Abstract: Aggregation, analysis, and presentation of financial and IP-related information in a common interface are described.
AGGREGATION, ANALYSIS, AND PRESENTATION OF INTELLECTUAL PROPERTY AND FINANCIAL INFORMATION

RELATED APPLICATIONS
[0001] This document claims priority to U.S. Provisional Application No. 60/977,629, filed Oct. 4, 2007, and to U.S. Provisional Application No. 60/978,088, filed Oct. 5, 2007. Both of these provisional applications are hereby incorporated by reference.

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BACKGROUND
[0003] Innovation is a key factor for many companies to succeed in a globally competitive world. Protection of innovation via intellectual property (IP) helps those companies convert innovation into business assets. Today, Intangible assets represent a significant share of the market capitalizations of many of the most successful and innovative companies. Yet, to the business community and many professionals who are not IP legal experts, intellectual property generally, and patents specifically, remain somewhat of a mystery to fully understand, assess, and value.

BRIEF DESCRIPTION OF THE DRAWINGS
[0004] The detailed description is described with reference to the accompanying figures. In the figures, the left-most digit(s) of a reference number
identifies the figure in which the reference number first appears. The use of the same reference numbers in different figures indicates similar or identical items.

[0005] Fig. 1 shows an exemplary system for acquiring and presenting information for an intellectual property document (e.g., intellectual property identification number as assigned by a government agency);

[0006] Fig. 2 shows an exemplary system for performing a first level analysis and a second level analysis based on a plurality of first level analyses;

[0007] Fig. 3 shows an exemplary method for integrating financial and legal information based on information found in an intellectual property document;

[0008] Fig. 4 shows an exemplary method for a landscape analysis of intellectual property rights;

[0009] Fig. 5 shows an exemplary method for displaying information related to a document based on information extracted from the document;

[0010] Fig. 6 shows an exemplary architecture for extracting information from an IP document (e.g., physical or computer-based) and information germane to assessing and/or valuing intellectual property;

[0011] Fig. 7 shows an exemplary display of global information related to intellectual property along with optional menus for a computer-implemented embodiment;

[0012] Fig. 8 shows an exemplary method for determining a number of unique words for a claim along with optional filtering and for determining a number of total words for a claim;

[0013] Fig. 9 shows an exemplary plot of unique words versus total words for two claims and plots of unique words versus count per unique word for the two claims;

[0014] Fig. 10 shows exemplary plots of count per unique word versus unique word for two claims;

[0015] Fig. 11 shows an exemplary method for filtering a claim for gerunds;
Fig. 12 shows an exemplary graphical display of patent prosecution information versus time and patent assignment information versus time where, for a computer-implemented embodiment, menus are optionally available for linking to additional information;

Fig. 13 shows an exemplary graphical display of patent prosecution information versus time along with an optional menu for linking to additional information;

Fig. 14 shows a series of exemplary graphical displays for associating patent prosecution information with scope of a claim;

Fig. 15 shows various exemplary graphical displays for associating patent prosecution information with scope of one or more claims, optionally as a function of time;

Fig. 16 shows various exemplary graphical displays including an exemplary graphical display of claim scope for a particular patent classified in a particular patent class in comparison with a class average claim scope and claim scopes for other groups of patents, which may be competitors of the owner of the particular patent, an exemplary graphical display of percentage of patents in the class based at least in part on ownership (e.g., assignment) and a graphical display of number of patents filed and issued versus time for the class;

Fig. 17 shows an exemplary technique and associated graphical display to provide a metric for a patent document;

Fig. 18 shows an exemplary graphical display and method for assessing inventiveness of one or more inventors, optionally by company;

Fig. 19 shows an exemplary graphical display of stock information and litigation events along with an optional menu for linking to additional information such as docket information for a litigation event;

Fig. 20 shows an exemplary system and various associated exemplary methods for selecting a time, a time frame, an event or events and graphically displaying information associated with the selected time, the selected time frame, the selected event or the selected events;
Fig. 21 shows an exemplary graphical display and an optional exemplary menu feature for the graphical display, optionally for a computer-implemented embodiment, where a variety of information associated, directly and/or indirectly, with a patent document is displayed along a time line;

Fig. 22 shows an exemplary graphical display for a company listed on two or more exchanges along with litigation events for one or more jurisdiction (e.g., US and foreign jurisdictions where one of the exchanges is outside the US);

Fig. 23 shows an exemplary graphical display of geography/jurisdictions along with exemplary menus for linking to additional information;

Fig. 24 shows an exemplary graphical display of financial information along with a menu for linking to additional financial information;

Fig. 25 shows an exemplary method for updating information; and

Fig. 26 shows an exemplary graphic that presents information based on searches using information from a single patent.

DETAILED DESCRIPTION

Across the globe, various mechanisms exist for recognizing or granting rights for intangibles such as inventions, creative expressions, symbols of goodwill, etc. Inventions are typically protected using patents, creative expressions are typically protected using copyrights, and symbols of goodwill are typically protected using trademarks (e.g., including trade dress and the like).

Various exemplary methods, systems, devices, described herein relate to intellectual property and information germane to intellectual property, especially for purposes of assessment or valuation of intellectual property.

Fig. 1 shows an exemplary system 100 for acquiring and presenting information for an intellectual property document (e.g., intellectual property
identification number as assigned by a government agency). The system 100 includes a computing device 102 having a CPU 104, memory 106 and one or more analysis modules 108 for analyzing information. The computing device 102 is representative of a server computing system which may be configured in any number of ways including, for example, as one or more servers (perhaps arranged in a cluster or as a server farm), a mainframe computer, or other server architectures. The computing device 102 may, in certain implementations, represent a site that is accessible over a network, such as website for information. The memory 106 is representative of a wide range of memory configurations (e.g., volatile and non-volatile memory) and capacities (e.g., disk drives, disk arrays, RAID systems, etc.).

[0034] The computing device 102 is configured to access information, such as information in the databases 112, 114, 116, 118, over one or more networks. In the example of Fig. 1, information is available from a financial database 112, a civil legal database 114, an administrative legal database 116 and/or one or more other databases 118. The financial database 112 can provide stock information and optionally other financial information such as options, bonds, etc. In general, such information is available in near real-time along with historic information. The civil legal database 114 can provide information as to litigation. One example database is the PACER database that tracks litigation dockets for both civil and criminal actions for various jurisdictions in the United States, although other legal databases may be used. The administrative legal database 116 is representative of a database associated with an administrative agency. For example, the administrative legal DB 116 may be associated with the US Patent & Trademark Office. While the term "legal" appears in describing the administrative database, an administrative agency may have a database with non-legal information or quasi-legal information as well, which is contemplated herein. Many administrative agencies make determinations as to rights such as patent rights. Other administrative agencies
include FDA, FERC, ITC, SEC, and the like. Other databases 118 may include databases of marketing data, country data (e.g., CIA database), etc.

[0035] The information collected in the databases may be of domestic or international scope. For instance, the financial DB 112 may represent databases that hold stock and financial information for US companies, or for non-US companies. Further, the administrative legal DB 116 may represent other sources of information, such as European patent information available from the European Patent Office, or Japanese patent information available from the Japanese Patent Office. Essentially, the computing device 102 may draw from any number of US or world based sources of financial, legal, and IP related information.

[0036] The computing device 102 acquires information from the one or more databases 112-118, aggregates the information, and assesses that information via the analysis modules 108. Once processed, the computing device 102 stores the aggregated and analyzed information in an integrative database 119, which allows accessibility to portions or all of the aggregated information.

