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(43) Pub. Date: Jul. 4, 2002

Calo et al.

(54) GLOBAL TRADING SYSTEM

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Related U.S. Application Data

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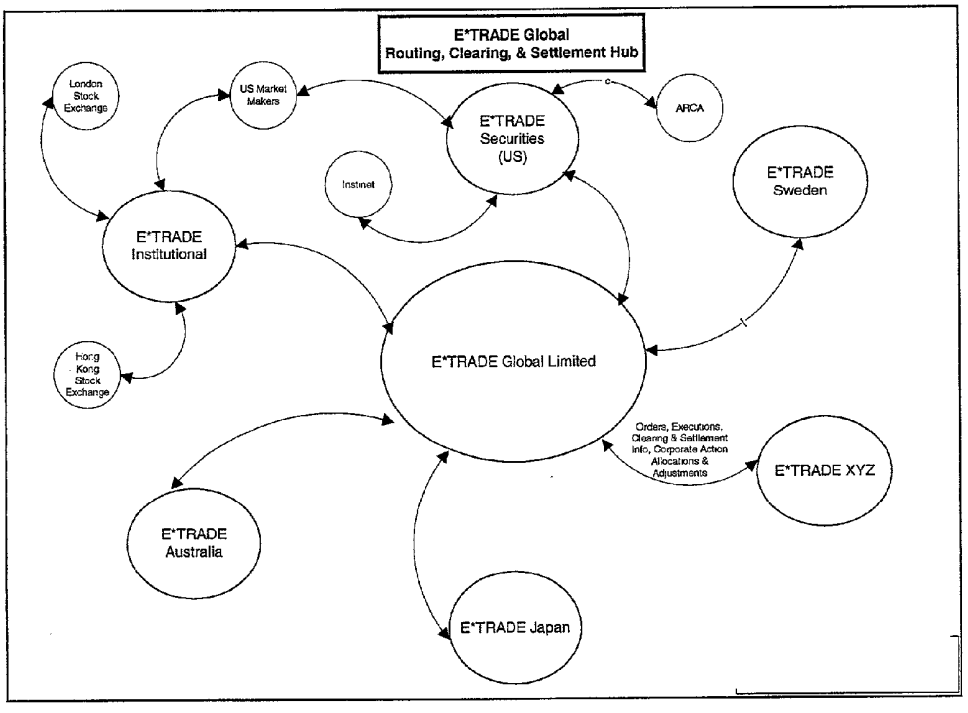
Publication Classification

(51) **Int. Cl.**[7] **G06F 17/60**

(52) **U.S. Cl.** **705/37**

(57) **ABSTRACT**

A computerized trading system permits trading across international boundaries. The system preferably includes multiple affiliates at the local level, each in a different country, that act as either introducing or executing agents. Between these local affiliates there is a global hub, with the local affiliates and the global hub being arranged in a hub-and-spoke arrangement. Introducing affiliates are responsible for handling customer accounts and information, and accepting transaction orders. Executing affiliates are responsible for executing the transaction orders for, e.g., equity trades in a local stock exchange. The global hub is responsible for routing orders and handling associated foreign exchange transactions to convert one currency into another.



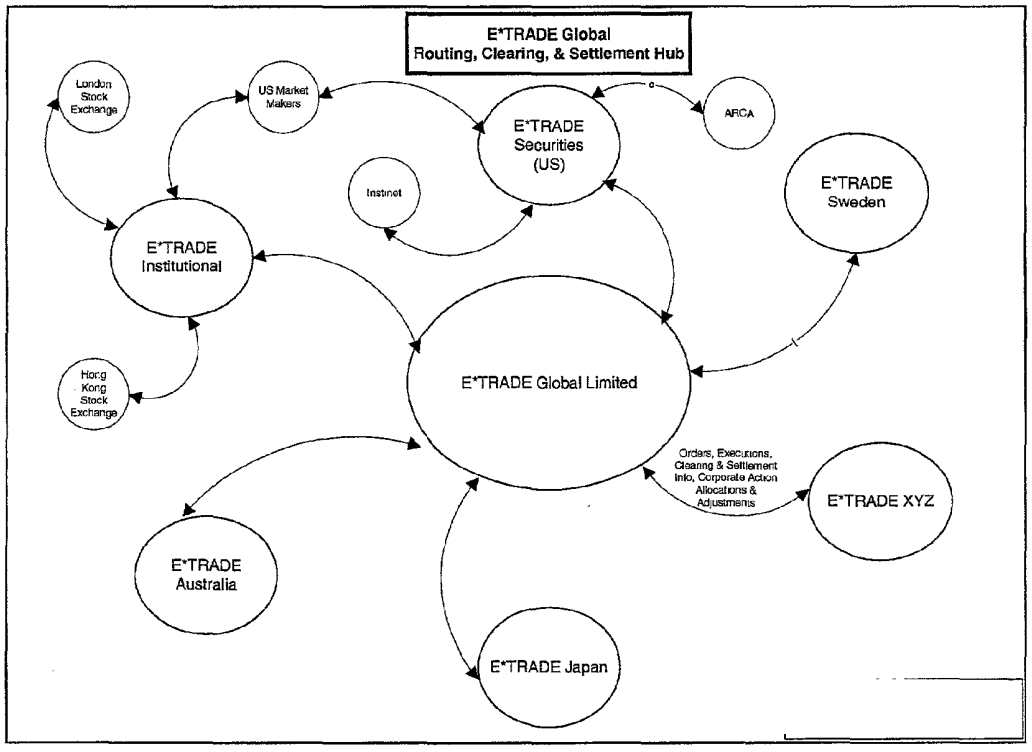

E*TRADE Global
Routing, Clearing, & Settlement Hub
London Stock Exchange
US Market Makers
E*TRADE Securities (US)
ARCA
Instinet
E*TRADE Sweden
E*TRADE Institutional
Hong Kong Stock Exchange
E*TRADE Global Limited
Orders, Executions, Clearing & Settlement Info, Corporate Action Allocations & Adjustments
E*TRADE XYZ
E*TRADE Australia
E*TRADE Japan

FIGURE 1

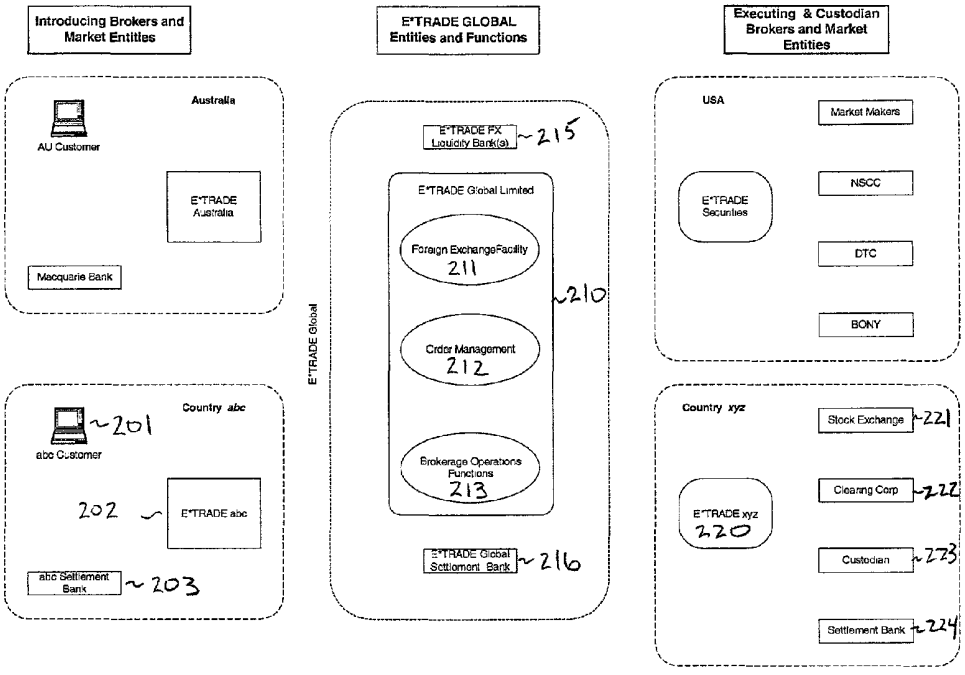

Introducing Brokers and Market Entities
E*TRADE GLOBAL Entities and Functions
Executing & Custodian Brokers and Market Entities
Australia
AU Customer
E*TRADE Australia
Macquarie Bank
Country abc
201
abc Customer
202
E*TRADE abc
abc Settlement Bank
203
E*TRADE Global
E*TRADE FX Liquidity Bank(s)
215
E*TRADE Global Limited
Foreign ExchangeFacility
211
210
Order Management
212
Brokerage Operations Functions
213
E*TRADE Global Settlement Bank
216
USA
Market Makers
E*TRADE Securities
NSCC
DTC
BONY
Country xyz
Stock Exchange
221
Clearing Corp
222
E*TRADE xyz
220
Custodian
223
Settlement Bank
224

FIGURE 2

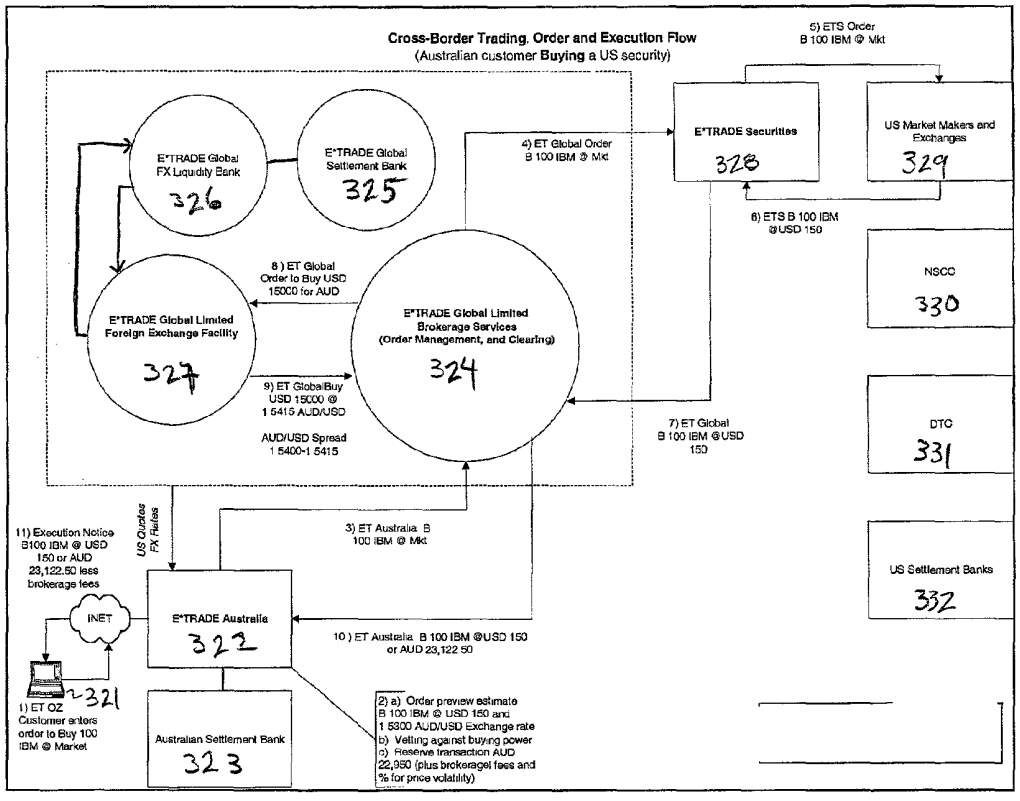

Cross-Border Trading, Order and Execution Flow
(Australian customer Buying a US security)
E*TRADE Global FX Liquidity Bank
326
E*TRADE Global Settlement Bank
325
E*TRADE Global Limited Foreign Exchange Facility
327
E*TRADE Global Limited Brokerage Services (Order Management, and Clearing)
324
E*TRADE Securities
328
US Market Makers and Exchanges
329
NSCC
330
DTC
331
US Settlement Banks
332
E*TRADE Australia
322
Australian Settlement Bank
323
INET
321
1) ET OZ Customer enters order to Buy 100 IBM @ Market
2) a) Order preview estimate B 100 IBM @ USD 150 and 1 5300 AUD/USD Exchange rate b) Vetting against buying power c) Reserve transaction AUD 22,950 (plus brokerage fees and % for price volatility)
3) ET Australia B 100 IBM @ Mkt
4) ET Global Order B 100 IBM @ Mkt
5) ETS Order B 100 IBM @ Mkt
6) ETS B 100 IBM @USD 150
7) ET Global B 100 IBM @USD 150
8) ET Global Order to Buy USD 15000 for AUD
9) ET Global Buy USD 15000 @ 1 5415 AUD/USD
AUD/USD Spread 1 5400-1 5415
10) ET Australia B 100 IBM @USD 150 or AUD 23,122 50
11) Execution Notice B100 IBM @ USD 150 or AUD 23,122.50 less brokerage fees
US Quotes FX Rates

FIGURE 3A

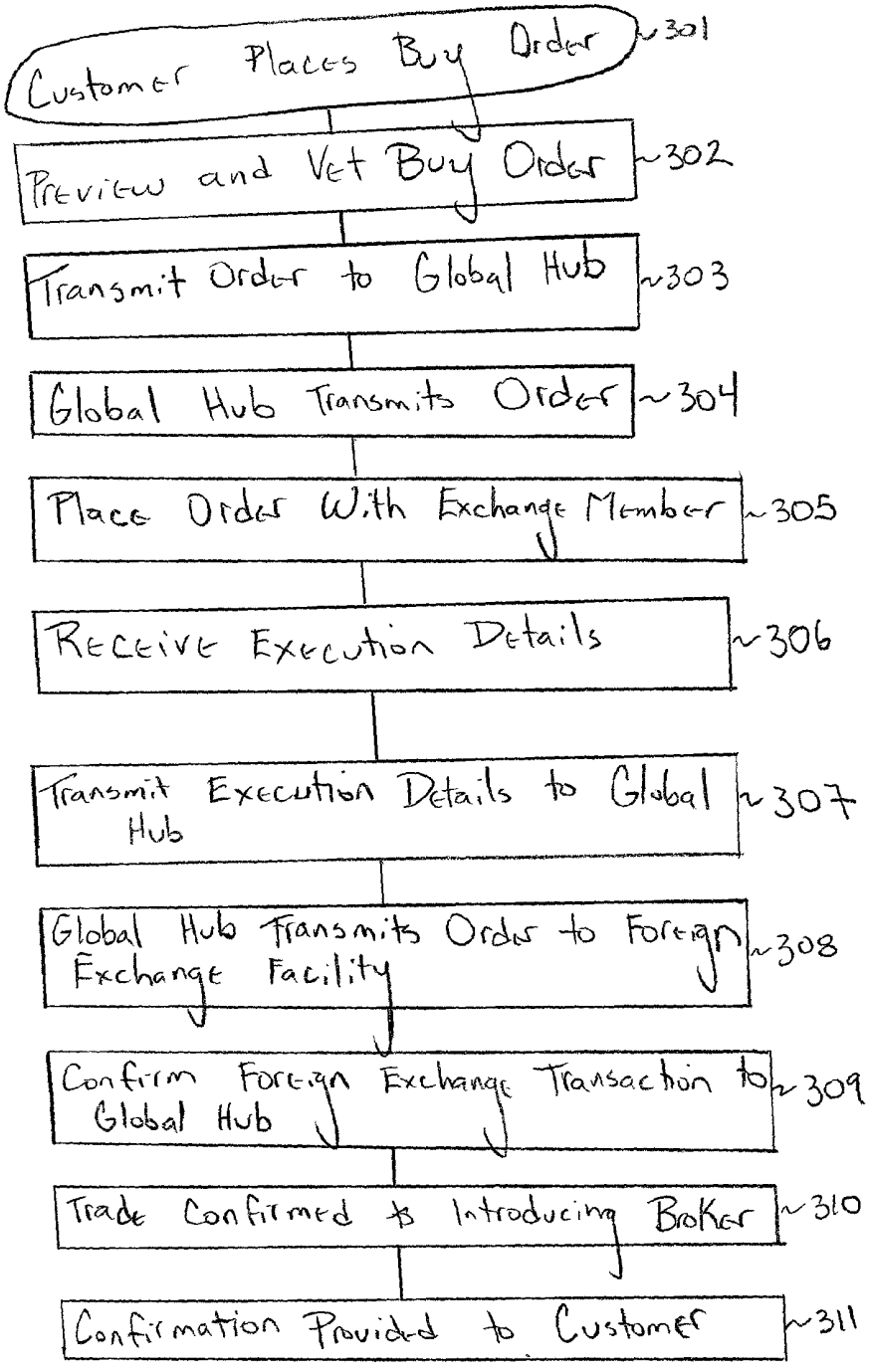

Customer Places Buy Order
301
Preview and Vet Buy Order
302
Transmit Order to Global Hub
303
Global Hub Transmits Order
304
Place Order With Exchange Member
305
Receive Execution Details
306
Transmit Execution Details to Global Hub
307
Global Hub Transmits Order to Foreign Exchange Facility
308
Confirm Foreign Exchange Transaction to Global Hub
309
Trade Confirmed to Introducing Broker
310
Confirmation Provided to Customer
311

