

distribute the additional information at a time that is common to all of the recipients so that each recipient may decipher (or decrypt) the data at substantially the same time as the other recipients. For example, once the system has distributed the data to each of the recipients, the system may provide the additional information to each of the recipients at substantially the same time.

[009] An exemplary use of the system relates to distribution of information for a market data update relating to a financial instrument to market participants. A market data update may indicate the prevailing supply and demand (e.g., as indicated by buy and/or sell orders in a CLOB) at a given time for a given instrument, that market participants may use to gauge whether to buy or sell the instrument.

[009A] In a first aspect, there is provided a computer implemented method of distributing credit-screened market data, the method being implemented in a computer system having one or more physical processors programmed with computer program instructions that, when executed by the one or more physical processors, cause the computer system to perform the method, the method comprising: obtaining, by the computer system, first market data, obtaining, by the computer system, credit data of each of a plurality of data recipients, including at least first credit data of a first data recipient and second credit data of a second data recipient; generating, by the computer system, first credit-screened market data for the first data recipient based on the first credit data and the first market data; generating, by the computer system, second credit-screened market data for the second data recipient based on the second credit data and the first market data; encrypting, by the computer system, at least a portion of the first market credit-screened data using an encryption key; encrypting, by the computer, at least a portion of the second credit-screened market data using the encryption key; transmitting, by the computer system, the encrypted first credit-screened market data to the first data recipient over an electronic communication network at a first time; transmitting, by the computer system, the encrypted second credit-screened market data to the second data recipient over the electronic communication network at a second time different than the first time; and transmitting, by the computer system, at a third time different than the first time and the second time, the encryption key simultaneously to the first data recipient and the second data

recipient.

[009B] In a second aspect, there is provided a system of distributing credit-screened market data, the system comprising: a computer system having one or more physical processors programmed with computer program instructions to: obtain first market data; obtain credit data of each of a plurality of data recipients, including at least first credit data of a first data recipient and second credit data of a second data recipient; generate first credit-screened market data for the first data recipient based on the first credit data and the first market data; generate second credit-screened market data for the second data recipient based on the second credit data and the first market data; encrypt at least a portion of the first credit-screened market data using an encryption key; encrypt at least a portion of the second credit-screened market data using the encryption key; transmit the encrypted first credit-screened market data to the first data recipient over an electronic communication network at a first time; transmit the encrypted second credit-screened market data to the second data recipient over the electronic communication network at a second time different than the first time; and transmit, at a third time different than the first time and the second time, the encryption key simultaneously to the first data recipient and the second data recipient.

[009C] In a third aspect, there is provided a computer readable storage device storing computer instructions for distributing credit screened market data, the instructions, when executed by one or more physical processors of a computer system, cause the computer system to: obtain first market data; obtain credit data of each of a plurality of data recipients, including at least first credit data of a first data recipient and second credit data of a second data recipient; generate first credit-screened market data for the first data recipient based on the first credit data and the first market data; generate second credit-screened market data for the second data recipient based on the second credit data and the first market data; encrypt at least a portion of the first credit-screened market data using an encryption key; encrypt at least a portion of the second credit-screened market data using the encryption key; transmit the encrypted first credit-screened market data to of the first data recipient over an electronic communication network at a

first time; transmit the encrypted second credit-screened market data to the second data recipient over the electronic communication network at a second time different than the first time; and transmit, at a third time different than the first time and the second time, the encryption key simultaneously to first data recipient and the second data recipient.

[010] In some instances, information from a market data update may be uniquely screened for a given market participant. For example, the system may determine a market participant's credit (e.g., ability to execute trades with other parties) and generate credit screened market data based on the market data update and the market participant's credit. The system may likewise perform such screening for other market participants using the market data update and the other market participants' credit. As such, credit screened market data based on a market data update may be generated for and distributed to a market participant sooner than other credit screened market data for another market participant. In these instances, the system may ensure that each market participant may access its own credit screened market data relating to an instrument only after other market participants have likewise received (or have been sent) their respective credit screened market data relating to the instrument.

[011] The systems and methods will be described herein with respect to credit screened market data for clarity of illustration and not limitation. For example, the system may be used in other contexts to ensure that data distributed to multiple recipients (whether or not completely unique to each recipient) and received at different times is made accessible at substantially the same time for all recipients. Furthermore, the system may be used to ensure that different data provided to a single recipient is accessible by that recipient at the same time. For instance, the system may provide first data to a recipient at a first time and second data to the recipient at a second time. Both the first data and the second data may be inaccessible without additional information. The system may provide the additional

CLAIMS

What is claimed is:

1. A computer implemented method of distributing credit-screened market data, the method being implemented in a computer system having one or more physical processors programmed with computer program instructions that, when executed by the one or more physical processors, cause the computer system to perform the method, the method comprising:
 - obtaining, by the computer system, first market data;
 - obtaining, by the computer system, credit data of each of a plurality of data recipients, including at least first credit data of a first data recipient and second credit data of a second data recipient;
 - generating, by the computer system, first credit-screened market data for the first data recipient based on the first credit data and the first market data;
 - generating, by the computer system, second credit-screened market data for the second data recipient based on the second credit data and the first market data;
 - encrypting, by the computer system, at least a portion of the first market credit-screened data using an encryption key;
 - encrypting, by the computer system, at least a portion of the second credit-screened market data using the encryption key;
 - transmitting, by the computer system, the encrypted first credit-screened market data to the first data recipient over an electronic communication network at a first time;
 - transmitting, by the computer system, the encrypted second credit-screened market data to the second data recipient over the electronic communication network at a second time different than the first time; and
 - transmitting, by the computer system, at a third time different than the first time and the second time, the encryption key simultaneously to the first data recipient and the second data recipient.
2. The method of claim 1, wherein the encryption key is transmitted to the first data recipient and the second data recipient utilizing a Multicast transport protocol.