[0037] The computing device 102 is further configured to present the information graphically as indicated by the graphic 120. The graphic 120 may be a printed page or displayed using a display device (e.g., associated with a computer, a terminal, etc.). The graphic 120 consists of a collection of informational items arranged on a page to convey visually certain aspects of the underlying IP asset, such basic information, key statistics, scope of IP rights, and financial information of the asset owner and how the IP related events may impact financial or operational aspects of the asset owner. The graphic 120 may consist of any number of informational items. In certain implementations, the number and arrangement of the items may be configurable by users. For
instance, a service hosted on the computing device 102 may allow a user to select from a menu of possible items and arrange those items on the graphic 120. Examples of possible graphics are shown and discussed below. However, these are merely representative, as other graphics may be used to convey the information.

[0038] In the example of Fig. 1, the graphic 120 is for an intellectual property document such as a patent or a patent application. In general, such documents have a serial number and/or other identifying number 121. The graphic 120 includes information germane to the document identified by number 121. While a number is stated, the identifier can be letters, numbers, symbols, a combination, and so forth.

[0039] In the example of Fig. 1, the graphic 120 includes a title 122, a description from the document 123, an image from the document 124, key information from the document 125, ownership information 126, information about administrative proceedings 127, landscape analysis of intellectual property rights or applied for rights with respect to time 128, integrative financial and legal information 130, global IP and/or market information 140, IP classification and/or category information 142, IP share for an owner 144, and IP rights analysis 146. The graphic 120 is provided as an example; other graphics may have less or more information.

[0040] Fig. 26 shows an example document 2600 that exhibits one particular implementation of informational items that correspond to informational items of the graphic 120 of Fig. 1. In this illustrated example, the document is generated for an IP asset in the form of a US patent. While there are many ways to depict certain informational items, Fig. 26 provides one set of example items that convey visually certain aspects of the underlying IP asset. Examples of the various items will now be described with reference to both Figs. 1 and 26.
The title area 122 of the graphic 120 is reserved for the title of the document as well as other general data about the document. For instance, the title area 122 of a graphic generated for a patent document may include the inventor name(s) or the assignee of the patent. For a trademark document, the title area 122 may include the assignee of the trademark or the class of goods and services.

The description 123 may include a brief summary of the asset covered by the IP document. In the case of a patent, the description 123 may be the abstract or summary portion of the document. Alternatively, it may be one of the claims, or selected text from the detailed description section of the patent document. In the case of a trademark, it may be a description of the goods or services.

The image 124 provides a visual of the asset being protected by the IP. For a patent, the image 124 may include an illustration from the patent document, such as one of the figures. For a trademark document, the image 124 may include an image of the mark.

The key information 125 is provided to allow the system administrators to designate certain data for inclusion on the graphic. For a patent document, such key information may include a filing date of the application, an issue date of when the patent issued, a publication date, any priority dates, inventor name(s), the US Examiner who examined the patent application, the law firm handling prosecution of the patent, the class within which the Patent Office classified the invention, a claim count (e.g., total claims, independent claims, etc.), the art unit examining the application, the allowance rate of the art unit, other related patents or applications, key references cited during prosecution,
and so forth. Similar information may be provided for other IP assets, such as trademarks and copyright registrations.

[0045] The information used to populate the title 122, description 123, image 124, and key information 125 may be retrieved from one or more databases. For instance, much of this information may be found at an administrative legal DB 116 maintained by the US Patent and Trademark Office. Alternatively, this information may be retrieved from other commercial sources, such as services promoted by Thomson®, Lexis/Nexis®, and Google®.

[0046] The ownership area 126 is provided for a graphic showing the chain of ownership from the time of filing to the present. For an IP document, such as a patent, this area visually depicts assignment data retrieved from the administrative legal DB 116 of the US Patent and Trademark Office.

[0047] The administrative process area 127 concerns key data pertaining to how the IP asset was formed. Consider the context of a patent document. When securing a patent, an applicant first files a patent application with the US Patent and Trademark Office, where it is examined. During the examination process, a record is created detailing the Examiner's review of the application and any responsive comments or changes to the patent application made by the applicant. For instance, the Examiner often rejects the initial application on the grounds that the invention as claimed is not novel or is obvious in view of that which is already known in the field of technology. The Examiner cites prior art references and submits arguments as to why the invention as claimed should not be allowed. In response, the applicant commonly submits rebuttal arguments and may on occasions amend the claims to change their scope in an effort to persuade the Examiner that the application should be allowed. This process is called "patent prosecution" and the record created is typically referred to as the "file wrapper history" or simply, "file history". During this process, the scope of
the IP asset may change and this scope change often has an impact on the value of the ultimate IP asset.

[0048] The computing device 102 retrieves the file history (or other administrative record) from the US Patent and Trademark Office (or other appropriate agency) or from a third party supplier. The analysis modules 108 classify and extract key portions of the file history and store them in the memory 106. For instance, in the context of patents, the analysis modules 108 may identify claims, amendments to the claims, arguments made by the Examiner, rebuttal arguments advanced by the applicant, key references, excerpts from those references, pertinent filings or admissions (e.g., terminal disclaimers, information disclosure statements, etc.), reasons for allowance, and so forth. Various forms of analysis (e.g., statistical, semantic, etc.) may be performed on the file history extracts stored in the memory 106 to provide key insights into the formation of the IP asset.

[0049] The administrative area 127 provides a graphic that visually conveys to the reader how the IP asset progressed during the administrative period (e.g., during patent prosecution) and how that process may have affected the scope of the IP asset. The graphic is intended to convey at a glance whether the IP asset's scope changed significantly or not during the administrative process. Further, it is intended to reveal whether the process involved many interactions with the agency or a few, as a proxy for how clean or messy the file history, which often plays a role in whether the asset owner chooses to assert the asset in litigation or offer it for licensing. One example graphic is shown in Fig. 26. A more detailed discussion of the administrative area 127 is provided below with reference to Figs. 14-15.

[0050] The landscape analysis 128 is an area that visually conveys information pertaining to how the IP asset fits within a larger context. The
landscape may be directed to technology, or a company's portfolio, or to one or more competitors portfolios, or to a particular geographical region, or to any number of contexts. In the example of Fig. 26, the landscape analysis 128 is directed to a landscape of independent claims found in patents within the relevant classification. A more detailed discussion is provided below with reference to Fig. 4.

[0051] The integrative financial/legal information area 130 is provided prominently on the graphic 120, in the upper right hand quadrant. It provides one or more visual cues to correlate certain legal events or transactions with certain financial parameters. In one example shown in Fig. 26, the integrative financial/legal information area 130 includes a stock chart showing the historical stock performance of the company that owns the IP asset over a period of time (e.g., week, month, quarter, year, multiple years, etc.). Overlaid on this chart are indicators showing related legal events, such as litigation events, patent issuance events, settlements, licensing transactions (if known), and so forth. This information is intended to convey whether certain legal events had any impact on the stock performance of the company. More detail is provided below with reference to Figs. 3, 19, 22, and 24. It is noted that other financial data and other events may be correlated in this space on the graphic 120 to allow the reader to assess quickly whether there has been a financial impact on the company due to a legal event.

[0052] The global IP/market information area 140 is provided to correlate market data with IP-related legal aspects. For instance, in one implementation, the global IP/market information area 140 visually conveys market data about a product being protected, in part, by the corresponding IP asset. As an example, suppose the graphic 120 is for a US Patent covering a communications chip used in cell phones. Here, a world map may be shown with different regions of the world color coded to exhibit different cell market growth rates (or penetration
rates, or sales figures, or other market data). Correlated with this view is another view of how well the IP asset maps to those regions. In one example, a second world map is juxtaposed with the first one and shows through different colors those regions in which the IP asset is protected by patents. In other implementations, such as those involving an interactive UI, the two world maps may be consolidated, and the user can hover over the various regions to learn whether the market data and whether IP rights for this asset extend to the selected region. More detailed information is provided below with reference to Figs. 7 and 23.

