US006338050B1

(12) **United States Patent**
Conklin et al.

(10) **Patent No.: US 6,338,050 B1**
(45) **Date of Patent: *Jan. 8, 2002**

(54) **SYSTEM AND METHOD FOR PROVIDING AND UPDATING USER SUPPLIED CONTEXT FOR A NEGOTIATIONS SYSTEM**

(75) Inventors: **Jeffrey Conklin**, Boston; **David Foucher**, Somerville; **Daniel Foucher**, Bedford, all of MA (US)

(73) Assignee: **Trade Access, Inc.**, Boston, MA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/192,729**

(22) Filed: **Nov. 16, 1998**

(51) **Int. Cl.**[7] **G06F 17/60**
(52) **U.S. Cl.** **705/80**; 705/26
(58) **Field of Search** 705/80, 1, 26, 705/27, 39, 37

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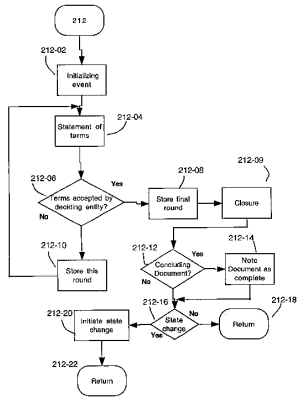
(List continued on next page.)

Primary Examiner—Tariq R. Hafiz
Assistant Examiner—Susanna Meinecke-Díaz
(74) *Attorney, Agent, or Firm*—Maureen Stretch

(57) **ABSTRACT**

A multivariate negotiations engine for international transaction processing which: enables a sponsor to create and administer a community between participants such as buyers and sellers having similar interests; allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms, request sample quantities, and track activity; allows a seller/participant to use remote authoring templates to create a complete Website for immediate integration and activation in the community, to evaluate proposed buyer orders and counteroffers, and to negotiate multiple variables such as prices, terms, conditions etc., iteratively with a buyer. The system provides secure databases, search engines, and other tools for use by the sponsor, which enable the sponsor to define the terms of community participation, establish standards, help promote the visibility of participating companies, monitor activity, collect fees, and promote successes. All this is done through a multivariate negotiations engine system operated at the system provider's Internet site, thus requiring no additional software at the sponsors', or participant sellers', or buyer's sites. This also allows buyers and sellers to use and negotiate payment options and methods that are accepted internationally. The system maintains internal databases that contain the history of all transactions in each community, so that sponsors, buyers and sellers may retrieve appropriate records to document each stage of interaction and negotiation. Documents are created by the system during the negotiation process.