3. The method of claim 2, wherein a respective copy of the encryption key is transmitted to the first data recipient and the second data recipient.
4. The method of claim 1, wherein the first market data varies includes price and quantity data for a given financial instrument.
5. The method of claim 1, wherein the encrypted portion of the first credit-screened market data cannot be deciphered by the first data recipient before the encryption key is transmitted by the computer system.
6. The method of claim 1, the method further comprising:
 - obtaining, by the computer system, second market data different from the first market data;
 - generating, by the computer system, third credit-screened market data for the first data recipient based on the second market data and the first credit data;
 - encrypting, by the computer system, at least a portion of third credit-screened market data using a second encryption key different than the encryption key; and
 - transmitting, by the computer system, the third credit-screened market data to the first data recipient.
7. The method of claim 1, wherein the encrypted first credit-screened market data is transmitted based on a predetermined time to be transmitted.
8. The method of claim 1, the method further comprising:
 - decrypting the encrypted portion of the first credit-screened market data utilizing the transmitted encryption key; and
 - displaying at least the decrypted portion of the first credit-screened market data on a display device.
9. A system of distributing credit-screened market data, the system comprising:

a computer system having one or more physical processors programmed with computer program instructions to:

obtain first market data;

obtain credit data of each of a plurality of data recipients, including at least first credit data of a first data recipient and second credit data of a second data recipient;

generate first credit-screened market data for the first data recipient based on the first credit data and the first market data;

generate second credit-screened market data for the second data recipient based on the second credit data and the first market data;

encrypt at least a portion of the first credit-screened market data using an encryption key;

encrypt at least a portion of the second credit-screened market data using the encryption key;

transmit the encrypted first credit-screened market data to the first data recipient over an electronic communication network at a first time;

transmit the encrypted second credit-screened market data to the second data recipient over the electronic communication network at a second time different than the first time; and

transmit, at a third time different than the first time and the second time, the encryption key simultaneously to the first data recipient and the second data recipient.

10. The system of claim 9, wherein the encryption key is transmitted to the first data recipient and the second data recipient utilizing a Multicast transport protocol.

11. The system of claim 10, wherein a respective copy of the encryption key is transmitted to the first data recipient and the second data recipient.

12. The system of claim 9, wherein the first market data includes price and quantity data for a given financial instrument.

13. The system of claim 9, wherein the encrypted portion of the first credit-screened market data cannot be deciphered by the first data recipient before the encryption key is transmitted by the computer system.
14. The system of claim 10, wherein the computer system is further programmed to:
obtain second market data different from the first market data;
generate third credit-screened market data for the first data recipient based on the second market data and the first credit data;
encrypt at least a portion of the third credit-screened market data using a second encryption key different than the encryption key; and
transmit the third credit-screened market data to the first data recipient.
15. The system of claim 9, wherein the encrypted first credit-screened market data is transmitted based on a predetermined time to be transmitted.
16. The system of claim 9, wherein the computer system is further programmed to:
decrypt the encrypted portion of the first credit-screened market data utilizing the transmitted encryption key; and
display at least the decrypted portion of the first credit-screened market data on a display device.
17. A computer readable storage device storing computer instructions for distributing credit screened market data, the instructions, when executed by one or more physical processors of a computer system, cause the computer system to:
obtain first market data;
obtain credit data of each of a plurality of data recipients, including at least first credit data of a first data recipient and second credit data of a second data recipient;
generate first credit-screened market data for the first data recipient based on the first credit data and the first market data;

generate second credit-screened market data for the second data recipient based on the second credit data and the first market data;

encrypt at least a portion of the first credit-screened market data using an encryption key;

encrypt at least a portion of the second credit-screened market data using the encryption key;

transmit the encrypted first credit-screened market data to of the first data recipient over an electronic communication network at a time;

transmit the encrypted second credit-screened market data to the second data recipient over the electronic communication network at a second time different than the first time; and

transmit, at a third time different than the first time and the second time, the encryption key simultaneously to the first data recipient and the second data recipient.

18. The non-transitory computer readable storage device of claim 17, wherein the encryption key is transmitted to first data recipient and the second data recipient utilizing a Multicast transport protocol.

19. The method of claim 1, the method further comprising:

receiving, by the computer system, from the first data recipient, a first indication that the first data recipient received the first credit-screened market data; and

receiving, by the computer system, from the second data recipient, a second indication that the second data recipient received the second credit-screened market data;

wherein the encryption key is transmitted to the first data recipient and the second data recipient at the third time responsive to receipt of the first indication and the second indication.

20. The method of claim 1, the method further comprising:

receiving, by the computer system, from the first data recipient, a first indication that the first data recipient received the first credit-screened market data;

determining, by the computer system, that a predetermined time period has elapsed without receiving a second indication from the second data recipient that the second data recipient received the second credit-screened market data;

re-transmitting, by the computer system, the second credit-screened market data to the second data recipient responsive to the determination that the predetermined time period has elapsed without receiving the second indication;

delaying, by the computer system, transmission of the encryption key to the first data recipient and the second data recipient until the second indication is received; and

receiving, by the computer system, the second indication from the second data recipient;

wherein the encryption key is transmitted to the to the first data recipient and the second data recipient in response to receipt of the first indication and the second indication.

21. The method of claim 1, the method further comprising:

receiving, by the computer system, a first confirmation that the first credit-screened market data has been transmitted to the first data recipient; and

receiving, by the computer system, a second confirmation that the second credit-screened market data has been transmitted to the second data recipient;

wherein the encryption key is transmitted to the first data recipient and the second data recipient at the third time responsive to receipt of the first confirmation and the second confirmation.