[0053] The IP category information area 142 provides information items pertaining more generally to IP data relevant to IP document. For instance, the area 142 may provide information about the class within which the IP document is assigned. It may alternatively provide information about the group art unit within which the IP document was examined, or the family tree showing other related IP documents, or IP filing rates in this particular technology worldwide. One example is shown in Fig. 26, where the history of application filings and patent issuances for the relevant class are depicted.

[0054] The IP share area 144 contains information items derived from analysis of ownership of IP documents within a particular technology area or class of the IP document being assessed. For instance, this area 144 may provide a breakdown of ownership of the IP documents in a particular class at the US Patent and Trademark Office to which the subject IP document belongs. As shown in Fig. 26, this item may be a pie chart showing the percentage ownership of the top holders of IP documents in the class to which the subject IP document belongs.

[0055] The IP rights analysis area 146 is an area reserved for results of an analysis of the scope of rights attached to the IP document. In the context of
patents, the scope of a patent document is dictated by the scope of the claims. Thus, the analysis is performed on the claims of the IP documents, and a graphical representation of scope is generated for presentation. In Fig. 26, for example, there is an overlapping set of circles that correlate to the scope of the IP document relative to other IP documents.

[0056] The graphic 120 produced by the system 100 may be used in many contexts. Financial professionals may use the graphic 120 and other higher level analyses to investigate the ties between financial aspects of a company and that company's IP portfolio. IP professionals may use the graphic 120 as a portfolio tool to analyze their own portfolios, as well as others (e.g., competitors, acquisition targets, etc.). IP professionals may further use the graphic 120 in transactions, as well as to assess opportunities in geographical regions or technology sectors.

[0057] It is further noted that Figs. 1 and 26 present merely one possible layout and format. The graphic 120 may consist of more or less items than shown in these figures. Moreover, other graphical items may be substituted in place of the ones described and discussed above in the exemplary context.

[0058] Fig. 2 shows an exemplary system 200 for performing a first level analysis and a second level analysis based on a plurality of first level analyses. The exemplary system 200 may be implemented in part, for example, by the computing device 102 and the analysis modules 108 shown in Fig. 1. In the example of Fig. 2, a single IP document 201 is provided and a level I analysis 210 is performed to integrate information from various fields (e.g., financial, legal, administrative, etc.). Level I presentation results 220 that focuses on the single IP document are produced as a result of the level I analysis 210.
Information associated with the single IP document 201 is stored in an integrative DB 119. Information may be data 232 and other information 234, typically structured for ease of access and relationships for purposes of queries. In general, the DB 119 includes information for a plurality of IP documents. For example, the DB 119 may include information for patents and patent applications in the US and Europe for a particular class (US and corresponding European class) filed and/or issued between the years 1980 and present. It may further include the file histories or other agency records pertaining to the IP documents. The integrative DB 119 may be implemented as part of memory 108 in Fig. 1, or as a separate database accessible by the computing device 102.

A level II analysis commences with a query 240, for trends, performance, etc., for example of an owner of the IP rights associated with the single IP document 201. The level II analysis and integration 250 accesses information in the DB 119 and generates a level II presentation 260. A level II presentation 260 may present information based on a portfolio analysis for a company. Other types of analyses are also possible, for example, inventor, examiner, former assignee, country, competitor, etc. This level II presentation 260 may be presented in near real-time to the user submitting the query, or alternatively stored in the integrative DB 119, or in other memory, for later retrieval and presentation to the user or another user submitting a similar query.

Fig. 3 shows an exemplary system and method 300 for integrating financial and legal information based on information found in an intellectual property document. According to the example of Fig. 3, an IP document identifier 121 is provided and used to acquire information from a database 116 where the information includes ownership information 126. The ownership information 126 is then entered into a civil legal database 114 and a financial database 112. Information from these two databases is integrated to provide a graphic 130. In the example of Fig. 3, the graphic 130 includes equity information 132 (e.g.,
stock price and trading volume over time) and IP legal information. Such IP legal information may include litigation information in the United States 134 and optionally foreign litigation information 136. Litigation information is typically for disputes in a court (e.g., IP litigation cases being argued in district courts, appellate courts, and agency actions, such as those before the International Trade Commission), however, information for other disputes may be acquired (e.g., mediation, arbitration, etc.). The IP legal information may further include events pertaining to the issuance of new patents or the expiration of old patents. In the graphic of Fig. 3, the IP legal information is illustrated as star-shaped indicia 302 overlaid on the date when the event occurred. In this manner, the IP legal information is correlated temporally with the equity information 132 to reveal whether any of the IP events had an impact on the company's stock movement.

Fig. 4 shows an exemplary system 400 for landscape analysis of intellectual property rights. The system 400 may be implemented, for example, by the computing device 102 from Fig. 1. A method 410 is executed by the system 400 and commences with entry of an IP document identifier 412 from a corresponding IP document (e.g., US Patent Number) into the administrative legal database 116 (e.g., USPTO patent database), as represented by process flow arrow 1. In response, ownership information 414 (e.g., patent assignee name) and category information 416 (e.g., patent classification) are returned from the administrative database 116, as represented by process flow arrows 2. Next, the ownership and category information is input to the database 116 (as represented by process flow arrow 3) and used to acquire additional IP documents 418 in that category, as represented by process flow arrow 4. Ownership information 420 is then acquired for these additional IP documents, as represented by process flow arrow 6. With the various portions of information, the method 410 generates the landscape analysis item 128 of the graphic 120 (Fig. 1).
[0062] One example landscape analysis item 128 is depicted as graphic element 430. The landscape graphic element 430 presents information in two dimensions over a third, time-based dimension. In the example of Fig. 4, for purposes of discussion, the IP document and graphic element pertain patents, and hence the information is for a single independent claim (e.g., claim 1) or multiple independent claims in a series of patents within a class. The information is plotted as the number of unique words in each claim (with optional filtering) along the x-axis versus the total number of words in the claim along the y-axis. In general, many believe that a claim with fewer total words tends to be broader in scope. It is noted that this is just one proxy for claim scope, and others may be employed. The claims are grouped temporarily into four different grids, with each grid representing a different timeframe in which the patent issued. In grid 432, the points represent claims that were issued before 1990. In the second grid 434, the points represent claims that were issued in the timeframe of 1990 to 1995. In the third grid 436, the points represent claims that were issued in the timeframe of 1995 to 2000, and the fourth grid 438 shows claims issued after 2000. As described herein, an exemplary technique considers total words for a claim in conjunction with unique words. As indicated in the graphic element 430, trends become apparent. In the shaded grid 434, an arrow 440 is depicted to indicate the point corresponding to the subject IP document being analyzed as part of the method 410.

[0063] The time periods allow one to see changes in the number of patents issued with respect to time, for example, as a technology develops. Further, trends become apparent as the points cluster with outliers. Such data is amenable to further analysis using statistical techniques. The class "fingerprint" facilitates review as it provides a framework for systematic analysis of claims. For example, a person or algorithm may commence an analysis at the lower left (fewer unique words and fewer total words). Such claims may have a tendency to be broader in scope or, in other words, a probability analysis may show that
claims in the lower left have a greater chance of being broader than claims in the upper right. Where the number of patents is large (e.g., thousands), such an approach can help manage patent assessment in a more systematic manner (e.g., for valuation, litigation risk, product clearance, etc.).

[0064] As described herein, a formula 450 may be used to characterize a claim or "fingerprint" a claim. In the example of Fig. 4, the formula 450 includes a semantic analysis for unique words, with optional filtering to remove words such as "a", "the", "and" and the like.