FIGURE 3B

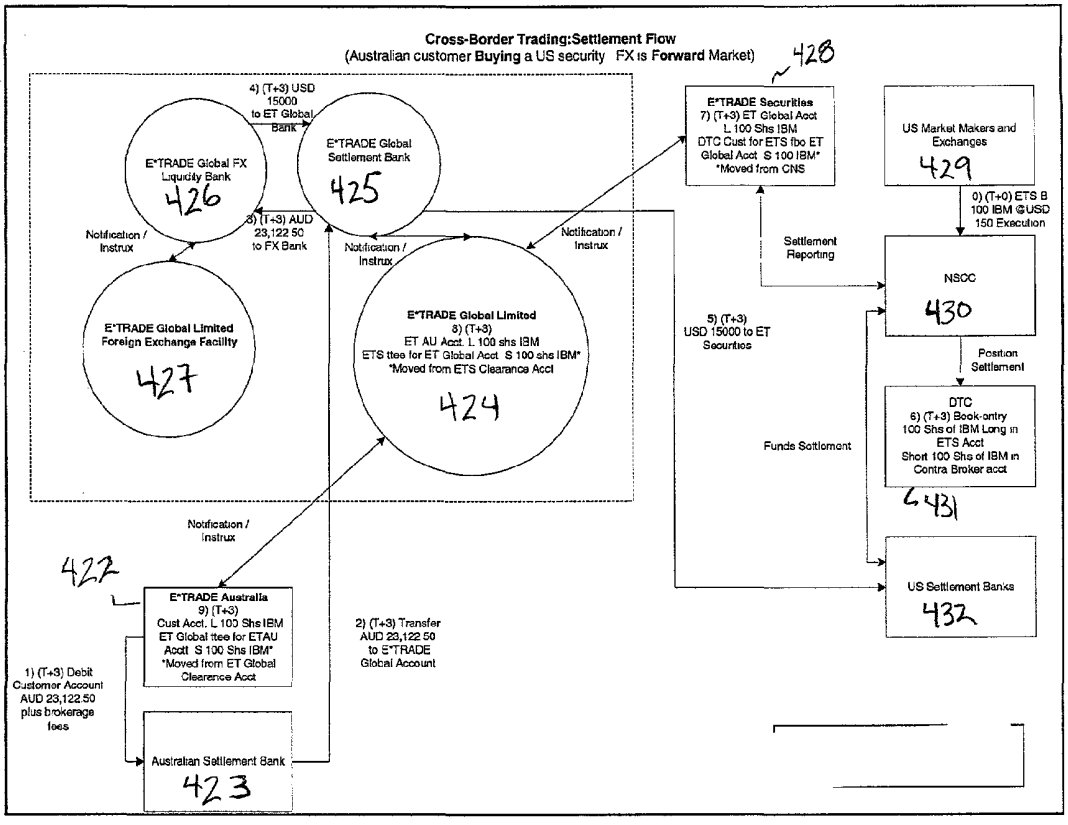

Cross-Border Trading:Settlement Flow
(Australian customer Buying a US security FX is Forward Market)
428
4) (T+3) USD 15000 to ET Global Bank
E*TRADE Global FX Liquidity Bank
426
E*TRADE Global Settlement Bank
425
3) (T+3) AUD 23,122 50 to FX Bank
Notification / Instrux
Notification / Instrux
Notification / Instrux
E*TRADE Global Limited Foreign Exchange Facility
427
E*TRADE Global Limited
8) (T+3)
ET AU Acct. L 100 shs IBM
ETS ttee for ET Global Acct S 100 shs IBM*
*Moved from ETS Clearance Acct
424
E*TRADE Securities
7) (T+3) ET Global Acct
L 100 Shs IBM
DTC Cust for ETS fbo ET Global Acct S 100 IBM*
*Moved from CNS
US Market Makers and Exchanges
429
0) (T+0) ETS B 100 IBM @USD 150 Execution
Settlement Reporting
NSCC
430
5) (T+3) USD 15000 to ET Securities
Position Settlement
DTC
6) (T+3) Book-entry
100 Shs of IBM Long in ETS Acct
Short 100 Shs of IBM in Contra Broker acct
431
Funds Settlement
US Settlement Banks
432
Notification / Instrux
422
E*TRADE Australia
9) (T+3)
Cust Acct. L 100 Shs IBM
ET Global ttee for ETAU Acct S 100 Shs IBM*
*Moved from ET Global Clearance Acct
2) (T+3) Transfer AUD 23,122 50 to E*TRADE Global Account
1) (T+3) Debit Customer Account AUD 23,122.50 plus brokerage fees
Australian Settlement Bank
423

FIGURE 4A

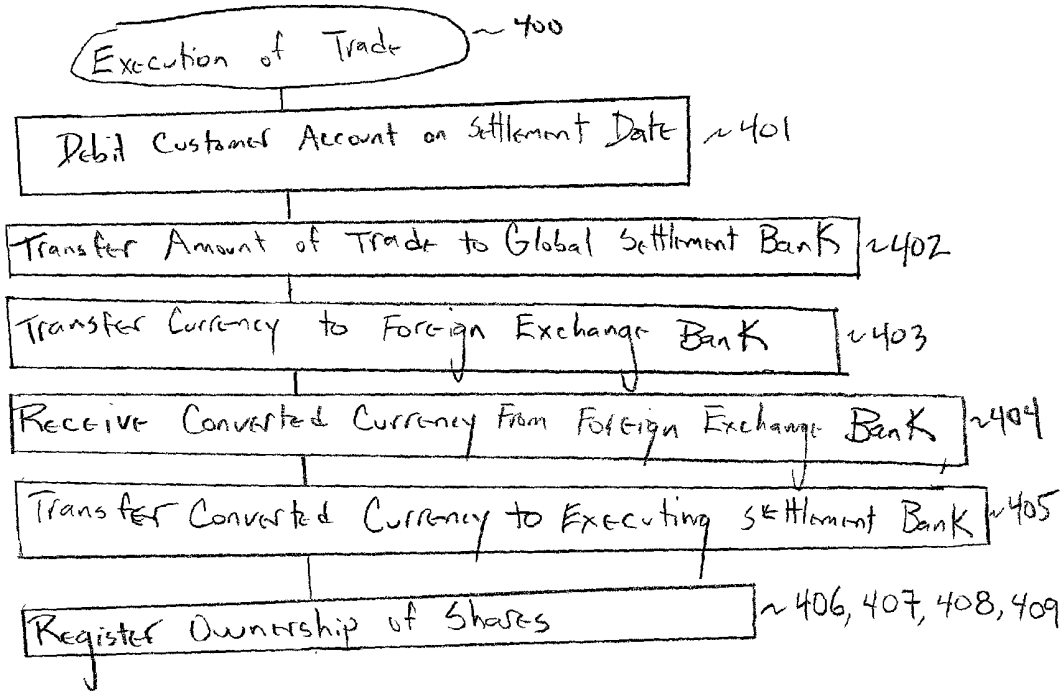

Execution of Trade
400
Debit Customer Account on Settlement Date
401
Transfer Amount of Trade to Global Settlement Bank
402
Transfer Currency to Foreign Exchange Bank
403
Receive Converted Currency From Foreign Exchange Bank
404
Transfer Converted Currency to Executing Settlement Bank
405
Register Ownership of Shares
406, 407, 408, 409

FIGURE 4B

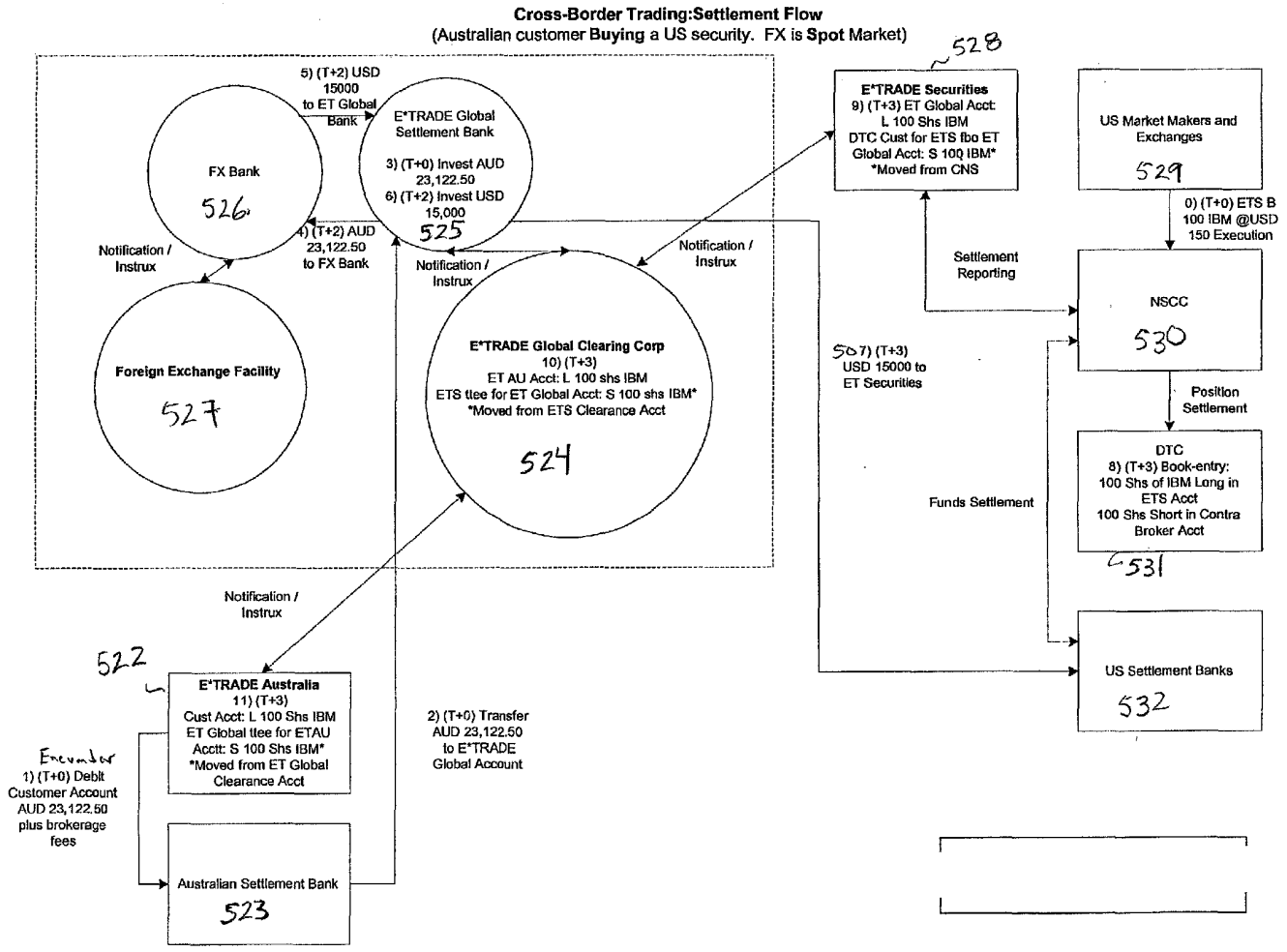

Cross-Border Trading:Settlement Flow
(Australian customer Buying a US security. FX is Spot Market)
528
E*TRADE Securities
9) (T+3) ET Global Acct: L 100 Shs IBM DTC Cust for ETS fbo ET Global Acct: S 100 IBM* *Moved from CNS
US Market Makers and Exchanges
529
0) (T+0) ETS B 100 IBM @USD 150 Execution
5) (T+2) USD 15000 to ET Global Bank
E*TRADE Global Settlement Bank
3) (T+0) Invest AUD 23,122.50
6) (T+2) Invest USD 15,000
525
FX Bank
526
4) (T+2) AUD 23,122.50 to FX Bank
Notification / Instrux
Notification / Instrux
Notification / Instrux
Settlement Reporting
NSCC
530
Foreign Exchange Facility
527
E*TRADE Global Clearing Corp
10) (T+3)
ET AU Acct: L 100 shs IBM
ETS tlee for ET Global Acct: S 100 shs IBM*
*Moved from ETS Clearance Acct
524
507) (T+3) USD 15000 to ET Securities
Position Settlement
DTC
8) (T+3) Book-entry: 100 Shs of IBM Long in ETS Acct 100 Shs Short in Contra Broker Acct
531
Funds Settlement
Notification / Instrux
522
E*TRADE Australia
11) (T+3)
Cust Acct: L 100 Shs IBM
ET Global tlee for ETAU Acctt: S 100 Shs IBM*
*Moved from ET Global Clearance Acct
US Settlement Banks
532
2) (T+0) Transfer AUD 23,122.50 to E*TRADE Global Account
Encumber
1) (T+0) Debit Customer Account AUD 23,122.50 plus brokerage fees
Australian Settlement Bank
523

FIGURE 5A

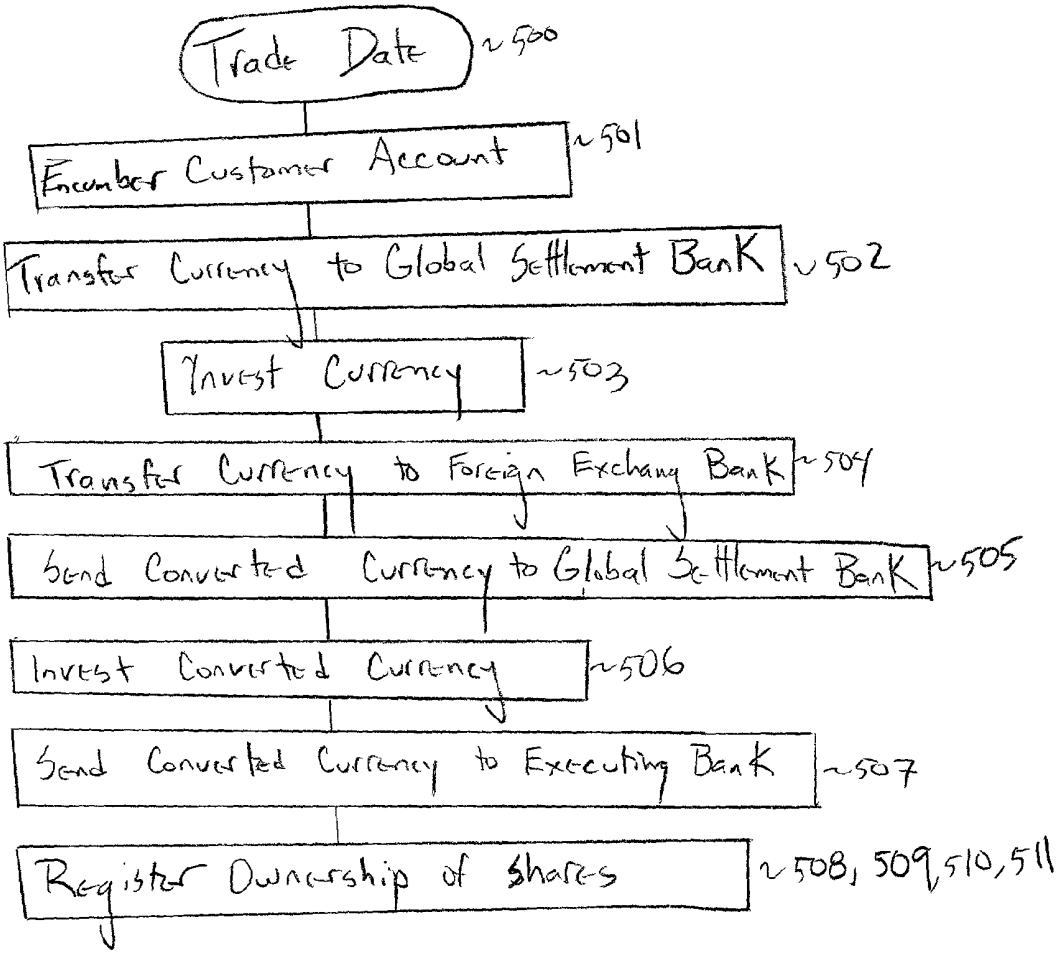

Trade Date
500
Encumber Customer Account
501
Transfer Currency to Global Settlement Bank
502
Invest Currency
503
Transfer Currency to Foreign Exchang Bank
504
Send Converted Currency to Global Settlement Bank
505
Invest Converted Currency
506
Send Converted Currency to Executing Bank
507
Register Ownership of Shares
508, 509, 510, 511

FIGURE 5B

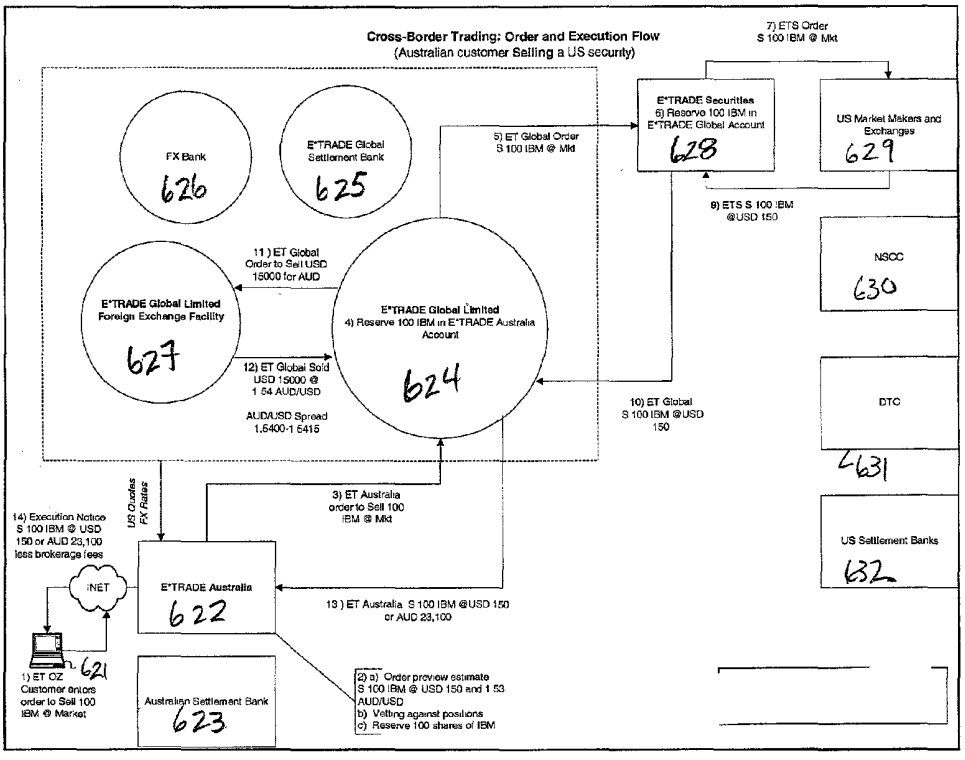

Cross-Border Trading: Order and Execution Flow
(Australian customer Selling a US security)
7) ETS Order
S 100 IBM @ Mkt
E*TRADE Securities
6) Reserve 100 IBM in
E*TRADE Global Account
628
US Market Makers and
Exchanges
629
FX Bank
626
E*TRADE Global
Settlement Bank
625
5) ET Global Order
S 100 IBM @ Mkt
8) ETS S 100 IBM
@USD 150
NSCC
630
11) ET Global
Order to Sell USD
15000 for AUD
E*TRADE Global Limited
Foreign Exchange Facility
627
E*TRADE Global Limited
4) Reserve 100 IBM in E*TRADE Australia
Account
624
12) ET Global Sold
USD 15000 @
1 54 AUD/USD
AUD/USD Spread
1.5400-1 5415
10) ET Global
S 100 IBM @USD
150
DTC
631
US Quotes
FX Rates
3) ET Australia
order to Sell 100
IBM @ Mkt
14) Execution Notice
S 100 IBM @ USD
150 or AUD 23,100
less brokerage fees
US Settlement Banks
632
iNET
E*TRADE Australia
622
13) ET Australia S 100 IBM @USD 150
or AUD 23,100
621
1) ET OZ
Customer enters
order to Sell 100
IBM @ Market
Australian Settlement Bank
623
2) a) Order preview estimate
S 100 IBM @ USD 150 and 1 53
AUD/USD
b) Vetting against positions
c) Reserve 100 shares of IBM

