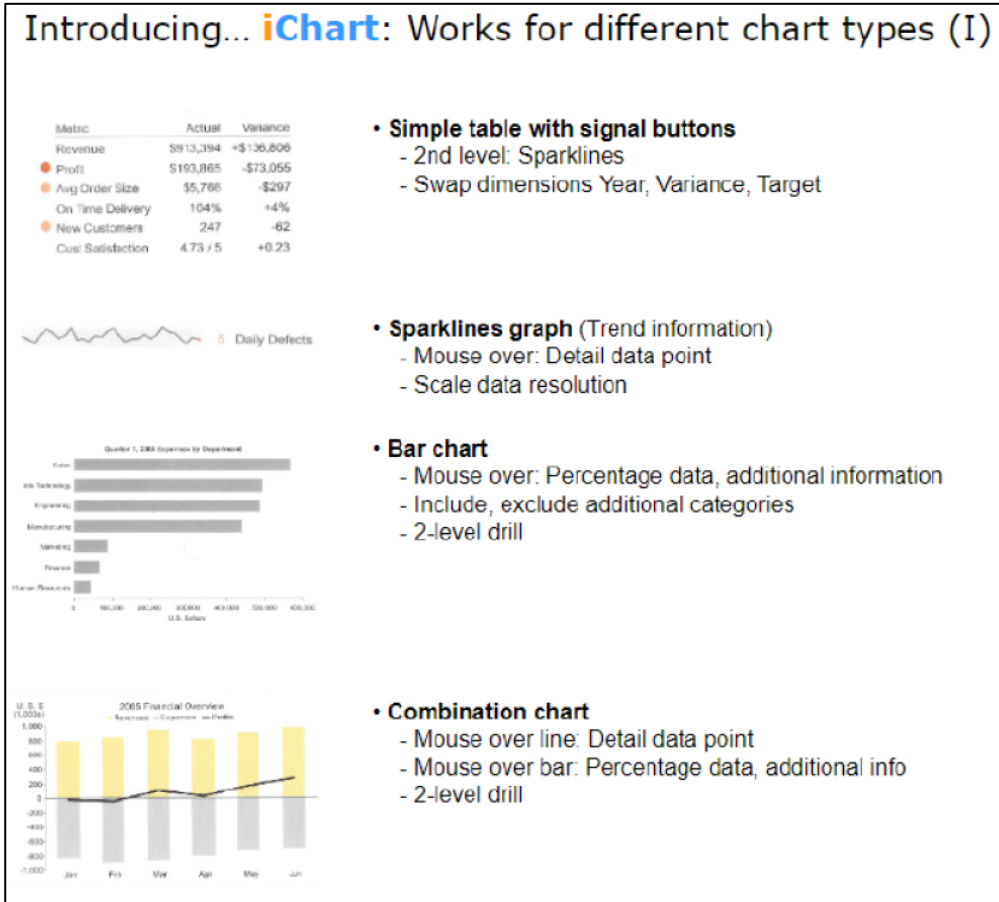
iCharts has not shown earlier conception of the invention

iCharts did not show conception or diligence

- ▶ iCharts has not shown possession of the recited “chart templates.”
- ▶ iCharts has not shown possession of the recited computer system architecture.
 - ▶ No “computer system comprising ... a data module ... a chart template module ... a generation interface ... [and] a sharing module” (claim 1)
 - ▶ No “computer-implemented method” involving “a chart template module located on a remote server” (claim 10)
- ▶ The conception evidence is piecemeal, failing to show possession of the complete invention.
- ▶ The conception and diligence evidence is not corroborated.

For the chart templates, iCharts relies only on chart types

iCharts' evidence of chart templates:



POR, 58 (citing EX2007).

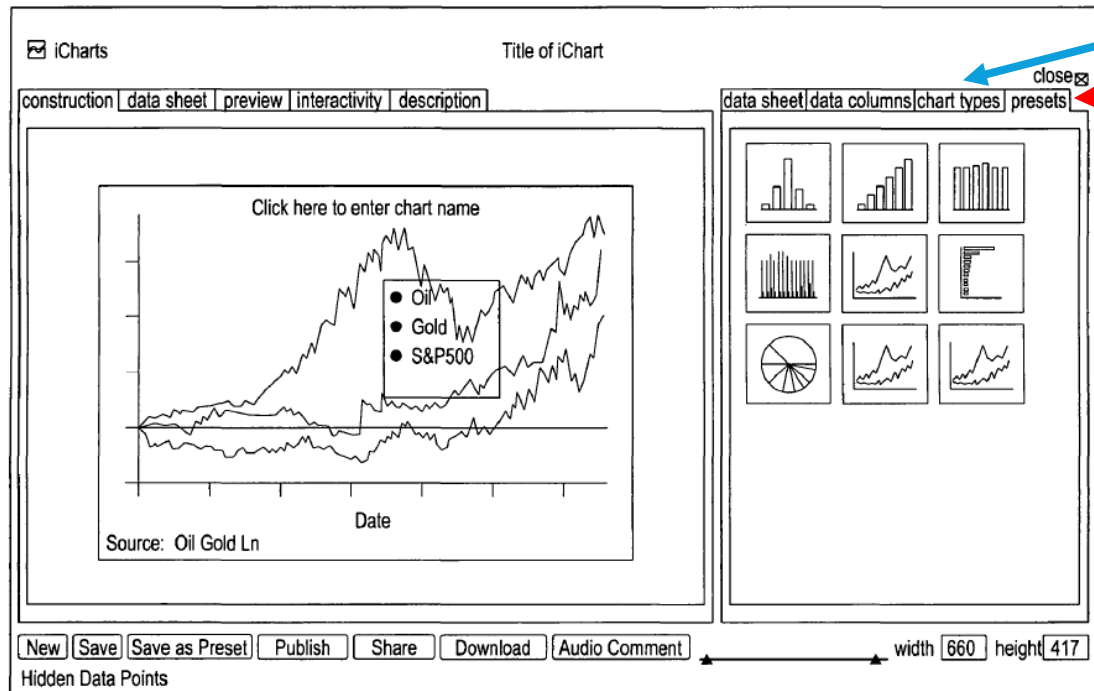
Petitioner's Expert

29. This excerpt states “iChart: Works for different chart types.” EX2007, 6. I disagree that working for different chart types shows possession of “a chart template module configured to store chart templates.” As the following excerpts from the '892 patent show, the concept of a chart type alone is different than a chart template.

EX1003, ¶29 (citing EX1001, 10:17-22, 12:57-65, 13:57-61, 16:20-31).

Chart Types ≠ Chart Templates

In the '892 patent, chart types are not chart templates



EX1001, FIG. 40B.

FIG. 40B

Chart Types

Presets / Chart Templates

FIGS. 40A-C illustrate a chart template feature 4000 for automatically modifying a chart by selecting a preset chart template. For example, FIG. 40A illustrates a chart 4004 that has a first look and feel. As shown in FIG. 40B, a user can select the preset tab 4008 which includes several selectable preset chart templates 4012. If a user selects one of the preset chart templates 4012, the chart 4004 is automatically updated to have the look and feel as the selected preset template chart 4012, as shown in FIG. 40C. The preset chart templates 4012 store formatting settings, such as colors, chart size, fonts, line thickness, etc., as a set. A preset can be created by saving any chart as a preset.

EX1001, 16:20-31.

Chart types alone are not chart templates

Mr. Duncker

Q According to your current understanding of the chart template, is a chart type alone a chart template?

A I think it requires presets as well. The ability to, otherwise it's chart types, I select the chart type -- I select the chart type... and if I'm able to customize those chart types, then for the -- then I can store this as a template that I would consider today as a template.

Q Okay. So according to your understanding, a -- to be a chart template, a chart type would have to also include presets?

A That's my evolved perspective today.

EX1071, 25:11-21.

iCharts has not shown the recited computer system architecture

Petitioner's Expert

38. It is also my opinion that the cited evidence for conception does not show the computer system architecture recited in claims 1 and 10. Claim 1 recites “[a] computer system comprising: a data module ... a chart template module ... a generation module ... [and] a sharing module.” EX1001, 18:33-45. Claim 10 recites “[a] computer-implemented method” that involves “a chart template module” and “a server.” EX1001, 19:13-19.

EX1072, ¶138.

PO's Expert

31. “[M]odule” element (claim 1) – A POSITA would have understood that a module is a self-contained unit of code or hardware that performs a specific function that can be combined with other modules to create a larger system. The '892 Patent discloses several modules as shown in the chart below, including a data module, chart template module, and generation module.

EX2201, ¶131.

iCharts has not shown the recited computer system architecture

Mr. Duncker

Q And none of these excerpts you cite for Element 1A show source code for data module, right?

A That is correct.

Q And none of these excerpts in Element 1A show the hardware for data module, right?

A Sure.

Q Is that right?

A Yes.

EX1071, 29:16-23.

Mr. Duncker

Q Okay. If we can go to page 11. Which includes the section for Element 1B. Which is quote, A chart template model configured to store chart templates. Do you see that?