54 Claims, 56 Drawing Sheets



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Fig. 1a

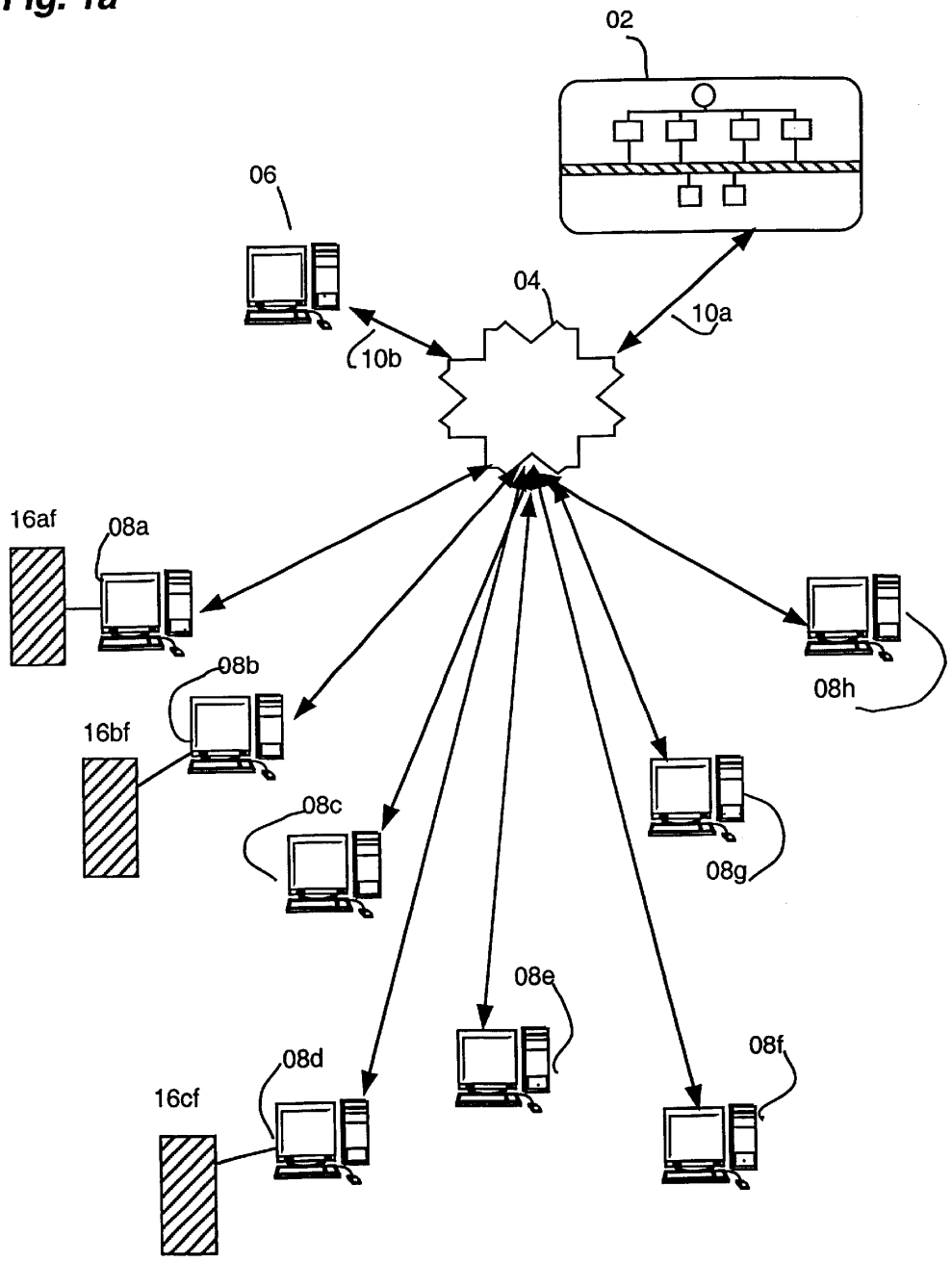