FIGURE 6A

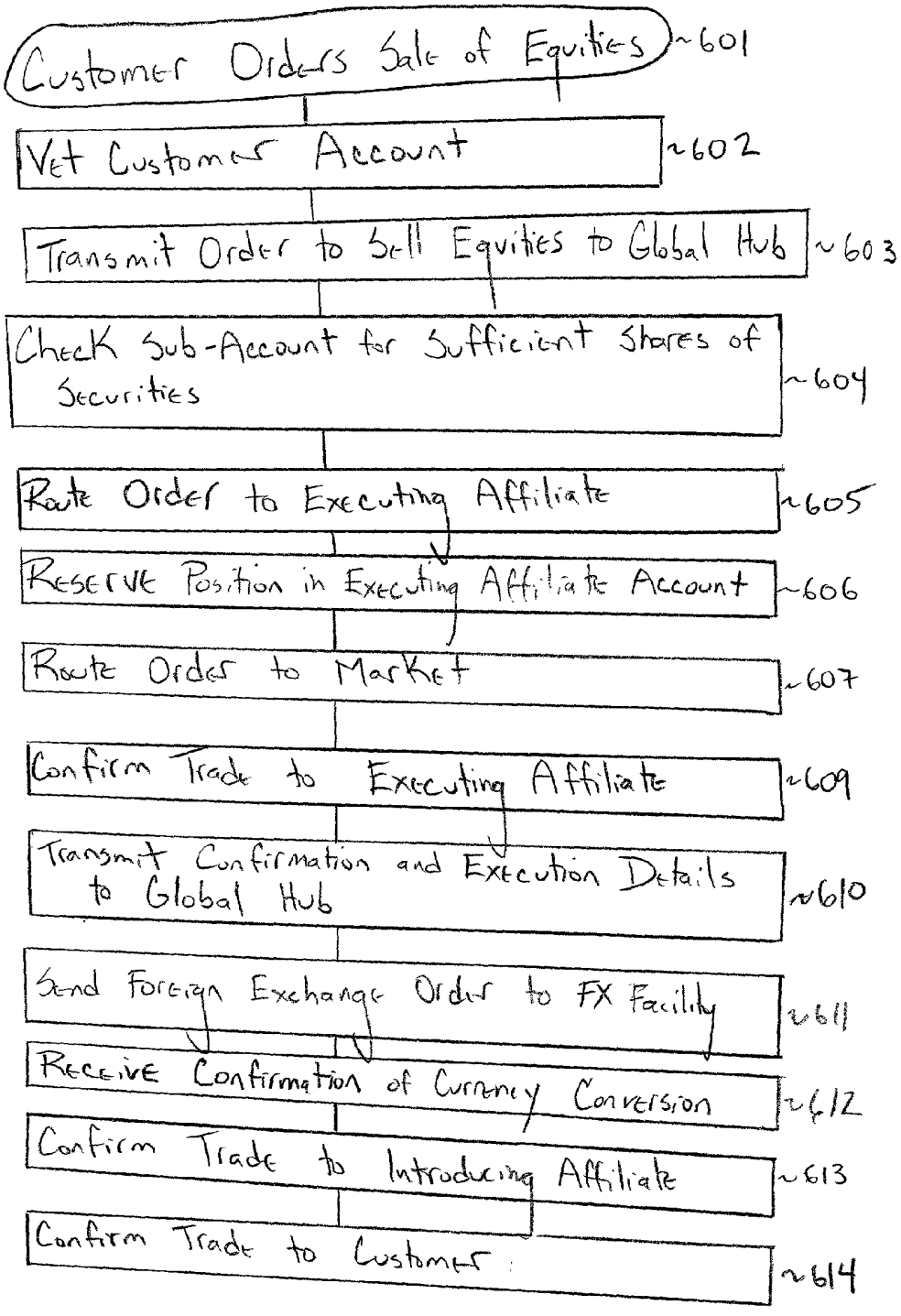

Customer Orders Sale of Equities
601
Vet Customer Account
602
Transmit Order to Sell Equities to Global Hub
603
Check Sub-Account for Sufficient Shares of Securities
604
Route Order to Executing Affiliate
605
Reserve Position in Executing Affiliate Account
606
Route Order to Market
607
Confirm Trade to Executing Affiliate
609
Transmit Confirmation and Execution Details to Global Hub
610
Send Foreign Exchange Order to FX Facility
611
Receive Confirmation of Currency Conversion
612
Confirm Trade to Introducing Affiliate
613
Confirm Trade to Customer
614

FIGURE 6B

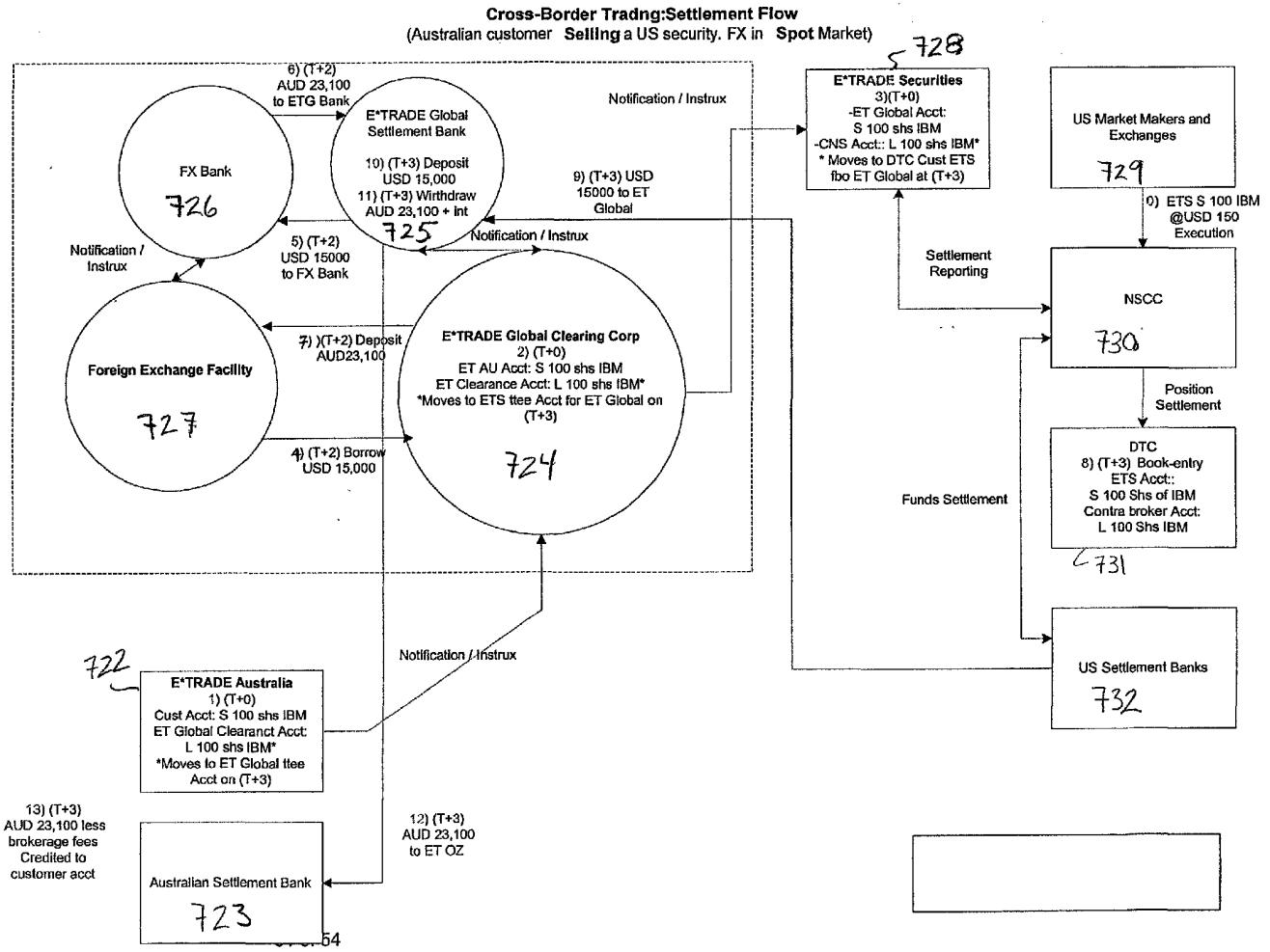

Cross-Border Tradng:Settlement Flow
(Australian customer Selling a US security. FX in Spot Market)
728
E*TRADE Securities
3)(T+0)
-ET Global Acct:
S 100 shs IBM
-CNS Acct:: L 100 shs IBM*
* Moves to DTC Cust ETS
fbo ET Global at (T+3)
US Market Makers and Exchanges
729
0) ETS S 100 IBM
@USD 150
Execution
6) (T+2)
AUD 23,100
to ETG Bank
E*TRADE Global
Settlement Bank
10) (T+3) Deposit
USD 15,000
11) (T+3) Wirthdraw
AUD 23,100 + int
725
Notification / Instrux
FX Bank
726
9) (T+3) USD
15000 to ET
Global
Notification / Instrux
5) (T+2)
USD 15000
to FX Bank
Notification /
Instrux
Settlement
Reporting
NSCC
730
Foreign Exchange Facility
727
7))(T+2) Deposit
AUD23,100
E*TRADE Global Clearing Corp
2) (T+0)
ET AU Acct: S 100 shs IBM
ET Clearance Acct: L 100 shs IBM*
*Moves to ETS ttee Acct for ET Global on
(T+3)
724
Position
Settlement
4) (T+2) Borrow
USD 15,000
DTC
8) (T+3) Book-entry
ETS Acct::
S 100 Shs of IBM
Contra broker Acct:
L 100 Shs IBM
731
Funds Settlement
Notification / Instrux
722
E*TRADE Australia
1) (T+0)
Cust Acct: S 100 shs IBM
ET Global Clearanct Acct:
L 100 shs IBM*
*Moves to ET Global ttee
Acct on (T+3)
US Settlement Banks
732
13) (T+3)
AUD 23,100 less
brokerage fees
Credited to
customer acct
12) (T+3)
AUD 23,100
to ET OZ
Australian Settlement Bank
723
54

FIGURE 7A

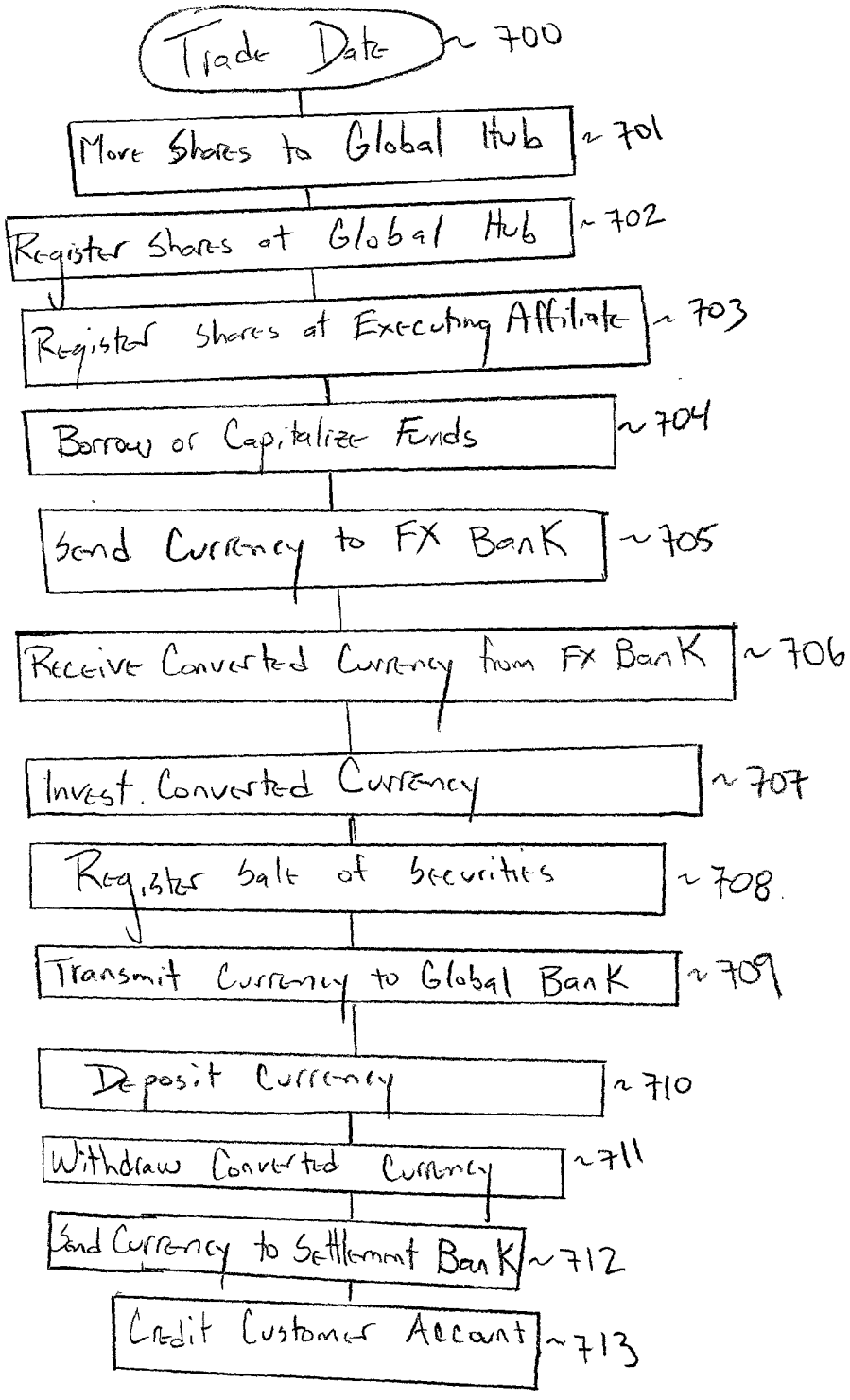

Trade Date
700
Move Shares to Global Hub
701
Register Shares at Global Hub
702
Register Shares at Executing Affiliate
703
Borrow or Capitalize Funds
704
Send Currency to FX Bank
705
Receive Converted Currency from FX Bank
706
Invest Converted Currency
707
Register Sale of Securities
708
Transmit Currency to Global Bank
709
Deposit Currency
710
Withdraw Converted Currency
711
Send Currency to Settlement Bank
712
Credit Customer Account
713

