

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TABLEAU SOFTWARE, LLC

Petitioners,

v.

iCHARTS LLC,

Patent Owner

Case No. IPR2024-01387

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

SUPPLEMENTAL DECLARATION OF DR. JEFFREY MILLER

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I, Jeffrey Miller, hereby declare as follows:

I. SCOPE OF THE ENGAGEMENT

1. I have been retained by Patent Owner in connection with the above-captioned *Inter Partes* Review (“IPR”) proceeding involving U.S. Patent No. 8,271,892 (“the ’892 Patent”) (EX1001).

2. I understand that this declaration (“Supplemental Declaration”) will be submitted in support of Patent Owner’s Response to the Institution Decision of the IPR. This Supplemental Declaration supplements my prior declaration in support of Patent Owner’s Preliminary Response for this IPR Proceeding (EX2001, “Prior Declaration”). In my Prior Declaration, I address many topics, including (but not limited to) my background and qualifications, an overview of the ’892 Patent and its claim construction, certain legal standards explained to me by counsel, and my opinions as to the validity of claims 1-16 of the ’892 Patent (collectively, the “Challenged Claims”) in view of the grounds set forth in the Petition.

3. I continue to hold the opinions from my Prior Declaration that are cited within the Patent Owner’s Response to the Institution Decision. This Supplemental Declaration is in response to the Institution Decision and provides additional opinions based on the Institution Decision (Paper 7, “DI” or “Decision”).

4. In addition to the materials identified in my Prior Declaration, I have also reviewed the Board’s Decision Granting Institution, the Patent Owner’s

Response to the Institution Decision, and the Declaration of Mr. Seymour Duncker (EX2200).

II. PERSON HAVING ORDINARY SKILL IN THE ART

5. The Board adopted the Petitioner's contention that a POSITA would have had at least a bachelor's degree in Computer Science, Computer Engineering, or equivalent experience relating to computing, as well as two to three additional years of academic or industry experience related to web application development and data visualization services. DI p.8. I also adopted this as the definition of a POSITA in my previous declaration and do so again here. Accordingly, my opinions contained herein are based on this level of ordinary skill in the art at the time of the invention.

6. I have been informed that the Patent Owner has construed the terms of the claims according to their ordinary and customary meanings as understood by a POSITA in view of the specification. I am informed and agree with Patent Owner that no term needs an explicit construction to resolve the controversy between the parties.

III. CONSTRUCTION OF CLAIM TERMS

7. I have been informed and understand that to properly evaluate the '892 Patent, the terms of the claims must first be interpreted.

8. I understand that neither party has proposed a specialized construction for the terms of the '892 Patent in this IPR at this time. Accordingly, the opinions set forth in this declaration are based on the plain and ordinary meaning of the claim terms set forth in the '892 Patent. To the extent any specialized construction is presented or offered, I reserve the right to supplement the opinions set forth herein.

IV. THE '892 PATENT AND THE ALLEGED PRIOR ART

A. THE '892 PATENT

9. I supplement my past summation of the '892 Patent, *see* EX2001 ¶¶27-41, with the following.

10. To reiterate, the '892 Patent relates to a system and method for generating and sharing interactive charts. The interactive charts are “generated in an online portal” that allows users to “customize the interactive features of the chart.” EX1001, Abstract. The interactive chart can be published on an external webpage or embedded in an external document. *Id.* 9:34-38.

11. In my opinion, FIG. 8, reproduced below, is significant in the current dispute and I highlight it here. It is a flow diagram with respect creating, sharing, and embedding an interactive chart. *Id.* 4:62-64.

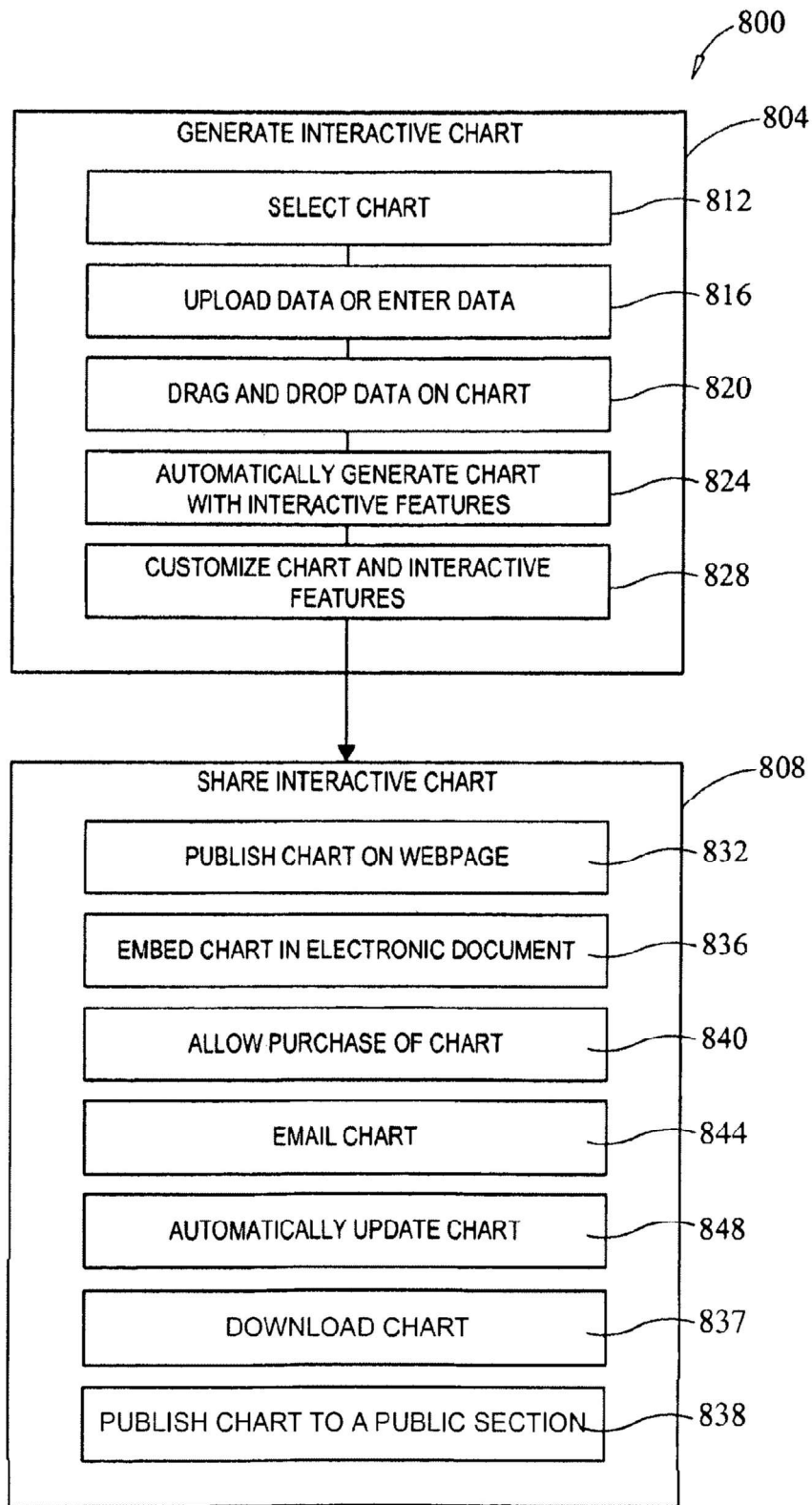


FIG. 8

12. The interactive chart is generated at **804**. *Id.* 11:37-42. Sharing **808** of the interactive chart may include publishing **832** the chart in a web page, embedding **836** the chart in an electronic document, downloading **837** the chart as “an interactive self-contained object that can be embedded elsewhere,” publishing **838** the chart to the public section of a web portal, allowing the chart to be purchased **840**, and/or emailing **844** the chart. *Id.* 11:43-49.

13. Once the interactive chart is created, it can be downloaded as an interactive self-contained object. *Id.* 11:45-47. The interactive charts that are downloaded are self-contained flash files that can exist independent of a web portal. *Id.* 10:7-8. The '892 Patent describes one embodiment of “the interactive chart 300” as “a flash file that contains code that a) renders the chart, b) obtains input from the user as per his desired action on this chart (i.e., interactivity), and c) re-renders the chart using the input as parameters.” *Id.* 9:51–54. The interactive chart data could be “stored within the flash file.” *Id.* 9:54–55. The flash file would contain dynamic code, executed on the client-side for interactivity. *Id.* 10:7-11.