Fig 1b

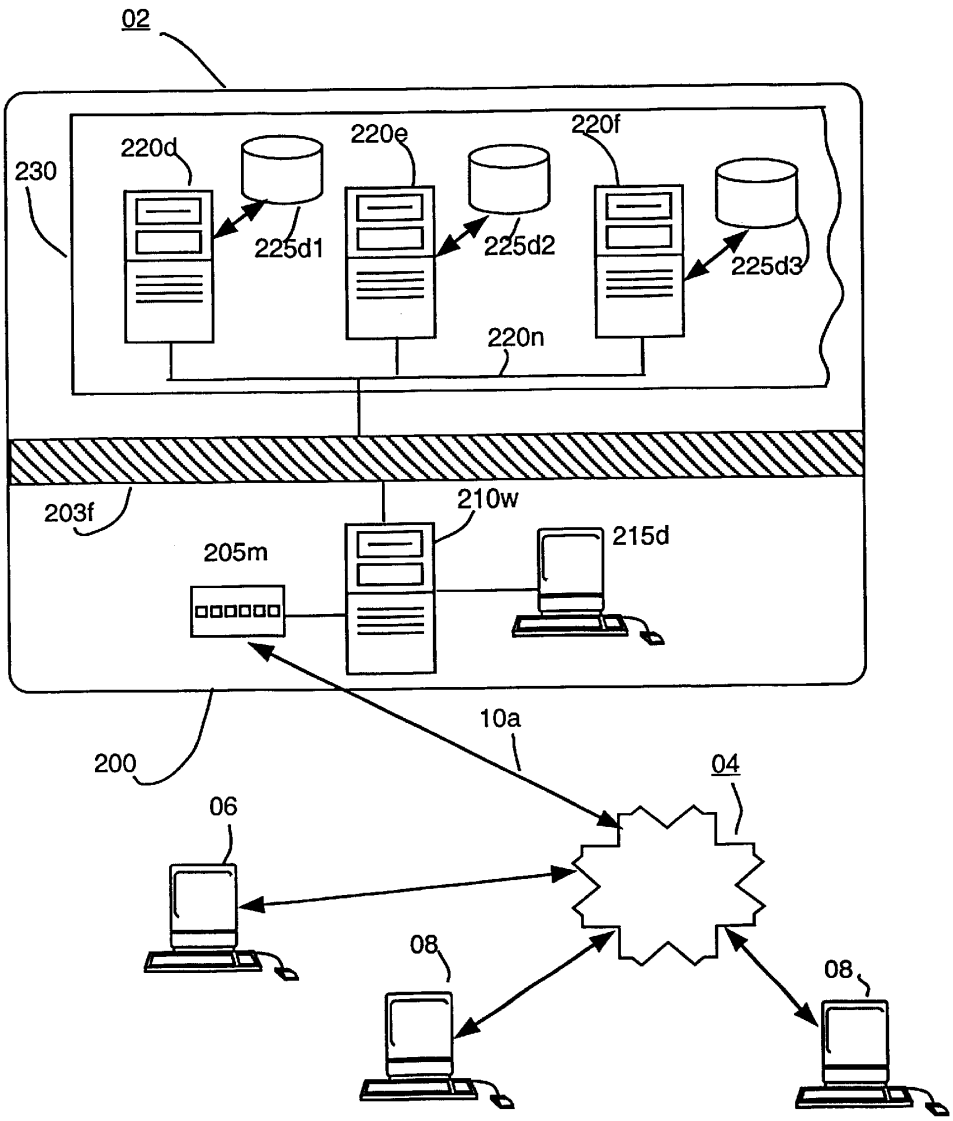

02
230
220d
220e
220f
225d1
225d2
225d3
220n
203f
210w
205m
215d
200
10a
04
06
08
08