FIGURE 7B

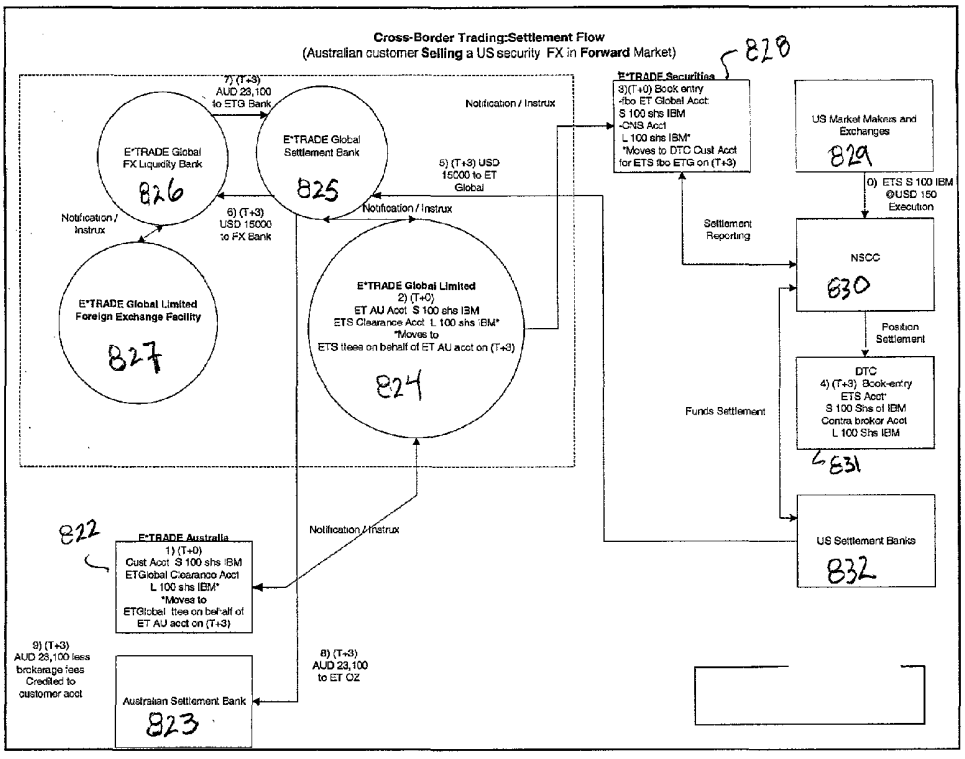

Cross-Border Trading:Settlement Flow
(Australian customer Selling a US security FX in Forward Market)
828
E*TRADE Securities
3)(T+0) Book entry
-fbo ET Global Acct:
S 100 shs IBM
-CNS Acct
L 100 shs IBM*
*Moves to DTC Cust Acct
for ETS fbo ETG on (T+3)
US Market Makers and Exchanges
829
0) ETS S 100 IBM
@USD 150
Execution
7) (T+3)
AUD 23,100
to ETG Bank
E*TRADE Global
FX Liquidity Bank
826
E*TRADE Global
Settlement Bank
825
Notification / Instrux
5) (T+3) USD
15000 to ET
Global
6) (T+3)
USD 15000
to FX Bank
Notification /
Instrux
Notification / Instrux
Settlement
Reporting
NSCC
830
E*TRADE Global Limited
Foreign Exchange Facility
827
E*TRADE Global Limited
2) (T+0)
ET AU Acct S 100 shs IBM
ETS Clearance Acct L 100 shs IBM*
*Moves to
ETS ttees on behalf of ET AU acct on (T+3)
824
Position
Settlement
DTC
4) (T+3) Book-entry
ETS Acct
S 100 Shs of IBM
Contra broker Acct
L 100 Shs IBM
Funds Settlement
831
822
E*TRADE Australia
1) (T+0)
Cust Acct S 100 shs IBM
ETGlobal Clearance Acct
L 100 shs IBM*
*Moves to
ETGlobal ttees on behalf of
ET AU acct on (T+3)
Notification / Instrux
US Settlement Banks
832
9) (T+3)
AUD 23,100 less
brokerage fees
Credited to
customer acct
8) (T+3)
AUD 23,100
to ET OZ
Australian Settlement Bank
823

FIGURE 8A

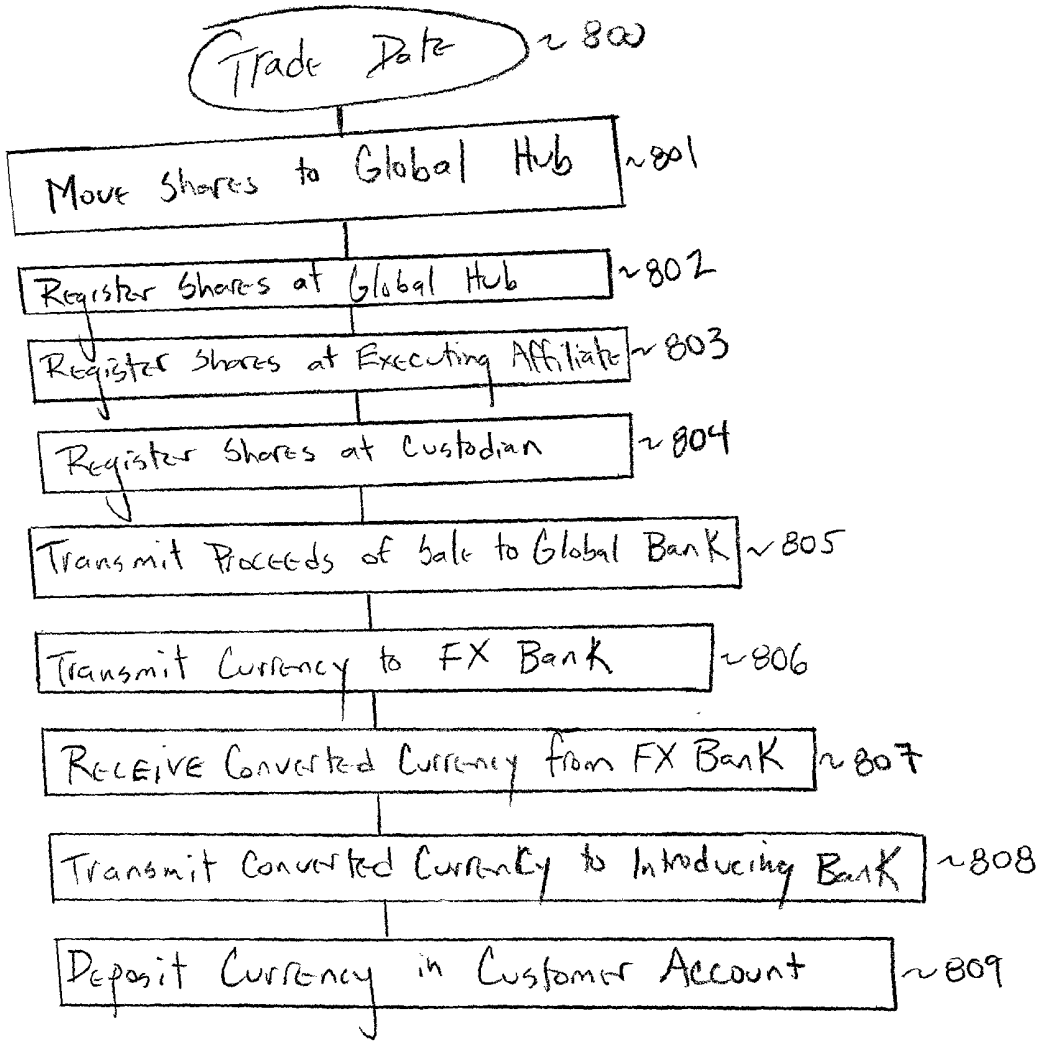

Trade Date
800
Move Shares to Global Hub
801
Register Shares at Global Hub
802
Register Shares at Executing Affiliate
803
Register Shares at Custodian
804
Transmit Proceeds of Sale to Global Bank
805
Transmit Currency to FX Bank
806
Receive Converted Currency from FX Bank
807
Transmit Converted Currency to Introducing Bank
808
Deposit Currency in Customer Account
809

FIGURE 8B

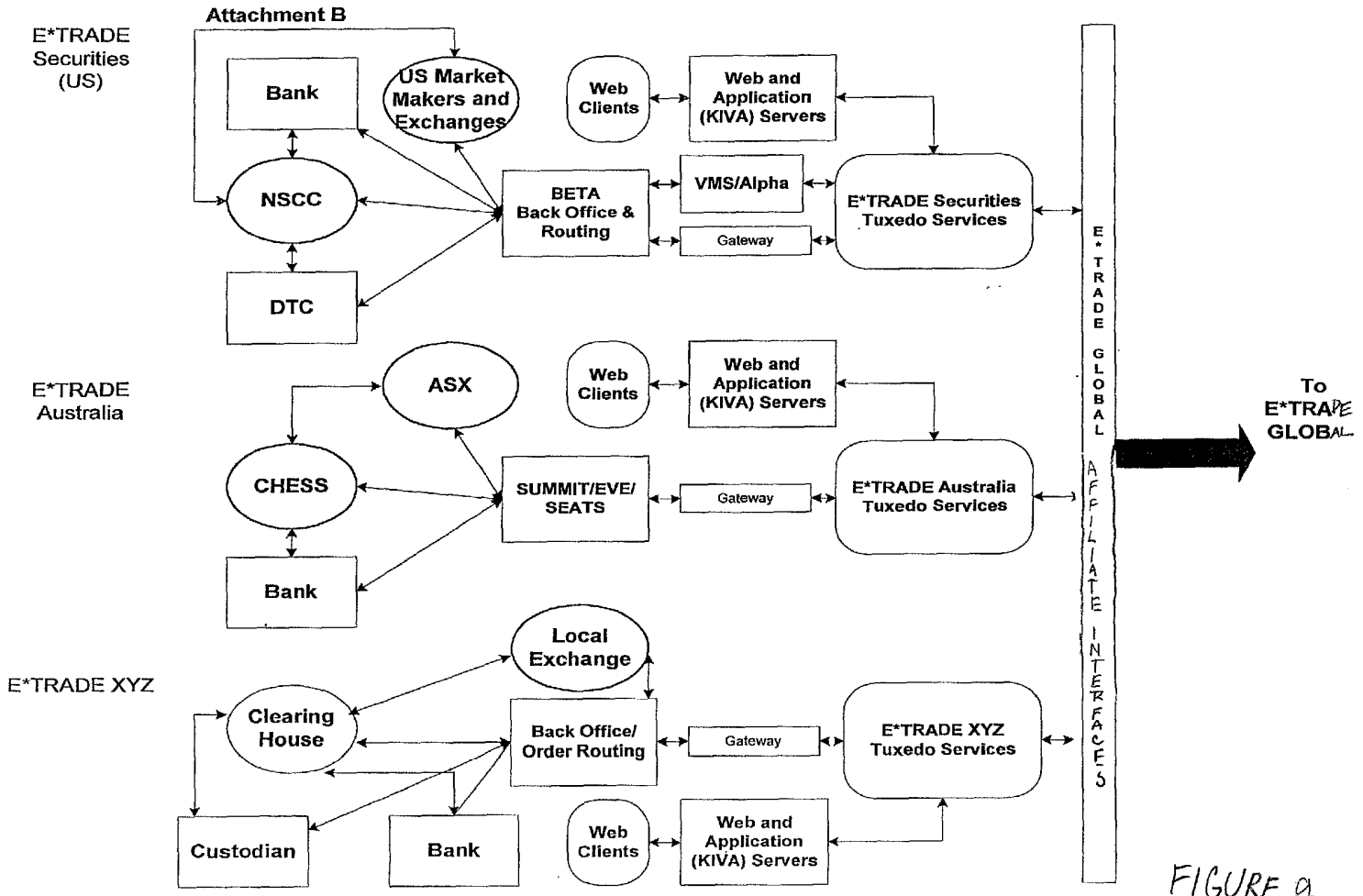

Attachment B
E*TRADE Securities (US)
Bank
US Market Makers and Exchanges
Web Clients
Web and Application (KIVA) Servers
NSCC
BETA Back Office & Routing
VMS/Alpha
Gateway
E*TRADE Securities Tuxedo Services
DTC
E*TRADE Australia
ASX
Web Clients
Web and Application (KIVA) Servers
CHESS
SUMMIT/EVE/ SEATS
Gateway
E*TRADE Australia Tuxedo Services
Bank
E*TRADE XYZ
Local Exchange
Clearing House
Back Office/ Order Routing
Gateway
E*TRADE XYZ Tuxedo Services
Custodian
Bank
Web Clients
Web and Application (KIVA) Servers
E*TRADE GLOBAL AFFILIATE INTERFACES
To E*TRADE GLOBAL

FIGURE 9

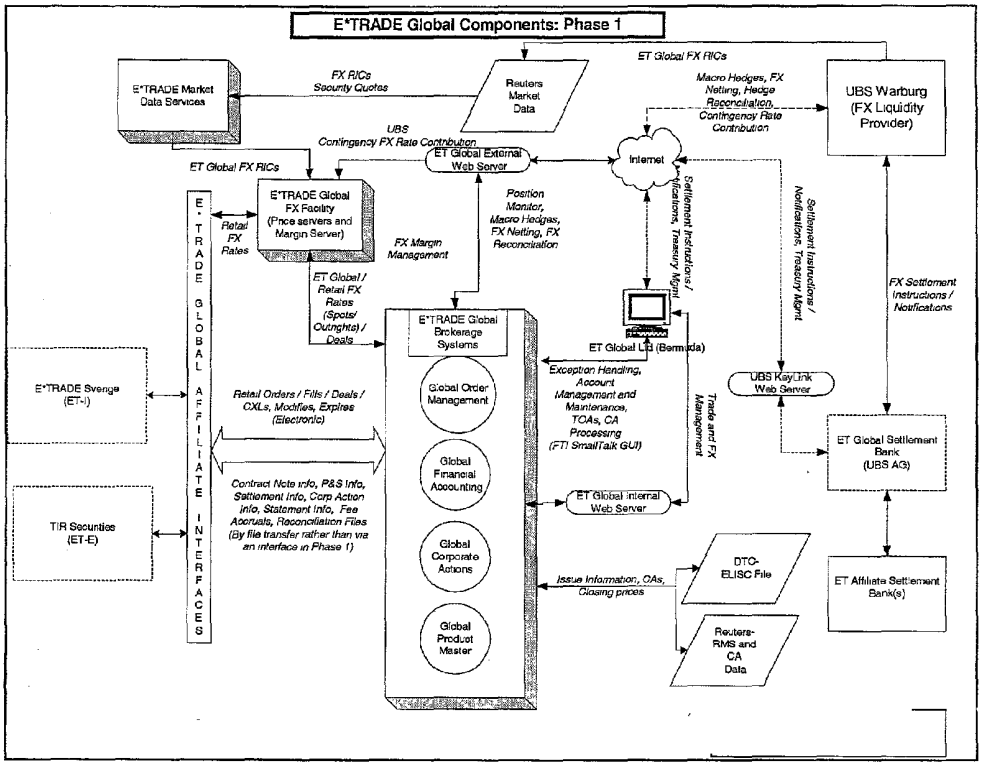

E*TRADE Global Components: Phase 1
E*TRADE Market Data Services
FX RICs Security Quotes
Reuters Market Data
ET Global FX RICs
Macro Hedges, FX Netting, Hedge Reconciliation, Contingency Rate Contribution
UBS Warburg (FX Liquidity Provider)
UBS Contingency FX Rate Contribution
ET Global External Web Server
Internet
ET Global FX RICs
E*TRADE Global FX Facility (Price servers and Margin Server)
Retail FX Rates
FX Margin Management
Position Monitor, Macro Hedges, FX Netting, FX Reconciliation
Settlement Instructions / Notifications, Treasury Mgmt
Settlement Instructions / Notifications, Treasury Mgmt
FX Settlement Instructions / Notifications
E-TRADE GLOBAL AFFILIATE INTERFACES
ET Global / Retail FX Rates (Spots/ Outrights) / Deals
E*TRADE Global Brokerage Systems
ET Global Ltd (Bermuda)
E*TRADE Sverige (ET-I)
Retail Orders / Fills / Deals / CXLs, Modifies, Expires (Electronic)
Global Order Management
Exception Handling, Account Management and Maintenance, TCAs, CA Processing (FT SmallTalk GUI)
UBS KeyLink Web Server
Trade and FX Management
ET Global Settlement Bank (UBS AG)
Global Financial Accounting
Contract Note info, P&S Info, Settlement Info, Corp Action info, Statement Info, Fee Accruals, Reconciliation Files (By file transfer rather than via an interface in Phase 1)
TIR Securities (ET-E)
ET Global Internal Web Server
Global Corporate Actions
Issue Information, CAs, Closing prices
DTC-ELISC File
ET Affiliate Settlement Bank(s)
Global Product Master
Reuters-RMS and CA Data

FIGURE 10

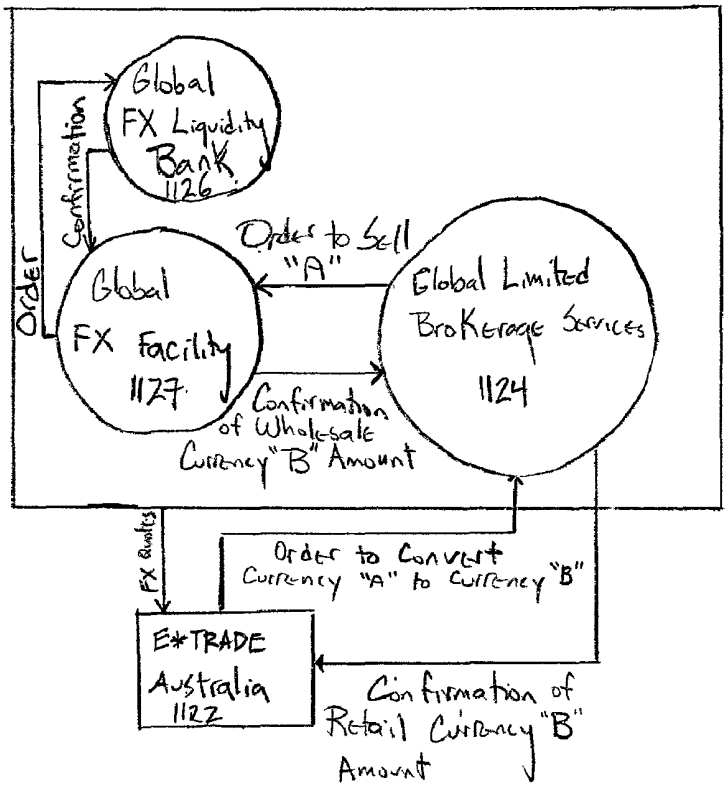

Global FX Liquidity Bank 1126
Confirmation
Order
Order to Sell "A"
Global FX Facility 1127
Global Limited Brokerage Services 1124
Confirmation of Wholesale Currency "B" Amount
FX Quotes
Order to Convert Currency "A" to Currency "B"
E*TRADE Australia 1122
Confirmation of Retail Currency "B" Amount