B. QlikView Manuals (EX1008 / EX1009)

14. I supplement my past summation of the QlikView Manuals, *see* EX2001 ¶¶59-87, with the following.

15. The QlikView Manuals disclose a server-client system for data analysis. EX1009 at 0009. The QlikView Server is the centerpiece of this

technology. *Id.* The QlikView Server provides a centrally managed QlikView document community that connects multiple users, client types, documents, and objects within a secure and safe environment. *Id.*

16. A QlikView document is designated as a .qvw file. *Id.* p.0123. A QlikView client is required for the display and usage for a QlikView document, which is a .qvw file. *Id.* The QlikView server is responsible for opening, hosting, and calculating the documents. *Id.* A QlikView client is required for user interaction and presenting the document and its objects. *Id.*

17. Another QlikView feature, the QlikView AJAX Zero-Footprint Client (ZFC), is an object-based client environment built on the AJAX (Asynchronous JavaScript and XML) architecture. *Id.* p.0155. The QlikView AJAX ZFC client requires no installation on the client computer. *Id.* Nevertheless, some HTML/ASP development is required to display and interact with objects from a QlikView document hosted by the QlikView server. *Id.*

18. The QlikView server is responsible for opening, hosting, and calculating the documents. EX1009 p.0123. Each open chart/table must be recalculated on the server after each change in the logical state. EX1009 p.0168.

C. Becerra (EX1005), Couckuyt (EX1006), Jou (EX1007), Key (EX1034), and Moyer (EX1010)

19. My summations of Petitioner's alleged prior art references Becerra, Couckuyt, Jou, Key, and Moyer can be found in my Prior Declaration. *See* EX2001 ¶¶43-58, 88-96.

V. PETITIONER'S ARGUMENTS FAIL TO PROVE THE UNPATENTABILITY OF THE CHALLENGED CLAIMS

A. Ground 1: Becerra (EX1005)

1. Becerra Does Not Render Obvious Claim 1

a. Becerra does not disclose a “sharing module configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document”

20. It is still my opinion that Becerra does not disclose generating an interactive chart. *See, generally*, EX2001 §VIII.A. Instead, Becerra discloses generating an interactive graphics simulation of a control panel with a bar chart component that is not generated from data in a data module and a chart template that is not generated from a chart template module. EX1005 11:1-6, 32:3-5. Because Becerra does not disclose generating an interactive chart, it cannot disclose a sharing module configured to publish or embed the interactive chart. EX2001 ¶¶134-136.

21. Petitioner relies on Becerra's disclosure of exporting the control panel or saving the control panel as a separate file (EX1005 52:1-4, 14-18). Petitioner does not address how Becerra discloses or teaches any module that enables publishing or

embedding the control panel. As explained in my previous declaration, a POSITA would understand that exporting or saving a file is different from publishing or embedding a file. EX2001 ¶136. Furthermore, it is still my opinion that a POSITA would understand that subsequently opening the file is not publishing the control panel. EX2001 ¶136. 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. Consequently, 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 '892 Patent. DIp.35. As I previously opined, a POSITA would understand that embedding requires that the file already exists before you add the interactive chart into it. EX2001 ¶136. In contrast, Becerra discloses saving a new file with *only* the control panel in it. EX1005 0052:14-18. To reiterate, Becerra *does not disclose* embedding. EX2001 ¶136. It is my opinion that the Board correctly noted that Becerra does not appear to disclose aspects related to and necessary for embedding the control panel anywhere. DIp.35. It remains my opinion, then, that because Becerra does not disclose publishing or embedding, Becerra does not disclose a sharing module.

B. Ground 7: QlikView Manuals (EX1008, EX1009)

1. QlikView Manuals Are Not Prior Art

22. I understand that the provisional application leading to the '892 Patent was filed on July 2, 2008, and the nonprovisional application was filed on September 5, 2008. EX1001 Cover Page. I understand that Petitioner has asserted that the priority date of the QlikView Manuals is July 8, 2008. Pet. p.7.

23. I understand that Petitioner has argued that the '892 Patent should not be afforded the July 2, 2008, priority date, because the provisional application does not provide adequate 112 support for several claim limitations. Pet. pp.5-6.

24. I use the legal principles below, of which I have been informed by counsel, as a guide in formulating my opinions.

25. With respect to the enablement requirement, I understand that 35 U.S.C. §112(a) (previously referred to as the first paragraph of 35 U.S.C. §112) requires that a patent's claims be supported by a specification to enable any person skilled in the art to make and use the claimed invention. I understand the test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.

26. With respect to the written description requirement, I understand that a provisional application satisfies the written description requirement when the

description clearly allows persons of ordinary skill in the art to recognize that the inventor invented what is claimed. I understand that possession of the invention is conveyed by such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention, although the exact terms need not be used *in haec verba* (i.e., verbatim).

27. A Markush claim is a specific type of patent claim that lists alternative species or elements that be selected as part of the claimed invention. This type of claim is typically expressed in the form: "a member selected from the group consisting of A, B, and C." Markush claims are characterized by their use of a Markush group, which is a listing of specified alternatives in a patent claim. Markush-type claims recite a plurality of alternatively usable substances or members and the members of the group are generally understood to be functionally equivalent for the purposes of the invention.

a) The '892 Provisional Application Provides Sufficient Section 112 Support

28. In my opinion the '892 Patent's provisional application provides adequate written description and enablement for each of the claimed elements, including those challenged by Petitioner.

29. Petitioner argues that the '892 Patent's priority date should not be based on the filing date of the provisional application because there is no "§112 support" for: (i) publishing or embedding feature (claims 1, 10); (ii) "module" element (claim

1); (iii) “data pane” (claims 3, 10); (iv) “computer system” (claim 1) or “computer-implemented method” (claim 10); (v) video, animation, drill-down, and data gliding features (claims 7, 12). Pet. pp.5-6. I disagree.

30. Publishing or embedding features (claims 1, 10) – The ’892 Patent’s provisional application specifically discloses “publish iChart” and explains that the user can embed their chart into their portal, blog, or online articles. EX1013 p.0059. The provisional further provides that after the chart is created, it can be published as an embedded object as a cold snippet of code or embedded as an interactive object. *Id.* p.0045. Additional disclosures detailed below provide further §112 support for this claim element.

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.

32. “[D]ata pane” (claims 3, 10) – The provisional provides that users can upload data or “enter data under the data sheet tab.” *Id.* A POSITA would have understood that the data pane is the portion of the user interface that displays the data such as the data sheet tab. Additional disclosures are detailed below.

33. “[C]omputer system” (claim 1) or “computer-implemented method” (claim 10) – A POSITA would have understood that the provisional application discloses a system on a computer or a method implemented on a computer. The provisional states that the invention is related to an “on-line service” for creating, sharing, and embedding interactive charts. *Id.* The provisional discloses numerous computer screenshots of user interfaces. *Id.* 0054-0058; 0061-0062; 0065-0073.

34. Video, animation, drill-down, and data gliding features (claims 7, 12) – A POSITA would have known that such features fall within the “rich interactivity features” disclosed in the provisional application. *See Id.* p.0054. In other words, a POSITA would have known that each Markush grouping lists rich interactivity features. I understand that each and every element of a Markush grouping does not need to be explicitly disclosed in the provisional as long as a POSITA would be persuaded to a reasonable certainty that the applicant possessed so much of the invention as to encompass the reference disclosure. The provisional application provides that “[i]n still further embodiments, users can select certain interactive features to include with the chart.” *Id.* p.0045. The provisional application discloses that “[e]xemplary interactive features include a zoom feature, a data mouse-over pop-up window, and a data hide/share feature.” *Id.* The first figure of the provisional application states that “iCharts contain rich interactivity features.” *Id.* p.0054. A POSITA would have understood these interactive features to also include video,

animation, drill-down, and data gliding features. The provisional application also shows in the first figure “[p]op up with data point detail,” (*Id.*), which supports a “drill-down feature.” A POSITA would have known that a data gliding feature enables a user to glide through different segments or levels of detail within data using interactive features like sliders, zoom functionality, and drill-down capabilities. The provisional application shows in the first figure “[s]liders to scale through time series,” (*Id.*), which supports “data gliding features.” *Id.* It is my opinion that a POSITA would have understood from a review of the first figure of the provisional application (*Id.*) that changing the slider markers (i.e., endpoints) allows scaling through time series.

