Figure 3

Third-Party Market Data Provider 37

Market signal receiver 31

Market data server 32

User preference client 41

User-side controller 42

Alert generator 49

User database 44

User interface 43

User 40
MARKET DATA ALERT AND NEWS-DRIVEN ALERT SYSTEM

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] None.

FIELD OF THE INVENTION

[0002] The present invention relates to software and a system for providing alerts or notices to a user, such as a trader or a daytrader, of market developments or changes, and news-driven notices, based on user-provided criteria or preferences provided in advance.

BACKGROUND OF THE INVENTION

[0003] In recent years, software has been developed to help traders, including daytraders, to sort through on a real time basis the voluminous market data being generated every day. For example, a trader interested in monitoring a particular stock on the New York Stock Exchange may wish to be notified in real time when the symbol associated with the stock reaches a 52-week high, or a 52-week low, or comes within a pre-specified percentage from the 52-week high or 52-week low. Software has been developed to provide real time alerts based on user-provided criteria for such situations. For example, the Trade-Ideas software allows a user to specify symbols in which he is interested and various events associated with the symbol will generate an alert. NexTrend has also provided the Filescan product to provide a similar service.

[0004] Traders, however, still face a problem of receiving too many alerts ("noise"), and not enough quality or relevant information of the type that is of interest to them upon which trades are warranted ("quality signals"). A related problem is that systems known to date do not provide a sufficient level of granularity to the trader to allow for customization—to generate alerts tailored to the needs to the user. For example, instances of a certain market phenomenon may be repeated and the user may wish to focus only when they follow within a certain period of time. Further, combinations of user criteria in connection with a given symbol
for generating an alert are not sufficiently provided for in current market alert systems. In addition, the user may wish to be alerted when news affecting companies or securities is reported.

SUMMARY OF THE INVENTION

[0005] A system, method, apparatus, means, and processor readable medium incorporating a program of instructions for providing a user alert based on market data are disclosed. The program includes: instructions for receiving a first user selection of a first market event setting designating a market event, the market event comprising a market item of at least one of a predefined value, predefined ratio, predefined range, predefined average, aggregate value, aggregate ratio or aggregate range; instructions for receiving user input specifying a maximum period of time; instructions for receiving a first market signal corresponding to the first market event occurring at a first moment in time at a first value and to receive a second market signal corresponding to the first market event occurring at a second moment in time at a second value, the first moment in time being before the second moment in time, the second value being different from the first value; and instructions for generating and to provide the user alert only when the second moment in time occurs within the maximum period of time after the first moment in time.

[0006] The instructions for receiving the user input specifying the maximum period of time may receive the maximum period of time specified in seconds, minutes, hours or days by a user.

[0007] In addition, such a program may further include instructions for providing a user interface configured to provide the user alert, the user interface including a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to a market event, and further including a plurality of filter settings, each filter value of the plurality of filter values specifying one of a minimum value or a maximum value; instructions for receiving a first user selection of at least one market event setting of the plurality of market event settings; instructions for receiving a second user selection of a first filter value of the
plurality of filter values; and the instructions for generating and providing the user alert are used to generate and to provide the user alert only if a third market signal indicating the market event corresponding to the at least one market event setting at the first filter value is received.

[0008] The program may also include instructions for receiving a third user selection of a second filter value of the plurality of filter values; and the instructions for generating and providing the user alert may generate and provide the user alert only if the third market signal indicates that the second filter value is also satisfied by the market event.

[0009] Also provided is a system, method, means, apparatus, and processor readable medium incorporating a program of instructions for providing a user alert based on market data, the program comprising: instructions operable to provide a user interface with a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to a market event, the market event being based on a market price, an aggregate market value, a market ratio, or a market price range, and the user interface further including a plurality of filter values, each filter value of the plurality of filter values specifying one of a minimum value or a maximum value; instructions for receiving a first user selection of at least one market event setting of the plurality of market event settings; instructions for receiving a second user selection of a first filter value; instructions for receiving a third user selection of a second filter value, the second filter value specifying a minimum period of time since a receipt of a first market signal indicating an occurrence of the at least one market event; instructions for generate and providing the user alert only if both of the following conditions are true: (1) a second market signal indicating the market event corresponding to the at least one market event setting at the first filter value is received, and (2) the second market signal is received after the expiration of the period of time since the receipt of the first market signal.

[0010] The first filter value may be for example a dollar value, a percentage value or a quantity of securities value. The period of time may be an interday interval expressed in a number of days or weeks. For example, the period of time may be an intraday interval expressed in seconds, minutes or hours.
In a second embodiment, provided is a system, method, means, apparatus, and a processor readable medium incorporating a program of instructions for providing a user alert based on news data, the program comprising: instructions for receiving as a first user selection a news filter of a plurality of news filters, each filter of the plurality of news filters specifying a corporate event; instructions for receiving as a second user selection a maximum period of time since an occurrence of the corporate event; and instructions for generating and providing the user alert only when business news content indicates that the event specified has occurred within the maximum period of time.

In such a program, the news filter may be one or more of a stock upgrade, a stock downgrade, a securities dividends or earnings report, a report of a corporate takeover or merger, a report of a corporate acquisition, a report of a corporate bankruptcy, a report of a corporate product release, a report of a corporate product change in market share, or a report of a rumor regarding a corporation.

Such a program could also include instructions for receiving as a third user selection a symbol corresponding to a company; and the instructions for generating and providing the user alert are used to generate and to provide the user alert only if the corporate event specified relates to the company.

Such a program may further include instructions for receiving as a third user selection a market event setting of a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to, for example, a market event based on a market price, an aggregate market value, a market ratio, or a market price range; such that the instructions for generating and providing the user alert are used to generate and to provide the user alert only when a market signal indicating an occurrence of the market event is received.

Such a program may further include instructions that provide a user interface configured to provide the user alert, the user interface including the plurality of news filters, each news filter being user selectable from the plurality of news filters.
[0016] The instructions for generating and providing the user alert may also provide in the user alert a live link directly linking to a news release including the corporate event.

[0017] Also contemplated is a system, method, means, apparatus, and a processor readable medium incorporating a program of instructions for providing a user alert based on news data, the program comprising: instructions for receiving as a first user selection a news filter of a plurality of news filters, each filter of the plurality of news filters specifying a corporate event; instructions for receiving as a second user selection a market event setting of a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to a market event; and instructions for generating and providing the user alert only when business news content indicates that the corporate event has occurred and a market signal indicating the market event corresponding to the at least one market event setting is received.

[0018] The news filter may be a stock upgrade, a stock downgrade, a securities dividends or earnings report, a report of a corporate takeover or merger, a report of a corporate acquisition, a report of a corporate bankruptcy, a report of a corporate product release, a report of a corporate product change in market share, or a report of a rumor regarding a corporation, or a combination of the foregoing, or any some such news story.

[0019] In such a program, there could also be instructions for receiving a third user selection of a symbol corresponding to a company, so that the instructions that generate and provide the user alert do so only when the corporate event specified relates to the company.

[0020] In this program, instructions could also be included to provide a user interface configured to provide the user alert, the user interface including the plurality of news filters, each news filter being user selectable from the plurality of news filters.

[0021] The user interface may also allow the user to set a maximum count or a minimum count for the number of alerts that will be generated based on essentially the same news story
or report. Also, a count of the number of news sources reporting the same news story or report can be displayed in the alert for the user.