A Yes.

...

Q None of these excerpts show source code for the chart template module, right?

A Sure. Yes, I mean, we're still in January 10, 2007. So that was a couple of weeks after we came up with the idea.

...

Q And what you cite for Element 1B, which is the chart template module element, you don't cite any -- anything that shows the hardware for the chart template module, right?

A Not in those five excerpts, yeah.

EX1071, 33:25-35:5.

Mr. Duncker admitted the evidence does not show a server

Mr. Duncker

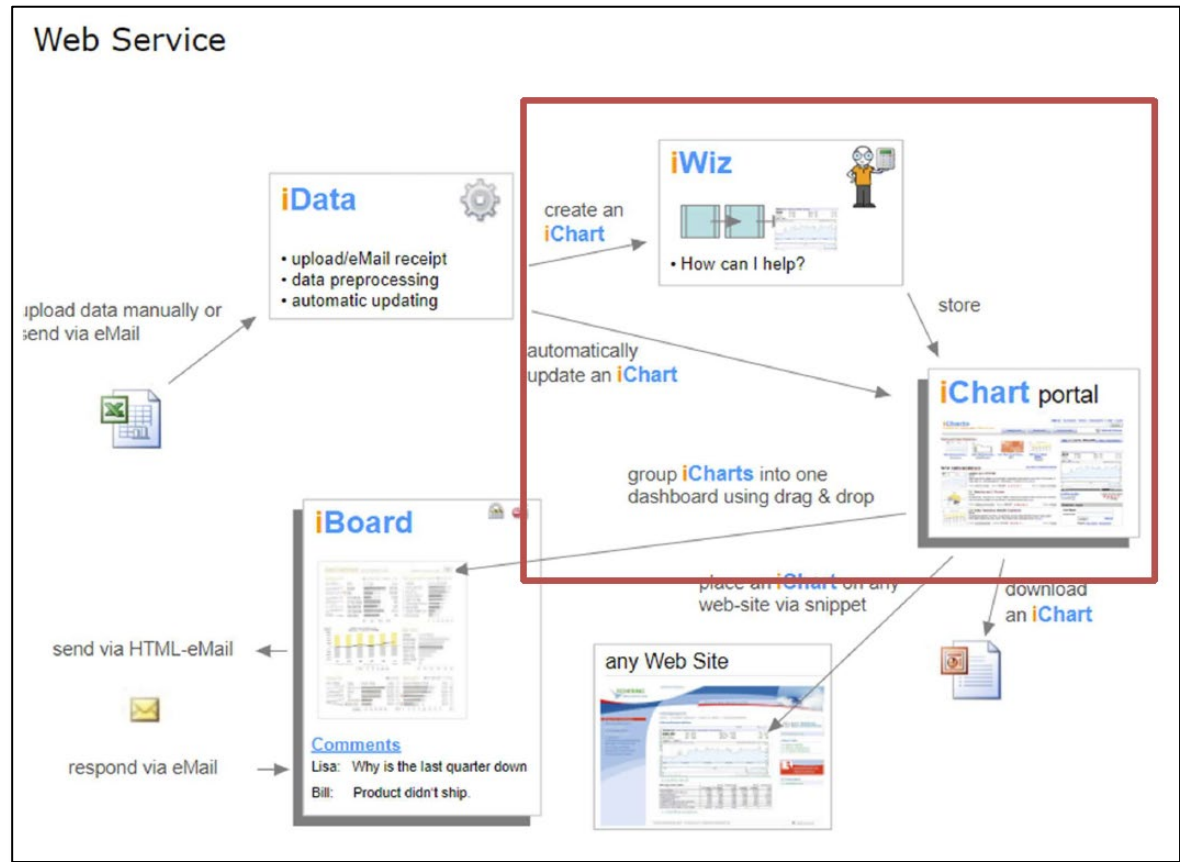
Q And this excerpt does not show a server, correct?

A This is a user flow, so it wouldn't look -- it would make sense to show a server here. But no, it does not show a server.

...

Q All right. So this excerpt would not show -- assuming that the iChart portal is a remote server, this would not show a chart template module located on a remote server, correct?

A By inference, yes.



EX2200, p. 43 (citing EX2005)

EX1071, 70:25-3, 72:8-12.

Mr. Duncker admitted the evidence does not show a server

Mr. Duncker

So if I understand your testimony, you're saying that the iChart portal is what you're pointing to for the server, for Element 10C; is that right?

A It's a remote server, yeah.

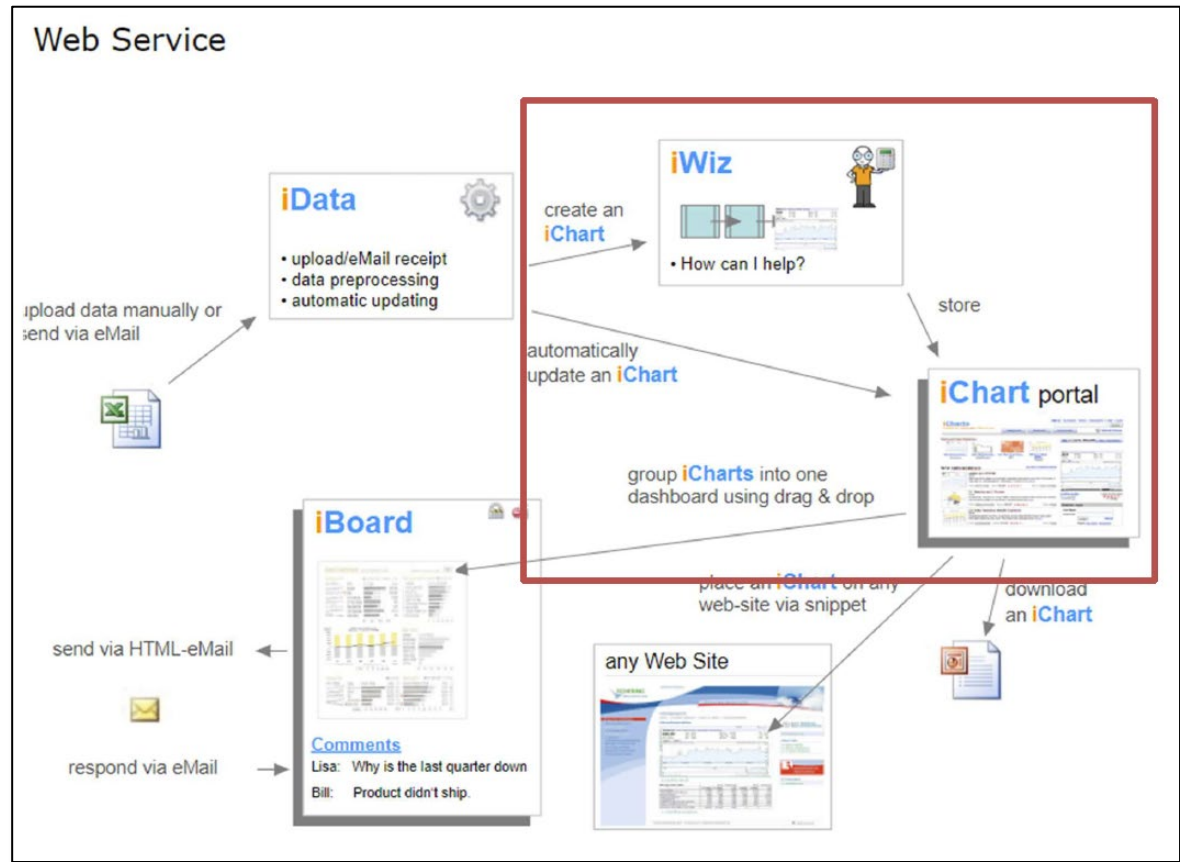
...

Q MR. DUTTON: This excerpt does not show the server architecture for iCharts, correct?

A Correct. It's a user flow diagram.

Q And just to clarify, you agree that the chart template module is not stored on the server for the iChart portal, correct?

A Correct.



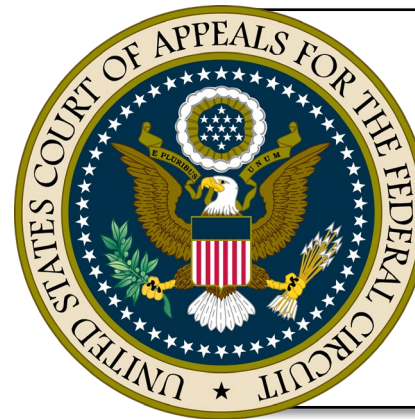
EX2200, p. 43 (citing EX2005)

EX1071, 72:22-25, 73:18-24.