35. In my opinion, the provisional application provides adequate written description and enablement for the Challenged Claims, as further outlined in the chart below:

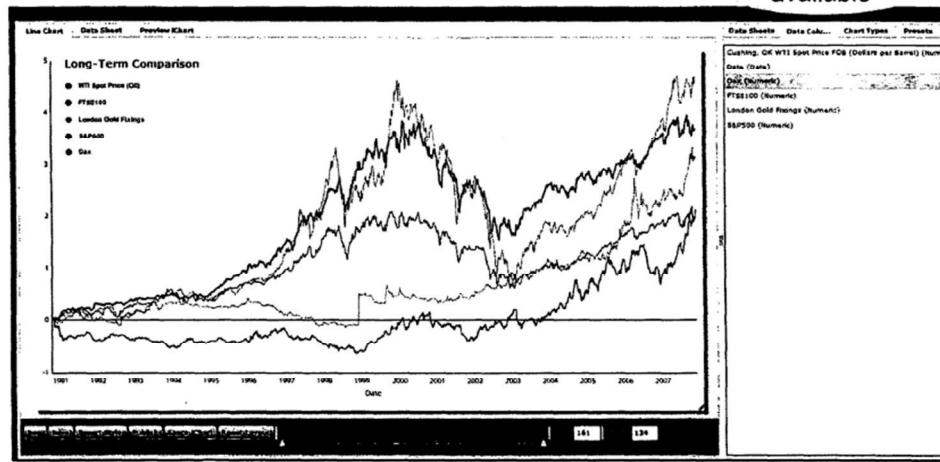
Claim	Support in Provisional Patent Application
1. A computer system comprising:	Embodiments of the invention relate to an on-line service for creating, sharing and embedding interactive charts. (EX1013 p.0045)
a data module configured to store data;	Users enter or upload data. The user can then drag and drop the data into a chart in a special charting pane.

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;

iCharts: Chart creation pane

Rich formatting options available



(EX1013 p.0062)

Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts 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.

(EX1013 p.0045)

... wherein the generation module generates the chart based on stored data and templates.

Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts 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.

(EX1013 p.0045)

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	<i>Publishing or embedding the interactive chart as a self-contained and independent electronic document . . .</i> iCharts is the fastest way to create and share interactive charts online 1 Sign up to iCharts 2 Create iChart Choose your data source (Excel, CSV, Copy & Paste) Drag' n' Drop your chart in a few simple steps 3 Publish iChart Embed into your portal Embed into your blog Embed in online articles Embed into Powerpoint Embed into PDF Embed into ePaper Download as image for Print Publishing 4 Share iChart Share iChart Send iChart Copy-to-my-account (EX1013 p.0059) 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 p.0045) <i>. . . wherein the 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. . .</i> 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. (EX1013 p.0045)
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enabling the interactive chart to retain interactivity when published or embedded.

10 reasons to use iCharts for chart creation

- On demand** No software to install. You can start right away
- Multi-Publishing** Embed charts in portals, blogs and online articles. Embed interactive charts into PDF, Powerpoint or ePaper. Download as image for print publishing.
- Interactive Charts** Anyone can create charts in a matter of seconds that automatically contain rich interactive features.
- Live updating** Update your online charts with a mouse click wherever they are located on the web
- Portable charts** Others can take your charts and customize them with own comments and interactive settings
- Share your charts** Multiple people can work on same charts, like team members or external service providers
- Searchable Charts** Rich tagging will make your public charts highly searchable through Google & other search engines.
- Presets** Store standardized chart designs as templates. Click once to adapt your chart to any preset.
- Ease of Use, Quality & Speed** Create high quality interactive charts faster than you can create a normal chart elsewhere
- Cost** Free service to create and publish online iCharts

(EX1013 p.0060)

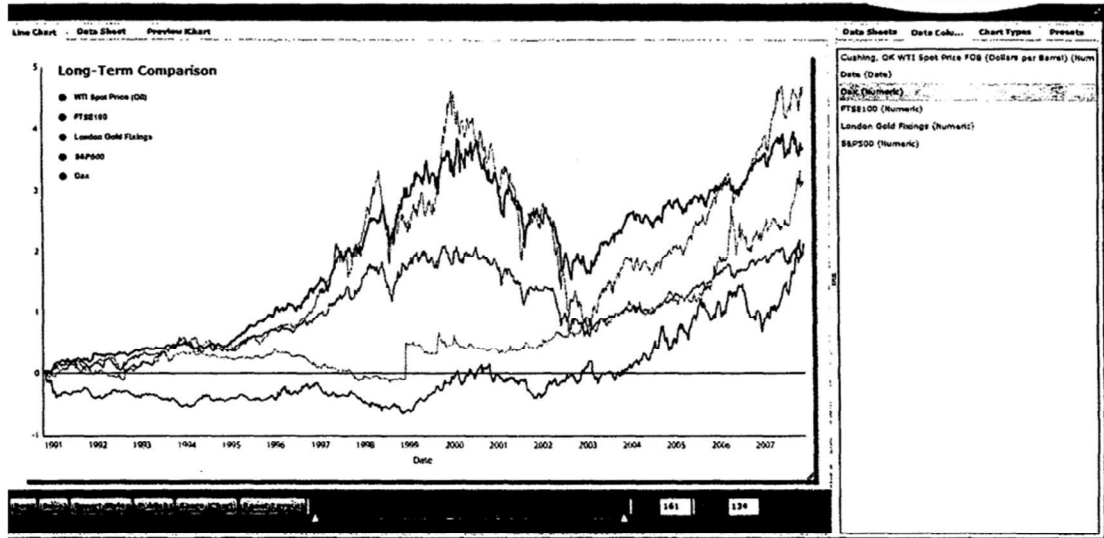
	LiveCharts: Embed once, update through iCharts as often as needed Website / Portal Website / Portal Website / Portal  Uploading new data sheet to iCharts refreshes embedded charts everywhere (EX1013 p.0064) <i>... thereby enabling the chart to retain interactive features when published/embedded.</i> The user can then <u>publish the chart online or download and embed the chart into for example a .pdf, .ppt, etc. file.</u> 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. (EX1013 p.0045)
2. The system of claim 1 wherein the generation interface is configured to	<i>A generation interface configured to receive data from a user and transmit the data to the data module to be use in chart creation.</i>

receive data from a user and transmit the data to the data module.	Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts creation page, the user can select the data columns on the right sight 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. (EX1013 p.0045)
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	<i>A generation interface that comprises a data pane and a chart pane . . .</i> Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts creation page, the user can select the data columns on the right sight 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. (EX1013 p.0045) Users enter or upload data. The user can then drag and drop the data into a chart in a special charting pane. (EX1013 p.0045)

interface receives an indication that the user has dropped the data into the chart pane.

iCharts: Chart creation pane

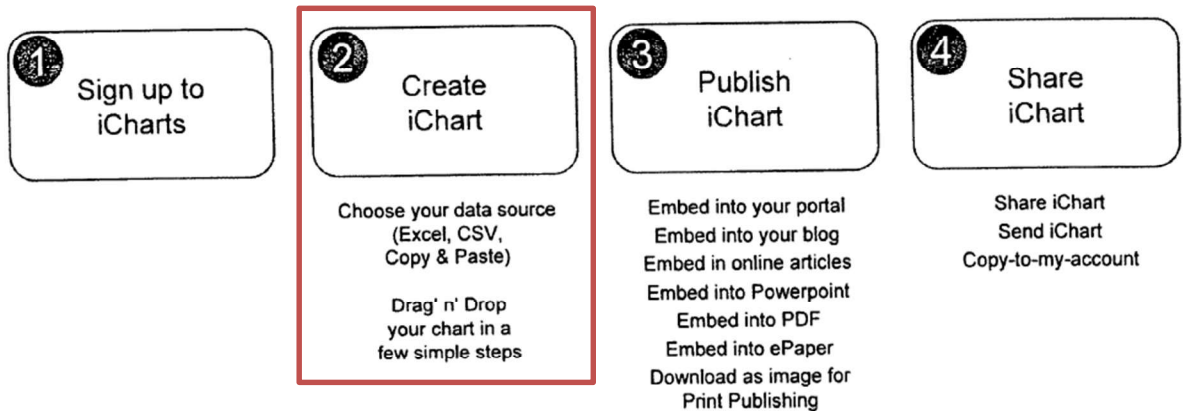
Rich formatting options available



(EX1013 p.0062)

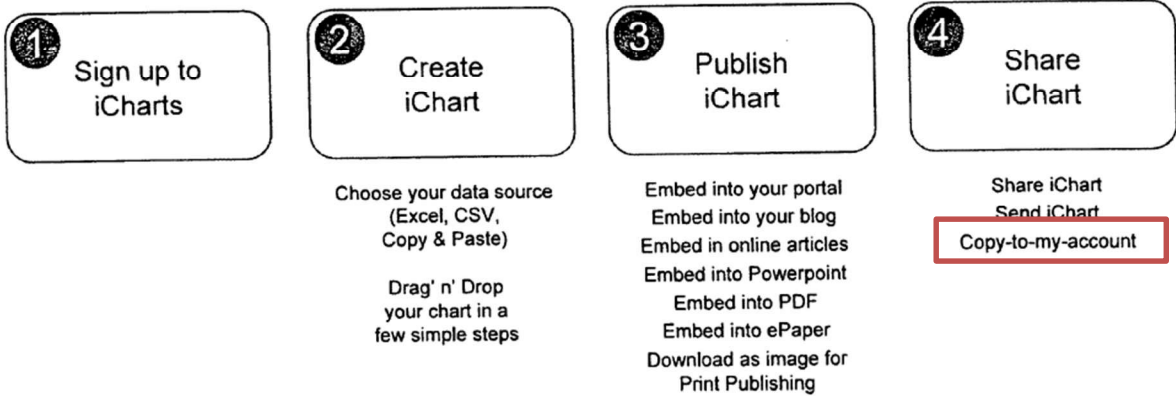
... and is configured to receive a selection of the data from the data pane and allow a user to drag and drop the data ...