[0022] Also in this program there could be included instructions to provide a list of companies that meet a user-specified condition; instructions operable to receive as a third user selection a symbol corresponding to a company from the list of companies provided; so that the instructions for generating and providing the user alert do so only when the corporate event specified relates to the company.

[0023] Additionally, the program could include instructions that provide a list of companies that meet a user-specified condition, and instructions operable to receive as a third user selection a selection from the list of companies provided.

[0024] Other features and advantages of the present disclosure will become apparent from the following description of the disclosure that refers to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0025] Fig. 1 shows the signals criteria that may be selected via the user interface according to an aspect of Applicant's invention.

[0026] Fig. 2 illustrates the filter criteria that may be selected via the same user interface according to an aspect of Applicant's invention.

[0027] Fig. 3 is a schematic illustration of major structures of a system according to an aspect of Applicant's invention.

[0028] Fig. 4 illustrates examples of alerts generated according to an aspect of Applicant's invention.

[0029] Fig. 5 shows the population of exchanges and lists according to another aspect of Applicant's invention.
Fig. 6 illustrates an interface for entering criteria for a news alert feature according to an aspect of Applicant's invention.

Fig. 7 illustrates another page of the news alert interface according to an aspect of Applicant's invention.

Fig. 8 illustrates a news driven alert list according an aspect of Applicant's invention.

With reference to the Drawings, the features thereof are described below.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION

A first major embodiment of Applicant's invention will be described with reference to Figs. 1-4.

Fig. 1 illustrates a list of "signals" which may be selected by the user through the user interface. Signals as used herein means a market event in connection with one or more symbols. For example, a user may be interested in signal 12 "New High" and a second signal 14 "New Low," which correspond to a new high or new low made by any symbol floating on the New York Stock Exchange, and may thus wish to check off signal 12 and additional signal 14 in the signals portion of the user interface shown in Fig. 1. Signal 12 and signal 14 each have an additional field "Minimum Day" 13 associated with them, which may specify the number of trading days to be considered in determining whether a new high or a new low has occurred. The trader may also be interested in additional signals 16 indicating a new pre-market high, a new pre-market low, a new post-market high or a new post-market low or an at pre-market or post-market high or an at pre-market or post-market low, respectively. Once the user has selected the signals which are to serve as the basis for generating alerts, the user can select the filters portion of the user interface by selecting the filters button or tab at the top of the page shown in Fig. 1. Many other types of signal may be selected as will be discussed below.
Fig. 2 shows the filters criteria that the user may select as the basis for generating alerts. For example, the user may be interested in the signals selected only if they occur within a maximum of 10 seconds after a previous instance of the same signal. When the Maximum Seconds filter 24 is selected, the number of seconds between a first market event corresponding to a signal and a second market event corresponding to the same type of signal is measured and an alert is generated only if the number of seconds between the first event and the second event is not more than the maximum number of seconds specified. Thus, if symbol ABCDE makes a new high at time X it meets the criterion for signal 12 selected in Fig. 1 and if the same symbol ABCDE makes another new high within 10 seconds then an alert is generated. If the second new high is generated more than 10 seconds after time X then no alert is generated. Essentially, what the trader is interested in is significant movement of a symbol, not mere isolated movement which the trader may regard as "noise." The trader in this case sets the filters so that no alerts are generated unless a new high is reached and a second new high of the same symbol is reached within the allotted number of seconds.

Similarly, Minimum Seconds (not selected in this case but shown as having no amount of seconds specified) is a filter that allows the user to specify the minimum seconds that must elapse between an instance of a signal and a second instance of the same signal for generating an alert. The Minimum Seconds filter 26 allows the user essentially to say, "If the signal, for example, the new high of a symbol, occurs after the same new high of the same symbol within a few seconds, then it is really the same event and I do not want to be bothered again with such an alert." Thus, while the "Max Seconds" filter 24 may be thought of as allowing the user to identify real significant movement, the "Minimum Seconds" filter 26 may be thought of as allowing the user primarily to reduce noise or repetitive alerts about essentially the same market developments.

The selected filters, in this case the Max Seconds signal 24 and the Minimum Average Daily Volume signal 28, will thus serve as the basis for a qualifying alert generated in conjunction with the signals selected in the portion of the interface shown in Fig. 1.
Accordingly, by the use of more carefully tailored alerts, fewer alerts may be provided to the client from the server and thus less communication bandwidth may be required by an operation of the system according to the present invention. Thus, higher quality alerts which provide less noise for the user may also produce a quicker communication time. Also, the client processor may require fewer CPU operations to provide the higher quality alerts for the user and generate less heat to provide the services according to the present invention.

Fig. 4 shows a set of alerts generated based on the signals selected in Fig. 1 and the filters selected in Fig. 2. The top row 51 is an alert generated and shows various types of information about the alert. The Icon column 52 shows the type of signal that served as the basis for generating it and is described more fully in the Description column 57. In this case, the "50" of the icon indicates a crossing above the 50-day moving average for the symbol CBB shown in the Symbol column 54. Column Trade Time 53 shows the time at which the signal that is the basis of this alert was triggered on the market. The Count column 55 may show the number of the alerts signaled, the ADV column 61 may present the multiple of the average daily volume, the Range column 56 may show the relation of the current value to the daily range, and the Value column 58 may show the most recent price of the symbol. The Real Time Volume column 59 may show the current trading volume as a fraction of the average trading volume for this time of day for this symbol. It will be understood that these columns are not essential and that one or may columns may be omitted, and other columns showing other types of alert related information may also be provided. Also, alerts may be provided in other formats and may be provided as audible information.

The Seconds column 60 shows the most recent time that this identical type of alert was generated. This provides the trader with an instant sense of how significant this alert is and works well in conjunction with the Maximum Seconds filter 24 discussed above.

In addition, using the maximum second feature, the user may elect to screen out alerts that would be generated after the second instance of the selected signal. That is, instead of burdening the user with alerts that would be generated within the max seconds period specified, the user may designate no further alerts even when more than two instances of the
signal occur within the max seconds time period. Accordingly, just one alert would be
generated but a column of the alert could show the number of times the signal criteria were
satisfied.

[0043] It will be understood that the filters shown in Fig. 2 are merely examples of the
types of filters that may be provided for user entry and the signals shown in Fig. 1 are also
examples and many other types of such signals and filters are known.

[0044] A system for providing such user alerts will now be described with reference to
Fig. 3. A market signal receiver 31 may be located at a central location of a vendor such as
Madscan. The market signal receiver 31 may receive a stream of relevant market data
throughout the trading day from third-party providers, for example, through a mass subscription
with the New York Stock Exchange. Fig. 3 shows the Third-Party Market Data Provider 37,
such as a server at the New York Stock Exchange, or any other stock domestic or foreign
exchange, bond trading floor, commodities exchange, currency exchange, or any other type of
exchange or combination of exchanges. Market signal receiver 31 may then provide the market
data to market data server 32 in a format usable to market data server 32.

[0045] User 40 may specify the signals and filters in which the user is interested through
user interface 43, parts of which are shown in Figs. 1 and 2 for purposes of illustration. User-
side controller 42 will then provide relevant data from the signals and filters selected to the user
preference client 41, which would pass them on to the market data server 32 at the central
location. In return, market data server 32 would provide to the user preference client 41,
typically at the user side, market data that are of the general type responsive to the user
preferences as entered in the user filters and the user signals. For example, market data server
32 could provide signals information for all user-specifiable signals to allow the user-side
components to generate alerts. User-side controller 42 would then pass on such responsive data
to the alert generator 49 which would collate the information necessary for the generation of
the alert and display it to the user 40 through the user interface 43. Alternatively, the market
data server 32 could house the alert generator 49 module and provide the user preference client
41 with a more specific, tailored set of data necessary for displaying the alert by user interface
43. The user database 44 would house some of the software and user subscription information that are not necessary in real time. However, it will be understood that the system shown in Fig. 3 is but one embodiment of the system according to the present invention and many modifications, combinations and versions are possible to configure a system that would carry out the functions and embody the structures of the present invention.