FIG. 1c

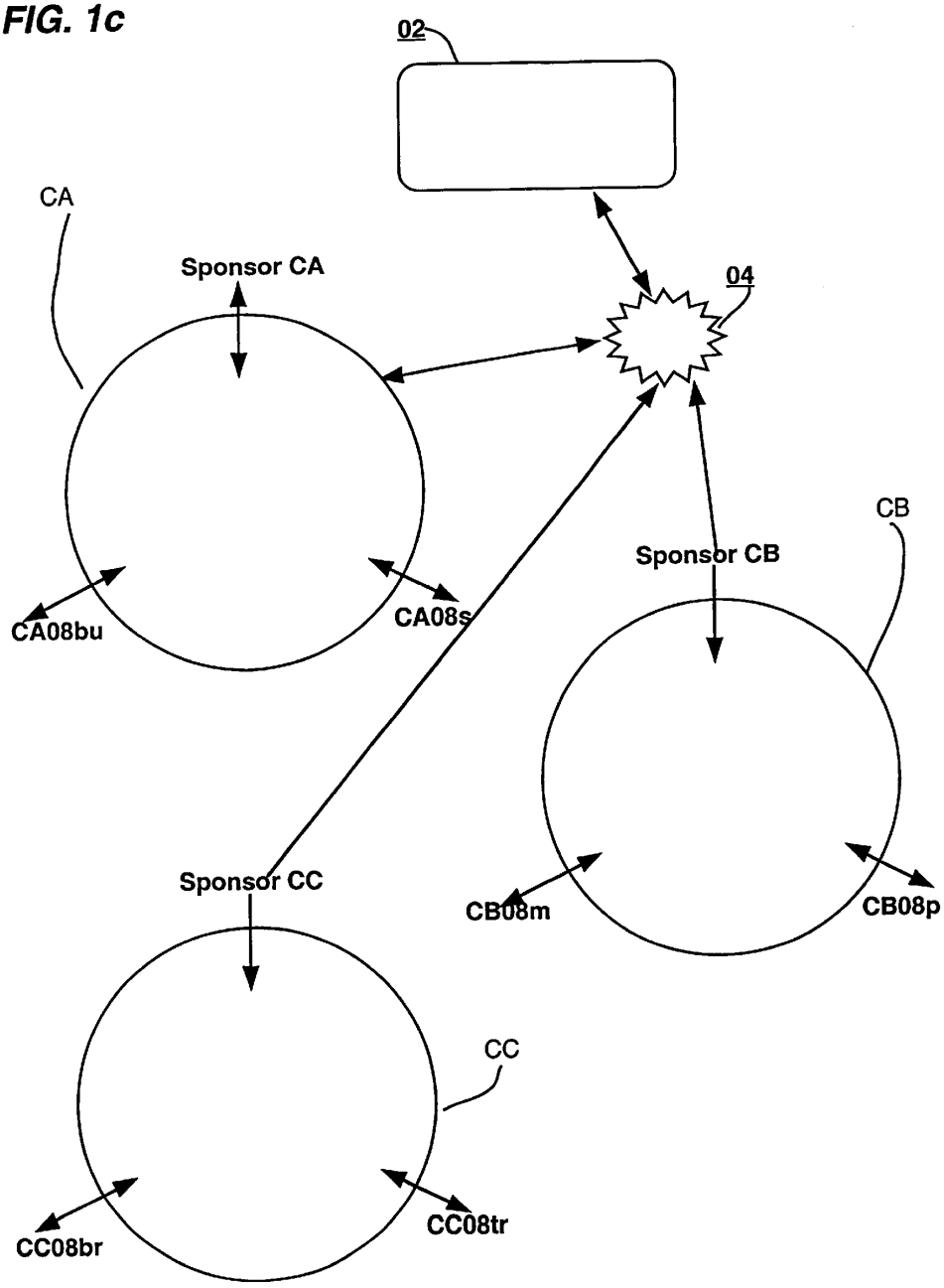

02
CA
Sponsor CA
04
CA08bu
CA08s
CB
Sponsor CB
CB08m
CB08p
Sponsor CC
CC
CC08br
CC08tr

Fig. 1d

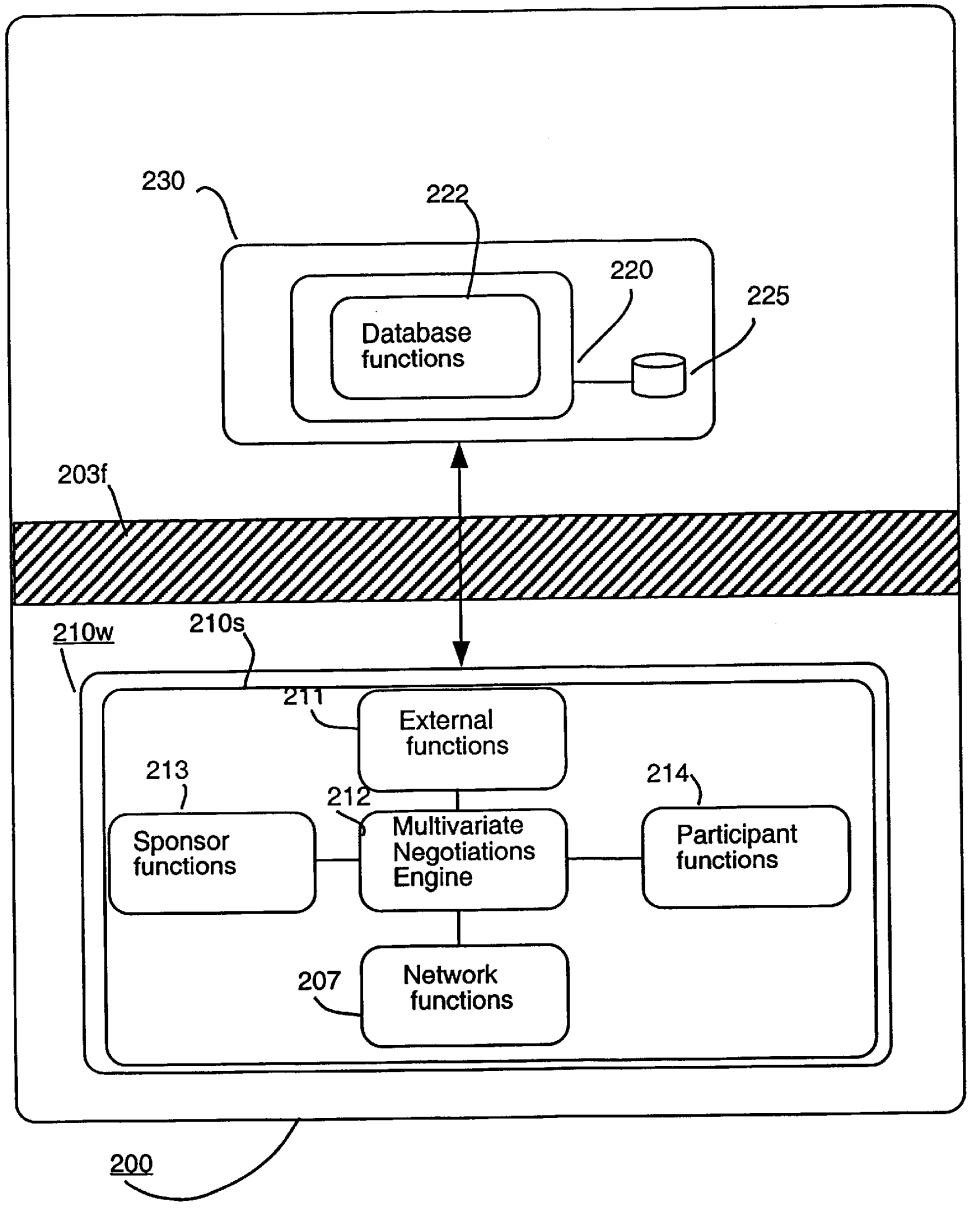

230
222
220
225
Database functions
203f
210w
210s
211
External functions
213
212
214
Sponsor functions
Multivariate Negotiations Engine
Participant functions
207
Network functions
200