The conception evidence is piecemeal, failing to show possession of the complete invention

1. A computer system comprising: ← EX2002
a data module configured to store data; ← EX2004
a chart template module configured to store chart templates; ← EX2007
a generation module configured to generate an interactive chart on a generation interface, ← EX2008
wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module; ← EX2005; EX2002
a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document, ← E2009
wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded. ← E2015

- ▶ PO relies on a different exhibit for nearly every element of claim 1
- ▶ PO relies on 15 exhibits across all claims (2002, 2004, 2005, 2007, 2008, 2009, 2011, 2013, 2015, 2018, 2022, 2023, 2026, 2028, 2030)



“Conception is the formulation ‘in the mind of the inventor of a definite and permanent idea of **the complete** and operative invention, as it is therefore to be applied in practice.’”

Kridl v. McCormick, 105 F.3d 1446, 1449 (Fed. Cir. 1997)

The conception and diligence evidence is not corroborated



“Even the most credible inventor testimony is *a fortiori* required to be corroborated by independent evidence.”

Medichem S.A. v. Rolabo, S.L., 437 F.3d 1157, 1171-72 (Fed. Cir. 2006).



“The evidence proffered by Mr. Drachmann is stuck in a catch-22 of corroboration: Apator attempts to corroborate Mr. Drachmann’s testimony with the emails and drawings, but the emails and drawings can only provide corroboration with help from Mr. Drachmann’s testimony.”

Apator Miitors ApS v. Kamstrup A/S, 887 F.3d 1293, 1296 (Fed. Cir. 2018).

Mr. Duncker



Inventor with a financial interest in the outcome of the case

EX1073, 0002; EX1071, 95:12-14 (providing the percentage).

iCharts relies on Mr. Duncker to authenticate the emails and documents

The QlikView Manuals were published by July 8, 2008.

Numerous witnesses support the QlikView evidence



- ▶ Deborah Lofton (EX1068): Qlik's Chief Legal Officer and Corporate Secretary



- ▶ Dr. Sylvia Hall-Ellis (EX1030): Expert in Library and Information Science with Over 50 Years of Experience



- ▶ Christopher Schmandt (EX1003): Expert in Computer Science, Computer Engineering, and User Interfaces for Data Visualization



- ▶ Nathaniel Frank-White (EX1032-33): Records Request Processor at the Internet Archive

Numerous witnesses support the QlikView evidence



- ▶ Deborah Lofton (EX1068): Qlik's Chief Legal Officer and Corporate Secretary



- ▶ Dr. Sylvia Hall-Flannery (EX1032-33): Over 20 years of experience



- ▶ [Witness Name] (EX1032-33): Science, Computer, and Information



- ▶ National Internet Archive (EX1032-33): Records Request Processor at the

**iCharts did not depose
any of these witnesses**

The QlikView Manuals were published by July 8 or 9, 2008

- ▶ Over 40,000 QlikView users in over 1,000 organizations in the Americas region. Over 7,000 organizations globally.
EX1023; EX1028.
- ▶ Ms. Lofton: “No later than July 9, 2008, Qlik was selling and shipping customers copies of QlikView Version 8.50. The documentation for QlikView Version 8.50, including the reference manuals (e.g. EX1008 and EX1009), would have been available at the time of sale”
EX1068, ¶7.
- ▶ QlikView Manuals were available on Qlik’s FTP website by July 8, 2008.
EX1068, ¶7; EX1014; EX1015; EX1016; EX1017.
- ▶ Qlik registered QlikView 8.50 for copyright, indicating a July 8, 2008 publication date.
EX1030, ¶¶29, 37; EX1059; EX1060.

QlikView was a well-known product

QlikNews: AmericasView

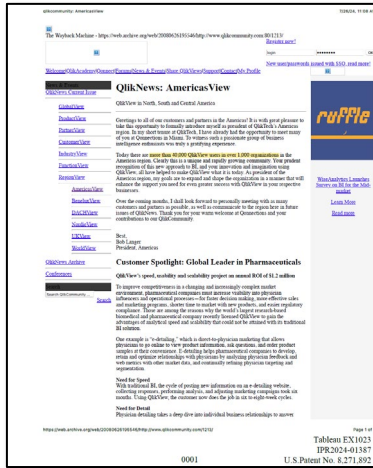
Today there are more than 40,000 QlikView users in over 1,000 organizations in the Americas region. Clearly this is a unique and rapidly growing community. Your prudent recognition of this new approach to BI, and your innovation and imagination using QlikView, all have helped to make QlikView what it is today. As president of the Americas region, my goals are to expand and shape the organization in a manner that will enhance the support you need for even greater success with QlikView in your respective businesses.

Archived July 26, 2008

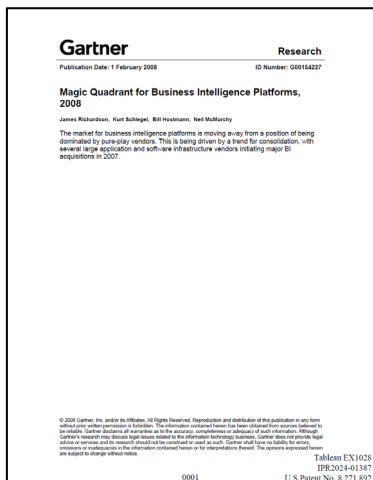
Gartner

- The perception of QlikTech as the "coolest" vendor in BI right now belies its efficiency as a business. It executed extremely well in 2007, growing faster than any other BI vendor and significantly expanding its customer base to over 7,000 organizations in more than 80 countries.

February 1, 2008



EX1023, 0001.



EX1028, 0017.

The QlikView Manuals were distributed to customers

Ms. Lofton

7. QlikView Version 8.50 was scheduled for release on June 30, 2008. See EX1021 (“Due for release on June 30, QlikView 8.5 features significant improvements”). No later than July 9, 2008, Qlik was selling and shipping to customers copies of QlikView Version 8.50. The documentation for QlikView Version 8.50, including the reference manuals (e.g. EX1008 and EX1009), would have been available at the time of sale either (1) on the compact disc (CD) containing QlikView’s installation package or (2) on Qlik’s ftp website (<http://ftp.QlikTech.com>). EX1008 and EX1009 appear to be documentation that would have been included with the purchase of QlikView Version 8.50 during the June/July 2008 timeframe.

EX1068, ¶7.

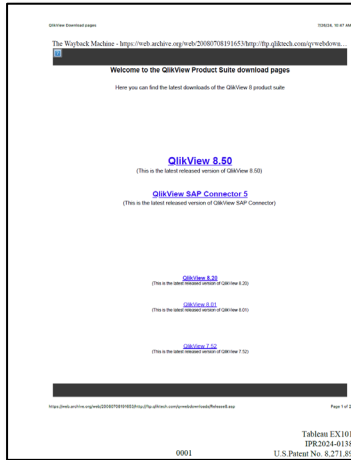


“Where, as here, a publication’s purpose is dialogue with the intended audience, that purpose indicates public accessibility.”

Weber, Inc. v. Provisur Tech., Inc., 92 F.4th 1059, 1067-68 (Fed. Cir. 2024).

QlikView Manuals were on Qlik's FTP website by July 8, 2008

<https://web.archive.org/web/20080708191653/http://ftp.qliktech.com/qvwebdownloads/Release8.asp>



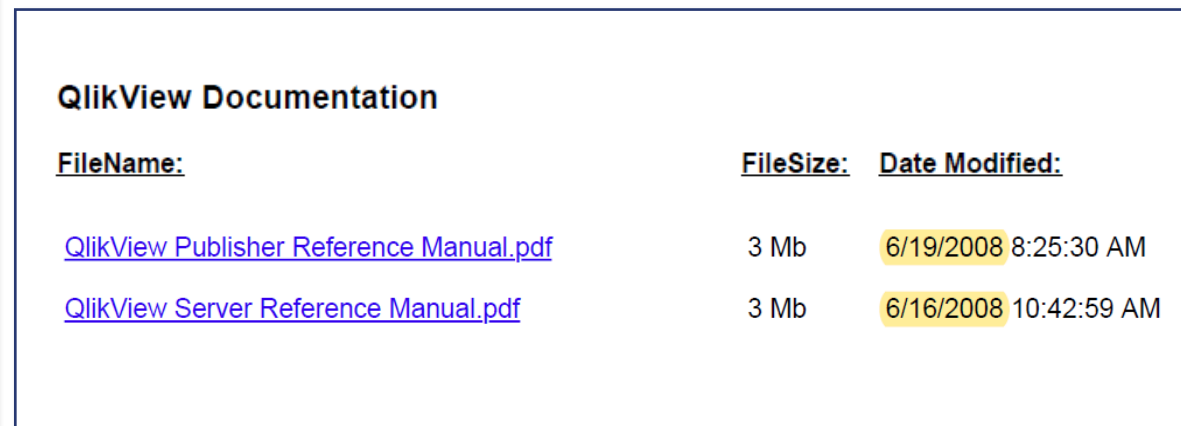
EX1015, 0001.