iCharts is the **fastest** way to create and share interactive charts online



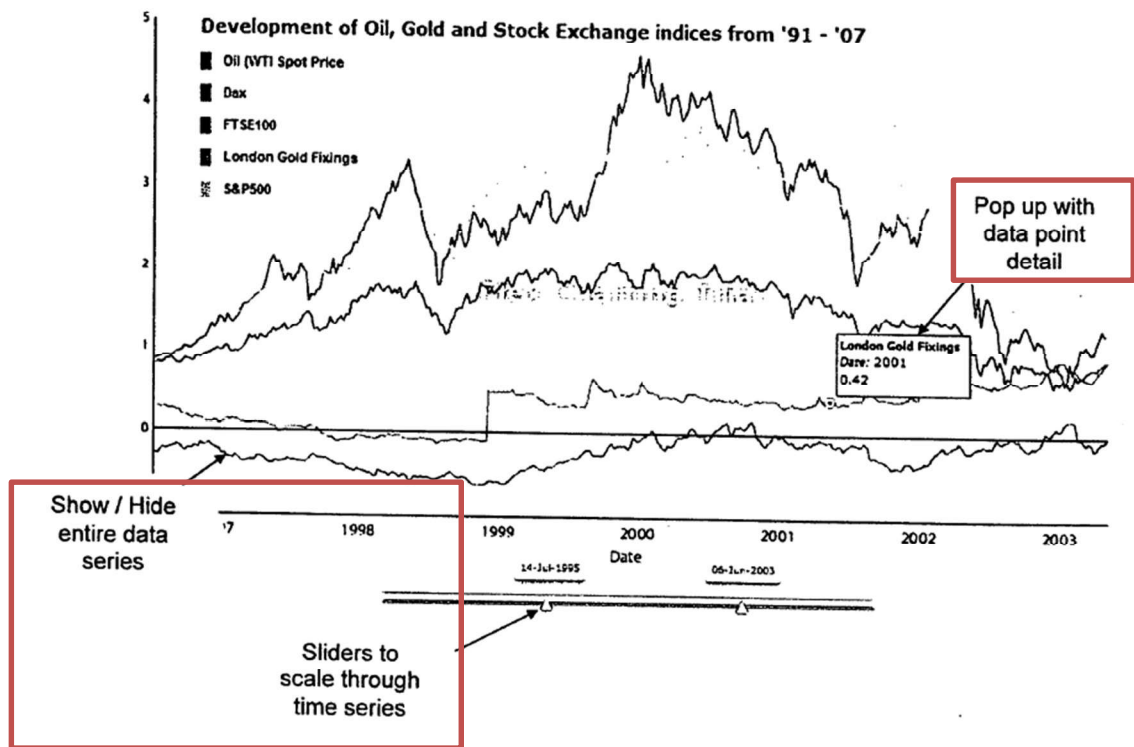
(EX1013 p.0059)

	Users enter or upload data. The user can then drag and drop the data into a chart in a special charting pane. (EX1013 p.0045) <i>. . . and upon receiving that dragged-and-dropped user selection, the generation module generates the interactive chart.</i> Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts 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. (EX1013 p.0045)
4. The system of claim 1 wherein the interactive chart comprises a flash object.	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. (EX1013 p.0045)
5. The system of claim 1 wherein the interactive chart has interactive features.	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. (EX1013 p.0045)

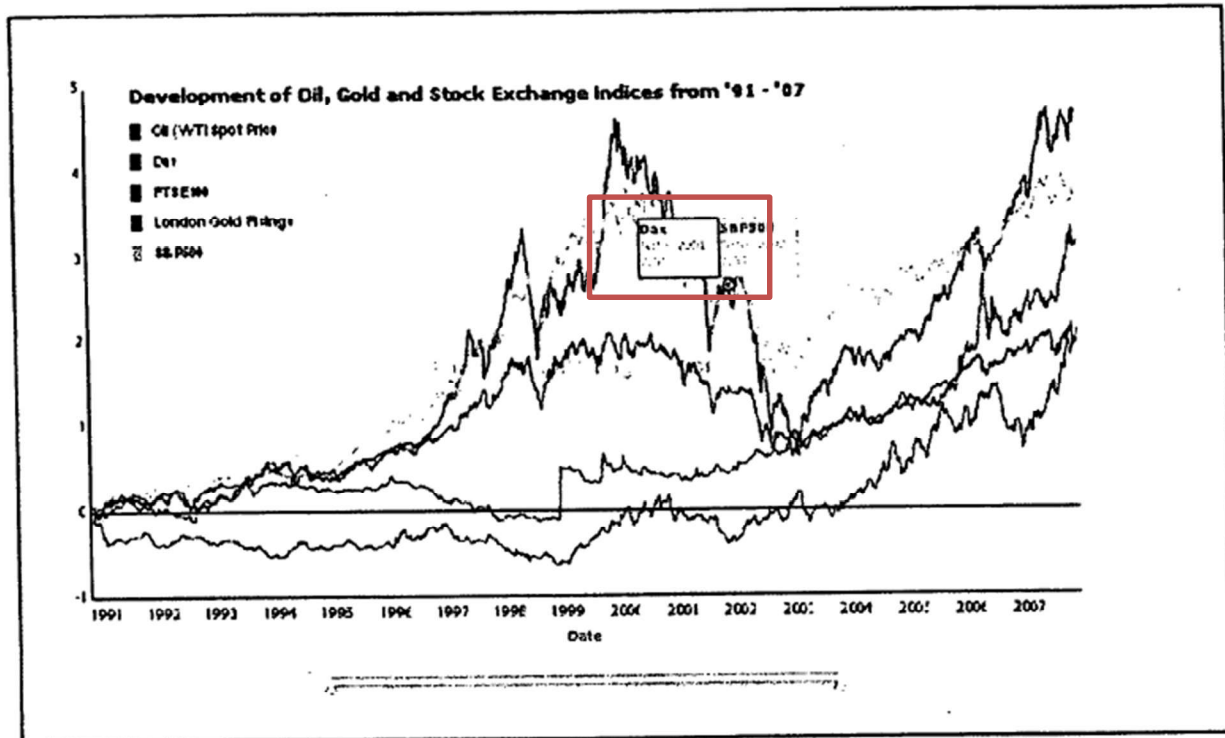
6. The system of claim 5 wherein the interactive features comprise a copy-to-my-account feature.	iCharts is the fastest way to create and share interactive charts online  (EX1013 p.0059)
7. The system of claim 5 wherein the interactive features are selected from the group consisting of a zoom feature, 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	<i>Interactive features may include zoom, mouse-over pop-up window, and/or data hide/share. . . . it may also include audio, video, animation, drill-down, and/or data gliding, and combinations thereof.</i> <u>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.</u> (EX1013 p.0045)

data gliding
feature and
combinations
thereof.

iCharts contain rich interactivity features



(EX1013 p.0054)



(EX1013 p.0057)

8. The system of claim 1 wherein the sharing module is configured to publish or embed the interactive chart with interactive features.

iCharts is the **fastest** way to create and share interactive charts online

1 Sign up to iCharts

2 Create iChart

Choose your data source
(Excel, CSV,
Copy & Paste)

Drag' n' Drop
your chart in a
few simple steps

3 Publish iChart

Embed into your portal
Embed into your blog
Embed in online articles
Embed into Powerpoint
Embed into PDF
Embed into ePaper
Download as image for
Print Publishing