[0046] Market data server 32 and user preference client 41 may communicate via the World Wide Web or they may communicate through a LAN, a WAN or a wireless connection over a wireless network. Similarly, market signal receiver 31 may communicate with the Third-Party Market Data Provider 37 and with the Third-Party News Source 38 via the World Wide Web or another type of internet connection, or they may be connected via a LAN, a WAN, or a wireless network.

[0047] More or less of the functionality provided by the system according to the present invention may be provided centrally by the market data server 32. Thus, at one extreme, the user 40 may communicate via a simple web browser or via a wireless network connection, such as a mobile telephone network using a handheld device, with the market data server 32, and the market data server 32 could provide all of the functionality above-described with respect to the user-side controller 42, the alert generator 49, the user database 44 and the user interface 43. At the other extreme, market data server 32 could stream all relevant market data to the subscriber node, the subscriber node including the user preference client 41, the user-side controller 42, the alert generator 49, the user database 44 and the user interface 43, and thus, most or all of the functionality provided by a system according to the present invention could be provided on the user side. Between these two extremes, various configurations are possible to share the search for relevant data in the data streams from the Third-Party Market Data Provider and the Third-Party News Source 38 and to generate the alerts based on the criteria set by the user 40. In another configuration, a centrally located system, such as at a larger trading company or trading floor, may house in one location all of the server side and user side components shown in Fig. 3. It will be noted that, although shown as separate modules, each of the units shown in Fig. 3 may be embodied as one or more computers or processors or several of the units shown in Fig. 3 may be provided by one computer. For example, typically
the user preference client 41, the user-side controller 42, the alert generator 49, the user database 44 and the user interface 43 will be provided as a single processor with which the user 40 may interact to set signal information, filter information and other preferences and to receive alerts via the user interface 43.

[0048] Also, according to another aspect of this embodiment of the present invention, various signals, such as 52-week high, 52-week low, daily and interday moving averages or the like could be combined with additional restrictive criteria that would be required to be met to generate an alert, thus reducing the noise and improving the quality of the alerts provided.

[0049] According to this aspect of the invention, the user could provide a minimum of a number of days or an amount of an intraday period (expressed in seconds, minutes or hours) since this signal was last crossed. Thus, the user is able to further define the event for certain signals by specifying an AND function of days/intraday period since the last crossing event of the type specified. For example, as shown in Fig. 1, the Minimum Day selection 13 allows the user to specify the number of minimum days since a market event corresponding to the New High signal 12 (or the New Low signal 14) has occurred if this alert is to be generated. If the minimum number of days specified at selection 13 has not elapsed, then no alert will be generated, even if a new high (or a new low) occurs.

[0050] The connection between the client 41 and the market data server 32 may be provided by a traditional socket connection using port 80 using an HTTP protocol and TCP/IP. According to one aspect of the Applicant’s invention, the client 41 may provide the market data server 32 with a list of signals, requested signals, that have been selected by the user as well as some but not all of the filters designated by the user. The market data server 32 can then provide the client 41 with codes for filters in connection with the requested signals. The market data server 32 can also provide quantity information in connection with each of the requested signals for generating the alerts by the client 41. Accordingly, the market data server 32 may be provided the requested signals but not know many or all of the filters selected by the user. In addition, the market data server 32 may be additionally given some types of filters selected by the user, such as those requiring more raw input data, such that the burden of
generating alerts is shared by the market data server 32 and client 41, with the client having the larger burden.

[0051] In addition, the market data server can generate and maintain statistical information and historical information, including user preference data for subscribers, for the purposes of system enhancement, security, marketing, pricing or the like.

[0052] It will be understood that such minimum day selection 13 may be used together with the filters selected to provide for a more powerful market alert system because the alert generated is more meaningful for the user. The user, according to an aspect of the present invention, is given more control over the nature of the alerts generated through a finer level of granularity of a combination of criteria that must be met for alert generation. In the example shown in Figs. 1 and 2 for purposes of illustration, an alert will be generated based on the New High signal 12 if the Minimum Day selection 13 (in this case set to zero and so non-applicable) and either of the maximum seconds filter 24 set at 10 seconds or the minimum average daily volume filter set at 200,000 shares is satisfied.

Second Embodiment

[0053] Traders are often concerned about recent company events, such as news of mergers and acquisitions, takeovers, IPOs, dividend releases, labor actions, or the like, or rumors of any of the foregoing, when making real time trade decisions. Therefore, real time alerts based on recent news stories could provide a real advantage. Provided is a system that generates alerts based on news stories from third-party news sources.

[0054] As shown in Fig. 5, in an illustrative embodiment, the user can select the "Exchanges and Lists" tab in the user interface 43 and make the selections in which the user is interested. In conjunction with these selections, the user can also select the signals and optionally also the filters as the basis for this alert.

[0055] For example, the user may be interested in stocks that have been upgraded/downgraded in the last X minutes or seconds, have had earnings released in the last X minutes
or seconds, about which a rumor has been generated in the last X minutes or seconds, have been mentioned as takeover candidates in the last X minutes or seconds, have been mentioned as having their price target changed in the last X minutes or seconds, have been mentioned as going public (being the subject of an IPO) in the last X minutes or seconds, or the like. Many other types of such news events are possible and news events relevant to the perceived value of a stock, a bond or other type of security, are too numerous to mention here but would be readily understood. Also, the user may be interested in any news in connection with a signal or any news in connection with a particular company and may wish to have alerts generated accordingly. The user can then select a signal and one of the foregoing news filters, for example, a 52-week low could be the signal and upgraded in the last X minutes or seconds, could be the criteria for generating the alert.

[0056] As shown in Fig. 5, if the user is interested in recent IPOs, in this instance, recent being set to the last three months, on either the New York Stock Exchange or NASDAQ, he would make the selections shown in Fig. 5 and then optionally he could also select one or more signals, and optionally one or more filters as the criteria for generating the alert. Also shown in Fig. 5 is news selection field 72 "Select Symbol List" which allows the user to specify the symbols of the companies in which he is interested. It will be understood that, throughout the disclosure, stock market examples are provided so that symbols refer to individual companies. However, the symbols may refer to ETFs or other types of closed-ended funds, bonds or bond funds, other types of securities or securities funds, currencies or currency funds, commodities or commodity funds, other types of publicly-traded items, or any type of market item.