<https://web.archive.org/web/20080817042629/http://ftp.gliktech.com:80/gvwebdownloads/Docs.asp>



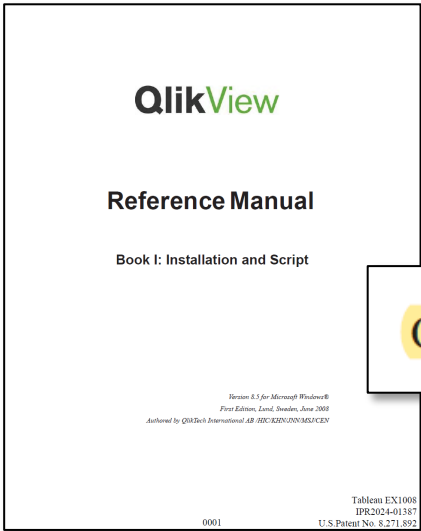
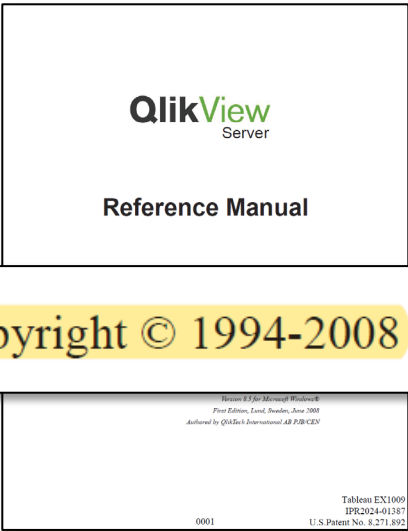
EX1015, 0017.



Qlik registered QlikView 8.50 for copyright

	Title _____	
	Title of Work: QlikView 8.50	
	Completion/Publication _____	
	Year of Completion: 2008	
	Date of 1st Publication: July 8, 2008	Nation of 1st Publication: Sweden
	Author _____	
	■ Author: QlikTech International AB	
	Author Created: text, editing, computer program	

EX1060, 0001-2.

	
Copyright © 1994-2008 Qlik®Tech International AB, Sweden.	

EX1008, 0002.

EX1009, 0002.

Ground 7: The QlikView Manuals (Claims 1, 2, and 5-9)

Ground 7: QlikView Manuals

1. A computer system comprising:

a data module configured to store data;

a chart template module configured to store chart templates;

a generation module configured to generate an interactive chart on a generation interface,

wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;

a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,

wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

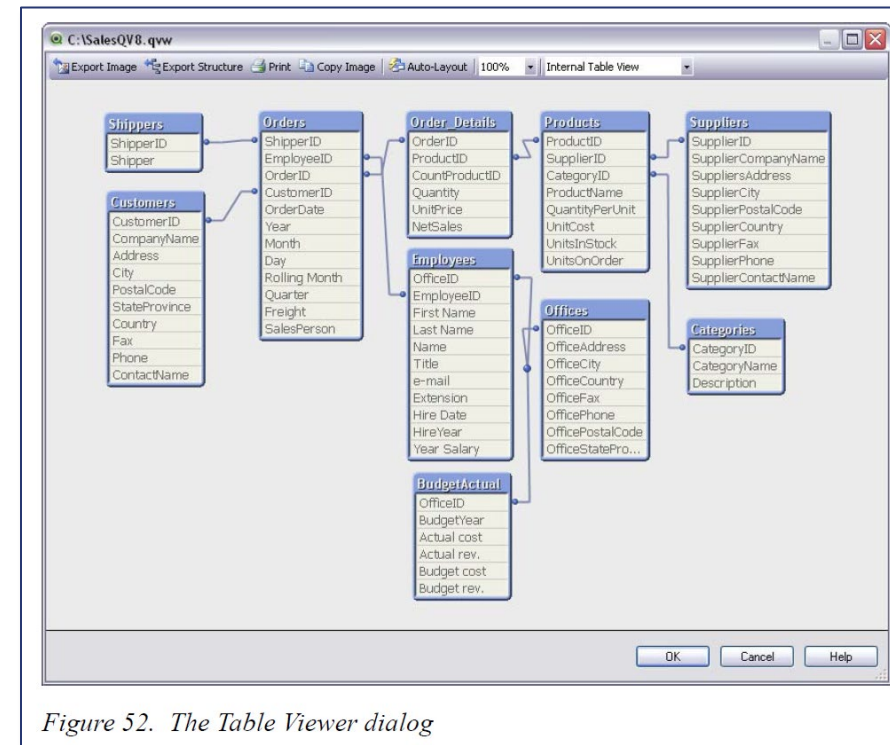


Figure 52. The Table Viewer dialog

EX1008, 0239.

8.1 OLE DB

QlikView supports the OLE DB interface for connection to external data sources.

You can access a great number of external databases via the Microsoft OLE DB Provider for ODBC Drivers.

EX1008, 0061.

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document, wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

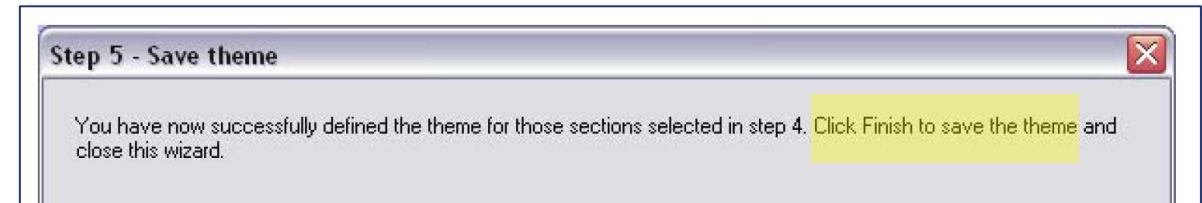
19.3 Making Themes with the Theme Maker Wizard

New Theme

Choose this option if you want to create a new theme.

Template

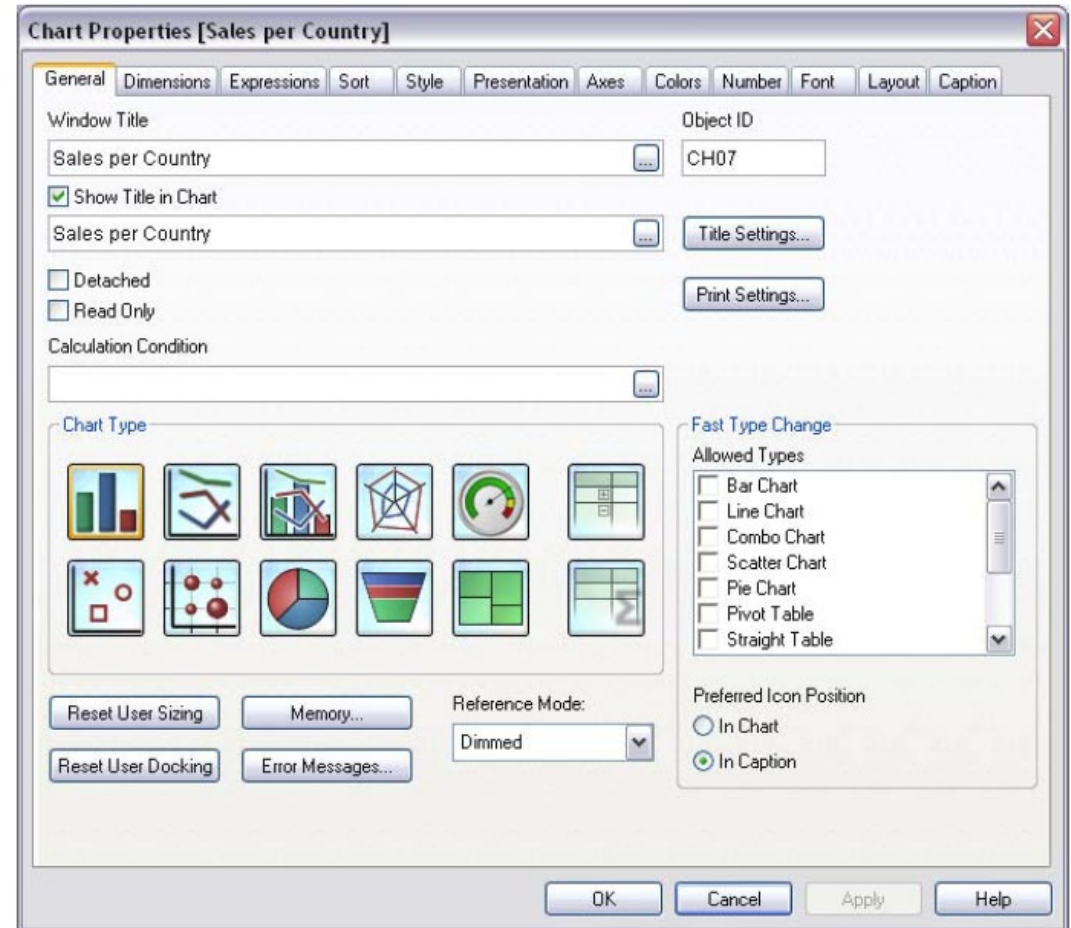
If you want to base your new theme on an existing one, choose the base theme in this drop-down. The drop-down will list all existing themes in your default QlikView theme folder. At the bottom of the list you will find a **Browse...** option for browsing for theme files in other locations.