FIGURE 11A

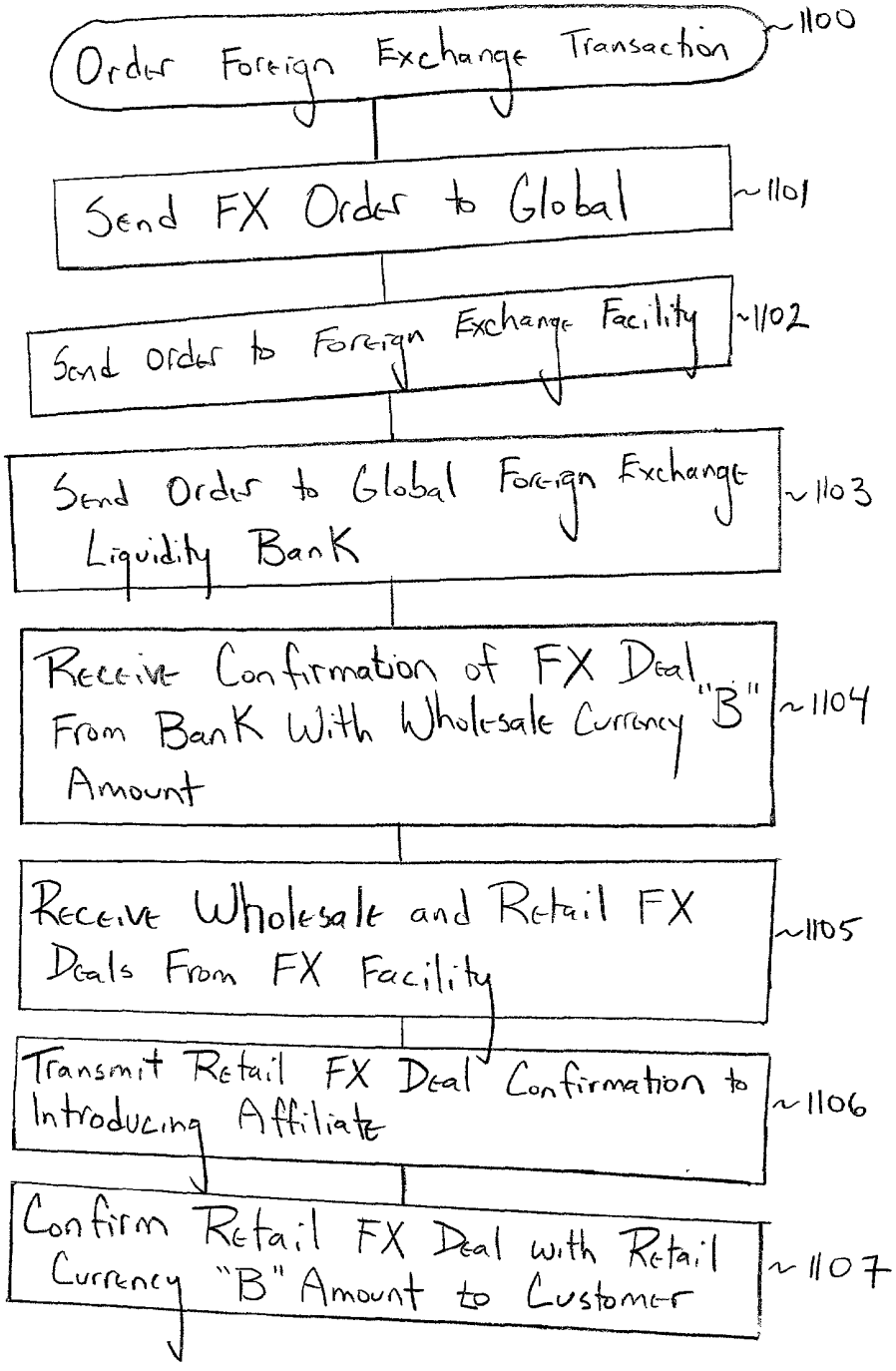

Order Foreign Exchange Transaction
1100
Send FX Order to Global
1101
Send Order to Foreign Exchange Facility
1102
Send Order to Global Foreign Exchange Liquidity Bank
1103
Receive Confirmation of FX Deal From Bank With Wholesale Currency "B" Amount
1104
Receive Wholesale and Retail FX Deals From FX Facility
1105
Transmit Retail FX Deal Confirmation to Introducing Affiliate
1106
Confirm Retail FX Deal with Retail Currency "B" Amount to Customer
1107

FIGURE 11B

GLOBAL TRADING SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims the benefit of 35 U.S.C. 111(b) provisional application serial No. 60/259,268, filed Dec. 30, 2000, and entitled Global Trading System.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention generally relates to the trading of securities and other commodities internationally. More particularly, the present invention relates to a globalized trading network that permits trading of stocks and other securities and commodities across international boundaries.

[0004] 2. Background of the Invention

[0005] The trading of various financial instruments such as equities (i.e. stocks) has been known for many years, and various stock exchanges exist all around the world. For example, one well-known stock exchange in the United States is the New York stock exchange (NYSE), with other being the NASDAQ and the AMEX stock exchanges. The United Kingdom has the London Stock Exchange. However, for a long period the trading of stocks was reserved for either large organizations or for the wealthy, and it was difficult for the ordinary investor to knowledgeably buy and sell individual stocks at reasonable prices. In recent years, the explosive growth of the internet has lowered the time and transaction costs previously necessary to research and trade individual stocks, leading to the popularity of trading of stocks on-line. This lowering of costs is especially true for the investor who is buying or selling stocks that trade on an exchange in his own country.

[0006] The problems of cross-border trading of equities has not been so easily solved, however. The conventional method to execute cross-border trading includes the use of telephone calls and facsimiles. For example, a Swedish investor might call his broker and request a trade of an equity handled in a United States exchange. The Swedish broker would call his U.S. counterpart, and contact by phone call or facsimile would then be made with a U.S. market maker, a U.S. bank, a Swedish bank, and a Swedish custodian. Obviously, this is a time consuming and expensive method to make cross-border trades. Therefore, even though there has been a substantial increase in the amount of cross-border trading of equities because of the heightened interest of individual investors, to a great extent individual investors remain limited to buying and selling stocks that trade in the their own markets. For example, despite the attraction of the United States stock market, an Australian investor may be able to buy and sell only stocks that trade on the Australian stock exchange (unless he wishes to pay very high commissions). Similarly, the individual investor in the United States may see opportunities in which he would like to invest in overseas, such as a particular equity in Europe, but the cost of buying and selling these stocks is unrealistically high.

[0007] It would be advantageous if there existed a system to simplify cross-border trading of stocks, options, mutual funds, and fixed income instruments. It would also be advantageous if such a system could trade different currencies directly, without any need to trade an equity or other financial instrument in concert.

BRIEF SUMMARY OF THE INVENTION

[0008] The present invention solves the deficiencies of the prior art by a computerized system for trading securities and commodities including a computerized introducing affiliate in a first country and from which a transaction order (such as to buy or sell a security) is transmitted electronically, an exchange on which the security is traded, and a global hub for electronically routing the transaction order from the introducing affiliate to the exchange. Two or more exchanges are preferably connected to the global hub. An executing affiliate is preferably included between the global hub and any exchange, each executing affiliate handling the particulars of the transaction order in compliance with local rules and regulations. Where a security is being bought, the purchase money is preferably sent from the introducing affiliate to the global hub to the executing affiliate. If necessary, a currency transaction is performed through the global hub to convert the currency of the first country to that used in the country in which the exchange resides. Where a security is being sold, the proceeds of the sale are preferably transmitted from the executing affiliate to the global hub to the local affiliate, with a currency transaction being performed through the global hub to transform the currency of the country in which the exchange resides to the first country.

[0009] The invention also may be expressed as a method to buy or to sell a security. In either case, the methods include accepting an electronic transaction order for the purchase or sale of a security, vetting the order to determine that the customer account holds at least an adequate amount of money or shares, transmitting the transaction order to a global hub, purchasing or selling the security, and adjusting the customer account accordingly. The methods may include converting currencies.

[0010] These and other aspects of the present invention will become apparent upon analyzing the drawings, detailed description and claims, which follow.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] For a detailed description of the preferred embodiments of the invention, reference will now be made to the accompanying drawings in which:

[0012] **FIG. 1** is a global diagram broadly illustrating the central global system and associated local affiliates;

[0013] **FIG. 2** is a block diagram illustrating an exemplary computer network constructed according to the preferred embodiment;

[0014] **FIGS. 3A and 3B** are flow diagrams illustrating cross-border trading order and execution flow for buying a security;

[0015] **FIGS. 4A and 4B** are flow diagrams illustrating cross-border trading settlement flow for buying a security where the foreign exchange is the forward market;

[0016] **FIGS. 5A and 5B** are flow diagrams illustrating cross-border trading settlement flow for buying a security where the foreign exchange is the spot market;

[0017] **FIGS. 6A and 6B** are flow diagrams illustrating cross-border trading order and execution flow for selling a security;

[0018] **FIGS. 7A and 7B** are flow diagrams illustrating cross-border trading settlement flow for selling a security where the foreign exchange is the spot market;

[0019] **FIGS. 8A and 8B** are flow diagrams illustrating cross-border trading settlement flow for selling a security where the foreign exchange is the forward market;

[0020] **FIG. 9** is a block diagram illustrating the preferred elements of local affiliates; and

[0021] **FIG. 10** is a block diagram with illustrating information flow for an exemplary computer network constructed according to the preferred embodiment.

[0022] **FIGS. 11A and 11B** are flow diagrams illustrating a global foreign exchange system.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0023] The detailed description of the preferred embodiment provided below includes many details not essential to the invention. For example, many of the examples below describe a hypothetical party in Australia either buying or selling a security in a U.S. stock market. Many examples below also refer to a unit or element as part of an system managed by E*TRADE.

[0024] However, the invention is not so limited and is not limited to Australia, the United States, or any specific country. These designations are used merely to simplify the explanation of the preferred embodiment of the invention.

[0025] **FIG. 1** is a schematic world map including the E*TRADE Global System connected to various E*TRADE local affiliates such as E*TRADE Securities (ETS) (for the United States), E*TRADE Japan (ET JP), E*TRADE Sweden, E*TRADE Australia (ET AU), E*TRADE XYZ (a non-specific country), and E*TRADE Institutional. Other local affiliates (not shown) might include E*TRADE Canada (ET CA), E*TRADE United Kingdom (ET UK), E*TRADE Israel (ET IL), E*TRADE Germany (ET DE), and E*TRADE Hong Kong (ET HK). Each local affiliate is preferably connected directly to the Global system, with the local affiliate also connected to a local exchange or exchange member, such as INSTINET, ARCA (Archipelago), or the U.S. market makers. In **FIG. 1, E***TRADE institutional is an affiliate that caters to the instiutional investor and is not affiliated with only a single country or stock exchange. As shown, it connects to the Hong Kong exchange, the London Stock Exchange, and the U.S. market makers, and also connect to other executing brokers and exchanges.

[0026] The cross-border trading model of the preferred embodiment is based on a hub and spoke configuration. All transactions that are executed outside the local market (i.e. non-domestic transaction) are routed through the E*TRADE Global hub by brokers in the network, with each international trade including an introducing broker, the E*TRADE global hub, and normally an executing broker. The system of **FIG. 1** allows a customer in any first country with a local affiliate to purchase or sell a stock or other financial instrument that is traded on an exchange in a second country.

[0027] **FIG. 2** illustrates the various entities associated with the introducing broker, the executing broker, and the E*TRADE Global system. Associated with the introducing broker of country abc is a customer **201**, the local E*TRADE affiliate **202**, and the abc settlement bank **203**. The abc customer advantageously accesses the system through an electronic connection, such as with a computer. Corresponding elements for an Australian introducing affiliate are also shown. The E*TRADE Global hub **210** supports a Foreign Exchange Facility **211**, an order management system **212** and a brokerage operation system **213** internally. E*TRADE Global **210** also interfaces with a Foreign Exchange (FX) liquidity bank **215**, and its own global settlement bank **216**. Associated with the executing brokers of country xyz is the local E*TRADE affiliate **220**, the stock exchange **221** of the country from where the equities are being purchased, the clearing corporation **222**, the custodian **223**, and the local settlement bank **224**.

[0028] The system is envisioned as being implemented primarily on a system of computers or electronics with associated hardware (although there may be some manual interface provided when a particular situation or concern arises such as an extraordinarily large trade order). The use of highly electronic systems lowers the cost of a single trade because it may be executed automatically or near-automatically. In addition, highly electronic systems allow for faster trades, resulting in a more real-time system and lower risks from price movement for both the customer and the party executing the trade.

[0029] Each cross-border trade potentially consists of two transactions: the equity transaction and the foreign exchange transaction. **FIGS. 3A and 3B** illustrates the cross-border trading and execution flow for, e.g., an Australian customer buying a U.S. security. An Australian introducing affiliate **322** connects to a customer **321**, and the Australian settlement bank **323**. Introducing affiliate **322** also connects to the Global Brokerage Service **324**, a Global Settlement Bank **325**, a Foreign Exchange Liquidity bank **326**, and the Foreign Exchange facility **327**. Global unit **324** also connects to E*TRADE Securities (an executing affiliate) **328**, U.S. Market Makers and Exchanges **329**, NSCC (a clearing house) **330**, DTC (Depository Trust Corporation) **331**, and U.S. Settlement Banks **332**. The introducing affiliate preferably does not connect directly to the Global Settlement Bank or Foreign Exchange Liquidity Bank, but instead connects to them only through Global Brokerage Services. Similarly, Global Brokerage Services preferably does not connect directly to the U.S. Market Makers and Exchanges, NSCC, DTC, or the U.S. Settlement Bank, but instead connects through the Executing affiliate. As numbered in the Figures, these units execute a series of steps.

[0030] Some time prior to step **301**, a customer in Australia receives from E*TRADE Global a preview price on a real-time basis for a U.S. equity (such as an individual stock or mutual fund share). A customer normally is expected to place orders based on the currency of the target market in which the security trades. A price in the native currency may also be provided, with this price being based on both the real-time quote for price on the U.S. equity, as well as a real-time conversion from the foreign exchange rates. In any case, the estimated prices are computed automatically through, by, or with information obtained through E*TRADE Global. At step **301**, the E*TRADE Australia

customer places a buy order for 100 shares of IBM stock at the market price. This may be done over the internet, with a presentation to the user that should be similar to the way trades are currently placed over the internet in a customer's home market. The customer places the order with a cost estimate based on the real-time quotes for the security. At step **302**, E*TRADE Australia provides a preview of the order and vets against the buying power of the customer to reserve the sum of the principal amount calculated in U.S. dollars (USD) based on the current U.S. ask price, the Australian dollar (AUD) equivalent based on the current ask price for USD based on the USD principal amount, the estimated commissions and fees for a cross-border trade to the US and an additional "reserve" over the previous amounts to allow for fluctuations in both the US equity and USD/AUD currency market. At step **303**, E*TRADE Australia transmits the order for **100** shares of IBM at the market price to E*TRADE Global. E*TRADE Global sees the order only as an E*TRADE Australia order, and determines that it should be routed to its US agent, E*TRADE Securities. At step **304**, E*TRADE Global transmits the order to E*TRADE Securities (ETS), the U.S. local affiliate. At step **305**, ETS places an order with an exchange member such as a U.S. market maker in a U.S. exchange, who then executes the trade. Alternately, E*TRADE Global could be registered in a country's exchange, allowing E*TRADE Global to execute the trade directly. After the equity order is executed, ETS receives the execution details at step **306**. At step **307**, at time T+**3** (i.e. settlement date of equity transaction) ETS transmits the execution details to E*TRADE Global. Preferably immediately after the equity order is executed and reported to E*TRADE Global, E*TRADE Global transacts a foreign exchange order prior to confirming the trade back to E*TRADE Australia in step **310**. At step **308**, E*TRADE Global transmits an order to the foreign exchange facility to sell Australian dollars. At step **309**, the foreign exchange facility confirms the FX deal to E*TRADE Global. Because of the timing of step **307**, it is assumed that the foreign exchange facility can match the value date of the currency transaction to the settlement date of the security transaction. At step **310**, the trade is confirmed to E*TRADE Australia with the USD execution price and principal amount as well as the locked-in AUD value of the trade. At step **311**, E*TRADE Australia gives confirmation to the customer of the purchase. This confirmation includes E*TRADE Australia's commissions and fees.

[**0031**] The details of the settlement flow for a customer buying a cross-border security depend on whether the foreign exchange is done in the forward market or in the spot market. Continuing the example of an Australian customer buying U.S. stocks, **FIGS. 4A and 4B** illustrate the series of transactions involved for cross-border trading settlement flow for an Australian customer buying the U.S. security, with the foreign exchange being executed in the forward market. An Australian introducing affiliate **422** connects to Australian settlement bank **423**. Introducing affiliate **422** also connects to the Global Brokerage Service **424**, a Global Settlement Bank **425**, a Foreign Exchange Liquidity bank **426**, and the Foreign Exchange facility **427**. Global unit **424** also connects to E*TRADE Securities (an executing affiliate) **428**, U.S. Market Makers and Exchanges **429**, NSCC (a clearing house) **430**, DTC (Depository Trust Corporation) **431**, and U.S. Settlement Banks **432**. The introducing affiliate preferably does not connect directly to the Global Settlement Bank or Foreign Exchange Liquidity Bank, but instead connects to them only through Global Brokerage Services. Similarly, Global Brokerage Services preferably does not connect directly to the U.S. Market Makers and Exchanges, NSCC, DTC, or the U.S. Settlement Bank, but instead connects through the Executing affiliate. As numbered in **FIG. 4A**, these units execute a series of steps.