[0065] Fig. 5 shows an exemplary method 500 for displaying information related to a document based on information extracted from the document. The method 500 may be implemented, for example, by the computing device 102 and particularly the analysis modules 108, as shown in Fig. 1. A provision block 504 provides a document, such as a TM registration, an issued patent (US or foreign), or a published application. An extraction block 508 extracts information from the document according to one or more criteria. A search block 512 performs a search or searches in one or more databases using the extracted information. In certain implementations, multiple databases from different genre are searched, such as the financial database 112, civil legal database 114, and administrative database 116. An aggregation block 516 aggregates the data searched and retrieved from the one or more databases. The aggregated data is analyzed and processed to simplify the data to meaningful nuggets of information that can be readily conveyed in a graphical manner. A display block 518 displays the results graphically (e.g., information from the one or more databases along with information from the document).

[0066] Fig. 6 shows an exemplary architecture 600 in which a system 602 is employed to extract information from an IP document (e.g., a physical "hard copy" document and/or an electronic document) 610, such as a patent or patent
application. From the IP document, the architecture can ascertain from one or more databases the assignee 612 of the IP document, the inventors 614, the technology area 616, the references 618 cited by the Examiner during prosecution, and the countries 620 within which the patent was filed. Further, the architecture may extract the specification and figures 622 (or portions thereof) as well as the claims 624 directly from the patent or patent application. In addition, other aspects of the file history 626 pertaining to the IP document may be extracted, such as amendments made to the claims and arguments advanced by the Examiner and/or the Applicant.

[0067] Once this information is extracted, the architecture 600 includes a system 630 that uses the extracted information to acquire additional information germane to assessing and/or valuing intellectual property. As an example, and non-exhaustive list, that information may include stock performance information 632 (e.g., based on the assignee 612), international patent filings 634 (e.g., based on the countries information 620), licensing information 636, international locations expansion history 638 of the company, international court proceedings 640, international diffusion of technology 642, multimedia and other news events 644, international arbitration and mediation 646, and international competitors 648.

[0068] Fig. 7 shows an exemplary display of global information 700 related to intellectual property. This global information is similar to the global IP/market alignment element 140 in the graphic 120 of Figs. 1 and 26. However, this particular implementation is provided in an interactive user interface (UI) on a computer-implemented embodiment. Thus, the global information 700 is representative of a UI that might be depicted on a computer display. The UI includes two world maps 710 and 720, along with optional menus that allow the user to drill down for more information. The top world map 710 includes market information (e.g., cell phone markets), for example, related to technology (e.g.,
per a patent classification). Different colors or gray scales (or other visual techniques) are used in the top world map 710 to differentiate among countries and/or regions according to a certain market criteria. Here, the countries are color coded based on market growth. In a computer-implemented embodiment, the map 710 includes menu options 712 activated using a pointing device, voice command, or the like. Here, the pointer is hovering over the United States, and information pertaining to that market is provided in the menu options 712. In the example map 710 of Fig. 7, the menu 712 includes options to view filers of patent applications, revenues for companies selling in the associated geography, and foreign companies selling in the associated geography. Other options may be used, such as sales figures, growth projections, or any other financial information.

[0069] The lower world map 720 includes patent information, for example, related to a particular patent document. Different colors or gray scales (or other visual techniques) are used in the lower world map 720 to differentiate among countries and/or regions according to where corresponding filings are made for a given patent document. Here, the countries are one color or shade if a patent application has been filed in the country or region, a second color or shade if a patent has issued, and a third color or shade if no patents were pursued. In a computer-implemented embodiment, the map 720 includes menu options 722 activated using a pointing device, voice command, or the like. Here, the pointer is hovering over Europe, and patent information pertaining to any filings in Europe is provided in the menu options 722. In the example map 720 of Fig. 7, the menu 722 includes options to view corresponding patents and/or patent applications (e.g., related patents or applications) with respect to geography or jurisdiction and to view the full document(s), status of the document(s) and/or abstract of the document(s). The full view optionally causes a display of a graphic such as the graphic 120 of Fig. 1 or the graphic of Fig. 26 for the related application or patent.
Fig. 8 shows an exemplary method 800 for determining a number of unique words for a claim along with optional filtering and for determining a number of total words for a claim. This method may be used, for example, as part of computations made to produce the IP rights analysis 146 of graphic 120, or the landscape analysis 128. An example claim 810 is provided to illustrate the method 800. The claim 810 may reside in a database as data in an XML format or other format. An optional filter 820 may be used to filter words, punctuation, etc., in the claim 810. In the example of Fig. 8, the filter 820 removes words that include "compr" as well as "a" and "the". The results 830 are presented graphically as unique word versus count per unique word. In the example of Fig. 8, the words are ordered by count per word and alphabetically; noting that other options exist that may depend on the type of analysis performed. The shape of the plot 830 can tend to be unique to a claim. A count of total words (filtered or unfiltered) may be determined. In the example of Fig. 8, the count of total words 840 corresponds to the number of words after filtering and is the sum of the count per unique word for all the unique words.

As noted, the method 800 may be used, in part, to help produce the landscape analysis 128. As shown in Fig. 4, one possible graphic is a series of temporally shifted two-dimensional grids with various claims mapped thereon. In some cases, the same claims may map to the same points. In an interactive UI setting, a user may examine those points in more detail, as is explained next with respect to Fig. 9.

Fig. 9 shows an exemplary method 900 that includes a plot of unique words versus total words for two claims 910 and plots of unique words versus count per unique word for the two claims 920, 930. In the example of Fig. 9, the two claims (X and Y) have the same number of unique words and total words. In the plot 910, in a computer-implemented embodiment, a cursor may
be positioned at a point to cause display of additional information. For example, a menu 915 allows a user to select a full display of the claim Y (or optionally a graphic such as the graphic 120 of Fig. 1 or the graphic 2600 of Fig. 26), a breakout display and/or a gerund display (e.g., words ending in "ing", which are commonly used in method claims). In the breakout plots 920 and 930, the claims X and Y are further distinguishable as the shape of the unique words to count per word plots differ. In this example, a person may conclude that a unique word appearing four times has particular significance with respect to claim scope.

[0073] The plot 920 optionally includes menu features such as the menu 925 where a user may select a unique word on the plot 920 and then cause a display of claim X where the word is highlighted, cause display of a specification for the patent document where the word is highlighted and/or cause a search for the word in claim Y (or another claim in the same patent document or in a different patent document).

[0074] By enabling this more refined analysis, the methods described herein allow the user to distinguish among key claims in a very quick and intuitive manner. The user may quickly ascertain through this UI the relative scopes of the claims, even though the proxy analysis plots them in the same general vicinity.

[0075] Fig. 10 shows an exemplary method 1000 that includes exemplary plots of count per unique word versus unique word for two claims X and Y. The exemplary method 1000 can apply one or more statistical techniques to analyze the count per word information for each claim. For example, kurtosis may be used to assess "peakedness" of the distribution (e.g., claim X has more "peakedness" than claim Y). Such an analysis may be performed for a large number of claims and then displayed to help a user characterize claims.
Fig. 11 shows an exemplary method 1100 for filtering a claim for gerunds. A claim 1110 is provided and a filter 1120 filter words having "ing" as gerunds while optionally filtering out words having "compr" such as "comprising". In patent claim drafting words such as comprising have legal meaning whereas other gerunds indicate actions, often related to steps in a method claim or functional action that occurs in a system claim. The method 1100 optionally displays a plot 1130 of unique gerunds versus count per unique gerund. The method 1100 can also determine the total number of gerunds. Such a method is particularly useful when analyzing method claims to identify the types of actions and how many times an action is recited and hence required by a method that may infringe the claim.

Fig. 12 shows an exemplary graphical display 1200 that shows two information items of the graphic 120 in an enlarged view; namely, the key information item 125 and the ownership item 126. The implementation of Fig. 12 is in the context of a computer-implemented embodiment, where the graphical elements are depicted as part of an interactive UI. In this example, the key information item 125 pertains to continuity data of a patent application plotted over time, which is illustrated as graphic 1210. As a user interacts with the patent continuity graphic 1210, menus are optionally available for linking to additional information. In the graphic 1210, information is optionally coded by color, shading, symbols, etc.