EX1008, 0262-68.

Ground 7: QlikView Manuals

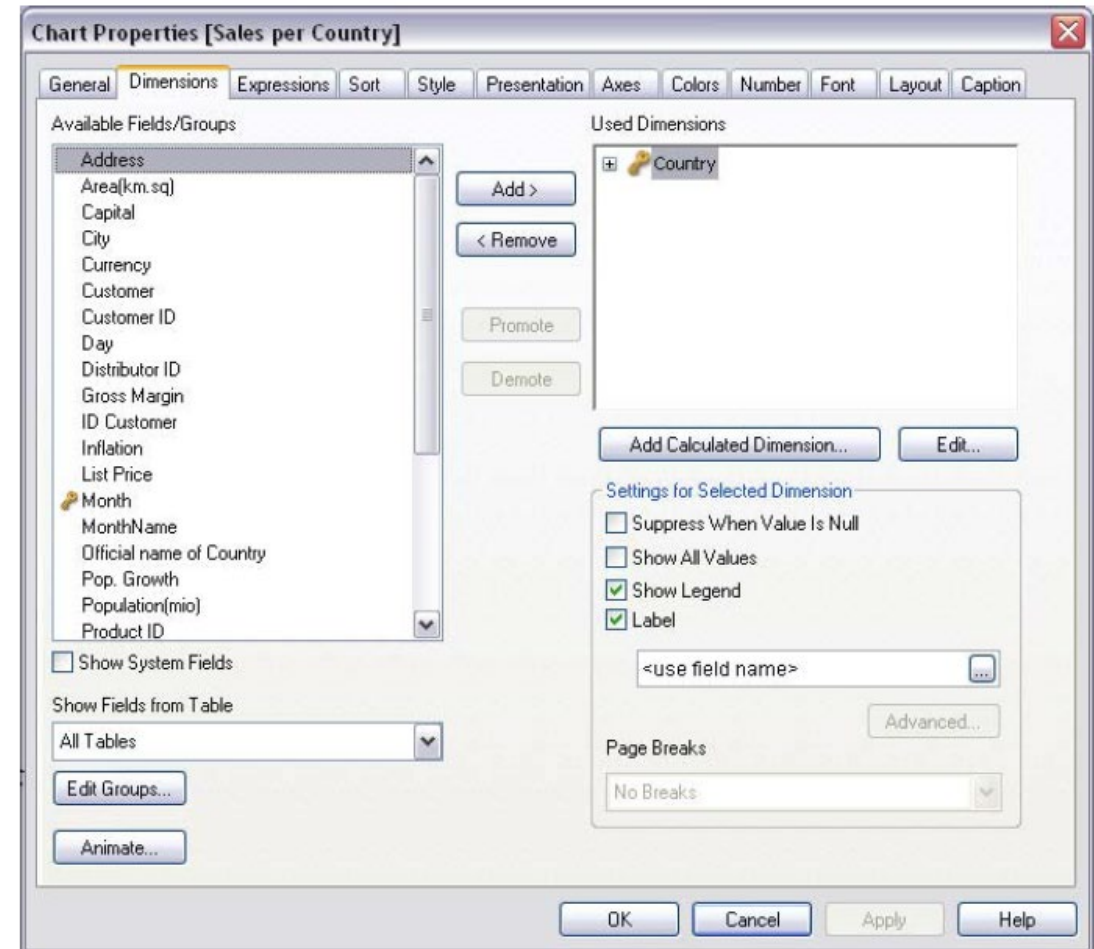
1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface,wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
- a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,
- wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.



EX1008, 0882.

Ground 7: QlikView Manuals

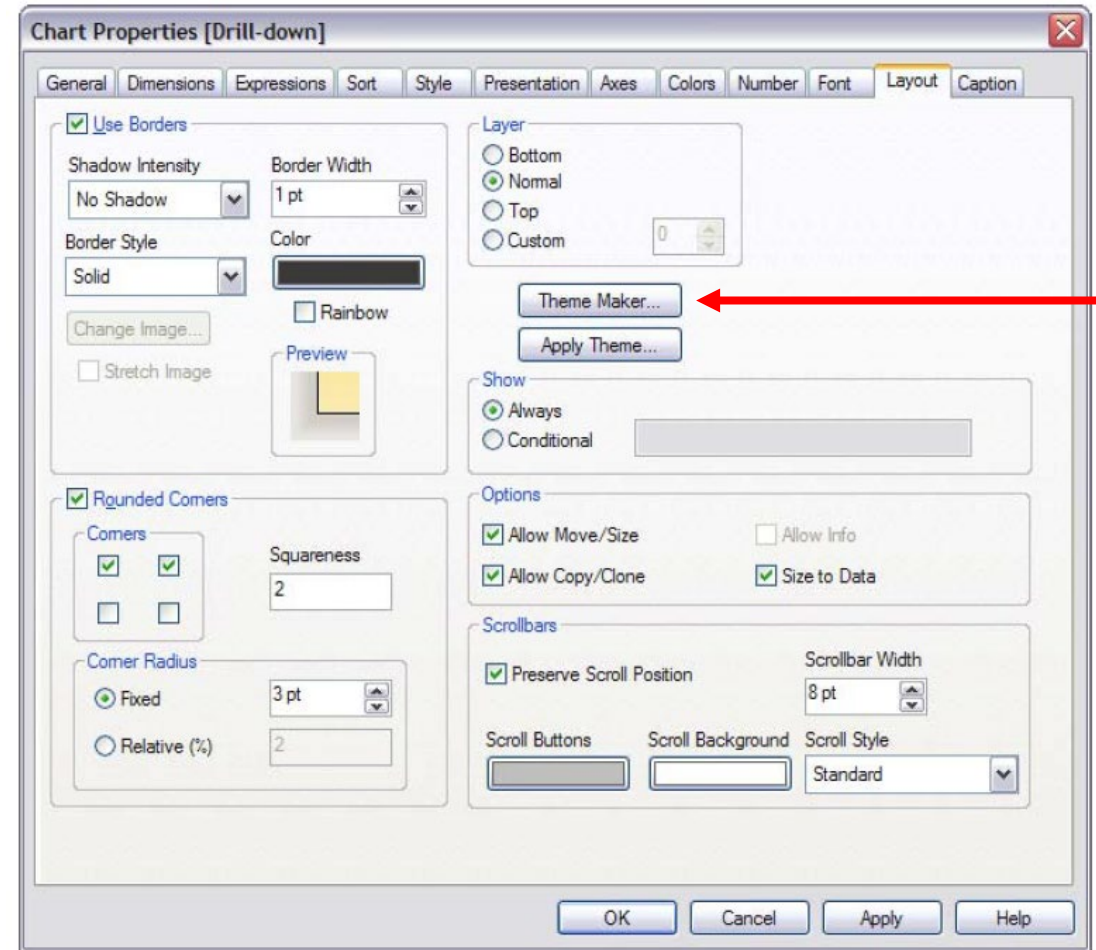
1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface,
 - wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,
 - wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.



EX1008, 0894.

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface,
 - wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,
 - wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.



EX1008, 0939.

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

The Petition's Theories:

1

The QlikView Manuals disclose “a *sharing module*” that enables a user to publish or embed a QlikView object (an “*interactive chart*”) as a webpage. . . . The webpages are also “*self-contained and independent*” because they rely on self-contained applications that display the interactive charts independently from the generation module/interface. EX1003, ¶¶346-47.

Pet., 64-67.