4 Share iChart

Share iChart
Send iChart
Copy-to-my-account

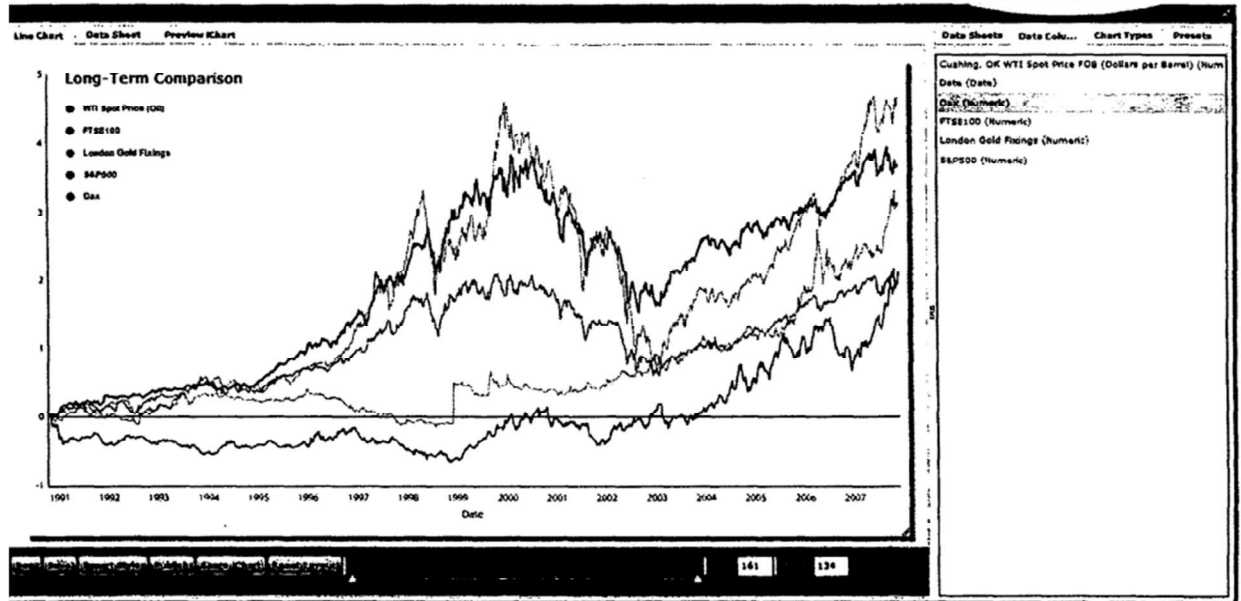
(EX1013 p.0059)

	Multi-Publishing Embed charts in portals, blogs and online articles. Embed interactive charts into PDF, Powerpoint or ePaper. Download as image for print publishing. Interactive Charts Anyone can create charts in a matter of seconds that automatically contain rich interactive features. (EX1013 p.0060) iCharts: Multi-publishing options Offline interactive Charts Embed into Powerpoint Embed into PDF Embed into ePaper Online interactive Charts Embed into your portal Embed into your blog Embed in online articles eMail Print Charts Download as image for Print Publishing  (EX1013 p.0063) 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. (EX1013 p.0045)
9. The system of claim 8 wherein the interactive features comprise	

customizable interactive features.	Interactive Charts Anyone can create charts in a matter of seconds that automatically contain rich interactive features. Live updating Update your online charts with a mouse click wherever they are located on the web Portable charts Others can take your charts and customize them with own comments and interactive settings (EX1013 p.0060)
10. A computer-implemented method comprising:	Embodiments of the invention relate to an on-line service for creating, sharing and embedding interactive charts. (EX1013 p.0045)
providing a generation interface having a data pane and a chart pane; receiving a user selection of data in the data pane;	Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts 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. (EX1013 p.0045) Users enter or upload data. The user can then drag and drop the data into a chart in a special charting pane. (EX1013 p.0045)

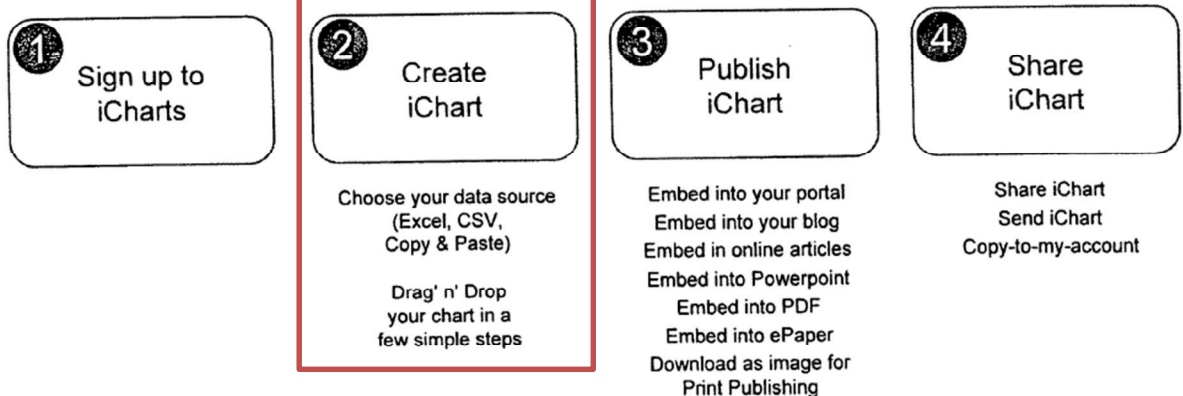
iCharts: Chart creation pane

Rich formatting
options
available



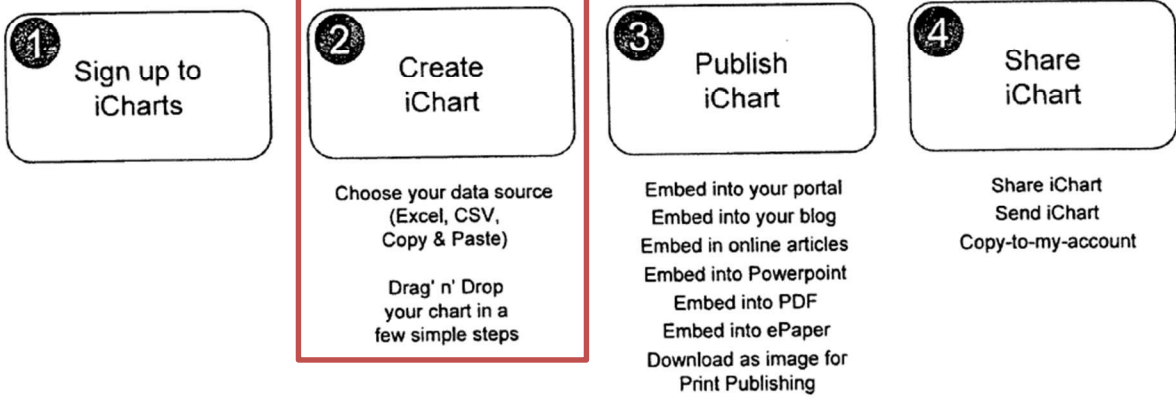
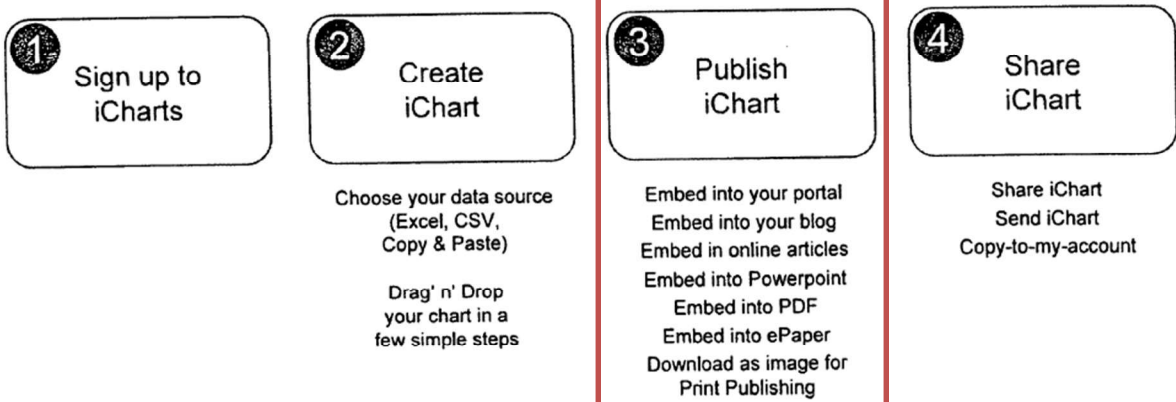
(EX1013 p.0062)

iCharts is the **fastest** way to create and share interactive charts online



(EX1013 p.0059)

	Users enter or upload data. The user can then drag and drop the data into a chart in a special charting pane. (EX1013 p.0045)
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;	The service may include chart templates. Users can store templates that allow them to create charts that all have the same look and feel. (EX1013 p.0045)
allowing the user to drag and drop the selected data into the chart pane on the generation interface;	Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts creation page, the user can select the data columns on the right sight 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. (EX1013 p.0045)
automatically generating an interactive chart using data dropped into the chart pane and the chart template from the chart template module	Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts creation page, the user can select the data columns on the right sight 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. (EX1013 p.0045)

selected by the user; and	iCharts is the fastest way to create and share interactive charts online  (EX1013 p.0059)
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	<i>Publishing or embedding the interactive chart as a self-contained and independent electronic document. . .</i> iCharts is the fastest way to create and share interactive charts online  (EX1013 p.0059)

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.	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 p.0045) <i>. . . wherein the 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. . .</i> 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. (EX1013 p.0045)
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10 reasons to use iCharts for chart creation

On demand

No software to install. You can start right away

Multi-Publishing

Embed charts in portals, blogs and online articles. Embed interactive charts into PDF, Powerpoint or ePaper. Download as image for print publishing.