An exemplary method optionally accesses a database affiliated with a governmental agency such as the USPTO to acquire the continuity information, which is represented as agency record 1212). Once acquired, color code markers are assigned to various events in the agency record, such as continuation and divisional data, and aligned along a time line. An exemplary menu feature 1214 allows a user to select a patent family member and display the full document, status of the document, and/or an abstract for the document.
Other options may include depiction of the graphic 120, links to other sibling or related applications, and the like.

[0079] As also shown in Fig. 12, the ownership item 126 pertains to assignment data of a patent plotted over time, which is illustrated as graphic 1220. An exemplary method produces the plot 1220 by acquiring information from an assignment database such as the USPTO database 1222. Once acquired, color code markers are assigned to various events (e.g., inventor assignment, merger activity, security agreements, sale/assignment, other liens, IP holding company, etc.). The markers are then aligned along a time line. In this example, there is a single event, so the time line is just one date. In other implementations, there may be multiple events arranged along a time line. An exemplary menu feature 1224 allows a user to select an assignment document/event and display the full document, related documents mentioned in the assignment document or related to the assignment event and/or inventors. In the examples of Fig. 12, other options exist for menus and may be selected from any of a variety of fields (see, e.g., various information fields mentioned herein).

[0080] Figs. 13-15 show various display views representing the administrative process item 127 in Fig. 1. The implementations shown in Figs. 13-15 are in the context of a computer-implemented embodiment, where the graphical elements are depicted as part of an interactive UI. Fig. 13 shows an exemplary graphical element 1310 of patent prosecution information versus time. Various events that might occur during prosecution (e.g., office action, final office action, response, examiner’s amendment, etc.) are provided in a list 1312 and color coded to assist the reader in quickly identifying the event type. The prosecution history is represented as a series of events placed along a timeline 1314. Optional menu 1316 allows for linking to additional information.
In the example of Fig. 13, an exemplary method may access the USPTO PAIR database and acquire information as to the prosecution history for a patent and/or a patent application. In one implementation, the system acquires the file history and the file history is tagged or otherwise processed to identify key events. Alternatively, the system acquires the transaction history, a record kept as part of the file history. One example transaction history is shown as element 1318. Once acquired and processed, the appropriate events are represented by color code markers that are aligned along the timeline 1314. Color coding allows a user to easily identify particular events that may occur during prosecution of a patent application or events that may occur even after issuance of a patent (e.g., reexamination, reissue, abandonment, etc.). The menu 1316 allows a user to select a prosecution event and view information germane to that event.

Fig. 14 shows a series of exemplary graphical display elements 1410, 1420, 1430 for associating patent prosecution information with scope of a claim. The graphic element 1410 includes the aforementioned prosecution timeline together with a graphic that represents some characteristic of a patent/patent application. In the example of Fig. 14, the graphic is a circle with a radius based on unique words (UW) in an independent claim (e.g., 1/UW). Other options also exist. The radius may be normalized with respect to an average value for patent claims in a patent classification (e.g., independent claim 1, which is typically, but not always, the broadest claim in a patent/patent application).

In the graphic 1410, prosecution events correspond to different radii. The filing data 9-95 corresponds to the largest radius, representing a broad claim at time of filing (more accurate, fewer unique words at time of filing). During prosecution, the claim was amended and narrowed due to, for example, a reference (USPN 5,356,447), which is displayed next to the circle. Yet later, an examiner's amendment narrowed the claim by adding more unique words and hence a smaller radius. In the example of Fig. 14, the latter amendment
corresponds to the Smith et al. reference. The graphic 1410 may be displayed statically, for example, on a screen or a sheet of paper. Where displayed in a computer-implemented environment, some additional options exist, such as the ability to select and link to the references (USPN 5,356,447 or Smith et al.) cited during prosecution or link to portions of the file history showing how the Examiner applied the references.

[0084] In the graphic 1420, the prosecution event line is an active control that a user may interact with to further understand prosecution of the patent application (e.g., of a selected claim or claims). The user may position a cursor 1425 on the prosecution event line where an exemplary method causes display of an associated reference 1427 and an associated claim scope. The graphic 1430 represents the display when a user moves the cursor 1435 to a different prosecution event that resulted in the scope of the claims being narrowed from that of filing (represented by the outer circle) to that illustrated by the colored inner circle. This represents the situation where the scope was narrowed because the applicant amended the claims to differentiate over a cited reference 1437.

[0085] Fig. 15 shows various exemplary graphical displays for associating patent prosecution information with scope of one or more claims, optionally as a function of time. Possible metrics 1519, 1529 are also shown for use in determining a graphical representation of a claim characteristic. The graphics 1510, 1520 include various features of the graphics of Fig. 14; however, they also include a respective claim window 1514, 1524 where claims may be selected. In general, the claims correspond to claims as issued in a patent or published in a patent application. Adjustments may be made such that a claim is linked to a claim numbering used during prosecution. Where a claim is renumbered prior to issuance, the historical information may be used to backtrack and associate claim number to a previous number for the claim or a
best match number. The graphics 1518, 1528 show relative scopes of the claims (both independent and dependent) for all claims in corresponding graphics 1514, 1524. Here, the circle radii are determined using a metric such as one over unique words and the circle is shaded to represent an amended claim for the associated prosecution event.

[0086] Fig. 16 shows various exemplary graphical displays that correspond to the IP share item 144, IP rights analysis item 146, and IP category item 142 of graphic 120. A graphic element 1610 provides relative claim scopes for various patents within a given class or other grouping. As shown, the element 1610 shows relative scopes for the subject patent (e.g., USPN 5,657,317), the average scope of patents owned by the assignee of the subject patent, a class average claim scope, and claim scopes for other groups of patents, which may be competitors of the owner of the particular patent.

[0087] For the graphic element 1610, a metric versus average for a classification may be shown (e.g., +/- % of average). In the example of Fig. 16, the circles are based on unique words, noting that other metrics may be used (e.g., total words, total words + unique words, etc.). As already explained, as the number of unique words increases the circle size decreases (inverse relationship) because a probability exists that an increase in number of unique causes a decrease in claim scope. Thus, the graphic represents the probable decrease in claim scope in a manner readily ascertainable by someone that may not be familiar with patents and/or patent claim scope.

[0088] Fig. 16 further shows a graphical element 1620 that shows the share of patents owned by the largest holders of patents within a particular group, such as a patent class. This is determined by computing percentage of patents in the class based at least in part on ownership (e.g., assignment). The graphical element 1630 provides a visual show of number of patents filed and
issued versus time for a given class. This information may provide insights as to whether the particular technology is still new or early in the innovation cycle or has matured.

[0089] Fig. 17 shows an exemplary technique for producing a score or metric 1700 that is one way to objectively assess patent document. This score is referred to as the BLINK score as it corresponds to assessing breadth, licensing/litigation exposure, identity, narrowing during prosecution and core market alignment for a patent. The BLINK score 1700 appears at the top of the graphic 120, as illustrated in the example of Fig. 26. In each of these assessment parameters, various levels may be defined and then the patent document intelligently and objectively assessed against the levels. Once each parameter is assessed, the set may be totaled to produce a score.

[0090] Fig. 18 shows exemplary graphical displays 1810, 1820, 1830 as associated with an exemplary method for assessing inventiveness of one or more inventors, optionally by company. In this realm, an article entitled "Invention and Inventivity Is a Random, Poisson Process: A Potential Guide to Analysis of General Creativity" (Creativity Research Journal 1998, Vol. 11, No. 3, Pages 231-241), noted that for most inventors, inventivity, the time pattern of invention, is random and fits the Poisson distribution. Such types of statistical analyses can be used to uncover trends or assess inventiveness of a company or to compare inventors. Such a statistical analysis may be activated by a control, for example, by selecting an inventor name under a key information entry on a graphic (see, e.g., graphic 120 and graphic 2600).