[**0032**] At step **400**, the trade is consummated in the relevant stock exchange at time T+**0**, (to remain consistent with the hypothetical, in the U.S.). At this time, the customer account is encumbered or flagged the value of the trade with the expectation that the settlement of the trade will be completed. On the settlement date, typically three days after the trade date (i.e. T+**3**), a number of activities occur. At step **401**, the Australian customer's account is debited the value of the trade on the settlement date (plus brokerage fees), in Australian currency. E*TRADE Australia sends instructions to its settlement bank prior to settlement date depending on its bank's cut-off times for such instructions. At step **402**, the Australian settlement bank transfers the principal amount of the trade in Australian dollars to E*TRADE Global's settlement bank (Australian currency sub-account). At step **403**, the global settlement bank sends the Australian dollars to the global foreign exchange liquidity bank, and receives back an equivalent amount of U.S. dollars at step **404**. At step **405**, E*TRADE Global settlement bank transfers USD to E*TRADE Securities settlement bank to settle the trade. The U.S. settlement bank then pays the clearing house (NSCC) in the U.S., which registers the ownership of the purchased shares in the E*TRADE account in the U.S. at step **406**. At step **407**, E*TRADE Securities registers the purchase as well for the benefit of E*TRADE Global. Step **408** includes the registering of this trade in the omnibus account at E*TRADE Global. Finally, at step **409**, the transaction is registered in the local affiliate account on behalf of the end customer. As a general rule, these activities each occur on the settlement date and therefore need not be executed in the order shown.

[**0033**] **FIGS. 5A and 5B** show the series of steps for settlement flow when the customer is buying a security and the foreign exchange is the spot market. An Australian introducing affiliate **522** connects to the Australian settlement bank **523**. Introducing affiliate **522** also connects to the Global Brokerage Service **524**, a Global Settlement Bank **525**, a Foreign Exchange Liquidity bank **526**, and the Foreign Exchange facility **527**. Global unit **524** also connects to E*TRADE Securities (an executing affiliate) **528**, U.S. Market Makers and Exchanges **529**, NSCC (a clearing house) **530**, DTC (Depository Trust Corporation) **531**, and U.S. Settlement Banks **532**. The introducing affiliate preferably does not connect directly to the Global Settlement Bank or Foreign Exchange Liquidity Bank, but instead connects to them only through Global Brokerage Services. Similarly, Global Brokerage Services preferably does not connect directly to the U.S. Market Makers and Exchanges, NSCC, DTC, or the U.S. Settlement Bank, but instead connects through the Executing affiliate. As numbered in the Figure, these units execute a series of steps.

[**0034**] At step **500**, the trade is consummated in the relevant stock exchange, (to remain consistent with the hypothetical, 100 shares of IBM stock in a U.S. stock exchange). At step **501**, the Australian customer's account is encumbered (i.e. the amount is reserved in the customer

account) in Australian currency the value of the trade on the trade date (i.e. T+**0**) (plus brokerage fees), immediately after the trade is executed. To comply with regulations, the customer account will not actually be debited until the equity settlement date, typically three days after the trade date, or T+**3**. E*TRADE Australia also sends instructions to its settlement bank. At step **502**, the Australian settlement bank transfers the principal amount of the trade in Australian dollars to E*TRADE Global's settlement bank (Australian currency sub-account). Because the funds in the customer account are not debited until the equity settlement date, the settlement in the spot market as shown in **FIG. 5** assumes that E*TRADE Australia through capitalization or borrowings would effectively extend credit to the customer between T+**2** and T+**3**. At step **503**, the E*TRADE Global Settlement bank invests the Australian dollars for one day. Alternately, instead of steps **502** and **503**, it may be E*TRADE Global that effectively extends the credit to E*TRADE Australia. In any event, at time T+**2** (i.e. the spot exchange settlement date), the global settlement bank sends the Australian dollars to the FX bank at step **504**. At step **505**, the FX bank sends U.S. dollars to the E*TRADE Global settlement bank. The Global settlement bank invests these U.S. dollars for a day at step **506**. One day later, at step **507**, the US dollars are sent to the US settlement bank. The US settlement bank then pays the clearing house in the U.S., which registers the ownership of the purchased shares in the E*TRADE account in the U.S. at step **508**. At step **509**, E*TRADE Securities registers the purchase as well for the benefit of E*TRADE Global. Step **510** includes the registering of this trade in the omnibus account at E*TRADE Global. Finally, at step **511**, the transaction is also registered in the local affiliate account on behalf of the end customer.

[**0035**] The 100 shares of IBM bought by the Australian customer is reflected by a series of book entries. Security positions are all book entry except at the custodian level. At the Depository Trust Company 100 shares of IBM long are recorded to the E*TRADE Securities account, and are recorded short at the contra broker's account. At E*TRADE Securities, a book entry is made reflecting **100** shares of IBM held in a segregated account for the benefit of (FBO) E*TRADE Global. At E*TRADE Global, a book entry reflects 100 shares of IBM held in the E*TRADE Australia omnibus account, with an offsetting short to an E*TRADE Securities Trustee account. At E*TRADE Australia, a book entry reflects **100** shares of IBM in the customer's account, with an offsetting short to an account with E*TRADE Global as trustee.

[**0036**] On the sell side, the sequence of steps is somewhat different than on the buy side. Referring to **FIGS. 6A and 6B**, an Australian introducing affiliate **622** connects to a customer **621**, and the Australian settlement bank **623**. Introducing affiliate **622** also connects to the Global Brokerage Service **624**, a Global Settlement Bank **625**, a Foreign Exchange Liquidity bank **626**, and the Foreign Exchange facility **627**. Global unit **624** also connects to E*TRADE Securities (an executing affiliate) **628**, U.S. Market Makers and Exchanges **629**, NSCC (a clearing house) **630**, DTC (Depository Trust Corporation) **631**, and U.S. Settlement Banks **632**. The introducing affiliate preferably does not connect directly to the Global Settlement Bank or Foreign Exchange Liquidity Bank, but instead connects to them only through Global Brokerage Services. Similarly, Global Brokerage Services preferably does not connect directly to the U.S. Market Makers and Exchanges, NSCC, DTC, or the U.S. Settlement Bank, but instead connects through the Executing affiliate. As numbered in the Figure, these units execute a series of steps which show the order and execution flow for a sale of a U.S. security Prior to step **601**, the E*TRADE Australia system will provide to the Australian customer a preview of the order with estimated proceeds based on the principal amount calculated in USD based on the current US bid price, the AUD equivalent based on the current bid price for USD based on the USD principal amount, less the estimated commissions and fees for a cross-border trade to the U.S. At step **601**, the customer decides to sell his equities. At step **602**, E*TRADE Australia will vet the order for an existing position in the customer's account and will reserve that position. At step **603**, E*TRADE Australia transmits to E*TRADE Global the order to sell the shares. At step **604**, the E*TRADE Global system, when it receives the trade order, will check that the E*TRADE Australia sub-account holds sufficient shares of the security and will reserve that amount prior to routing the order to E*TRADE Securities (U.S.). At step **605**, E*TRADE Global routes the trade order to E*TRADE Securities. At step **606**, E*TRADE Securities reserves the position in its account. At step **607**, E*TRADE Securities routes the order to the market. At step **608**, the trade is executed. At step **609**, the transaction is confirmed to E*TRADE Securities. Step **610** includes transmitting the confirmation and execution details to E*TRADE Global. At step **611**, and after the equity order is executed, E*TRADE Global transacts a foreign exchange deal prior to confirming the sale of the equity back to E*TRADE Australia. Step **611** includes sending an order to the Global FX facility to sell U.S. dollars for Australian dollars. At step **612**, the foreign exchange bank confirms the foreign exchange deal with the Australian dollar counter amount to E*TRADE Global. At step **613**, the trade is confirmed to E*TRADE Australia with the USD execution price and principal amount as well as the locked-in AUD value of the trade. At step **614**, the final confirmation to the E*TRADE Australia customer will net out E*TRADE Australia's commissions and fees.

[**0037**] **FIGS. 7A and 7B** show greater detail for the settlement flow for a sale of a U.S. security with the foreign exchange being executed in the spot market. An Australian introducing affiliate **722** connects to a customer **721**, and the Australian settlement bank **723**. Introducing affiliate **722** also connects to the Global Brokerage Service **724**, a Global Settlement Bank **725**, a Foreign Exchange Liquidity bank **726**, and the Foreign Exchange facility **727**. Global unit **724** also connects to E*TRADE Securities (an executing affiliate) **728**, U.S. Market Makers and Exchanges **729**, NSCC (a clearing house) **730**, DTC (Depository Trust Corporation) **731**, and U.S. Settlement Banks **732**. The introducing affiliate preferably does not connect directly to the Global Settlement Bank or Foreign Exchange Liquidity Bank, but instead connects to them only through Global Brokerage Services. Similarly, Global Brokerage Services preferably does not connect directly to the U.S. Market Makers and Exchanges, NSCC, DTC, or the U.S. Settlement Bank, but instead connects through the Executing affiliate. As numbered in **FIG. 7**A, these units execute a series of steps.

[**0038**] Prior to step **700**, the E*TRADE Australia system will provide to the Australian customer a preview of the order with estimated proceeds based on the principal amount calculated in USD based on the current US bid price, the

AUD equivalent based on the current bid price for USD based on the USD principal amount, less the estimated commissions and fees for a cross-border trade to the U.S. If the customer decides to sell his equities, E*TRADE Australia will vet the order for an existing position in the customer's account and will reserve that position. The trade and foreign exchange deals are executed and confirmed at step **700** at time T+**0**. At step **701** (at time T+**3**), E*TRADE Australia moves the shares to E*TRADE Global. Step **702** includes registering the shares in the Australian sub-account of the E*TRADE Global system. At step **703**, E*TRADE Securities registers the shares. At step **704**, two days after the equity order is executed, E*TRADE Global settles the foreign exchange deal with the Foreign Exchange Bank. In particular, E*TRADE Global through capitalization or borrowing puts up U.S. dollars to deliver against Australian dollars. At step **705**, the E*TRADE Global Settlement bank sends these U.S. dollars to the foreign exchange bank. In return, the foreign exchange bank sends the amount in Australian dollars to the E*TRADE Global settlement bank at step **706**. At step **707**, E*TRADE Global invests these Australian dollars for a day. At step **708**, on the settlement date, three days after the trade, the trade is book entered in the DTC in the U.S. (or the country where the exchange resides). At step **709**, after settling the trade, the US settlement bank transmits the US dollars to the E*TRADE Global settlement bank. At this time during step **710**, the US dollars are deposited and at step **711** the Australian dollars are withdrawn. At step **712**, Australian dollar funds are sent to to E*TRADE Australia's Settlement Bank. At step **713**, funds are credited to the E*TRADE Australia customer net of E*TRADE Australia's commissions and fees.

[**0039**] **FIGS. 8A and 8B** show greater detail for the preferred settlement flow for a sale of a U.S. security with the foreign exchange being executed in the forward market. An Australian introducing affiliate **822** connects to the Australian settlement bank **823**. Introducing affiliate **822** also connects to the Global Brokerage Service **824**, a Global Settlement Bank **825**, a Foreign Exchange Liquidity bank **826**, and the Foreign Exchange facility **827**. Global unit **824** also connects to E*TRADE Securities (an executing affiliate) **828**, U.S. Market Makers and Exchanges **829**, NSCC (a clearing house) **830**, DTC (Depository Trust Corporation) **831**, and U.S. Settlement Banks **832**. The introducing affiliate preferably does not connect directly to the Global Settlement Bank or Foreign Exchange Liquidity Bank, but instead connects to them only through Global Brokerage Services. Similarly, Global Brokerage Services preferably does not connect directly to the U.S. Market Makers and Exchanges, NSCC, DTC, or the U.S. Settlement Bank, but instead connects through the Executing affiliate. As numbered in the Figure, these units execute a series of steps.

[**0040**] Prior to step **800**, the E*TRADE Australia system will provide to the Australian customer a preview of the order with estimated proceeds based on the principal amount calculated in USD based on the current US bid price, the AUD equivalent based on the current bid price for USD based on the USD principal amount, less the estimated commissions and fees for a cross-border trade to the U.S. If the customer decides to sell his equities, E*TRADE Australia will vet the order for an existing position in the customer's account and will reserve that position. The trade and foreign exchange deals are executed and confirmed at step **800** at time T+**0**. At step **801**, E*TRADE Australia moves the shares to E*TRADE Global. Step **802** includes registering the shares in the Australian sub-account of the E*TRADE Global system at the time of settlement, T+**3**. At step **803**, a book entry is made in the E*TRADE Securities account. At step **804**, a book entry is made in the DTC (Depository Trust Corporation) at time T+**3** (when the trade has settled). At step **805** (time T+**3**), the proceeds of the sale in U.S. Dollars (because it was the sale of a U.S. stock) are transmitted to the Global settlement bank. At step **806**, the Global Settlement Bank transmits the proceeds in U.S. dollars to the Global Liquidity Bank. At step **807**, an equivalent amount of Australian dollars is transmitted back to the Global Settlement Bank. At step **808**, the Global Settlement Bank transmits the Australian dollars (minus charges) to the Australian Settlement Bank. At step **809**, the money is deposited in the local account of the Australian customer who initiated the sale.

[**0041**] The ability to match the equity and foreign exchange settlement dates is important for a cross-border sale of a security. The spot foreign exchange settlement cycle is typically shorter than the equity settlement cycle, and means that proceeds from the equity transaction will be available at a later date than currency is expected to be delivered. If the foreign exchange transaction is to be executed in the forward market to match the equity settlement date (i.e. three days after the sale), then three days after the sale of the equity, E*TRADE Global will receive the proceeds from the sale from E*TRADE Securities which it will deliver to the foreign exchange bank to settle the currency transaction. In return, AUD (for example) will be delivered to E*TRADE Global which are then transferred by E*TRADE Global to E*TRADE Australia. E*TRADE Australia credits the customer account on the day of the equity settlement date. If the foreign exchange transaction is to be done on the spot market, two days after the sale E*TRADE Global will borrow US dollars for a day to deliver against AUD. E*TRADE Global, however, will be receiving Australian dollars which can be invested between days two and three. Whether this is a net benefit or cost depends on the relative interest levels associated with the USD and AUD.

[**0042**] The sale by the Australian customer is reflected by a series of short book entries. These series of book entries include entries at E*TRADE Australia in the customer's account, with a corresponding long in the account with E*TRADE Global as a trustee, at E*TRADE Global, in the E*TRADE Australia Securities omnibus account with a corresponding entry in the account with E*TRADE Securities as trustee, at E*TRADE Securities, in the E*TRADE Global omnibus acount with a corresponding entry in a segregated account for the benefit of E*TRADE Global, and at the Depository Trust Company, and in the E*TRADE Securities account.

[**0043**] One advantage to the system is the use of a Global Foreign Exchange facility and Global Settlement Bank. If each retail broker were to organize or associate itself with a separate foreign exchange bank, economies of scale would be reduced, thus increasing costs. Similarly, a single Global Foreign Exchange facility and Global settlement bank provides negotiating leverage with a foreign exchange bank such as UBS Warburg in obtaining foreign exchange rates. Moreover, because a single foreign exchange facility may be backed and supported by a large corporation such as E*TRADE, it is more likely to obtain better loan rates

because it is a better credit risk. These cost advantages may be passed on to the customer, kept by the operator of the system, or split between the two.

[0044] E*TRADE Global obtains revenues from the ability to capture spread on the foreign exchange transactions. Profit on the foreign exchange transaction is generated in one of two ways. First, E*TRADE Global may simultaneously buy the currency of the target country at a given price (for example, purchasing USD for 1.5400 from a bank/dealer) and sell to the customer at a slightly higher price (for example, 1.5415). This back-to-back transaction assumes that E*TRADE Global has an adequate liquidity pool arrangement to guarantee that it gets execution on the dealer side of the deal. The potential profits from this arrangement may be higher if the bank side can guarantee interbank rates. Second, E*TRADE Global may take the ask price for the target currency (USD in the example) for the lower price from the dealer (such as 1.5400), but pass the higher ask price (of AUD 1.5415, for example) to the customer. All margins added assume that the ending rate to the customer remains better than the retail rate available at a commercial bank, with the profit margin to E*TRADE Global being dictated by the available rates. The amount of profit generated by the currency transaction will depend on the currency pair being transacted and the relative economic parameters affecting them; the size of the transaction (the best FXrates in the foreign currency market are inter-bank rates reserved for the $1 million plus transactions, with the expected transactions for E*TRADE Global being significantly smaller), the degree to which dealer or banks can provide tradable quotes at or close to the interbank rate, and the mark-up E*TRADE Global decides to apply to the quote it passes to the introducing broker.

[0045] E*TRADE Global also earns interest income from investing its reserves. E*TRADE Global may also earn potential investment income from any mismatch of currency and equity settlement dates.

[0046] E*TRADE Global also obtains revenue from clearing, with the revenue being based on mark-up over operating costs. Each of the affiliates in the network obtains revenue through standard mark-ups over cost charged to E*TRADE Global as the executing affiliate, brokerage fees to the customer as the introducing broker for foreign orders, and a percentage of the profit generated in the foreign exchange transaction as the introducing broker. Other commissions and transaction charges include commissions charged by the introducing broker to its own client. These will be reflected in the contract note (confirmation) to the end-client. E*TRADE Global will have a transaction charge which it will bill the introducing broker on a regular basis (e.g. monthly). This should be built per transaction but will not accompany the transaction record. The back office for E*TRADE Global should be able to handle this fee schedule separate from the transaction.

[0047] E*TRADE Global may share profits from the foreign exchange transactions with the introducing broker. This will not be part of the trade record passed back to the introducing broker but should be built transaction by transaction, separately. As with revenues, the total due to an affiliate will be paid on a regular basis. There may also be other fees or other charges that will be reported with each trade record from the executing broker, through E*TRADE Global, through the introducing broker and on to the client. The U.S. Securities and Exchange Commission (SEC) fee on sales, for example, may need to be reflected in the end-customer's contract note. Another potential item is tax withheld on sales. Other transaction fees might include a service bureau charge per trade, a floor brokerage charge per equity transaction, NSCC (National Securities Clearing Corporation) and DTC (Depository Trust Corporation) fees per transaction, clearing costs, systems cost, and stamp duties (as required by countries). These items would also need to be part of the foreign exchange conversion.