[0057] In conjunction with news selection field 72, through window 80, the user may select a list of symbols either manually entered or populated automatically in window 80. News selection field 73 "Earnings List" allows the user to select companies which have reported an earning, such as a dividend, to be listed. In conjunction with news selection field 73, selections 81 and 82 allow the user to specify the time period, either selection 81, "Days Back," the number of days in the past during which the earnings were reported, or selection 82, "Days Forward," the number of days in the future during which the earnings will be posted.
Such market news would be provided in real time by third-party vendors, such as Reuters, Business News, Smart Money, Bloomberg or the like. Third-Party News Source 38 would provide news sources to market signal receiver 31, or to a parallel interface not shown other than the interface through which the Third-Party Market Data Provider 37 provides its stream of market data. The news reports would then be delivered to market data server 32, or in another embodiment, to a parallel server different from the one that receives the market data from the Third-Party Market Data Provider 37. The user preference client 41 would then obtain lists of symbols or companies in various categories, such as a list of companies which had been the subject of IPOs in the last three months, a list of Mad Money mentions, and so forth for use in generating alerts. As discussed, much of the functionality provided by the system could be provided by either the market data server 32 centrally or on the user side depending on a number of design considerations, such as the likely needs of the user, the type of subscription agreements purchased by the user, the type of device used by the user, the bandwidth of the connection between the market data server 32 and the user preference client 41, the number of users using the system, and other such considerations. Thus, as discussed above, much of the functionality, including the alert generator 49, could be moved to the market data server 32 to provide the news-driven alerts, without departing from the spirit of the present invention.

Certain users may also be interested in the recommendations of various commentators in making trading decisions. News field selection 75 allows the user to generate alerts based on the recommendations of one or more commentators, as in the illustration provided, based on the companies recommended by the television stock trading show "Mad Money." In conjunction with news field selection 75, the user may also specify how recent the time period must be during which the recommendation must have been made. Thus, selection 83 allows the user to specify the maximum number of days back during which the recommendation must have been made if an alert is to be generated, and selection 84 allows the user to select only those companies mentioned in the most recent Mad Money broadcast.
News field selection 76 "Upgrades Downgrades" allows a user to generate alerts for companies for which an upgrade or a downgrade has been reported. In conjunction with news field selection 76, the user can finetune the type of upgrade or downgrade in which the user is interested through selection 86. Also, through selection 88, the user is given the option of finetuning the type of upgrade or downgrade news in which he is interested by, for example, selecting the brokerage firm through which the upgrading or downgrading occurs. As discussed, many other types of company news, or currency or commodity or bonds or other market news, are also contemplated as options to be selected by the user.

Selection 88 shows a list of brokerage firms in conjunction with the news field selection 76 "Upgrades Downgrades." In a similar fashion, also contemplated is a feature by which a list of stocks relevant to a selection criterion would be shown to the user. Thus, if the user selects recent IPOs, a list of all companies that had been recently the subject of an IPO would be shown to the user and then the user can select "all" or "some" of the list of companies in conjunction with a signal, or optionally in conjunction also with a filter to generate the alert. Similarly, the user, upon selecting news field selection 75 would be given a list of companies that were mentioned as good buys on the show Mad Money within the time period specified by the user and then the user can select one or more or all of the recommended companies as the basis for an alert. Such a pre-populated list of companies displayed to the user in conjunction with the news field selection facilitates the user's ability to finetune alerts and speeds up the criterion selection process since the user does not have to compile the list from scratch. Such a pre-populated list could also be generated with respect to other types of news events, such as upgrades or downgrades, stocks of a specific sector or country, stocks that have reported earnings, stocks that have been the subject of takeover rumors, stocks that have reported significant market share increase, stocks that have reported significant profits in the most recent quarter, and so forth.

Alerts generated based on news would also include a field in which the news source providing the relevant news would be displayed. Figure 8 shows an alert 51A in which column 61 provides information about the news item. Field 132 of column 61 shows the time at which
the news story or report was generated or arrived at the market signal receiver 31 (shown in Figure 3). Field 131 of column 61 indicates the source of the news story or report, in this case using initials of the third-party business news reporting agency. In addition, the news source name displayed as part of the alert could be clickable. Accordingly, if the user wishes to consult the news article which provided the basis for the alert to learn more about the news item, he could do so.

[0063] Figure 6 shows an example of a news interface 101 through which the user can designate preferences for generating news-driven alerts 51a. Selection 102 allow as a user to select the maximum time period during which the news story or report must have been generated or received by market signal receiver 31 in order to serve as the basis for an alert. News sources fields 103 allow the user to designate the third party news sources which may serve as alerts. By way of example, some of the third party news sources shown are business wire 103a, PR News Wire 103b, Market Wire 103c, The Fly On The Wall 103d, Prime Zone 103e, Briefing 103f, Ten-K wizard 103g miscellaneous news source 103h, Canada Newswire 103i, and CCN Matthews 103j. In addition, FDA or other regulatory agencies may serve as news sources, as can press releases provided by companies and FCC filings or FCC releases. Further, stock markets or other exchanges or bourses, brokerage houses or industry associations may also provide news stories or reports that serve as a basis for news alerts. Through type of news selection 104, the user may specify what type of news is of interest to the exclusion of other types of news. Accordingly, by way of example, 104a earnings selection allows the user to express preference for news reporting earnings, or non-earnings of a company, market, industry, sector or geographic region, upgrades/downgrades selection 104b, FDA- Pharmaceuticals selection 104c, rumors selection 104d and all other news 104f allows the user to limit the news alerts generated based on these selections.

[0064] A news count setting (not shown) may also be provided to allow the user to input a minimum count or a maximum count, indicating the number of alerts that will be generated based on essentially the same news report or news story being reported by different news sources. Thus, the user may wish to specify in the max count input the maximum number alerts that will be generated by essentially the same news story or report when more than one
news source reports that story. For example if a news story is released or received by the system about a particular company or symbol at 8:30 a.m. and the alert and filter criteria selected by the user are met then an alert will be generated as shown in Fig. 8.

[0065] If the time since press release input box 102 of Fig. 6 is selected then the alert will be generated only if the news item was released or received by the system within the time set, in this example shown as in the last 30 minutes. Then, if an additional news story involving that stock or symbol is released or received by the system and the signal and filter criteria selected by the user are again satisfied then a second alert will be generated provided that the alert and filter criteria are satisfied within 30 minutes of the second news story release or receipt.

[0066] Fig. 8 shows a news-driven alert 51a that includes the identifier of the news source 131a. A count identifying the number of news sources that have provided news stories or reports about this company, symbol or other item exchanged on a market (not shown) could also be provided. However, since the max count input box in this example for purposes of illustration is set at 2, no further alert will be generated for the company or symbol in question. In addition, a time that has elapsed since the first breaking of the story today about this company or symbol may also be provided as part of the alert (not shown).

[0067] Figure 7 illustrates a news lists interface that allows the user additional control over the news-driven alerts to be generated. Symbol list selection 110 allows the user to enter symbols in connection with which the news story or report must be generated to generate an alert. Selection 111 allows the user to enter a personal list of symbols in which he or she is interested or allows the system to provide a candidate list of symbols based on prior user history, the type of news selected using selection 104, or by providing a complete list based on the exchange selected, a selection of recommendation of an analyst, or allows the user to select more than types of such symbols from the list. Earnings list selection 112 allows the user to specify an interest only in news stories or reports related to earnings. Day's back selection 113a and day's forward selection 113b allow the user to specify the number of days backward or forward in time during which the earnings related news stories are of interest. Similarly,
selection 112b allows the user to select the type of earnings in which there is an interest for
generating an alert: selection 114 allows pre-market or post-market related news from
yesterday, selection 115 allows pre-market, market or post-market related earnings news from
today, and selection 116 allows pre-market, market or post-market related news for tomorrow.
It will be understood that other time periods may be specified and these time periods are
provided as examples only. Recent IPO selection 121 allows the user to designate an interest in
IPO's, for example, IPO's in the last three months, for which news stories or reports are
generated. Mad Money Mentions selection 122 limits news sources to those symbols which
were mentioned on the television show Mad Money. It will be understood that additional
controls may allow designation of only symbols mentioned by another stock analyst or by a
combination of stock analysts or the like, and the symbols could be limited to recommendations
instead of mentions, and to "short" recommendations as well as "long" recommendations. The
days back selection 125 controls how far back, for example, how many nights back, the Mad
Money mention or recommendation must have been made. By selecting upgrades/downgrades
selection 123, the user designates an interest only in those stories that involve upgrades or
downgrades of a symbol.