[0091] Fig. 19 shows an exemplary graphical display of stock information and litigation events 1910 along with an optional menu for linking to additional information such as docket information for a litigation event 1915. As already mentioned, such information may be part of a graphic such as the graphic 120
and/or the graphic 2600 of Fig. 26. The technique of Fig. 19 may be applied in other areas aside from patents and patent litigation, whereby a link exists between litigation information and stock information. In particular, where a link exists between stock information and a database such as the PACER database. The PACER Service Center is the Federal Judiciary's centralized registration, billing, and technical support center for electronic access to U.S. District, Bankruptcy, and Appellate court records (http://pacer.psc.uscourts.gov). It includes Digital Audio Recordings Pilot, Federal Case Statistics, Policies and Procedures, Written Opinions, and other information.

[0092] Fig. 20 shows an exemplary system 2000 and various associated exemplary methods 2010, 2020, and 2030 for selecting a time, a time frame, an event or events and graphically displaying information associated with the selected time, the selected time frame, the selected event or the selected events. The graphic includes features of the graphic 120 of Fig. 1 (and/or features of the graphic 2600) along with a timeline control 2005 that can cause display of certain data. It is noted that the timeline control may alternatively be separate from the graphic document.

[0093] The method 2010 includes selecting a time 2012 on the timeline and then displaying data for the selected time 2014 for one or more of the items in the graphic. The method 2020 includes selecting a time frame 2022 on the timeline and then displaying data for the selected time frame 2024 for one or more of the items in the graphic. The method 2030 includes selecting one or more events 2032 from a graphic item and then displaying data for the selected event(s) 2034 for one or more of the items in the graphic. In this manner, the user can gain a much broader appreciation as to how aspects related to the IP document may change over time.
Fig. 21 shows an exemplary graphical display 2110 and an optional exemplary menu feature 2125 for the graphical display 2120, optionally for a computer-implemented embodiment, where a variety of information associated, directly and/or indirectly, with a patent document is displayed along a time line.

In the example of Fig. 21, the time chart 2110 includes a series of categories associated with a patent document and ownership of the patent document together with events in the categories over a common timeline. The time chart 2120 includes active controls to access information for events in one or more of the categories.

Fig. 22 shows an exemplary graphical display and method 2200 for a company listed on two or more exchanges along with litigation events for one or more jurisdiction (e.g., US and foreign jurisdictions where one of the exchanges is outside the US). In the example of Fig. 22, the graphic 2200 also includes information as to filing, publication and issuance of patent documents in more than one jurisdiction.

Fig. 23 shows exemplary graphical displays 2310, 2320 of geography/jurisdictions along with exemplary menus for linking to additional information 2315, 2325. The menu 2315 relates to patents for a company that is listed as the owner of particular patent rights (e.g., patent/patent application) or for a classification while the menu 2325 relates to patents for a selected company and percent share in a patent classification(s) or general technology area and trend information with respect to share, i.e., is the share increasing or decreasing in the selected geography.

Fig. 24 shows an exemplary graphical display 2400 of financial information along with a menu for linking to additional financial information 2420. In this example, the graphic 2410 includes litigation information and stock
information. The menu 2415 allows for zooming or other display (e.g., around a litigation event) and/or display of options (e.g., puts/calls) and/or news.

[0099] Fig. 25 shows an exemplary method 2500 for updating information for presentation in a graphical display. The method 2500 includes monitoring one or more databases for new and/or related events 2510, updating information for presentation in a graphical display 2520 and issuing an alert and/or sending updated information. Such a method may be part of a subscription service for a user that desires up-to-date information concerning patent litigation and/or patent prosecution. Such a method may output an updated graphic such as the graphic 120 and/or the graphic 2600 or a portion of a graphic, where the portion may be highlighted or otherwise indicate that an update occurred.

[00100] In a particular example, a user may have a list of patents and/or patent applications on a desktop. When an update occurs for one of these, then the patent and/or patent application becomes highlighted. When the user clicks on the highlighted patent and/or patent application, a window is launched to display an updated graphic for that patent and/or patent application.

[00101] In another example, a user has a list of patent litigation matters on a desktop. When an update occurs for one of these, then the matter becomes highlighted. When the user clicks on the highlighted matter, a window is launched to display an updated graphic for a patent and/or patent application related to the matter (e.g., patent in litigation, reexamination, reissue, etc.) and/or a graphic of the event related to the litigation (e.g., hearing scheduled, opinion, brief filed, etc.).

[00102] Fig. 26 is an example of an exemplary integrated document for a single patent 2600. The graphic 2600 includes financial information and litigation information as well as global information (e.g., information from one or more
jurisdictions outside the United States). Global information may include market information for products/services, dispute information (e.g., mediation, arbitration, litigation), patent information (e.g., admin, agency, prosecution, etc.). With respect to litigation, administrative appeals, etc., for patent applications may also be included (e.g., matters appealed from the USPTO or other administrative agencies).

[00103] As described herein, various exemplary methods, systems, devices, etc., can acquire information from multiple databases and collate in a format (e.g., patent, stock, litigation databases).

[00104] An exemplary graphic user interface displays financial and intellectual property facts in the same graphic user interface. Such an interface may be automated (see, e.g., various menus and timeline controls).

[00105] An exemplary method calculates a number of unique words in a claim. Such a method may then calculate a metric for use in portraying scope of a claim. For example, an exemplary metric is one divided by the number of unique words where the metric can be used as a radius of a circle to portray scope of a claim. Such a method may be repeated for different times during prosecution of a claim to show how scope changes. Such a method may be repeated for different claims to allow a comparison of scope between claims.

[00106] An exemplary method calculates a number of total words and a number of unique words in a claim. Such numbers may be used as metrics to assess claim scope. An exemplary method includes presenting graphically, for a claim, the number of unique words versus the number of total words. An exemplary method includes presenting graphically, for a plurality of claims, the number of unique words. An exemplary method includes presenting graphically, for a plurality of claims, the number of unique words versus the number of total
words. Various exemplary methods can present graphical information with respect to time, for example, with respect to prosecution (e.g., amendments).

[00107] An exemplary method includes presenting graphically how claim scope changed during prosecution, for example, using Venn diagrams to graphically depict whether scope grew or shrunk. Such a method may include correlating or associating graphically the claim scope change with a comparison of scopes of other patents in the class and/or held by competitors.

[00108] An exemplary method includes presenting graphically prosecution events for a patent application in conjunction with a measure of word count or some other proxy for determining claim scope.

[00109] An exemplary method includes presenting graphically assignment information and a stock price chart for at least one assignee.

[00110] An exemplary method includes determining a parameter associated with words in a claim of a patent or a patent application and using the parameter as a dimension of a 2-D shape.

[00111] An exemplary method includes presenting graphically global coverage as related to patent application filings (or PCT option to file). Such a method optionally includes presenting in combination with at least some global market data for technology associated with the patent application filings. Such a method optionally includes presenting graphically a global coverage map and showing a company's entire patent portfolio distribution across the globe. Such a method optionally includes presenting, in combination, a global coverage map of a competitor's patent portfolio.
An exemplary method allows for a comparison (drill down through a UI from the global coverage maps) between two or more competitors' IP coverage in one or more particular regions of the world in terms of relative scopes and/or fingerprints of these patent assets.

An exemplary method includes presenting a stock chart for an assignee of a patent application in combination with indicia of patent litigation. Such a method optionally includes indicia that indicate, for historical events, a financially favorable or a financially unfavorable outcome.

An exemplary method includes presenting a plurality of stock charts for an assignee of a patent application where the plurality of stock charts are associated with different stock exchanges (i.e., DAX and NYSE). Such a method may present information along a single timeline. Such a method may include presenting a chart in combination with one or more patent related litigation events where the one or more litigation events may correspond to events in different countries. An exemplary user interface allows a user to click on or roll over events to see more information about event and micro stock chart (tick chart, or day chart, or three day chart).