[0048] In addition to transaction-based fees, as an executing broker, each affiliate would pass through any maintenance fees associated with maintaining positions for the global network. Examples using E*TRADE Securities would include custodial fees at the depository, account maintenance charges levied by a service bureau, and electronic file transmission fees for daily activity, dividend announcements, reorganization announcements, proxies, voluntary corporate actions, TOAs (transfer of accounts), statement files, and confirmation files. Special handling fees that may be incurred include fees associated with failed transactions or late settlement, transfer of account fees from custodians, requests for certificates (registration of physical securities), and physical stock transfers. E*TRADE Global will charge the introducing broker a transaction fee (based on the country and type of transaction) and a maintenance and custody fee (dependent upon the portfolio mix of the affiliate's omnibus account). Special fees to the affiliates include penalty fees for non-timely receipt of funds, excessively low funds, or excessive reconciliation issues that reflect a service level problem.

[0049] Although the above examples illustrate many of the useful aspects of the invention, they do not capture the full breadth of responsibilities of the parties in the network. Referring to **FIGS. 2, 9**, and **10**, at the local affiliate level, the network includes E*TRADE Securities (US), E*TRADE Australia, and E*TRADE XYZ (a non-specific country). E*TRADE Securities (US) includes a transaction clearing agent (NSCC) connected to a depository (DTC), a bank, and the U.S. market makers who actually execute the trades in the stock exchange. The clearing agent also connects to back office and routing services, which in turn connect through various middleware applications and software (such as E*TRADE Securities TUXEDO Services and E*TRADE Global TUXEDO Services) to E*TRADE Global. The back office and routing services also preferably connect directly to the market makers, the bank, and the depository. E*TRADE Australia and E*TRADE XYZ contain similar components.

[0050] Referring to **FIG. 10, E***TRADE Global includes the local affiliates which interface to E*TRADE Global via a global affiliate interface, which also interfaces to the E*TRADE Global FX facility and its brokerage services systems. The E*TRADE Global FX facility is responsible for the foreign exchange procedures and therefore receives global foreign exchange rates from E*TRADE Market Data Services (which in turn receives foreign exchange quotes from a provider). The E*TRADE Global FX facility also maintains FX Margin management data, and can receives a contingency foreign exchange contribution via a Web Server connected to the internet. The E*TRADE Global FX facility

communicates retail foreign exchange rates to each local affiliate through E*TRADE global affiliate interface.

[0051] E*TRADE Global brokerage system is comprised of a global order management module, a global financial accounting (GFA) module, a global corporate actions (GCA) module, and a global product master module (collectively with the FX Facility, called E*TRADE Global Limited). The various labels used and how the responsibilities of E*TRADE Global are distributed among different entities is not as important as the role the global hub plays as contrasted to the local affiliates. For example, as represented in **FIG. 10**, all of these entities can be integrated into a single computer system platform linked by common software (or they may be separate, as desired) and run by a set of computers or processors.

[0052] The E*TRADE Global brokerage system exchanges information such as retail foreign exchange rates and deals, order and settlement information with the E*TRADE Global FX facility, and supports exception handling, routing, clearing, settlement, relationship management, and account maintenance information. E*TRADE Global's system receives retail orders, fills, and deals from the local affiliates via the Global affiliate interface, and transmits back contract note information, P&S (Purchase and Sales) information, settlement information, corporate action information, statement information, fee accruals, and reconciliation files. The Global System also supports macro hedges, foreign currency netting, and hedge reconciliation functions via E*TRADE Global Web Server connected to the internet. The E*TRADE Global Web Server exchanges the macro hedges, foreign exchange netting, hedge reconciliation, and contingency rate contribution information with a provider such as UBS Warburg (a foreign exchange liquidity bank that provides foreign exchange rates). Settlement instructions and notifications are exchanged with the E*TRADE Global Settlement bank (which in turn communicates with the E*TRADE affiliate banks through the international banking network, and a foreign exchange provider such as UBS Warburg with whom the E*TRADE Global Settlement bank exchanges foreign exchange settlement instructions and notifications). E*TRADE Global's system also obtains market data such as issue information and closing data from market data sources. Both the E*TRADE FX facility and the E*TRADE Global brokerage systems preferably access global foreign exchange data from UBS Warburg, but the particular data source is not essential, so long as the E*TRADE Global system has access to suitable market and foreign exchange data.

[0053] Each local affiliate of the network can act either as an introducing or executing partner or affiliate, and provides a local broker/dealer licensed to execute trades in the local market and a back-office provider to maintain customer books and records. Each local affiliate has or will establish relationships with clients and is responsible for keeping account information for each client. Preferably, as a security measure, client data is handled at the local level and is not passed on to either the E*TRADE Global hub or to an executing affiliate. The servicing and ownership of customer accounts will always remain with the local affiliate broker/dealer, and each customer will need only one account to execute global trading. This also reduces the overhead required at the global level since memory and operating resources are not used maintaining excess customer information. In addition, each local affiliate has or will have established relationships with the entities to provide banking, clearing, settlement, and custody services. This minimizes the potential for error across the network that could arise from differences in language, for example. This also eliminates any need for E*TRADE Global to open branch offices or be registered in each affiliate country, and lowers the costs of set-up, administration, and liability for the business. Each of the brokers or dealers in the network preferably meets stringent standards of conduct, with acceptance of the broker into the network occurring only after it has proven its operational integrity.

[0054] A non-exhaustive list of the responsibilities for the introducing broker are: 1) Vetting (i.e. carefully checking) each order received from each customer for adequacy of assets (funds on the buy side, positions on the sell side), compliance with rules governing their customers trading abroad, and compliance with the target market rules; 2) reserving customer assets associated with open orders, the local currency value of the estimated trade in the client's account for the buy side and the position for the sell side; 3) routing vetted orders to E*TRADE Global; 4) adjusting open cross-border orders as necessary to account for foreign exchange fluctuations; 5) maintaining adequate reserve levels for trading volumes and open orders at E*TRADE Global; 6) transferring settlement funds to E*TRADE Global's account on a timely basis based on E*TRADE Global's instructions; 7) reconciling fully-disclosed books and records with the omnibus records transmitted by E*TRADE Global, including transactions, positions and balances; 8) processing and allocating corporate actions from the omnibus account to the individual client such as dividends, stock splits, and other relevant corporate actions, and discussing with the customers the details of each corporate action; 9) notifying customers of information associated with cross border trading such as sending confirmations (contract notes) for cross-border trades as required by local regulations, sending regular statements that include the positions and valuations of foreign security holdings, and distributing proxy statements and other corporate action notifications (which may involve the production by the introducing affiliate of the number of shareholders to determine accurately the number of proxies to be sent); 10) adjusting open limit orders for dividends and splits; 11) maintaining a back office security master that accommodates foreign securities; 12) maintaining books and records that include positions and balances denominated in multiple currencies; 13) transmitting appropriate tax withholding rates for sales with the order record; 14) generating order records differentiating payment currency from settlement currency; and 15) determining the pricing schedule to the local customer for cross-border trades in their local market. This should be consistent with the rest of the global network by accounting for E*TRADE Global's transfer costs, any additional costs to the local broker for maintaining foreign security records, and the competitive environment. With multiple transactions in a day, for each settlement day the introducing broker also aggregates the trades it needs to settle with E*TRADE Global (in, for example, AUD), nets proceeds against payment (in AUD), and ensures that the net amount AUD is forwarded to the E*TRADE Global AUD account (or whichever account applies).

[0055] It is the responsibility of the introducing broker to decide on what types of transfers are acceptable (i.e. full

transfers versus partial transfers). Any fees associated with incoming/outgoing transfers by the executing broker will be passed on to the E*TRADE Global network, who then pass them on to the introducing broker. Security balances will be passed onto the executing broker for custody and the introducing broker will be responsibility of communicating transfer information to their customers. If a security is domiciled within the network the introducing broker must transfer the security position to the executing broker of which the security is domiciled. For instance, all Australian securities must be given to E*TRADE Australia for custody.

[0056] The responsibilities of the executing broker/dealer include: 1) maintaining an omnibus account for E*TRADE Global and segregating its positions; 2) accepting orders on this account on a "versus payment" basis; 3) routing orders for this account for best price execution on a timely basis; 4) adjusting limit orders for dividends and splits; 5) providing execution confirmations and order expiry information electronically to E*TRADE Global; 6) providing corporate action information and allocations for all E*TRADE Global positions; 7) transmitting non-transaction sweeps such as dividend payments; 8) providing trading rules for foreigners in the market to E*TRADE Global; 9) custody securities in a segregated account for the benefit of E*TRADE Global; 10) providing statement information for the E*TRADE Global omnibus account; 11) withholding the appropriate taxes for dividends, interests, and sale proceeds; and 12) processing all corporate actions (reorganizations, dividend pay outs, proxy voting) and notifying E*TRADE Global in a timely manner. E*TRADE Global's back office system should receive a daily free from each of the target markets back office system, with the feed including information in which E*TRADE Global has a position. With multiple transactions in a day, for each settlement day the executing broker also aggregates all trades settling that day (for example, E*TRADE Securities would aggregate all trades settling that day in US dollars), nets proceeds against payments, and ensures that the net amount in USD is forwarded to the US settlement bank from E*TRADE's Global USD account.

[0057] The Order Management System, referred to in **FIG. 2** as E*TRADE Global Trading, handles the routing and execution reporting of cross-border transactions (securities and currency) to, as needed, the appropriate affiliate and foreign exchange facility. It therefore is responsible for: 1) routing all non-domestic customer securities orders from the introducing broker/dealer to the executing broker/dealer; 2) routing order status (executions and expirations) from the executing broker to the introducing broker/dealer including local currency value of executions; 3) defining which instruments can be traded in the network (for example, only over-the-counter equities might be traded through the system); 4) identifying and defining the destinations for certain types of instruments if it is not one of the affiliate broker/dealers. Currency transactions, for example will be routed to the foreign exchange facility; 5) managing the routing (and re-routing) parameters by instrument including currencies; 6) monitoring order and execution activity, including accompanying foreign exchange transactions; 7) reconciling orders and trades, including foreign exchange; 8) generating a corresponding foreign exchange order on a real-time basis after an equity order executes by differentiating between payment and settlement currencies on an order record; 9) defining and developing the procedures for managing exceptions which occur in the order and execution process; adjusting open orders for corporate actions, expirations, and exercises; 10) monitoring open orders against currency fluctuations and notifying the introducing brokers when this exposure occurs; 11) validating cross-border orders against affiliates' positions and trading limits; 12) routing orders based on parameters per security traded in the Global network; 13) automatically placing any foreign exchange deal after execution of an equity trade; 14) placing speculative foreign exchange transactions for cash management purposes; 15) reconciling trades; 16) managing open orders such as expirations and adjustments for corporate actions; and 17) ordering and filling adjustments. These responsibilities include monitoring each introducing broker's trading activity against the reserves it holds at E*TRADE Global. The reserves for each affiliate will be deposited in US dollars (USD) and, perhaps, US treasuries. Unsettled trades will need to be converted to USD and compared against reserve levels on a regular basis, with an alert when certain thresholds are being approached. E*TRADE Global Limited organized as a company and broker-dealer registered offshore, which allows E*TRADE Global to receive orders and route from the local broker/dealers without being registered in the target country as a broker/dealer.

[0058] E*TRADE Global maintains accounts on an omnibus basis. Each of the affiliates will have a separate account as an introducing broker and as an executing broker. With 30 affiliates, there will be approximately 60 dealer accounts in E*TRADE Global plus a variety of posting and nominee accounts. E*TRADE Global, acting as trustee on behalf of the introducing broker, will be represented as a single omnibus account at each executing broker.

[0059] Referring to **FIGS. 2 and 10**, E*TRADE Global also maintains Global Financial Accounting, the Global Corporate Actions, and the Global Product Master modules. E*TRADE Global handles the clearing and settlement of cross-border transactions, global custody of non-domestic securities through a series of nominee/FBO accounts, and corporate action processing. E*TRADE Global's Foreign Exchange Facility handles the currency exchange transactions. E*TRADE Limited will preferably be a separate company, registered offshore as an omnibus broker/dealer holding one account for each introducing affiliate, as well as each executing affiliate. Its offshore registration allows E*TRADE Global Limited to receive orders and route from the local affiliate without registration in the target country. It also has a number of responsibilities, which include: 1) maintaining an omnibus account for each broker/dealer in the E*TRADE Global network; 2) maintaining reserves deposited by each affiliate broker/dealer based on the greater of a set amount (such as USD 100,000), or each affiliate's average cross-border settlement payments multiplied by a given number of days; 3) managing the investment of "excess" cash overnight; 4) enforcing the penalization of late payments by local affiliates; 5) guaranteeing settlement to each executing broker on a net basis daily and in local currency; 6) performing daily trade reconciliation with each executing affiliate; 7) performing daily trade reconciliation with each introducing partner; 8) transmitting confirmation (also called contract note) information including currency equivalents to each affiliate electronically; 9) maintaining and reconciling the daily stock record; 10) transmitting periodic (such as monthly) statement information to each introducing affiliate electronically, with consolidation of all

custodian affiliates' records; 11) transmitting corporate action information to each affiliate broker/dealer impacted by the corporate action. Corporate actions include dividends and splits, proxy information, and voluntary actions; 12) allocating and transferring dividend payments to each affiliate broker/dealer and executing the associated currency exchange transactions; 13) adjusting and transmitting stock splits and reverse splits for each affiliate broker/dealer; 14) adjusting the omnibus open limit orders for changes due to dividends and splits; 15) transmitting adjustments to open limit orders for changes due to dividends and splits to the introducing broker/dealer; 16) defining, managing, and enforcing execution and clearing agreements between E*TRADE global and each affiliate broker/dealer; 17) maintaining a consistent fee schedule for transaction to each target market. For example, each local affiliate will be subject to the same fee for each target market (e.g. a U.S. trade will cost the same for any affiliate in the global network), fees will be based on the target broker/dealer cost plus E*TRADE global's cost for the transaction. This will vary from country to country, and fees will be denominated in one base currency (U.S. dollars); 18) providing guidelines for pricing of crossborder trades charged by each affiliate broker/dealer to its customer; 19) maintaining tax withholding matrices for country-to-country withholding rates on dividends, interest, and sales proceeds.; 20) repositorying the country trading rules on foreigners trading in domestic markets including withholding tax. Facilitating the distribution of the rules to all affiliate broker/dealers (enforcement of these rules, as well as the rules on local customers trading abroad will be the responsibility of the local affiliate); 21) performing compliance due diligence and regular audits on affiliates to maintain high confidence that E*TRADE Global can maintain an omnibus clearing and trading relationship; 22) identifying and setting up a settlement bank for E*TRADE Global's settlement of funds associated with securities trading (with sub-accounts for currencies); 23) maintaining and generating bank instruction for funds settlement associated with trades by each affiliate; 24) maintaining the accounting records of charges and revenues due to affiliates and E*TRADE Global; and 25) bill, collect, or remit appropriate amounts to each affiliate monthly. With multiple introducing and executing brokers, E*TRADE Global also aggregates trades to an executing broker from others in the network and aggregates the introducing brokers trades to the rest of the network.

[0060] The Global Financial Accounting product manages the omnibus accounts per the introducing broker, manages trustee accounts per the executing broker, manages the cash and stock settlement instructions, maintains fee schedules, processes contract notes, processes and allocates corporate actions from executing to introducing affiliates, manages reserves, manages accruals and allocations for fees and foreign exchange margin revenues and associated billing, handles bank settlement instructions, manages foreign exchange settlement instructions, manages foreign exchange profit allocations, executes profit accounting by transaction in the specified currency, and reconciles trades. The Global Product Master product obtains data from Reuters Master Source and DTC and other market data services.

[0061] The currency exchange facility or foreign exchange facility provides indicative foreign exchange rates for an order preview, real-time auto-execution of deals associated with security transactions, executable rates and real-time execution for stand-alone foreign exchange trades, and management of foreign exchange spread parameters. With regard to the management of foreign exchange spread parameters, an E*TRADE Global foreign exchange margin is added to the indicative rates and deal rates returned by the liquidity bank to E*TRADE Global. The rates passed to the affiliates will be after this margin has been added. E*TRADE Global Foreign Exchange Facility will provide conversion of payments from the customer currency to the target market currency on the buy side of a security transaction and perform the reverse on the proceeds of a sale. In addition to facilitating and supporting cross-border securities trading, the facility should also be able to support currency trading as a product in its own right. The E*TRADE Foreign Exchange Facility could either be a partner currency exchange facility, or could be in-house within E*TRADE Global. In either case, the E*TRADE Global Foreign Exchange Facility should be able to: 1) support currency pairs to correspond with the cross-border trading markets within the global network (including against the Euro); 2) provide round-the-clock access to realtime currency exchange rates which can be distributed throughout the global network and to the end user to preview a securities trade, as an executable quote for a foreign exchange speculative trade, to update a portfolio, or simply as quotes; 3) accept orders for foreign currency on an electronic and real-time basis; 4) execute foreign exchange transactions immediately after security trade executes (auto accept); 5) allow the specification of value dates on currency transactions to match the equity settlement dates (and avoid the settlement date mismatches which will occur if restricted to spot transactions); 6) differentiate between transactions associated with a securities trade and those which consist of speculative trading in currency pairs; 7) support cash management in multiple currencies (allow deposits and loans); 8) generate revenue for E*TRADE Global while delivering competitive retail rates to the end-customer through allowing management of spreads passed through to the end client by country or through back-to-back executions of currency orders which lock in a spread; 9) provide revenue through the share of the spread or margin on back-to-back executions at inter-bank rates; 10) settle on a net basis per currency with E*TRADE Global; 11) provide electronic reporting of transactions and profits by currency pairs; and 12) allow designation of currency for profit. Because of multiple transactions in any one day, for each settlement date the FX facility also aggregates all trades by currency pair, nets proceeds against payments by currency, and ensures that the net amounts of USD and AUD (for example) are either sent from or credited to the appropriate FX accounts.