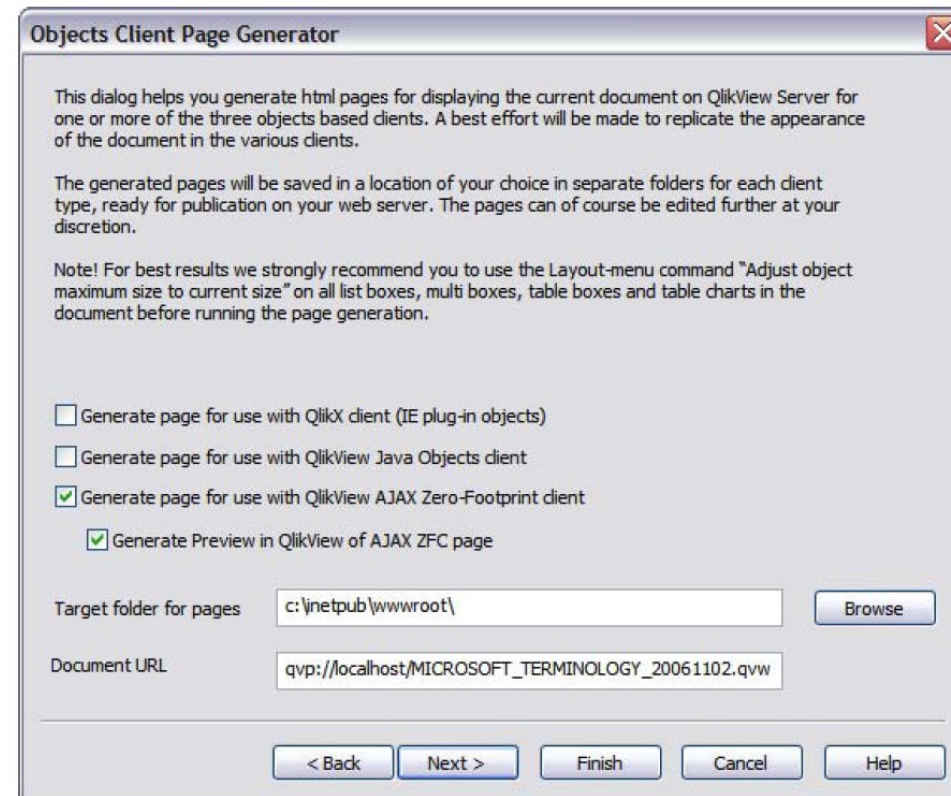
2

The QlikView Manuals also disclose “a *sharing module*” that enables a user to publish or embed the interactive chart (e.g. a QlikView table chart) as a Microsoft Excel document. EX1009, 0069-70, 0204; EX1008, 0030, 1064-65, 1084-85; EX1003, ¶348. As a POSA would have understood, an Excel document is “a *self-contained and independent electronic document*” because it can be saved locally, sent to third parties, and modified without QlikView. EX1003, ¶348.

Pet., 68.

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document,
 - wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.



EX1008, 0807.

This dialog helps you generate html pages for displaying the current document on QlikView Server for one or more of the three objects based clients. A best effort will be made to replicate the appearance of the document in the various clients. The generated pages will be saved in a location of your choice in separate folders for each client type, ready for publication on your web server. The pages can of course be edited further at your discretion, using a third-party html editor.

EX1008, 0807.

Ground 7: QlikView Manuals

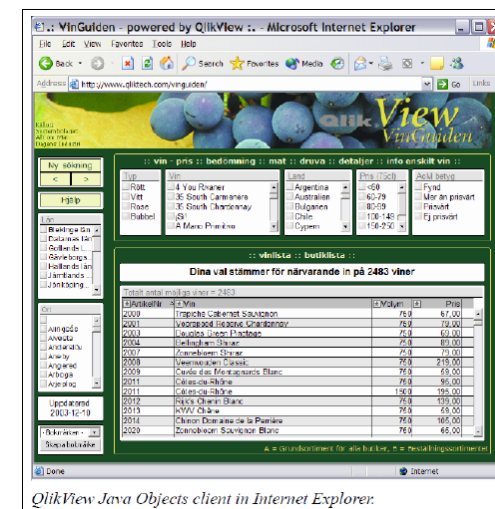
1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document, wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

When published via a Java Objects Client, QlikView documents are “self-contained and independent”

Q: What is a Java Runtime Environment (JRE)?

A: The JRE is a plug-in to an internet browser which creates a "sandbox" for running applets written in Java inside the browser. The applets have no access to the machine on which they are running outside the JRE.

- Java applets (e.g. QlikView Java clients) which are programs run inside a Java Runtime Environment in a browser.
- Java programs which are self-contained applications written in Java as opposed to e.g. VB or VC++.



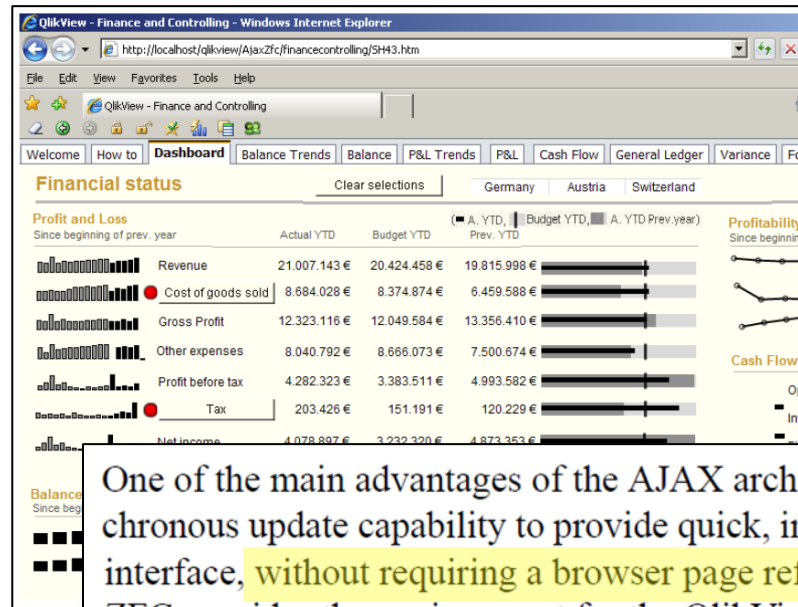
EX1009, 0199.

EX1009, 0133.

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document, wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

When published, the interactive chart is self-contained and independent relative to the generation interface and template module



One of the main advantages of the AJAX architecture is the inherent asynchronous update capability to provide quick, incremental updates to the user interface, without requiring a browser page refresh. The QlikView AJAX ZFC provides the environment for the QlikView Server to produce and send Dynamic HTML (DHTML) pages and XML data to the browser running on the client computer and also receive feedback from the user clicking in those pages. DHTML is basically HTML with scripting. Nothing is installed on the client computer.

EX1009, 0155-56.

Ground 7: QlikView Manuals

Prosecution History: “self-contained” and “independent” is relative to the generation interface and template module

Claim 25 is amended with adequate support from the originally filed application. First, the phrase “user interface” is replaced with “generation interface” to improve clarity. Further, the specification provides that the interactive chart can be embedded or published as “an electronic document” (page 19, line 4) which can be downloaded as a “self-contained” file “independent of the web portal” (generation interface) (page 21, last two lines). Moreover, such a self-contained and independent interactive chart can be opened by any electronic program to show the interactive chart (page 22, lines 1-2).

The sole independent claim among these rejected claims, claim 25, as currently amended, recites a generation interface for generating a chart. Further, the generation can employ a template from a chart template module. Moreover, claim 25 prescribes that, when the chart, as a self-contained and independent electronic document, is opened in a program in the absence of the generation interface and the template module, the chart still retains interactivity.

UTILITY PATENT APPLICATION TRANSMITTAL		MODIFIED FORM PTO/SB/05 (07-09)	
(Only for new nonprovisional applications under 37 CFR 1.53(b))		Attorney Docket No.	048887-001000
		First Inventor	Seymour Duncker
		Title	CREATION, SHARING AND EMBEDDING OF INTERACTIVE CHARTS
		Express Mail Label No.	
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents		ADDRESS TO:	Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450
1. ☐ Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and duplicate for fee processing)		ACCOMPANYING APPLICATION PARTS	
2. ☒ Applicant claims small entity status. See 37 CFR 1.27.		9. ☐ Assignment Papers (cover sheet & document(s)) Name of Assignee: <u>ICHARTS, INC.</u>	
3. ☒ Specification Both the claims and abstract must start on a new page (For information on the preferred arrangement, see MPEP 608.01(a)). [Total Pages <u>53</u>]		10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney (when there is an assignee)	
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets <u>34</u>]		11. ☐ English Translation Document (if applicable)	
5. Oath or Declaration [Total Sheets <u> </u>] a. ☐ New executed (original or copy) b. ☐ A copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. ☐ <u>DELETION OF INVENTORS</u> Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).		12. ☐ Information Disclosure Statement (PTO/SB/08 or PTO-1449)	
6. ☐ Application Data Sheet. See 37 CFR 1.76		13. ☐ Preliminary Amendment	
7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) ☐ Landscape Table on CD		14. ☐ Return Receipt PostCard (MPEP 503) (Should be specifically itemized)	
8. ☐ Nucleotide and/or Amino Acid Sequence Submission (If applicable, items a - c are required) a. ☐ Computer Readable Form (CRF) Specification Sequence Listing on: i. ☐ CD-ROM or CD-R (2 copies); or ii. ☐ Paper		15. ☐ Certificate Copy of Priority Document(s) (If foreign priority is claimed)	
c. ☐ Statements verifying identity of above copies.		16. ☐ Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i) Applicant must attach form PTO/SB/35 or equivalent.	
19. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No. <u> </u> Prior application Information: Examiner <u>Brandon S. Hoffman</u> Art Unit: <u> </u>		17. ☒ Priority is claimed from: U.S. Provisional Application No. 61/077,728 filed on July 2, 2008	
20. CORRESPONDENCE ADDRESS ☒ The address associated with Customer Number: <u>22204</u> WASHINGTON D.C. OFFICE CUSTOMER NUMBER		18. ☐ Other:	
OR ☐ Correspondence address below			
Name			
Address			
City	State	Zip Code	
County	Telephone	Email Address	
Signature	Date	September 5, 2008	
Name (Print/Type)	Jennifer Hayes	Registration No.	50,845

Tableau EX1002
IPR2024-01387
U.S. Patent No. 8,271,892

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document, wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

PO's Expert

Q The interactive chart, in your opinion is self-contained and independent because it's capable of rendering in absence of the generation interface in the chart template module; is that correct?