An exemplary method includes presenting graphically, a metric based on word count for an assignee of a patent application and for at least one other assignee of a patent within the same class. Such a method optionally includes at least one other assignee that is a competitor.

An exemplary method includes characterizing a claim based on the number of unique words in the claim and the number of total words in the claim. Such a method may include filtering characterized claims. Filtering optionally includes one or more of assignee, law firm, attorney/agent, examiner, class, year of filing, year of issue, country of applicant, country of assignee, location of
application, location of assignee, location of law firm, location of inventor, inventor, litigation in a district court, litigation at an appellate court, damage award in a litigation, licensing information, total number of claims, PCT filing, word type, word suffix, etc.

[00117] An exemplary method includes generating a scatter plot and presenting a scatter plot for understanding patents and coverage.

[00118] An exemplary method produces a scatter plot that shows two or more different tech areas for a large multinational corporation that has patents, and the concentration of those patents. An exemplary method overlays another company's coverage on the scatter plot. An exemplary method includes evaluating proximity or "nearness" according to one or more different criteria: filing date, expiration date, technology, class/subclass, semantic similarity, assignee, inventorship, geography (country of filing), etc.

[00119] In a particular example, given patent A, an exemplary method compiles a set of patents including all patents cited as prior art in patent A and all other patents that cite patent A as prior art. The method then determines the class/subclasses of all of those patents. Next, based on those class/subclasses, the method evaluates all patents falling within those class/subclasses. The method then compares word frequency to that of the global population of patents. Then the method notes those words that occur frequently in the small group of patents but that don't normally occur that frequently in the global population. The method then produces a "signature" of this group of patents. Given a signature, the method uses it as a basis of a further search to find other patents with the same or similar signature, and use that as the landscape.

[00120] This technique addresses an issue that can arise in automated patent searching, that different patents might use different language for the same
thing. While USPTO classifications can be narrow, by combining both, results are improved. Such an exemplary method (e.g., as a computer-implemented tool) allows a user to easily try different techniques to compare patents and groups of patents. Such an exemplary method combines normal relational database features with word-based searching and analysis.

[00121] Various exemplary methods may be optionally embodied, in whole or in part, as instructions on a computer-readable medium.
CLAIMS

1. A method comprising:
   accessing patent information;
   accessing financial information;
   integrating the patent information and the financial information; and
   displaying the patent information and financial information on a common interface.

2. The method of claim 1, wherein the integrating comprises aligning patent events and financial events with respect to a timeline.

3. The method of claim 2, further comprising:
   enabling a user to select among different times;
   updating the patent information and financial information for the selected time; and
   displaying the patent information and the financial information, as updated, on the common interface.

4. A method comprising:
   accessing information associated with at least one of a patent number or a patent application serial number, the information including patent prosecution information and patent assignee information;
   accessing financial information using the patent assignee information; and
   presenting the patent prosecution information and the financial information in at least one of a paper document or an electronic document.
5. The method of claim 4, further comprising accessing litigation information using the patent assignee information and presenting the litigation information in the paper document or the electronic document.

6. The method of claim 4, wherein the paper document comprises a single page.

7. The method of claim 4, wherein the electronic document comprises active controls to link to additional information.

8. The method of claim 4, wherein the electronic document comprises a common timeline associated with an active control.

9. A method comprising:
   determining a number of unique words in a patent claim;
   determining a metric based at least in part on the number of unique words in the patent claim; and
   using the metric as a dimension of a two-dimensional shape.

10. The method of claim 9, wherein the metric comprises one divided by the number of unique words.

11. The method of claim 9, wherein the shape comprises a circle.

12. The method of claim 9, wherein the area of the two-dimensional shape diminishes with respect to an increase in the number of unique words.

13. The method of claim 9, further comprising repeating the method in response to amendment of the patent claim.
14. The method of claim 9, further comprising filtering the claim using a semantic filter.

15. The method of claim 9, further comprising:
   determining a total number of words in the patent claim; and
   plotting a point using the number of unique words and the number of total words.

16. The method of claim 15, further comprising plotting a plurality of points for a plurality of claims.

17. The method of claim 16, wherein the plurality of claims comprise claims from one or more patents.

18. The method of claim 15, further comprising repeating the method in response to amendment of the claim.

19. A method comprising:
   processing an agency record pertaining to an intellectual property (IP) asset to identify aspects of the record that pertain to scope of the IP asset; and
   generating a graphic to visually convey a scope of the IP asset and whether the scope changed as captured by the agency record.

20. The method of claim 19, wherein the IP asset comprises a patent, and the graphic visually conveys how the scope of patent claims changed during prosecution.

21. A method comprising:
   presenting a graphical map of one or more regions of the world;
representing on the graphical map market-related information pertaining to a particular technology or product; and
representing on the graphical map patent-related information pertaining to one or more patents that are associated with the particular technology or product.

22. The method of claim 21, wherein the graphical map has multiple regions that are color coded to represent different market-related information.

23. The method of claim 21, further comprising first and second graphical maps juxtaposed to one another, and the market-related information is represented on the first graphical map and the patent-related information is represented on the second map.
Exemplary System 200

Financial DB 112
Civil Legal DB 114
Admin. Legal DB 116
Other DB 118

201
Single IP Document

210
Level I Analysis & Integration

220
Level I Presentation Focus for Single IP Document

240
Query:
(a) Trends,
(b) Performance,
(c) Other.

119
Integrative DB

250
Level II Analysis & Integration

260
Level II Presentation

DATA 232
Structured Information 234

FIG. 2

SUBSTITUTE SHEET (RULE 26)
FIG. 3

SUBSTITUTE SHEET (RULE 26)
EXEMPLARY METHOD 500

PROVIDE DOCUMENT 504

EXTRACT INFORMATION ACCORDING TO CRITERIA 508

PERFORM SEARCHES IN ONE OR MORE DATABASES 512

AGGREGATE AND ANALYZE DATA 516

DISPLAY RESULTS GRAPHICALLY 518

FIG. 5

SUBSTITUTE SHEET (RULE 26)
Exemplary Architecture 600

- Patent and/or Patent Application
- Country(ies)
- Inventor(s)
- Technology
- Cited References
- Specification/Drawings
- File History
- Assignee
- Claims
- Other Information 630
  - Stock Performance 632
  - Int'l Locations Expansion History Including M&A 638
  - International Patent Filings 634
  - International Court Proceedings 640
  - Multimedia, News, etc. 644
  - International Arbitration and Mediation 646
  - Licensing 636
  - International Diffusion of Technology 642
  - International Competitors 648

Fig. 6
Substitute Sheet (Rule 26)
EXEMPLARY METHOD 800

A method comprising:
receiving a request from a client;
parsing the request;
forming a query based on the parsing;
issuing a query to a database;
receiving data from the database;
formatting the data; and
transmitting the formatted data to the client.

OPTIONAL FILTER: - COMPR*, - A, - THE 820

data (3)
client (2)
database (2)
from (2)
 parsing (2)
 receiving (2)
 request (2)
 query (2)
to (2)
 based
 forming
 formatted
 formatting
 issuing
 method
 on
 transmitting

830

Total Words: \[ \sum_{i=1}^{17} (UW(i) \times CPUW(i)) \]

FIG. 8

SUBSTITUTE SHEET (RULE 26)
FIG. 9

SUBSTITUTE SHEET (RULE 26)
FIG. 10
**Exemplary Method 1100**

A method comprising:
- receiving a request from a client;
- parsing the request;
- forming a query based on the parsing;
- issuing a query to a database;
- receiving data from the database;
- formatting the data; and
- transmitting the formatted data to the client.