Interactive Charts

Anyone can create charts in a matter of seconds that automatically contain rich interactive features.

Live updating

Update your online charts with a mouse click wherever they are located on the web

Portable charts

Others can take your charts and customize them with own comments and interactive settings

Share your charts

Multiple people can work on same charts, like team members or external service providers

Searchable Charts

Rich tagging will make your public charts highly searchable through Google & other search engines.

Presets

Store standardized chart designs as templates. Click once to adapt your chart to any preset.

Ease of Use, Quality & Speed

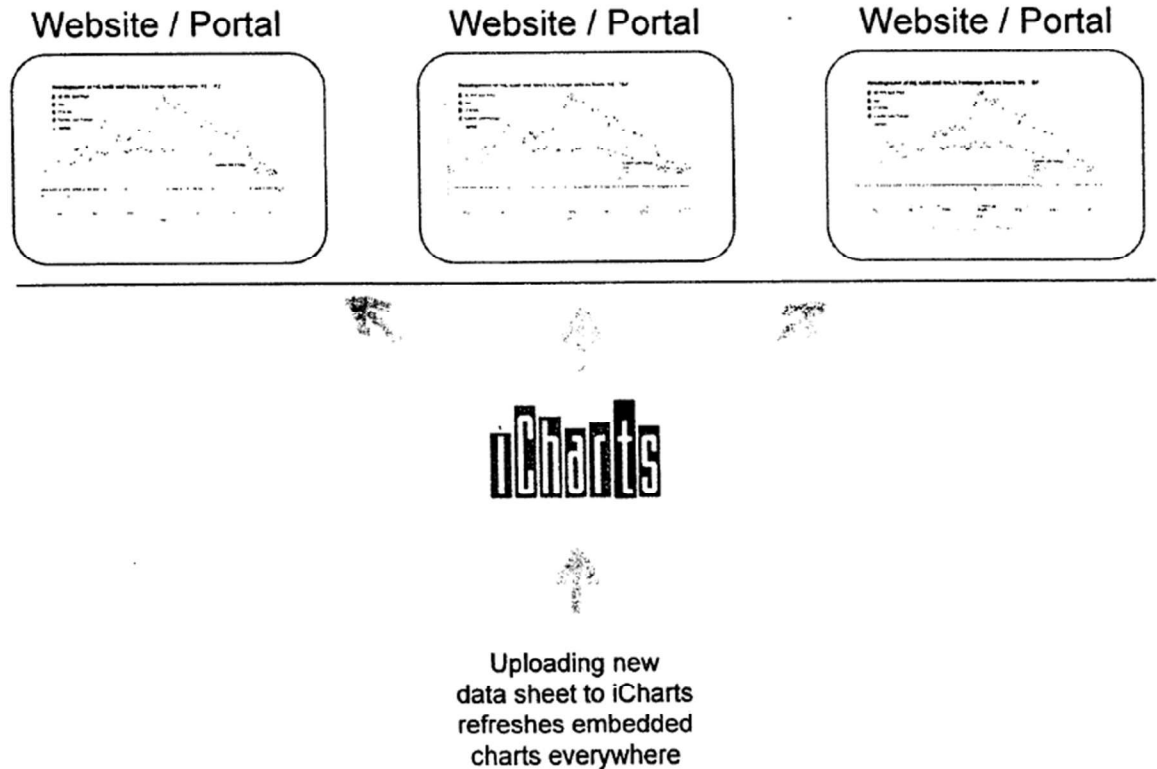
Create high quality interactive charts faster than you can create a normal chart elsewhere

Cost

Free service to create and publish online iCharts

(EX1013 p.0060)

LiveCharts: Embed once, **update** through iCharts as often as needed



(EX1013 p.0064)

... thereby enabling the chart to retain interactive features when published/embedded.

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.

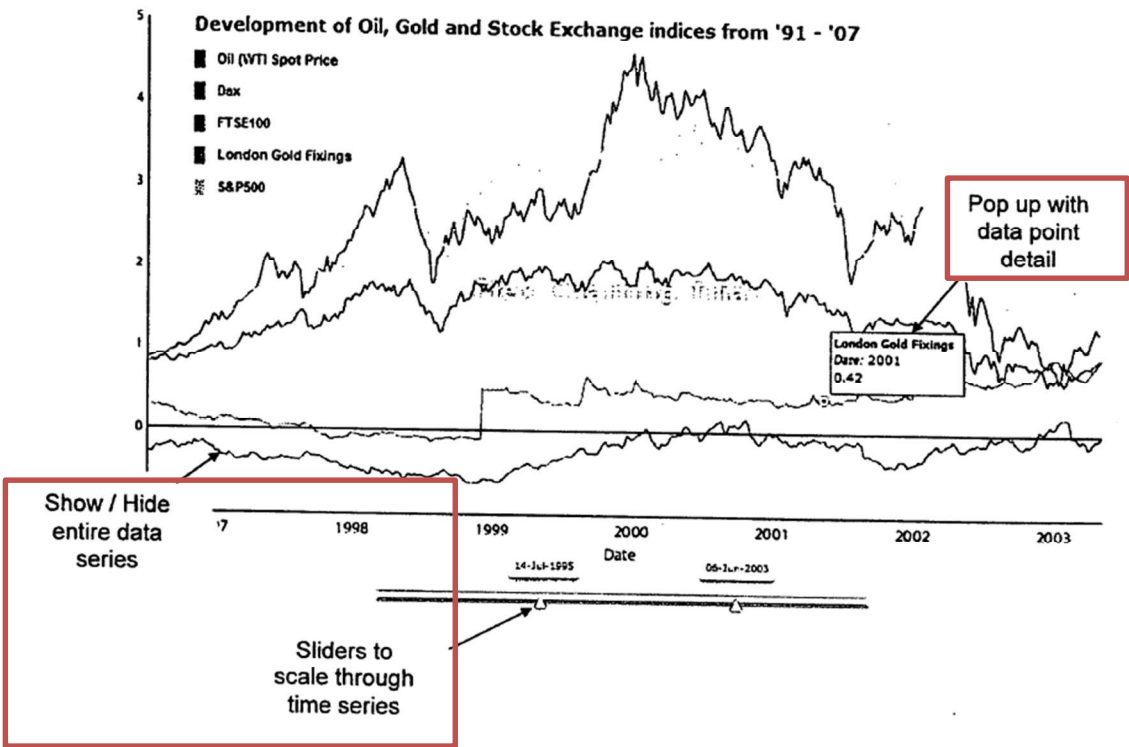
(EX1013 p.0045)