[0068] It will be appreciated that a single source consolidator of third party news reporters
can be the single news source for the news server of the system.

[0069] The system may also be set up to generate automatically alerts based on news
stories received from news sources. For example, a news-driven alert can be generated if
within a certain pre-specified period of time of the issue or receipt of the news story or report a
trading volume increases significantly for the symbol or market-listed item mentioned in the
story or report.

[0070] Further, if the trading volume exceeds a certain pre-specified threshold or increases
by a certain pre-specified percentage within 10 minutes, or within some other pre-specified
period of time of the issue or receipt of the news story or report, then a news-driven alert can be
generated.
For example, a running up on news story alert can be generated if the price or the average trading range (ATR) of a symbol or market-listed item changes by a certain amount within a pre-specified amount of time since the release, issue or receipt of the news report or story. For example, if within 10 minutes of the news story on a particular symbol, the price of the symbol increases by 50 cents (or some other user-specified or default amount) or increases by 10% of its average trading range (or some other user-specified or default percentage), an alert will be generated for the user based on the news story. Such an alert could include a reference, including a link, to the news story and will show the change in price or the change in the average trading range since the story. Other similar indicia of price or percentage increase can also be used, instead of (or in combination with) the price or the average trading range. Further, such a running up on news story alert can be generated only if within the 10-minute period since the news story (or within some other period of time) the symbol or other market-listed item has made one-minute highs or at least one one-minute high.

A similar running down on news story alert can also be generated in an analogous manner for when the symbol or market-listed item moves down since the news story. Thus, the running down on news story alert will generate an alert if within, for example, 10 minutes of a news story the symbol featured in the news story moves down 50 cents, or some other user-specified or default amount, or moves down a minimum percentage of its average trading range, and makes a one-minute low. It will be understood that the minimum price and the average trading range indicia of movement can be used individually or together in combination for generating the alert, that is, either they must be met individually or they must both be met for generating the alert. Similarly for the one-minute high or low.

Also contemplated is a news count feature which provides the user in the news-driven alert with the number of news stories or reports issued that day. Such a news count would include the number of news stories or reports from all sources available. Alternatively, the news count can keep track of the number of news sources reporting the news report or story about this symbol or market-listed item. Such a news count can provide the user with an idea of the import or effect of the news report or story as well as its freshness and hence relevance.
Also, the alert can specify the elapsed time since the most recent news story about this symbol to provide the user with an indication of whether this news story is old. In addition, the amount of time or the number of minutes between the recent story and the penultimate story about this symbol can also be provided to give the user an idea of whether the most recent story provides new information about the event or symbol.

[0074] It will be understood that more than one selection of the foregoing type selections may be designated if the user is interested in a variety of types of news. In connection with the upgrade/downgrade selection, the user may select coverage dropped, coverage initiated, coverage REIT/price target change, downgrades or upgrades via selection 124 to further limit the upgrades or downgrades that will serve as a basis for generating news-driven alerts. Similarly, brokerage selection 88 allows the user to designate the brokerages or firms handling the upgrades or downgrades in which the user is interested for generating news-driven alerts.

[0075] In addition to or instead of the selections made in the news-related interface showing Fig. 7, the user is able to specify other filters that would serve as the basis for generating news-driven alerts. Thus, the user can generate primary filters, such as volume or other criteria, which together with the signals designated in the symbol list selection 110 will control what news-driven alerts are generated when a news story or report is reported for the symbol. That is, for the selected symbol, an alert will be generated if a news story or report in connection with the symbol is reported and meets the criteria specified by the signals and/or filters selected. Thus the user is empowered to specify and receive alerts based on news-driven events limited to the symbols and/or signals and/or filters the user specifies.

[0076] In addition, the user may designate secondary filters in addition to the primary filters shown in Fig. 7, the secondary filters being drawn from the list shown in Fig. 2 or from other similar criteria. This provides improved granularity for user selection of the criteria upon which news-generated alerts are generated. This allows a trader to "trade the news" based on news-driven alerts that meet the trader's pre-specified criteria, and thus obviating the need to watch for or listen to market-related news while trading.
Also contemplated is an auto-trade feature by which the user could click on an alert received and be guided to a user interface page through which he could place an order or execute a trade. That is, to make the alert system provided by the interface more trader-friendly, alerts provided could be actionable. Thus, as shown in Fig. 3, user preference client 41 may be additionally connected to a trade server 39 to receive an order placed by the user through user interface 43 in response to the alert selected by user. Trade server 39 could be connected via the internet or via other electronic means to a brokerage for executing the trade.

In addition, also contemplated is a grey-box or black-box embodiment in which alerts would automatically result in trades. Upon providing an alert, user interface 43 would display a box by which the number of shares could be selected by the user, or other trade information could be supplied by the user as the basis for placing the order.

Alternatively, as part of selecting the signals, filters or other selection criteria, the user could also select the other trade information necessary for executing the trade. Then, when the criteria are met, the alert could be displayed but, in any case, the trade would automatically be executed without further input from the user.

Although the present disclosure has been described in relation to particular embodiments thereof, many other variations, modifications, combination of features, and other uses will become apparent to those skilled in the art. It is preferred, therefore, that the present disclosure be limited not by the specific disclosure herein, but only by the appended claim.
WHAT IS CLAIMED IS:

1. A processor readable medium incorporating a program of instructions for providing a user alert based on market data, the program comprising:

   instructions operable to receive a first user selection of a first market event setting designating a market event, the market event comprising a market item at at least one of a predefined value, predefined ratio, predefined range, predefined average, aggregate value, aggregate ratio or aggregate range;

   instructions operable to receive user input specifying a maximum period of time;

   instructions operable to receive a first market signal corresponding to the first market event occurring at a first moment in time at a first value and to receive a second market signal corresponding to the first market event occurring at a second moment in time at a second value, the first moment in time being before the second moment in time, the second value being different from the first value; and

   instructions operable to generate and to provide the user alert only when the second moment in time occurs within the maximum period of time of the first moment in time.

2. The processor readable medium of claim 1, wherein the instructions for receiving the user input specifying the maximum period of time are operative to receive the maximum period of time specified in seconds by a user.

3. The processor readable medium of claim 1, further comprising:

   instructions operable to provide a user interface configured to provide the user alert, the user interface including a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to a market event, and further including a plurality of filter values, each filter value of the plurality of filter values specifying one of a minimum value or a maximum value;
instructions operable to receive a first user selection of at least one market event setting of the plurality of market event settings;
instructions operable to receive a second user selection of a first filter value of the plurality of filter values; and
the instructions for generating and providing the user alert being operable to generate and to provide the user alert only if a third market signal indicating the market event corresponding to the at least one market event setting at the first filter value is received.

4. The processor readable medium of claim 3, wherein the first filter value is one of a dollar value, a percentage value or a quantity of securities value.

5. The processor readable medium of claim 3, further comprising:
instructions operable to receive a third user selection of a second filter value of the plurality of filter values; and
the instructions for generating and providing the user alert are operable to generate and to provide the user alert only if the third market signal indicates that the second filter value is also satisfied by the market event.