FILTER: *ING, -COMPR*  

Total Gerunds: $\sum_{i=1}^{17} (UW(i) \times CPUW(i))$
FIG. 12

SUBSTITUTE SHEET (RULE 26)
FIG. 13

SUBSTITUTE SHEET (RULE 26)
Docket (e.g., USPTO)

Radius = $\frac{1}{UW}, \frac{1}{TW}, \frac{1}{(UW+TW)}$ or other

1.9y

USPN 5,356,447

Smith et al. 1988

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Docket (e.g., USPTO)

Radius = $\frac{1}{UW}, \frac{1}{TW}, \frac{1}{(UW+TW)}$ or other

1.9y

USPN 5,356,447

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Docket (e.g., USPTO)

Radius = $\frac{1}{UW}, \frac{1}{TW}, \frac{1}{(UW+TW)}$ or other

1.9y

Smith et al. 1988

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**FIG. 14**

SUBSTITUTE SHEET (RULE 26)
**BLINK Score**

Acronym for Breadth, Licensing/litigation exposure, Identity, Narrowed, and Kore market alignment

**B (Breadth)** – How does the claim scope compare to competitors. Based on Claim Scope vs Competitor graphic

- if greater than average scope by 10%
- if within +/- 10% of average scope
- if less than average scope by 10%

**L (Licensing/Litigation Exposure)**

- if licensed and/or asserted in litigation
- if
- if

**I (Identity)** – This shows identity range.

- if red dot in Lower Left Section
- if red dot in Middle Diagonal
- if red dot in Upper Right Section

**N (Narrowed during Prosecution)** – This is a proxy for file wrapper estoppels and patent quality

- if no change or enlarged scope
- if ≤ 20% reduction in claim scope
- if >20% reduction in claim scope

**K (Core “Kore” Market Alignment)**

- if the patents align with hottest markets
- if the patent partially aligns with the hottest markets

**Fig. 17**

SUBSTITUTE SHEET (RULE 26)
Fig. 18
FIG. 19
**Exemplary System 2000**

- **IP Document Title**
- **IP Document No.**
- **Description from IP Document**
- **Image from IP Document**
- **Key Information**
- **Ownership**
- **Administrative Process(es)**
- **Landcape Analysis of IP Rights wrt Time**
- **IP Share**
- **IP Rights Analysis**
- **Global IP/Market Information**
- **IP Category Information**

**Exemplary Method 2010**
- **Select Time 2012**
- **Display Data for Selected Time 2014**

**Exemplary Method 2020**
- **Select Time Frame 2022**
- **Display Data for Selected Time Frame 2024**

**Exemplary Method 2030**
- **Select Event(s) 2032**
- **Display Data for Time/Time Frame of Selected Event(s) 2034**

**Fig. 20**
In U.S.

1. Infineon to pay $160 million in fines

2. Tessera v Micron  Infineon, a defendant, forced with Micron to pay $30 million in licensing to Tessera for rights to "compliant chip" packaging technology.

3. Mosaid v Infineon  Infineon receives 6 yr license to entire Mosaid Portfolio for an undisclosed sum.

4. Rambus v Infineon  Infineon to pay as much as $150 million over 2 year period for semiconductor licenses.

5. Lin Packaging v Nanya Technology Group  Infineon is a defendant in patent infringement suit concerning SDRAM semiconductor chips.

In Germany


Fig. 22

Substitute Sheet (Rule 26)
EXEMPLARY GRAPHIC/METHOD 2310

Patent Coverage

EXEMPLARY GRAPHIC/METHOD 2320

Patent Coverage

FIG. 23

SUBSTITUTE SHEET (RULE 26)
**Fig. 24**
EXEMPLARY METHOD 2500

CIVIL LEGAL DB (E.G., PACER) ADMIN. LEGAL DB (E.G., PAIR)

NETWORK

MONITOR DATABASES FOR NEW AND/OR RELATED EVENTS (E.G., BASED ON PATENT APPLICATION, LITIGATION, COMPANY, INVENTOR, EXAMINER, ETC.)

UPDATE INFORMATION

ISSUE ALERT/SEND UPDATED INFORMATION

FIG. 25

SUBSTITUTE SHEET (RULE 26)
INTERNATIONAL SEARCH REPORT

International application No
PCT/US 08/78861

A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06F 17/00 (2009 01)  
USPC - 715/201

According to International Patent Classification (IPC) or to both national classification and IPC

B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
USPC 715/201

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC 705/1, 500, 707/100, 715/200, 201, 700

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (USPT, PGPB, EPAB, JPAB), and Google Patent/Scholar
Search Terms Used access display search update patent prosecution application assignee litigation time timeline event docket finance

C DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 2004/0210497 Al (Hirayama et al.) 21 October 2004 (21 10 2004), entire document, especially, para [0027], [0054], [0057], [0058], [0064], [0068], [0073], [0076], [0091], [0130], [0136], [001959], Abstract and Fig 2-5</td>
<td>1-3</td>
</tr>
<tr>
<td>Y</td>
<td>US 2002/0022974 A1 (Undh) 21 February 2002 (21 02 2002), entire document, especially, para [0018], [0038] and Fig 1-3</td>
<td>4-8</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C

Date of the actual completion of the international search
20 January 2009 (20 01 2009)

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No 571-273-3201

Date of mailing of the international search report
25 JAN 2009

Authorized officer

Form PCT/ISA/210 (second sheet) (April 2007)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [ ] Claims Nos. 1-8, because they relate to subject matter not required to be searched by this Authority, namely

2. [ ] Claims Nos. 9-18, because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically

3. [ ] Claims Nos. because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6-4(a)

This International Searching Authority found multiple inventions in this international application, as follows:

Group 1, Claims 1-8, drawn to a method comprising accessing patent information, accessing financial information, integrating the patent information and the financial information, and displaying the patent information and financial information on a common interface.

Group 2, Claims 9-18, drawn to a method comprising determining a number of unique words in a patent claim, determining a metric based at least in part on the number of unique words in the patent claims, and using the metric as a dimension of a two-dimensional shape.

continued on p. 7 of this form

1. [ ] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.

4. [x] No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims, it is covered by claims Nos. 1-8.

Remark on Protest: [ ] The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

[ ] The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

[ ] No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2007)
continuation of Box III

Group III, Claims 19-20, drawn to a method comprising processing an agency record pertaining to an intellectual property (IP) asset to identify aspects of the record that pertain to scope of the IP asset, and generating a graphic to visually convey a scope of the IP asset and whether the scope changed as captured by the agency record.

Group IV, Claims 21-23, drawn to a method comprising presenting a graphical map of one or more regions of the world, representing on the graphical map market-related information pertaining to a particular technology or product, and representing on the graphical map patent-related information pertaining to one or more patents that are associated with the particular technology or product.

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13 1 because, under PCT Rule 13 2, they lack the same or corresponding special technical features for the following reasons. The special technical feature of the Group I invention is a method comprising accessing patent information, accessing financial information, integrating the patent information and the financial information, and displaying the patent information and financial information on a common interface. The special technical feature of the Group II invention a method comprising determining a number of unique words in a patent claim, determining a metric based at least in part on the number of unique words in the patent claims, and using the metric as a dimension of a two dimensional shape. The special technical feature of the Group III invention is a method comprising processing an agency record pertaining to an intellectual property (IP) asset to identify aspects of the record that pertain to scope of the IP asset, and generating a graphic to visually convey a scope of the IP asset and whether the scope changed as captured by the agency record. The special technical feature of the Group IV invention is a method comprising presenting a graphical map of one or more regions of the world, representing on the graphical map market-related information pertaining to a particular technology or product, and representing on the graphical map patent-related information pertaining to one or more patents that are associated with the particular technology or product.

None of these special technical features are common to the other groups, nor do they correspond to a special technical feature in the other groups. Therefore, unity of invention is lacking.