[0062] The E*TRADE Global Affiliate interface is a software domain that provides an interface between: 1) executing brokers and E*TRADE Global trading, foreign exchange, and clearing services; 2) introducing brokers and E*TRADE Global trading, clearing and foreign exchange services; and 3) E*TRADE Global Trading and clearing systems and the E*TRADE Global Foreign Exchange Facility.

[0063] The E*TRADE Affiliate Interface is a software interface service to the affiliate back office, and is suited to handle messages to and from the affiliate as an executing broker, and to and from the affiliate as an introducing broker.

[0064] The E*TRADE Global settlement bank handles the cash settlement for equity transactions between E*TRADE global and each affiliate, and instructions to the settlement bank is associated with cash settlement of securities transactions. It also holds a sub-account for each currency, and will custody the cash reserves of E*TRADE Global. All affiliates will be instructed to send net payments to the E*TRADE Global Settlement Account.

[0065] The Foreign Exchange Settlement Bank handles the settlement of currency transactions for E*TRADE Foreign Exchange. It should have a sub-account for each currency. The instruction for the sell side and buy side of a currency transaction should merely reflect how different (sub)-accounts at E*TRADE Global's foreign exchange settlement bank. The banks used by E*TRADE Global for equity and FX settlement may be the same and merely have different accounts for different functions.

[0066] Various web-based interfaces will be available to the network. E*TRADE Global staff will have user interface screens will be provided for managing the business parameters underlying the different systems, for managing exceptions, for monitoring, for research, for order routing, for setting thresholds for manual review, for setting of spread parameters by currency pair, and for entering an FX deal requires as part of cash management. Certain user interface screens will also be advantageously available to providers, to allow them to monitor currency positions, hedge them, initiate reconciliation files, and agree net settlement balances with E*TRADE Global.

[0067] Corporate actions may affect customer positions. Examples of corporate actions that affect customer positions are forward stock splits, reverse splits, name/symbol changes, mergers, tender offers (voluntary and mandatory), exchange offers, rights offerings, warrant exercises, and dividend payout.

[0068] Once a corporate action has been announced, the executing broker will notify E*TRADE Global. E*TRADE Global will pass on the information to all introducing brokers affected, along with records and pay dates. For example, for a dividend the executing broker should send a message or file to E*TRADE Global indicating an adjustment in price to all open orders in the security in which a dividend was paid. E*TRADE Global's adjustment to its order file should, likewise, transmit an adjustment on to the introducing broker with impacted open orders. For stock splits, the adjustments should be reflected first in the executing broker's order file and transmitted to E*TRADE Global. E*TRADE Global's adjustment to its order files should be transmitted to the relevant introducing brokers so that their orders are adjusted and clients notified. For a reorganization (name changes, mergers, mandatory tenders), the open orders should be cancelled and the end client notified why. For other corporate actions, on the pay date, the executing broker will reconcile E*TRADE Global's holdings with their depository, and E*TRADE Global will reconcile with the introducing brokers. In some instances, the executing broker does not see the change until a couple of days later. This delay is usually caused by the depository or transfer agents. If the executing broker's balance is not changed on pay date, E*TRADE Global and the introducing brokers position balance will not change as well. This is to avoid overpayment in the case a company does not execute its corporate action. The back offices at E*TRADE Global and at the introducing broker will need the facility to process and allocate global corporate actions based on terms sent to them. If the corporate action is voluntary, the executing broker will notify E*TRADE Global of all voluntary deadlines.

[0069] Associated with these transactions are a number of risks. The risks in the invention arise from having two transactions occurring in a cross-border trade (equity and currency) and having to deal with different time zones. For example, when a customer places a market order there are two price risks involved. First, there is the risk that the price of the stock that is being bought or sold will move significantly between the time the order is previewed and placed and the time it is executed. Second, there is the risk that the exchange rate for the currency pair will have changed significantly between the time the order is placed and the time of execution. While these risks are ultimately the customer's, the introducing broker bears some exposure if it doesn't reserve sufficient customer assets to account for the price changes. During the market day, these risks will tend to be minimal since most transactions should execute within seconds. Where the order is in a thinly traded stock, the risk becomes greater. Price and currency exposure can be mitigated by adding a margin on the amount reserved for the open order, such E*TRADE Global reserving 105% of the trade value from the introducing broker's account. Exposure can also be mitigated by initiating and executing the currency exchange transaction immediately after the equity transaction is executed to lock in an exchange rate as close as possible to that previewed. Risk can also be minimized by establishing an earlier cut-off for cross-border market orders to ensure that an accompanying foreign exchange transaction can be initiated.

[0070] Limit orders on an equity guarantees that an equity will be bought or sold only at a specific price. This removes the price risk that accompanies market orders. With cross-border trades, however, the currency exchange risks remain and may, in fact, be greater. A limit order can potentially be left open for 60 days in the US market, for example, and currency rates can move substantially within that time frame. Risks from limit orders may be mitigated by, for example, reserving a margin for the exchange rate volatility factor when a limit order is placed. For most currencies, a 5-10% volatility factor should be sufficient for a 30-day period. The introducing broker would be expected to reserve this amount at the customer level based on the principal and brokerage amount. E*TRADE Global would apply the reserved amount to the introducing brokers account based on the principal. Another means to reduce risk from limit orders is marking-to-the market all open limit orders on a regular basis, such as at the end of the day. A third means to reduce this risk is to shorten the period during which a limit order is allowed to be open.

[0071] Cross-border trading also carries with it certain settlement risks from settling in each executing market on a daily basis. E*TRADE Global therefore incurs risks from introducing brokers failing to send funds to settle both currency and equity trades by the settlement of cut-off times, the complexity of coordinating settlement transactions to meet the requirements of the equity market, currency market, and banking hours in each country (time zone differences), and mismatches in currency and equity settlement

dates where there are no forward markets or when the currency market is closed while the equity markets are open. These risks can be mitigated by each affiliate maintaining a reserve with E*TRADE Global equal to the value of the average payment volume generated in cross-border trades (for a number of settlement days) by the affiliate or a minimum USD 100,000, by the levy of a penalty on affiliates that fail to deliver settlement funds on a timely basis, by maintaining detailed settlement calendars for the currency market, each exchange, and banks, and by establishment of share or principal value thresholds that will require a secondary review and approval process.

[0072] Custody risks also exist in cross-border trading. The invention has each of the affiliates acting as the global custodian for all domestic securities held by customers in the rest of the network. The risks arise from any failure by the affiliate to properly segregate positions for the benefit of E*TRADE Global. It opens E*TRADE Global and the rest of the network to a liability if an affiliate fails and the rest of the network's holdings in domestic equities are tied up, or if there is fraud in the domestic office and the global network's holdings in domestic securities are compromised. Custody risk can be mitigated through a combination of legal and compliance due diligence before any affiliate is designated as the correspondent in a market for the rest of the E*TRADE Global trading network, and by obtaining excess insurance to cover this risk.

[0073] Regulatory risks arise from the ability to vet all orders based on local regulator's rules governing their residents trading abroad, foreigners trading in their markets, and any generic rules for anyone, resident or foreigners alike, trading in the market. In order to be in compliance with all jurisdictions, all orders should be vetted for both rules, and E*TRADE Global Clearing as an omnibus entity will not know any individual customer. In order to mitigate these risks, the legal liability should be allocated to executing brokers to update the rules investors need to know to trade in the target market and provide these to E*TRADE Global. Similarly, the risks can be mitigated by giving the introducing broker the obligation to retrieve and apply the rules of the target market, having both indemnify E*TRADE Global from any obligation to update and apply the regulatory rules, and having E*TRADE Global communicate and double check (auditing) affiliates on a regular basis.

[0074] **FIGS. 11A and 11B** are a simplified system diagram and a flow diagram for a system useful for stand alone foreign exchange deals. This simplified diagram of **FIGS. 11A and 11B** includes the foreign exchange components integrated into the global trading system taught above. Such an arrangement may be used when the asset class at issue is currency, and the conversion of one currency to another is the primary concern. An introducing affiliate **1122** connects to the Global Limited Brokerage Services unit **1124**, a Global Limited Foreign Exchange Facility **1127** and a Global Foreign Exchange Liquidity Bank **1126**; The introducing affiliate does not connect directly to the Global Foreign Exchange Liquidity bank, but instead connects through the Global Brokerage unit **1124**. A customer at the introducing affiliate receives foreign exchange quotes from the Global Foreign Exchange Facility, and enters an order at step **1100** to the introducing affiliate to trade or convert an amount of currency "A" to currency "B." At step **1100** when the customer places the FX order, he specifies that it is a spot deal. The customer account is immediately encumbered this amount. The order is sent to the Global unit **1124** on the foreign exchange trade date T**+0** at step **1101**. At step **1102**, the Global unit sends to the Global Foreign Exchange Facility the order to sell a set amount of currency "A" for currency "B". This order is then sent to the Global Foreign Exchange Liquidity Bank **1126**, where the exchange is made. At step **1103**, the Global Foreign Exchange Liquidity Bank confirms the wholesale exchange rate of the deal and the counter currency amount for currency "B", and the actual settlement date to E*TRADE Global via the FX facility. At step **1104**, the Global unit transmits confirmation of the retail foreign exchange deal to the Initiating Affiliate, who then confirms the deal to the customer including the amount of currency "B". At step **1105**, on T**+2**, the debit is made in the customer account of an amount of currency "A" and a deposit is made in the customer account of currency "B".

[0075] The above discussion is meant to be illustrative of the principles and various embodiments of the present invention. Numerous variations and modifications will become apparent to those skilled in the art once the above disclosure is fully appreciated. It is intended that the following claims be interpreted to embrace all such variations and modifications.

What is claimed is:

1. A computerized system for trading securities and commodities, comprising:

a first computerized introducing affiliate in a first country suitable for accepting a transaction order from a customer, and transmitting said transaction order electronically, said transaction order being for the handling of a security or commodity; a second computerized introducing affiliate in a second country;

an exchange on which said security or commodity is traded;

a global hub connected between said first introducing affiliate and said second introducing affiliate, said global hub for electronically routing said transaction order from said introducing affiliate to said exchange.

2. The system of claim 1, further comprising a computerized executing affiliate in a second country suitable for electronically receiving said transaction order, said global hub connected between said first introducing affiliate and said executing affiliate, said global hub suitable to route electronically said transaction order to said executing affiliate.

3. The system of claim 2, wherein said transaction order is to sell an equity, and said executing affiliate electronically transmits proceeds from said sale of said equity to said global hub.

4. The system of claim 3, wherein said global hub transmits said proceeds to said introducing affiliate.

5. The system of claim 2, further comprising a second computerized executing affiliate in a third country suitable for electronically receiving said transaction order, said global hub for electronically routing said transaction order to said second executing affiliate.

6. The system of claim 1, wherein said transaction order is to purchase an equity, and said introducing affiliate electronically transmitting currency for said purchase of said equity to said global hub.

7. The system of claim 6, wherein said global hub transmits said currency to said executing affiliate.

8. The system of claim 7, wherein said first affiliate maintains an account for said customer in a first currency and prior to transmitting said currency to said executing affiliate, a check is made of said account to ensure said account holds an amount greater than said amount of said purchase of said equity.

9. The system of claim 1, wherein said first affiliate maintains an account for said customer in a first currency and said execution of said transaction order is made is a second currency.

10. The system of claim 1, further comprising a second introducing affiliate in a second country, said second introducing affiliate being suitable for accepting a transaction order from a second customer, and transmitting said transaction order electronically.

11. The system of claim 1, wherein each of said transaction orders requires a trade of a first currency to a second currency, said global hub responsible for converting said first currency to said second currency.

12. The system of claim 11, wherein said global hub is connected to a foreign exchange rate information source and a foreign exchange rate bank, said global hub sending said first currency to said foreign exchange rate bank and receiving in return said second currency.

13. The system of claim 1, wherein there exists a customer account corresponding to said customer, and further wherein other than said transaction order, said introducing affiliate not sending information pertaining to said customer account to said global hub.

14. A method of buying a security or commodity, comprising the acts of:

accepting an electronic transaction order from a first customer in a first country to purchase a stock for a first amount, said stock being available on a first financial exchange;

checking an account balance in a customer account for said first customer to determine if said customer account balance is at least equal to said first amount;

electronically transmitting said transaction order to a global hub where said customer account balance is at least said first amount, said global hub being electronically connected to at least a second financial exchange and said first financial exchange;

purchasing said stock on said first financial exchange; and

deleting a second amount from said customer account.

15. The method of claim 14, wherein said first financial exchange is in a second country different from said first country.

16. The method of claim 14, wherein said step of purchasing said stock includes said global hub electronically transmitting said transaction order to an executing affiliate that purchases said stock in said first financial exchange.

17. The method of claim 14, wherein said second amount correlates to said first amount.

18. The method of claim 14, wherein said customer account is in a first currency and a second currency is purchases said stock on said first financial exchange.

19. The system of claim 18, wherein said global hub converts said first currency to said second currency.

20. The system of claim 14, further comprising:

accepting a second electronic transaction order from a second customer in a third country different from said first country.

21. A method of selling a security or commodity, comprising the acts of:

accepting an electronic transaction order from a first customer in a first country to sell a stock, said stock being traded on a first financial exchange;

checking an account in a customer account for said first customer to determine if said customer owns said stock;

electronically transmitting said transaction order to a global hub, said global hub being electronically connected to at least a second financial exchange and said first financial exchange;

selling said stock on said first financial exchange;

electronically transmitting proceeds from said sale of said stock from said first financial exchange to said customer account.

22. The method of claim 21, wherein said first financial exchange is in a second country.

23. The method of claim 21, where prior to electronically transmitting said proceeds to said customer account, said proceeds are transmitted to said global hub.

24. The system of claim 21, wherein said step of selling said stock includes said global hub electronically transmitting said transaction order to an executing affiliate that sells said stock on said first exchange.

25. The system of claim 24, wherein said executing affiliate is in a second country.

26. A method of buying a security or commodity, comprising:

entering a transaction order into a first computerized system, said transaction order being for the purchase of a security or commodity;

transmitting said transaction order electronically to a second computerized system, said second computerized system being connected to a plurality stock exchanges in a plurality of countries; and

receiving from said second computerized system execution details regarding the purchase of said security or commodity in response to said transaction order, said purchase of said security or commodity being made by a stock exchange member connected to said second computerized system.

27. The method of claim 26, wherein said first computerized system maintains a customer account in a first currency and said security or commodity trades on a stock exchange in a second currency.

28. The method of claim 27, wherein said second computerized system converts said first currency to said second currency to purchase said security or commodity.

29. The method of claim 26, wherein said second computerized system connects to stock exchanges in at least three countries.

30. The method of claim 26, further comprising:

vetting a customer account in said first computerized system to determine that said customer account holds funds sufficient to purchase said security or commodity.

31. A method for buying a security or commodity, comprising:

receiving a transaction order electronically in a first country to purchase a security or commodity, said transaction order being initiated from a second country and being transmitted through a global hub, said global hub being connected to stock exchanges in a plurality of countries;

executing the purchase of said security or commodity on a stock exchange in said first country in response to said transaction order;

transmitting electronically the execution details of said purchase of said security or commodity, said execution details including a price for said purchase.

32. The method of claim 31, wherein said method includes converting a first currency to a second currency to facilitate said purchase of said security or commodity.

33. The method of claim 32, wherein said conversion of said first currency to said second currency occurs on the settlement date for said purchase.

34. The method of claim 31, wherein said step of transmitting comprises first transmitting said execution details to said global hub from an executing affiliate and second transmitting to an introducing affiliate in said first country.

35. The method of claim 31, wherein said transaction order is associated with a customer account upon generation of said transaction order, said customer account being encumbered by an amount at least equal to said price for said purchase.

36. The method of claim 35, wherein the amount of said encumbrance is based on a price for said security or commodity, and an exchange rate between a first currency and a second currency.

37. The method of claim 31, wherein said method includes an executing broker that executes said transaction order, said executing broker also being suitable to act as an introducing broker for the generation of a transaction order.

38. The method of claim 31, wherein said transaction order is received electronically by a computer system.

39. The method of claim 31, wherein said global hub connects between any given pair of stock exchanges.

40. A method of selling a security or commodity, comprising:

entering a transaction order into a first computerized system, said transaction order being for the sale of a security or commodity;

transmitting said transaction order electronically toward a second computerized system, said second computerized system being connected to a plurality stock exchanges in a plurality of countries; and

receiving from said second computerized system execution details regarding the sale of said security or commodity in response to said transaction order, said sale of said security or commodity being made by a stock exchange member connected to said second computerized system.

41. The method of claim 40, wherein said second computerized system connects to said plurality of stock exchanges in a hub and spoke configuration.

42. The method of claim 40, wherein said method includes receiving from said second computerized system the proceeds from the sale of said security or commodity.

43. The method of claim 40, wherein said method includes the conversion of a first currency to a second currency.

44. A method for selling a security or commodity, comprising:

receiving a transaction order electronically in a first country to sell a security or

commodity, said transaction order being initiated from a second country and being

transmitted through a global hub, said global hub being electronically connected to

stock exchanges in a plurality of countries;

executing the sale of said security or commodity on a stock exchange in said first country;

transmitting electronically the execution details of said sale of said security or commodity, said execution details including a price for said sale.

45. The method of claim 44, further comprising a step of crediting a consumer account said price for said sale, less charges.

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