6. A processor readable medium incorporating a program of instructions for providing a user alert based on market data, the program comprising:
instructions operable to provide a user interface including a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to a market event, the market event being based on a market price, an aggregate market value, a market ratio, or a market price range, and the user interface further including a plurality of filter values, each filter value of the plurality of filter values specifying one of a minimum value or a maximum value;
instructions operable to receive a first user selection of at least one market event setting of the plurality of market event settings;
instructions operable to receive a second user selection of a first filter value;
instructions operable to receive a third user selection of a second filter value, the second filter value specifying a minimum period of time since a receipt of a first market signal indicating an occurrence of the at least one market event; and

instructions operable to generate and to provide the user alert only if both of the following conditions are true: (1) a second market signal indicating the market event corresponding to the at least one market event setting at the first filter value is received, and (2) the second market signal is received after the expiration of the period of time since the receipt of the first market signal.

7. The processor readable medium of claim 6, wherein the first filter value is one of a dollar value, a percentage value or a quantity of securities value.

8. The processor readable medium of claim 6, wherein the period of time is an interday interval expressed in a number of days or weeks.

9. The processor readable medium of claim 6, wherein the period of time is an intraday interval expressed in seconds or minutes.

10. A processor readable medium incorporating a program of instructions for providing a user alert based on news data received from a news source and relating to a market symbol for an item exchanged on a market, the program comprising:

instructions operable to receive a first user selection of a first market event setting designating an event based on a market condition;

instructions operable to receive market data relating to the first market event;

instructions operable to receive the news data; and

instructions operable to generate and to provide the user alert only when the market data indicate that the first market event has occurred and relate to the market symbol indicated by the news data received.
11. The processor readable medium of claim 10, further comprising:

instructions operable to receive a news filter user selection comprising at least one of a stock upgrade, a stock downgrade, a securities dividends or earnings report, a report of a corporate takeover or merger, a report of a corporate acquisition, a report of a corporate bankruptcy, a report of a corporate product release, a report of a corporate product change in market share, or a report of a rumor regarding a corporation,

wherein the instructions for generating and providing the user alert are operable to generate and to provide the user alert only if the news data indicate an event related to the news filter.

12. The processor readable medium of claim 10, further comprising:

instructions operable to receive as a second user selection of the market symbol,

wherein the instructions for generating and providing the user alert are operable to generate and to provide the user alert only when the market event specified relates to the market symbol.

13. The processor readable medium of claim 10, further comprising:

instructions operable to receive as a filter user selection a second market event setting corresponding to a market event based on a market price, an aggregate market value, a market ratio, or a market price range,

wherein the instructions for generating and providing the user alert are operable to generate and to provide the user alert only when the market data indicate an occurrence of the second market event is received.

14. The processor readable medium of claim 10, further comprising:

instructions operable to provide a user interface configured to provide the user alert, the user interface including the plurality of news filters, each news filter being user selectable from the plurality of news filters.
15. The processor readable medium of claim 10, wherein the instructions for generating and providing the user alert are further operable to provide in the user alert a live link directly linking to a news release including the corporate event.

16. A processor readable medium incorporating a program of instructions for providing a user alert based on business news data received from a news source, the program comprising:
   instructions operable to receive as a first user selection a market symbol specifying a market-listed item;
   instructions operable to generate and to provide the user alert only when the business news data is received indicating news regarding the market symbol.

17. The processor readable medium of claim 16, further comprising:
   instructions operable to receive as a second user selection a market event setting indicating an occurrence of an event on a market relating to the market symbol; and
   the instructions for generating and providing the user alert operable to generate and to provide the user alert only when the business news data indicates an occurrence of the market event.

18. The processor readable medium of claim 17, wherein the second user selection specifying a market event relates to at least one of a stock upgrade, a stock downgrade, a securities dividends or earnings report, a report of a corporate takeover or merger, a report of a corporate acquisition, a report of a corporate bankruptcy, a report of a corporate product release, a report of a corporate product change in market share, or a report of a rumor regarding a corporation.

19. The processor readable medium of claim 16, further comprising:
   instructions operable to receive as a maximum count setting a maximum number of times that an alert is to be generated for the market symbol; and
the instructions for generating and providing the user alert operable to

generate and to provide the user alert for the market symbol the maximum number of
times indicated by the maximum count setting.

20. The processor readable medium of claim 16, further comprising:
instructions operable to receive as a minimum count setting a minimum
number of times that an alert is to be generated for the market symbol; and
the instructions for generating and providing the user alert operable to
generate and to provide the user alert for the market symbol the minimum number of
times indicated by the minimum count setting.

21. The processor readable medium of claim 16, further comprising:
instructions operable to provide a user interface configured to provide the user
alert, the user interface including a plurality of company events from which the company
event is user selectable.

22. The processor readable medium of claim 16, wherein the instructions for
generating and providing the user alert are further operable to include in the user alert a
live link directly linking to a news release including the corporate event.

23. The processor readable medium of claim 16, further comprising:
instructions operable to provide a user interface automatically providing a list
of market symbols that meet a user-specified condition;
instructions operable to receive as the market symbol selection at least one of
the market symbols from the list of market symbols.

24. The processor readable medium of claim 23, wherein the list of companies
comprises at least one of: a list of companies whose securities are recommended by a
market commentator; a list of companies whose stocks have been, are being, or will be
released as part of initial public offerings; a list of companies that are releasing earnings
reports within a user specified time period; a list of companies whose stocks are being downgraded; a list of companies whose stocks are being upgraded; a list of companies that have been mentioned within 24 hours in the business press; a list of companies of a user-specified industry or sector; a list of companies whose stocks are subject to a lockup period; or a list of companies that are subject to sympathy plays.

25. The processor readable medium of claim 16, further comprising:
instructions operable to receive as a filter user selection a second market event setting indicating an occurrence of a second market event relating to the market symbol; and
instructions operable to generate and to provide the user alert only when the second market event occurs.

26. The processor readable medium incorporating a program of instructions for providing a user alert based on news data, the program comprising:
instructions operable to receive from a news provider news data regarding a market-related entity; and
instructions operable to generate and to provide the user alert only when a trade volume of the market-related entity changes by a pre-specified amount or percentage or exceeds a pre-set threshold amount of trading volume.

27. The processor-readable medium of claim 26, wherein the alert is generated only if the change in the trade volume occurs within a pre-defined period of the receipt of the news data from the news provider.

28. The processor-readable medium of claim 26, wherein the alert is generated only when the change in the trade volume is accompanied by a change in price of the market-related entity by a pre-specified amount or percentage for the market-related entity.
29. The processor-readable medium of claim 26, wherein the alert includes a news count indicating a number of news reports, stories or sources reporting the news data for the market-related entity.

30. The processor-readable medium of claim 26, wherein the alert includes an indication of a number of minutes between a final news report and a penultimate news report.
1. A processor readable medium incorporating a program of instructions for providing a user alert based on market data received from an exchange data stream including data for a plurality of exchange-traded market items, the program comprising:

   instructions operable to receive, as a first user selection, a first market event setting designating a first market event, the first market event comprising a market item of the plurality of exchange-traded market items trading at at least one of a high value for a first predefined time designation, a low value for the first predefined time designation, a high value for an average or aggregate value for a second time designation, or a low value for the second time designation;

   instructions operable to receive user input specifying a maximum period of time;

   instructions operable to receive the market data comprising a first market signal corresponding to the first market event occurring at a first moment in time at a first value and to receive the market data comprising a second market signal corresponding to the first market event occurring at a second moment in time at a second value, the first moment in time being before the second moment in time, the second value being different from the first value; and

   instructions operable to generate and to provide the user alert only when the second moment in time occurs within the maximum period of time of the first moment in time.