11. The method

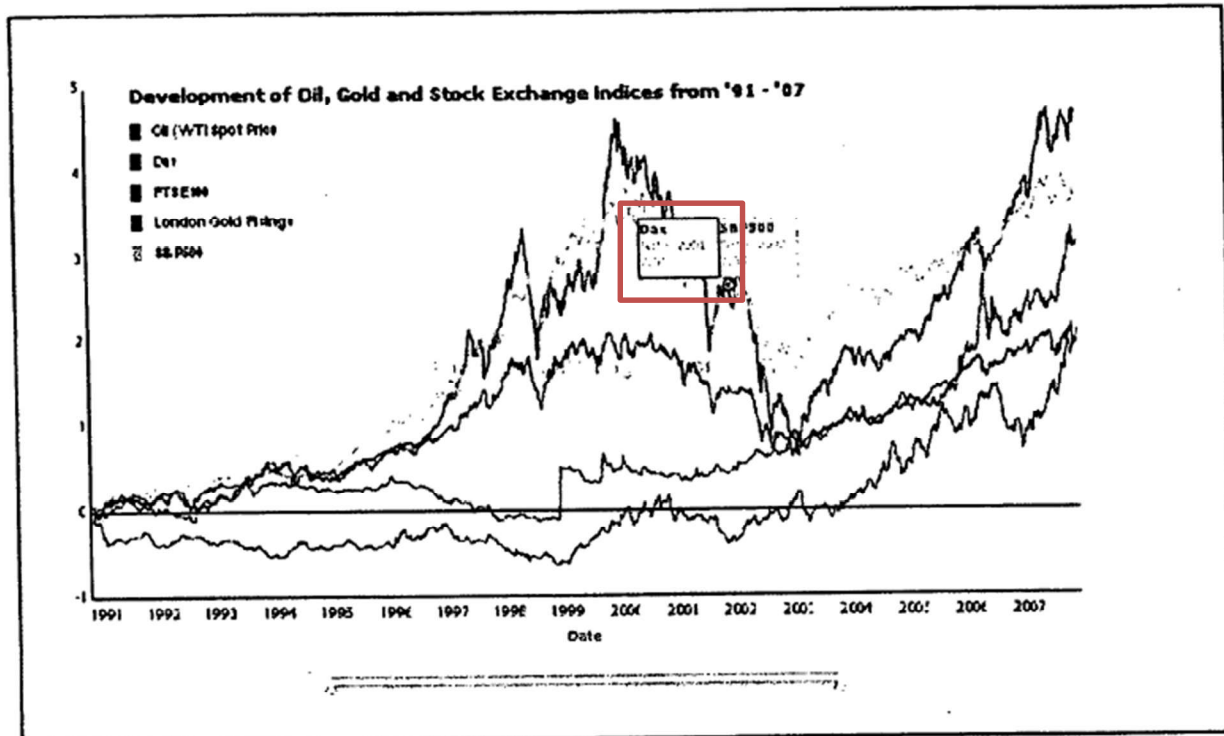
of claim 10, further comprising allowing a user to customize interactive features of the interactive chart.	In one embodiment, the chart is automatically interactive. In other embodiments, the chart is not interactive. In still further embodiments, users can select certain interactive features to include with the chart. Exemplary interactive features include a zoom feature, a data mouse-over pop-up window, and a data hide/share feature. (EX1013 p.0045)
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	<i>Interactive features may include zoom, mouse-over pop-up window, and/or data hide/share. . . . it may also include audio, video, animation, drill-down, and/or data gliding, and combinations thereof.</i> 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. (EX1013 p.0045)

combinations thereof.

iCharts contain rich interactivity features



(EX1013 p.0054)



(EX1013 p.0057)

13. The method of claim 10, further comprising receiving user entry of data.

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

(EX1013 p.0045)

Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts 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.

(EX1013 p.0045)

14. The method of claim 10, further comprising uploading

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

(EX1013 p.0045)

data from a client computer associated with the user.	Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts 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. (EX1013 p.0045)
15. The method of claim 10, wherein the user selection is a mouse click of data listed in the data pane.	Live updating Update your online charts with a mouse click wherever they are located on the web (EX1013 p.0060)
16. The method of claim 10, wherein receiving the user selection of the chart template is before receiving the user selection of the data.	<i>The provisional describes a method of chart creation where, after data is uploaded, the user first selects a chart before selecting data to drag and drop into the chart.</i> Users upload data or enter data under the data sheet tab. The user then selects the icharts tab. From the icharts 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. (EX1013 p.0045)

36. Thus the '892 Patent's provisional application supports the claimed priority date.

b) Conception and Diligent Reduction to Practice

37. I understand that Patent Owner has argued that even if the provisional application does not provide adequate §112 support, the '892 Patent is entitled to a priority date of no later than June 4, 2008 because the inventors have presented documentation to show that the inventors conceived of the '892 Patent by at least this date which predates Petitioner's asserted publication date for the QlikView Manuals and Patent Owner constructively reduced the invention to practice with reasonable diligence when it filed the nonprovisional application for the '892 Patent on September 5, 2008.

38. I have reviewed the conception evidence presented in Mr. Seymour Duncker's declaration, EX2200 ¶¶14-15, and agree that the documents disclose each and every claim limitation of the Challenged Claims.

39. In my opinion, the inventors clearly had possession of the claimed invention by June 4, 2008.

2. The Disclosure of the QlikView Manuals Does Not Render Obvious Claim 1

40. While it is my opinion that the QlikView Manuals are not prior art, should the Board characterize them as such, it is my opinion that they do not render obvious claim 1 of the '892 Patent.

41. It is my opinion that the QlikView Manuals teach away from the invention of the '892 Patent. The QlikView Manuals do not disclose (1) a sharing

module, (2) a self-contained and independent electronic document, or (3) a self-contained and independent interactive chart.

42. For the '892 Patent, the claimed “sharing module” is configured to enable a user to publish or embed the interactive chart as a self-contained and independent electronic document.

43. On the other hand, the QlikView Manuals disclose a server-client system for data analysis. EX1009 p.0009. The QlikView Server is the centerpiece of this technology. *Id.* The QlikView Server provides a centrally managed QlikView document community that connects multiple users, client types, documents, and objects within a secure and safe environment. *Id.*

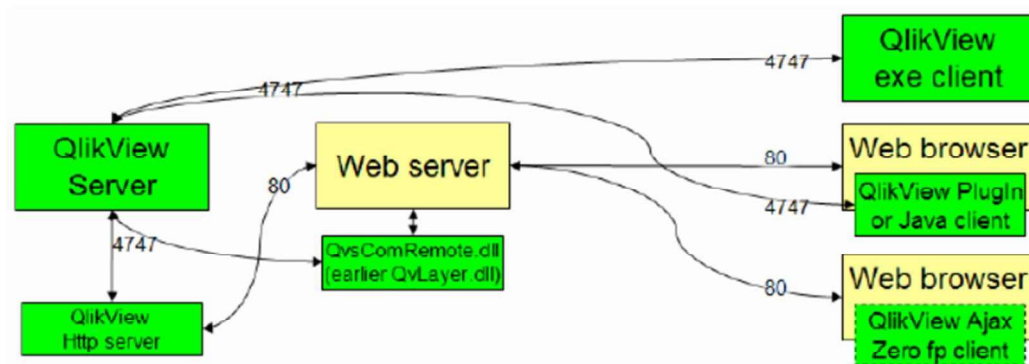
44. A QlikView document is designated as a .qvw file. EX1009 p.0123. A QlikView client is required for the display and usage for a QlikView document, which is a .qvw file. *Id.* The QlikView server is responsible for opening, hosting, and calculating the documents. *Id.* A client is required for user interaction and presenting the document and its objects. *Id.*

45. There are three types of QlikView Clients that interact with the QlikView Server: (1) the QlikView Developer, (2) the QlikView Professional, and (3) the QlikView Analyzer. EX1008 p.0016.

46. A user of the QlikView Developer client can create charts and tables on the QlikView Server. *Id.* pp.0016, 0073, 0880

47. The QlikView Analyzer client is the low-end client that can be used to access QlikView documents on the QlikView Server. *Id.* at 0016. The user may navigate the layout, make selections, and view results. *Id.* No modification of the layout is possible, however. *Id.* The QlikView Analyzer comes in the following versions: (1) an installed Windows client, (2) a plug-in to Internet Explorer, (3) a Java applet client, or (4) an AJAX Zero Footprint Client (ZFC). *Id.* The QlikView Object clients are the Java Objects client, the QlikX client, and the AJAX client. EX1009 p.0009.

48. The figure reproduced below from the QlikView Server Manual shows how the QlikView clients communicate with the QlikView server.



Id. at 0098.

49. The Objects Client HTML Page Generator includes a box called “Document URL” where the user specifies the QlikView target document URL on the QlikView Server where the html pages are to be run. EX1008 p.0808. This setting is necessary for the Java Objects and QlikX pages to work properly. *Id.* It is

my opinion that the specification of a QlikView target document URL on the QlikView Server provides evidence that the QlikView clients establish a connection to the QlikView server to interact with the QlikView documents.

50. The QlikView Manuals disclose in a section called “Performance Considerations” that each open chart and table will require extra memory for each user connected. EX1009 at 0168. Significantly, the QlikView Manuals disclose that *each open chart/table must be recalculated on the server after each change in the logical state*. EX1009 at 0168. In my opinion, a POSITA would have understood from those statements that any change in the logical state by the user, including a change in data used to generate the chart or table, would require a corresponding recalculation on the server for each open chart or table. In my opinion, then, each QlikView document is not self-contained and independent given that each open chart/table in a QlikView document must be recalculated on the server after each change in the logical state. Thus, there is no sharing module in the QlikView system for enabling a user to publish or embed an interactive chart as a self-contained and independent electronic document because a QlikView .qvw file is not self-contained and independent. The QlikView electronic documents are rendered on the QlikView server, stored on the QlikView server, and can be interacted with via QlikView clients connected to the QlikView server. But those QlikView documents are *never* shared as self-contained and independent documents given that recalculation is done

on the QlikView server after each change in the logical state. It is my understanding that the QlikView server never relinquishes control of an electronic document, so *no electronic document is self-contained and independent*, as taught by the '892 Patent. Without a self-contained and independent electronic document, there can be no sharing module for sharing an independent and self-contained electronic document. The QlikView server is responsible for opening, hosting, and calculating the documents. EX1009 p.0123.