A Yes. I believe that that's included in what's meant by self-contained in independent interactive chart.

EX1070, 28:9-14.

Ground 7: QlikView Manuals

```
<object id='onlineIChart' height='593' width='895'>
<param name='src' value='http://pilot.icharts.net/icharts/onlineIChart.swf'>
<param name='flashVars' value='iChartId=148'>
<embed name='onlineIChart'
src=http://pilot.icharts.net/icharts/onlineIChart.swf
height='593'
width='895'
flashVars='iChartId=148'>
</embed>
</object>
```

EX2014, 0001.

Mr. Duncker:

Q Okay. If someone wanted to update the chart, would they be able to do so by saving a kind of updated version of the iChart at the same file path that's identified in HTML code?

A Yeah, so how updating would work is in the studio, they would go there, make the updates, whatever they want, and once they click save, right, the next time you refresh your page, then you would get the updated chart.

EX1071, 55:10-18.

Like QlikView maintaining charts on a QlikView server, iCharts were maintained on an iCharts server

Like QlikView, if a chart was updated, embed code would retrieve the updated chart from the server upon browser refresh

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or **embed the interactive chart as a self-contained and independent electronic document,** wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

An Excel document is “a self-contained and independent document”

QlikView

Q: Can I export and send to Excel directly from QVA for IE?

A: YES!

Send to Excel

Exports the table to Microsoft Excel, which is automatically launched if not already running. The table will appear in a new Excel worksheet. For this functionality to work Microsoft Excel 97 or later must be installed on the computer.

EX1009, 0204; EX1008, 1065.

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface,
 - wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or **embed the interactive chart as a self-contained and independent electronic document,**
 - wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

Tables in Excel documents are charts

QlikView

chart A common name for bar charts, pie charts, funnel charts, line charts, grid charts, scatter plots, **pivot tables and straight tables.** Charts show aggregated values of the data, i.e. one item in a chart (a cell in a pivot table, a bar in a bar chart, etc.) corresponds to several records in the logical tables.

EX1008, 1313.



chart 1 of 2 **noun**

'chärt ㄣ)

2 **a : a sheet giving information in tabular form**

b : GRAPH

c : DIAGRAM

d : a sheet of paper ruled and graduated for use in a recording instrument

e : a record of medical information about a patient

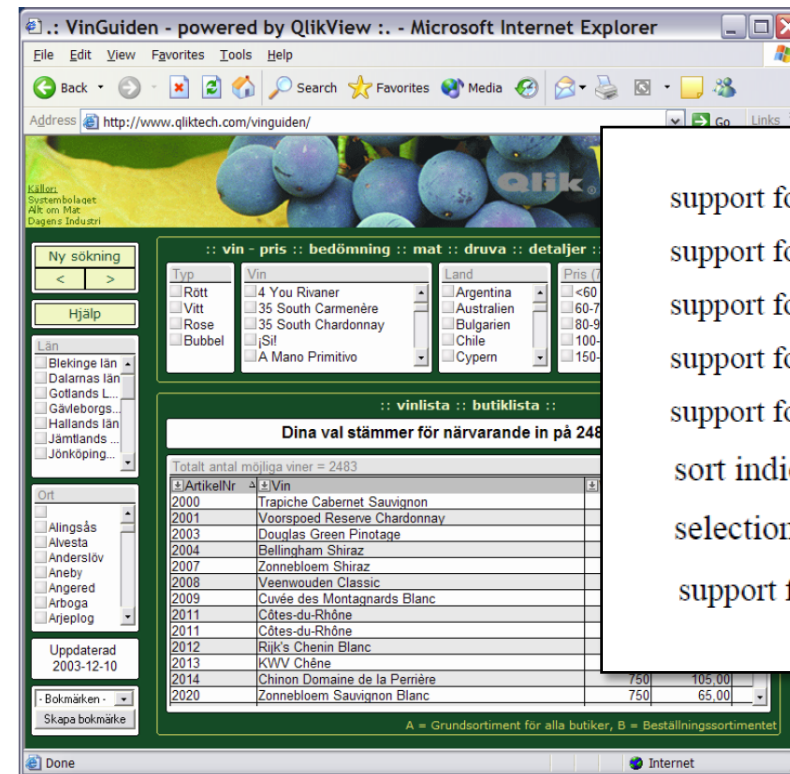
f : a listing by rank (as of sales) → usually used in plural

EX1069, 0001.

Ground 7: QlikView Manuals

1. A computer system comprising:
 - a data module configured to store data;
 - a chart template module configured to store chart templates;
 - a generation module configured to generate an interactive chart on a generation interface, wherein the generation interface is configured to enable a user to generate the interactive chart from data stored in the data module and a template from the chart template module;
 - a sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document, wherein the self-contained and independent interactive chart, when opened in a program in the absence of the generation interface and the chart template module, enables a user to a) render the chart, b) obtain input from a user and c) rerender the chart using the input as a parameter thereby enabling the interactive chart to retain interactivity when published or embedded.

Published/Embedded QlikView charts include many interactive features, such as:



support for drill-down and cyclic groups
support for cyclic expressions
support for fast type-change in charts
support for fixed number of lines in tables
support for drop-down select in tables
sort indicators in tables
selection indicators (LEDs) in tables
support for slider object

EX1008, 0035-36.

EX1009, 0133.

iCharts does not dispute QlikView's teaching of the claim elements in the dependent claims for Ground 7

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TABLEAU SOFTWARE, LLC

Petitioner,

v.

iCHARTS LLC,

Patent Owner.

Case No. IPR2024-01387
U.S. Patent No. 8,271,892

PATENT OWNER'S RESPONSE TO INSTITUTION OF
INTER PARTES REVIEW

Patent Owner Response

3. QlikView Manuals Do Not Teach Claim 2, 4, 5, 7, 8, 9

Because Petitioner has failed to show that QlikView Manuals render claim 1 obvious, Petitioner necessarily fails to show that QlikView Manuals teach claim 2, 4, 5, 7, 8, 9 given that these claims depend on claim 1. *Supra*, §IV.G.1(a); EX2001 ¶220.

*iCharts lists claims 2, 4, 5, 7, 8, and 9. But the dependent claims for ground 7 are 2 and 5-9.

Ground 8: The QlikView Manuals and Couckuyt (Claims 3 and 10-16)

Ground 8: QlikView Manuals and Couckuyt

Patent Owner Response

available. EX1008 0216. Thus, a POSA would not have been motivated to redesign QlikView's Chart Wizard to accomplish something it already does in a quick and easy way. EX2001 ¶¶221-225. See *Virtek Vision*, 97 F.4th at 88.

POR., 88.



“[A] finding that the prior art as a whole suggests the desirability of a particular combination need not be supported by a finding that the prior art suggests that the combination claimed by the patent applicant is the preferred, or most desirable, combination.”

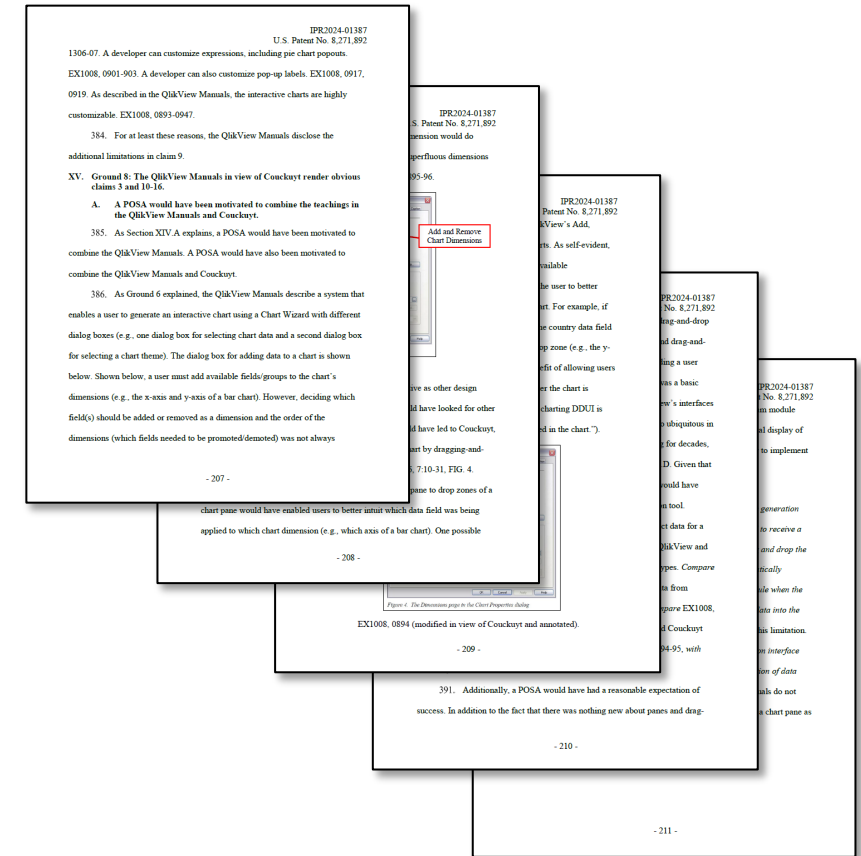
In re Fulton, 391 F.3d 1195, 1200 (Fed. Cir. 2004).