2. The processor readable medium of claim 1, wherein the instructions for receiving the user input specifying the maximum period of time are operable to receive the maximum period of time specified in seconds by a user.

3. The processor readable medium of claim 1, further comprising:

   instructions operable to provide a user interface configured to provide the user alert, the user interface including a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to a respective market event,
instructions operable to receive, as a second user selection, a first filter value specifying one of a maximum value or a minimum value concerning the market event; and the instructions for generating and providing the user alert being operable to generate and to provide the user alert only if the market data comprising a third market signal is received indicating the market event corresponding to the at least one market event setting and occurring at the first filter value.

4. The processor readable medium of claim 3, wherein the first filter value is one of a dollar value, a percentage value or a quantity of securities value.

5. The processor readable medium of claim 3, further comprising: instructions operable to receive, as a third user selection, a second filter value specifying one of a maximum value or a minimum value concerning the market event; and the instructions for generating and providing the user alert are operable to generate and to provide the user alert only if the market data received indicates that the second filter value is also satisfied by the market event.

6. A processor readable medium incorporating a program of instructions for providing a user alert based on market data received from an exchange data stream including data for a plurality of exchange-traded market items, the program comprising:

instructions operable to provide a user interface including a plurality of market event settings, each market event setting of the plurality of market event settings corresponding to a market event, the market event being based on a market price, an aggregate market value, a market ratio, or a market price range, and the user interface further including a plurality of filter value settings, each filter value setting of the plurality of filter values settings configured to receive user input specifying one of a minimum value concerning the market event or a maximum value concerning the market event;

instructions operable to receive, as a first user selection, at least one market event setting of the plurality of market event settings;

instructions operable to receive, as a second user selection, a first filter value specifying one of the maximum value or the minimum value concerning the market event;
instructions operable to receive, as a third user selection, a second filter value, the second filter value specifying a minimum period of time that must elapse after a receipt of the market data comprising a first market signal indicating an occurrence of the at least one market event; and

instructions operable to generate and to provide the user alert only if both of the following conditions are true: (1) the market data comprising a second market signal indicating the market event corresponding to the at least one market event setting and occurring at the first filter value is received, and (2) the second market signal is received after the expiration of the period of time since the receipt of the first market signal.

7. The processor readable medium of claim 6, wherein the first filter value is one of a dollar value, a percentage value or a quantity of securities value.

8. The processor readable medium of claim 6, wherein the period of time is an interday interval expressed in a number of days or weeks.

9. The processor readable medium of claim 6, wherein the period of time is an intraday interval expressed in seconds or minutes.

10. A processor readable medium incorporating a program of instructions for providing a user alert based on market data received from an exchange data stream and comprising data for a plurality of exchange-traded market items, and based on news data received from a news source, the news data comprising a business news story, a business news article, a company financial filing, a government report, or a press release involving a market symbol for a market item exchanged on an exchange, the program comprising:

    instructions operable to receive, as a first user selection, a first market event setting designating an event based on a market condition;

    instructions operable to receive the market data including data relating to the first market event;

    instructions operable to receive the news data; and
instructions operable to generate and to provide the user alert only when the market data indicate that the first market event has occurred and relates to the market symbol indicated by the news data received.

11. The processor readable medium of claim 10, further comprising:

instructions operable to receive, as a news filter, a user selection comprising at least one of a stock upgrade, a stock downgrade, a securities dividends or earnings report, a report of a corporate takeover or merger, a report of a corporate acquisition, a report of a corporate bankruptcy, a report of a corporate product release, a report of a corporate product change in market share, or a report of a rumor regarding a corporation,

wherein the instructions for generating and providing the user alert are operable to generate and to provide the user alert only when the news data indicate an event related to the news filter.

12. The processor readable medium of claim 10, further comprising:

instructions operable to receive as a second user selection of the market symbol, wherein the instructions for generating and providing the user alert are operable to generate and to provide the user alert only when the market event specified relates to the market symbol.

13. The processor readable medium of claim 10, further comprising:

instructions operable to receive as a filter user selection a second market event setting corresponding to a market event based on a market price, an aggregate market value, a market ratio, or a market price range,

wherein the instructions for generating and providing the user alert are operable to generate and to provide the user alert only when the market data indicate an occurrence of the second market event is received.

14. The processor readable medium of claim 10, further comprising:

instructions operable to provide a user interface configured to provide the user alert, the user interface including the plurality of news filters, each news filter being user selectable from the plurality of news filters.
15. The processor readable medium of claim 10, wherein the instructions for generating and providing the user alert are further operable to provide in the user alert a live link directly linking to a news release including the corporate event.

16. A processor readable medium incorporating a program of instructions for providing a user alert based on business news data received from a news source, the business news data comprising a business news story, a business news article, a company financial filing, a government report, or a press release involving a market symbol for a market item exchanged on an exchange, and the news source being a news source other than market data received from an exchange data stream, the program comprising:

   instructions operable to receive as a first user selection a market symbol specifying a market-listed item;
   instructions operable to generate and to provide the user alert only when the business news data is received indicating news regarding the market symbol.

17. The processor readable medium of claim 16, further comprising:

   instructions operable to receive as a second user selection a market event setting indicating an occurrence of an event on a market relating to the market symbol; and
   the instructions for generating and providing the user alert operable to generate and to provide the user alert only when the business news data indicates an occurrence of the market event.

18. The processor readable medium of claim 17, wherein the second user selection specifying a market event relates to at least one of a stock upgrade, a stock downgrade, a securities dividends or earnings report, a report of a corporate takeover or merger, a report of a corporate acquisition, a report of a corporate bankruptcy, a report of a corporate product release, a report of a corporate product change in market share, or a report of a rumor regarding a corporation.

19. The processor readable medium of claim 16, further comprising:

   instructions operable to receive as a maximum count setting a maximum number of times that an alert is to be generated for the market symbol; and
the instructions for generating and providing the user alert operable to generate and to provide the user alert for the market symbol the maximum number of times indicated by the maximum count setting.

20. The processor readable medium of claim 16, further comprising:
instructions operable to receive as a minimum count setting a minimum number of times that an alert is to be generated for the market symbol; and
the instructions for generating and providing the user alert operable to generate and to provide the user alert for the market symbol the minimum number of times indicated by the minimum count setting.

21. The processor readable medium of claim 16, further comprising:
instructions operable to provide a user interface configured to provide the user alert, the user interface including a plurality of company events from which the company event is user selectable.

22. The processor readable medium of claim 16, wherein the instructions for generating and providing the user alert are further operable to include in the user alert a live link directly linking to a news release including the corporate event.

23. The processor readable medium of claim 16, further comprising:
instructions operable to provide a user interface automatically providing a list of market symbols that meet a user-specified condition;
instructions operable to receive as the market symbol selection at least one of the market symbols from the list of market symbols.

24. The processor readable medium of claim 23, wherein the list of companies comprises at least one of: a list of companies whose securities are recommended by a market commentator; a list of companies whose stocks have been, are being, or will be released as part of initial public offerings; a list of companies that are releasing earnings reports within a user specified time period; a list of companies whose stocks are being downgraded; a list of companies whose stocks are being upgraded; a list of companies that have been mentioned
within 24 hours in the business press; a list of companies of a user-specified industry or sector; a list of companies whose stocks are subject to a lockup period; or a list of companies that are subject to sympathy plays.