51. Furthermore, it is my opinion that the QlikView server-controlled system is instead analogous to the Google online service described in the background of the '892 Patent. *See* EX1001 1:28-44.

52. Petitioner cannot show that the QlikView Manuals disclose the “self-contained and independent” limitation for a few more reasons. With respect to the QlikView Java Objects client, Petitioner points to QlikView VinGuiden example, EX1009 at 0133, (Pet. p.69), but that example shows a table, *not* a chart. Petitioner also points to a discussion of “Java basics,” (EX1009 p.0199), as showing that Java programs are self-contained applications and that the Java Runtime Environment (JRE) is a plug-in to an internet browser which creates a sandbox for running applets written in Java inside the browser. Pet. pp.67-68. But it is my opinion that the QlikView Manuals do not disclose sufficient details of how the QlikView Analyzer Java Client or the QlikView Analyzer Java Objects Client operate. Petitioner

appears to speculate that the use of Java results in a chart that is self-contained and independent, but Petitioner and its expert do not provide support for this speculation. Given that a QlikView document must be recalculated on the server after each change in the logical state of operation, which in my opinion a POSITA would have understood to include a change of data used to generate the QlikView document, the most likely scenario would have been the opposite of what Petitioner and its expert contend. A Java applet (i.e., embedded container) was able to only show a table, not a chart. The data for the table resided in a document stored on the QlikView server. A user clicking on a filter box on the front end sent a signal to the backend to recalculate the tabular data and update the document on the QlikView server. The front-end window would have to be refreshed to pull that fresh document. It is my understanding that the Java applet would have been embedded on a webpage and that the webpage would have been hosted on the QlikView server. The user would access that webpage from a browser that pulled the applet into the local browser.

53. Additionally, the QlikView Manuals disclosing “the possibility to change certain field values without running the script,” (EX1008 p.0023), does not disclose the “self-contained and independent” limitation. From my review of the Petition, Petitioner and its expert have not articulated specific reasoning regarding this statement. The ability to change field values only applies to input fields, and only list boxes and table columns that contain input fields are editable. EX1008

p.0225. Thus, the QlikView Manuals do not disclose this ability with respect to charts. In addition, the entire QlikView document will automatically recalculate whenever new values are entered. *Id.* As noted above, the QlikView Manuals disclose that each open chart/table must be recalculated on the server after each change in the logical state. EX1009 p.0168. Thus, it is my opinion that the reference to changing field values does not show that QlikView documents are shared as self-contained and independent documents.

54. Petitioner and its expert have failed to connect the “self-contained and independent” limitation to the QlikView Analyzer AJAX Zero Footprint Client (ZFC). Petitioner cites the Financial Status screenshot, (EX1009 p.0155), as an AJAX client with the toolbar option. But the QlikView Manuals do not disclose that a toolbar option makes that screenshot an interactive chart, nor does Petitioner or its expert provide an explanation.

55. The QlikView Manuals disclose that the AJAX ZFC client has an inherent asynchronous update capability that provides quick, incremental updates to the user interface, without requiring a browser page refresh. EX1009 pp.0155-0156. The QlikView Server Reference Manual states that 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.*” EX1009

p.0156. (emphasis added). Therefore, the user on the client computer is providing feedback to the server and not interacting with a self-contained and independent document. This is consistent with the fact that the QlikView Manuals disclose that a QlikView document must be recalculated on the server after each change in the logical state of operation. *Id.* p.0168.

56. It is my opinion, then, that the QlikView Manuals disclose details counter to Petitioner's position regarding the QlikView AJAX client. Petitioner and its expert merely speculate that the use of the QlikView AJAX client results in a chart that is self-contained and independent, but that position lacks support.

57. Petitioner's and the Board's reliance on the Web Selector Tool (EX1003 ¶¶355-359; EX1024-1027) for support is misplaced. Petitioner alleges that the QlikView Manuals were available to the public by at least July 8, 2008. Pet. p.7. The QlikView Server Reference Manual is for Version 8.5 of QlikView for Microsoft Windows. EX1009 p.0001. The Web Selector Tool evidence is, however, dated January 7-8, 2007, (EX1003 ¶8; EX1024-1027), and neither Petitioner, nor the Board, has provided evidence of any connection between the Web Selector Tool and the disclosure of Version 8.5 of the later-dated QlikView Manuals. Thus, the Web Selector tool is not entitled to any weight. Moreover, I have been informed that Patent Owner has filed evidentiary objections to exhibits EX1024-1027 (Paper No. 10 filed May 29, 2025) and intends to move to exclude them.

58. In any event, the Web Selector Tool is comprised of pull-down menus and is not a chart. *See* EX1024-1027. In addition, the fact that an end user *could* interact with the Web Selector Tool does not prove the existence of a self-contained and independent chart. The screen shots numbered as Exhibits 1025 and 1026 each say “Powered by QlikView.” It is my opinion that it is likely that the updates provided by the user by clicking menus on the front end send a signal to the backend to recalculate the data and update the document on the QlikView server, and Petitioner and its expert have provided no evidence to the contrary. Thus, it is my opinion that the Web Selector Tool provides no proof for Petitioner regarding the “self-contained and independent” limitation regarding an interactive chart.

59. Furthermore, it is incorrect to point to an export to Excel as satisfying the limitation of an interactive chart. The QlikView Manuals only disclose exporting data and tables—not interactive charts—to Excel. Each of the bar, line, combo, grid, pie, funnel, block, and gauge charts has an Object Menu when the chart is active that allows the user to send values to a Microsoft Excel program. EX1008 at 0890, 0892, 0948, 0950, 0960, 0961, 1002, 1003, 1014, 1015, 1024, 1025, 1034, 1035, 1046, 1047. What the user can export to Excel is the underlying data, which is a straight table equivalent to the chart. *Id.* at 0892, 0950, 0961, 1003, 1015, 1025, 1035, 1047. Excel is automatically launched if it is not already running. *Id.* at 0892, 0950, 0961, 1003, 1015, 1025, 1035, and 1047. The table of data will appear in a new Excel

worksheet. *Id.* at 0892, 0950, 0961, 1003, 1015, 1025, 1035, 1047. The respective Object Menu for each of the radar and scatter charts does not have an export-of-data-to-Excel feature. *Id.* at 0972-0974, 0984-0986.

60. The pivot table and straight table each have an Object Menu when the respective table is active that allows the user to export the table to a Microsoft Excel program. *Id.* at 1062, 1065, 1083, 1085. Excel is automatically launched if it is not already running. *Id.* at 1065, 1085. The table will appear in a new Excel worksheet. *Id.*

61. Based on the foregoing, it is my opinion that what the QlikView Manuals disclose as being exported to Excel comprise data and tables. Consequently, the data and tables are not charts, so this feature does not satisfy the claim limitation of an interactive chart.

C. Ground 8: QlikView Manuals (EX1008, EX1009) and Couckuyt (EX1006)

1. The QlikView Manuals In View of Couckuyt Do Not Render Independent Claim 10 Obvious

62. It is my opinion that a POSITA would not have been motivated to combine the QlikView Manuals with Couckuyt. This is because, even if the QlikView Manuals were combined with Couckuyt, the combination would lack the following limitations of claim 10: “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.”

63. As I have opined above, each QlikView document is not self-contained and independent given that each open chart/table in a QlikView document must be recalculated on the server after each change in the logical state. Therefore, it follows that there is no sharing module in the QlikView system for enabling a user to publish or embed an interactive chart as a self-contained and independent electronic document because a QlikView .qvw file is not self-contained and independent. The QlikView documents are rendered on the QlikView server, are stored on the QlikView server, can be interacted with via QlikView clients connected to the QlikView server, but those very same QlikView documents are never shared as self-contained and independent documents given that recalculation is done on the QlikView server after each change in the logical state.

64. It is my opinion that pointing to an export to Excel as satisfying this element is incorrect. The QlikView Manuals only disclose exporting data and tables—not interactive charts—to Excel.

VI. REVISION OR SUPPLEMENTATION

65. In this report, I have presented my supplemental opinions regarding the alleged invalidity arguments against the '892 Patent based on the information available to me. My opinions are subject to change in view of any additional information that I may receive as it arises in the *Inter Partes* Review process. I reserve the right to supplement my opinions accordingly.

I hereby declare that all statements made herein of my own knowledge are true and that all opinions expressed herein are my own; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: August 6, 2025

A handwritten signature in black ink, appearing to read "Jeff Miller", is written above a horizontal line.

Jeffrey Miller