“[The expert] stated eleven times that he did not provide any reason to combine the references in his expert declaration.”

Virtek Vision Int'l ULC v. Assembly Guidance Sys., Inc., 97 F.4th 882, 887 (Fed. Cir. 2024).

Petitioner's Expert's Motivation to Combine Analysis

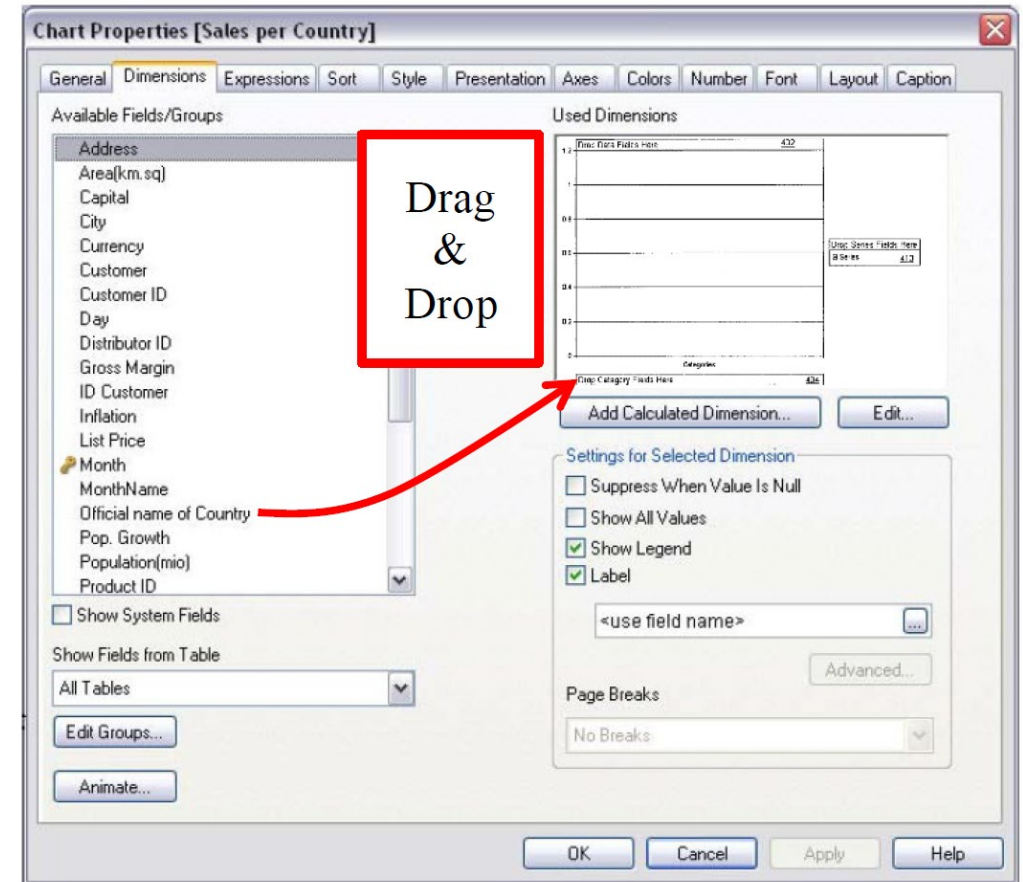


EX1072, ¶¶385-91.

Ground 8: QlikView Manuals and Couckuyt

PO's Expert

388. Allowing users to drag data fields from a data pane to drop zones of a chart pane would have enabled users to better intuit which data field was being applied to which chart dimension (e.g., which axis of a bar chart). One possible combination is shown below, which is more intuitive than QlikView's Add, Remove, Promote, and Demote options for adding data to charts. As self-evident, providing drag-and-drop functionality from a data pane (the available fields/groups) to a chart pane (top right) would have enabled the user to better know what data it was applying to which dimension of the chart. For example, if the user wanted to plot sales by country, the user could drag the country data field to a drop zone (e.g., the x-axis) and the sales data field to a drop zone (e.g., the y-axis). This simple design change would have also had the benefit of allowing users to quickly view changes in real time rather than at the end, after the chart is generated. See EX1006, 1:18-19 ("The primary benefit of the charting DDUI is that the user can quickly change the data that is being presented in the chart.").



EX1003, ¶388 (modifying EX1008, 0894).

EX1003, ¶388.

Ground 8: QlikView Manuals and Couckuyt

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TABLEAU SOFTWARE, LLC
Petitioner

v.

ICHARTS LLC
Patent Owner

Case IPR2024-01387
U.S. Patent No. 8,271,892

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Petitioner Reply

B. Ground 8 discloses every element of claims 3 and 10-16.

If the Board determines QlikView teaches the elements in claim 1 and a POSA would have combined QlikView and Couckuyt, iCharts does not dispute any other elements of these claims. POR, 88-90.

Ground 9: The QlikView Manuals, Couckuyt, and Keys (Claims 10-16)

Ground 9: QlikView Manuals, Couckuyt, and Keys

POR

I. Ground 9: QlikView Manuals In View of Couckuyt and Keys Do Not Render Obvious Claims 10-16

Keys does not disclose, teach, or suggest the limitation of claim 10, a “chart template module located on a remote server.” EX2001 ¶¶235-241.

POR, 90.

Keys

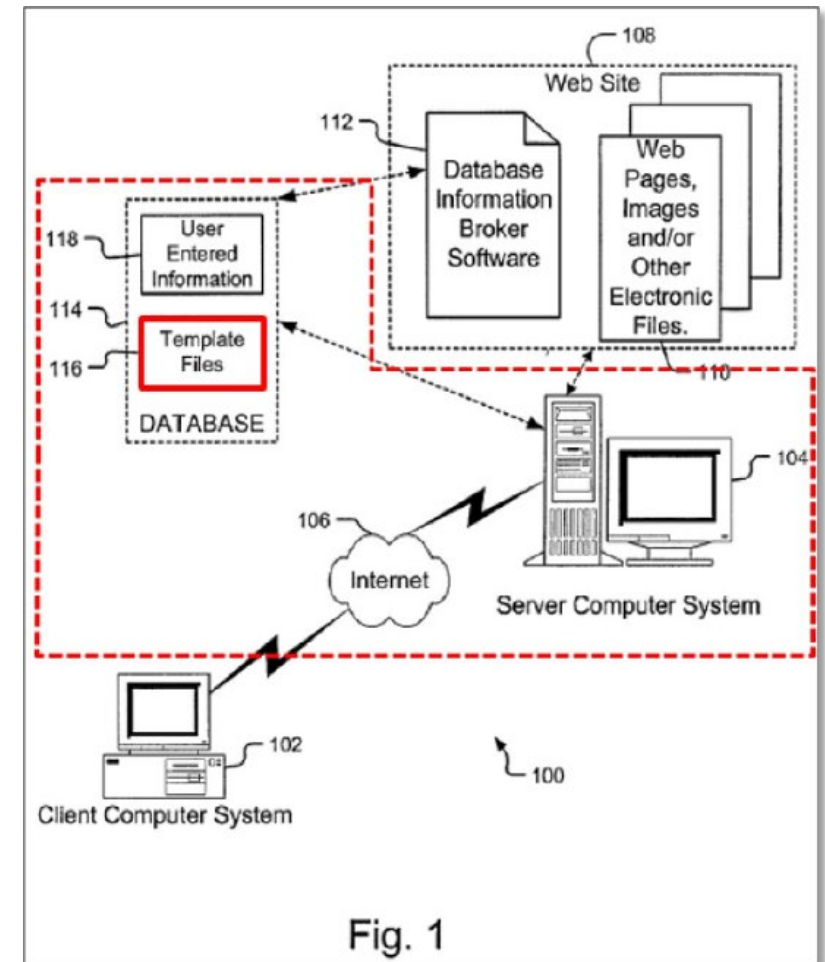


Fig. 1

EX1034, FIG. 1.

Ground 9: The QlikView Manuals and Moyer (Claim 6)

Ground 8: QlikView Manuals and Moyer

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TABLEAU SOFTWARE, LLC
Petitioner

v.

ICHARTS LLC
Patent Owner

Case IPR2024-01387
U.S. Patent No. 8,271,892

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Petitioner Reply

XII. Ground 10: QlikView Manuals-Moyer

Tableau disagrees with iCharts' arguments. Pet., 92-93; POR, 92. However, the Board need not resolve this dispute because iCharts does not dispute QlikView's teaching of a "*copy-to-my-account feature*." POR, 87; Pet., 74 (including claim 6 in Ground 7).

Thank You