25. The processor readable medium of claim 16, further comprising:
   instructions operable to receive as a filter user selection a second market event setting indicating an occurrence of a second market event relating to the market symbol; and
   instructions operable to generate and to provide the user alert only when the second market event occurs.

26. The processor readable medium incorporating a program of instructions for providing a user alert based on news data, the program comprising:
   instructions operable to receive from a news provider news data, the news data comprising a business news story, a business news article, a company financial filing, a government report, or a press release involving a market-related entity; and
   instructions operable to receive market data from an exchange data stream including market signals for a plurality of exchange-traded market items including the market-related entity, and to generate and to provide the user alert only when a first market signal of the market data indicate that a trade volume of the market-related entity has changed by a pre-specified amount or percentage or has exceeded a pre-set threshold amount of trading volume.

27. The processor-readable medium of claim 26, wherein the alert is generated only if the change in the trade volume occurs within a pre-defined period of the receipt of the news data from the news provider.

28. The processor-readable medium of claim 26, wherein the alert is generated only when the change in the trade volume is accompanied by a change in price of the market-related entity by a pre-specified amount or percentage for the market-related entity.
29. The processor-readable medium of claim 26, wherein the alert includes a news count indicating a number of news reports, stories or sources reporting the news data for the market-related entity.

30. The processor-readable medium of claim 26, wherein the alert includes an indication of a number of minutes between a final news report and a penultimate news report.
Fig. 1

Signals | Filters | Exchanges & Lists | Scan Name | Minimum Day
---|---|---|---|---
10 | 20 | | |

12
☑ New High 0 Minimum Day
☑ New Low 0 Minimum Day

14
☐ At The High
☐ At The Low
☐ Cross Above 5 Minute Moving Average 7 ▼
☐ Cross Below 5 Minute Moving Average 7 ▼
☐ Cross Above 15 Minute Moving Average 7 ▼
☐ Cross Below 15 Minute Moving Average 7 ▼
☐ Cross Above 60 Minute Moving Average 7 ▼
☐ Cross Below 60 Minute Moving Average 7 ▼
☐ New 52 Week High
☐ New 52 Week Low
☐ New Pre Market High
☐ New Pre Market Low
☐ New Post Market High
☐ New Post Market Low
☐ At Pre/Post Market High
☐ At Pre/Post Market Low
☐ New 1 Minute Pre/Post High
☐ New 1 Minute Pre/Post Low
☐ New 3 Minute Pre/Post High
☐ New 3 Minute Pre/Post Low
☐ Consolidate
☐ New 10 Minute High
### Fig. 2

<table>
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<th>Exchanges &amp; Lists</th>
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<p>| 22      | Min Count: |                   |           |
|         | Max Count: |                   |           |
|         | Min Seconds: | 26 |   |           |
| 24      | Max Seconds: | 10 | Dollar |           |
|         | Min Price: |                   |           |
|         | Max Price: |                   |           |
|         | Min Spread: |                   |           |
|         | Max Spread: |                   |           |
|         | Min Float: | Shares            |           |
|         | Max Float: | Shares            |           |
|         | Min Shares Outstanding: | Shares |           |
|         | Max Shares Outstanding: | Shares |           |
|         | Min % Of Float Short: | % |           |
|         | Max % Of Float Short: | % |           |
|         | Min Bid Size: | Shares |           |
|         | Max Bid Size: | Shares |           |
|         | Min Ask Size: | Shares |           |
|         | Max Ask Size: | Shares |           |
|         | Min Current Volume: | Shares |           |
|         | Max Current Volume: | Shares |           |
| 28      | Min Average Daily Volume: | 200000 | Shares |           |
|         | Max Average Daily Volume: | Shares |           |
|         | Min Real Time Volume Multiple: | 1, 2, 3 |           |</p>
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Fig. 5

Signals  Filters  Exchanges & Lists  Scan Name

EXCHANGES:
☐ NYSE  ☑ NASDAQ

AND ONLY USE SYMBOLS FROM THE LISTS BELOW:

☐ Select Symbol List
☐ Earnings List
☑ Recent Ipos (3 Months)
☐ Mad Money Mentions:
☐ Upgrades/Downgrades:
☐ Coverage Dropped
☐ Coverage Initiated
☐ Coverage Reit/Price Target Ch
☐ Downgrades
☐ Upgrades

Days Back: 1  Days Forward: 1  1
Max Days Back: 7  7 (1 = Last Night)

Brokerage Firm:
☐ Am Tech/JSA Research
☐ Banc of America Sec
☐ BB&T Capital Mkts
☐ Bear Stearns
☐ Brean Murray
☐ Calyon Securities
☐ Cantor Fitzgerald
☐ Caris & Company
☐ CIBC Wrld Mkts
☐ Citigroup
☐ Credit Suisse
TIME SINCE PRESS RELEASE

ALL SOURCES  NO SOURCES

BUSINESS WIRE (BW)
PR NEWSWIRE (PR)
MARKET WIRE (MW)
THE FLY ON THE WALL (FW)
PRIME ZONE (PZ)
BRIEFING (BF)
10-K WIZARD (10-k)
CANADA NEWSWIRE (CN)
CCN MATTHEWS (CM)

ALL NEWS  NO NEWS

EARNINGS
UPGRADES/DOWNGRADES
FDA-PHARMACEUTICALS
RUMORS
AND ONLY USE SYMBOLS FROM THE LISTS BELOW:

Fig. 7

Select Symbol List

110

111

112

112a

112b

Yesterday:

113a

Days Back:

1

113b

Days Forward:

1

Tomorrow:

114

115

116

Pre Market

During

Post Market

Pre Market

During

Post Market

121

Recent Ipos (3 Months):

Coverage Dropped

Coverage Initiated

Coverage Reit/Price Target Ch

122

Mad Money Mentions:

Upgrades/Downgrades:

123

124

Check All

125

(1 = Last Night)
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US 09/00426

A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - 1 H04M 1/725 (2009 01)
USPC - 455/412 2

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 455/412 2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC 455/306, 353, 412 2, 420, 567, 557, 709/206, 725/42, 705/14, 707/10 (view search terms below)

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
PubWEST(USPT,PGPB,EPAB,JPAB), Google Scholar
Search Terms market, stock, user, alert, data, notification, condition, filter, real, time

C DOCUMENTS CONSIDERED TO BE RELEVANT

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<td>US 2004/0153453 A1 [BRODIE et al] 05 August 2004 (05 08 2004) entire document, especially Abstract, Fig 2H, 7-8, para [0018], [0040], [0042], [0045], [0063], [0070], [0073], [0077], [0087], [0090], [0101], [0104]-[0105]</td>
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D Further documents are listed in the continuation of Box C

* Special categories of cited documents
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  "O" document referring to an oral disclosure, use, exhibition or other means
  "P" document published prior to the international filing date but later than the priority date claimed
  "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
  "X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
  "Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
  "Z" document member of the same patent family

Date of the actual completion of the international search
03 March 2009 (03 03 2009)

Date of mailing of the international search report
10 MAR 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

Authorized officer
Lee W Young
PCT H[sp][a]sk 571 272-4300
PCT OSP 571 272 7774

Form PCT/ISA/210 (second sheet) (April 2007)