Fig. 1e

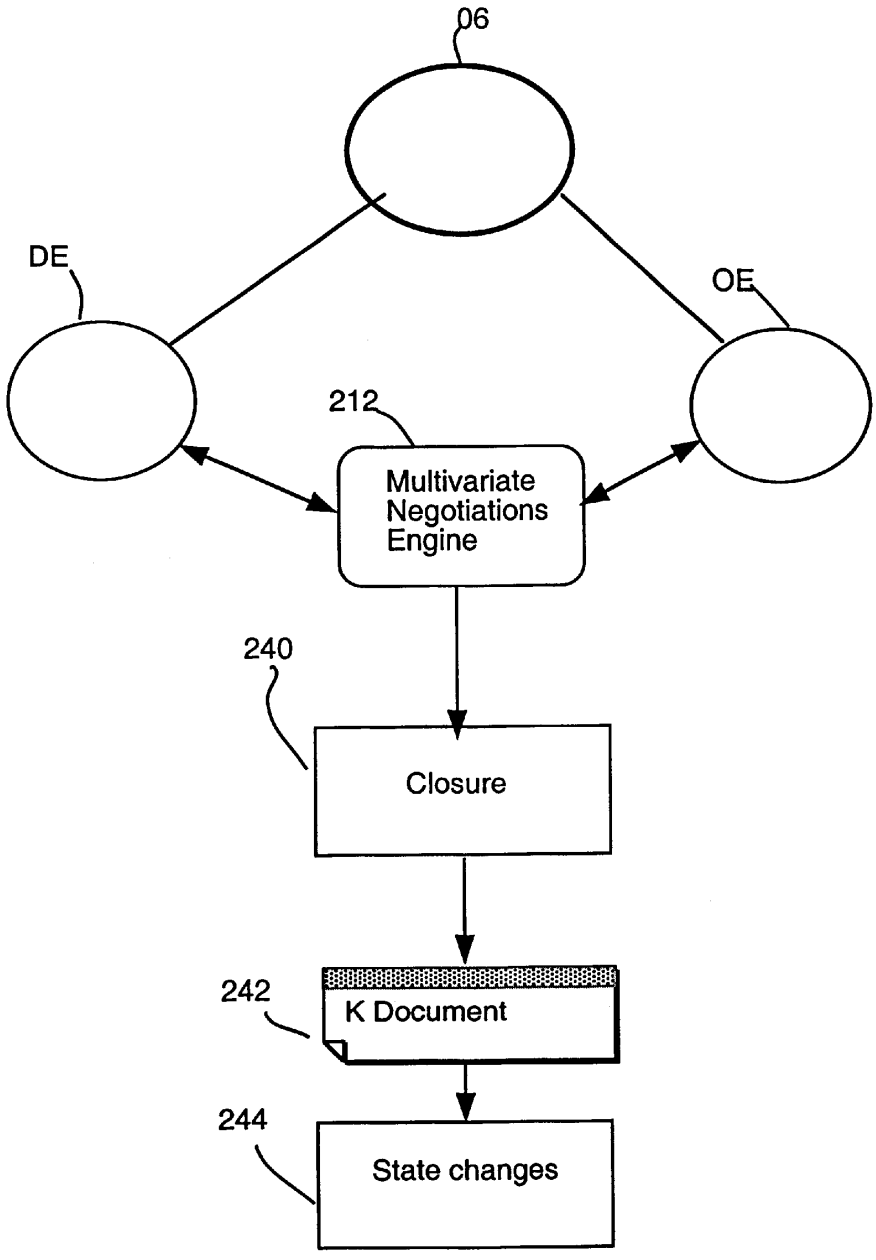
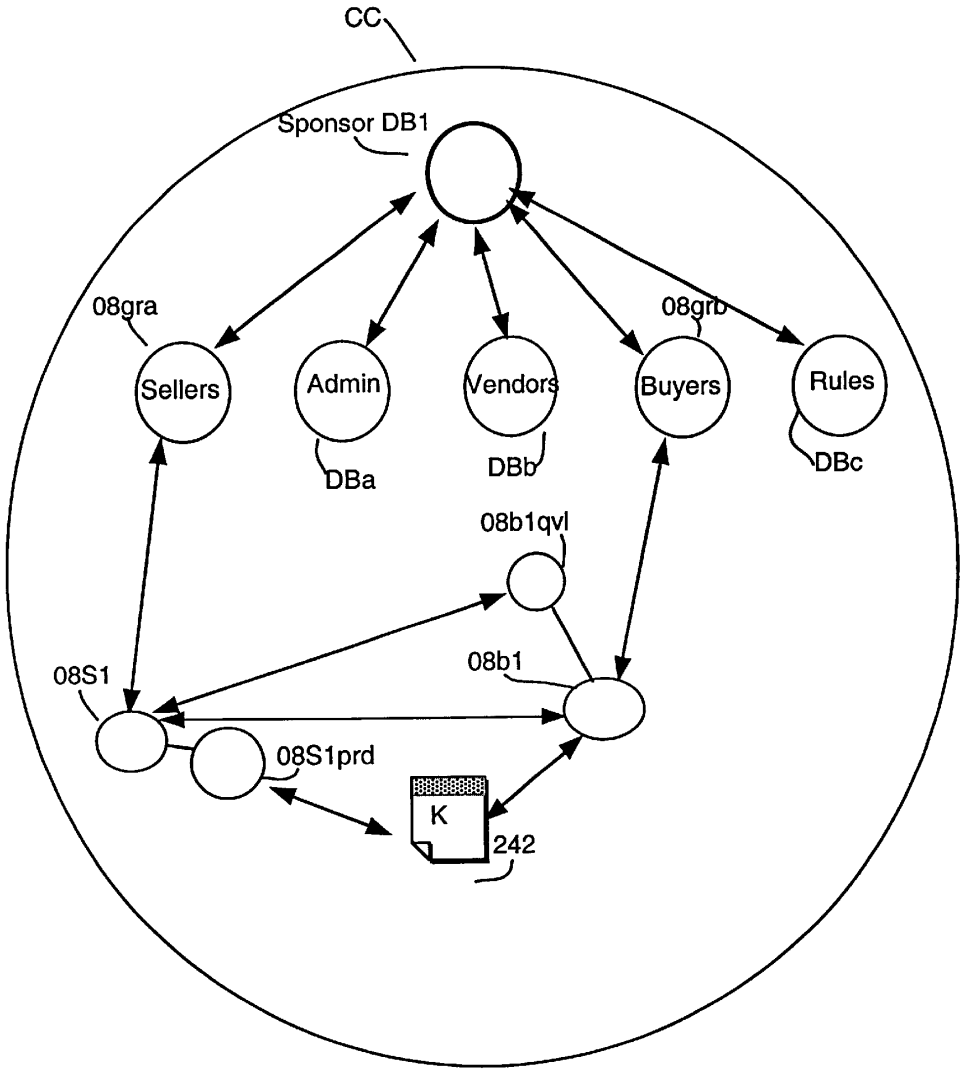

06
DE
OE
212
Multivariate Negotiations Engine
240
Closure
242
K Document
244
State changes

Fig. 1f


CC
Sponsor DB1
08gra
08grb
Sellers
Admin
Vendors
Buyers
Rules
DBa
DBb
DBc
08b1qvl
08b1
08S1
08S1prd
K
242

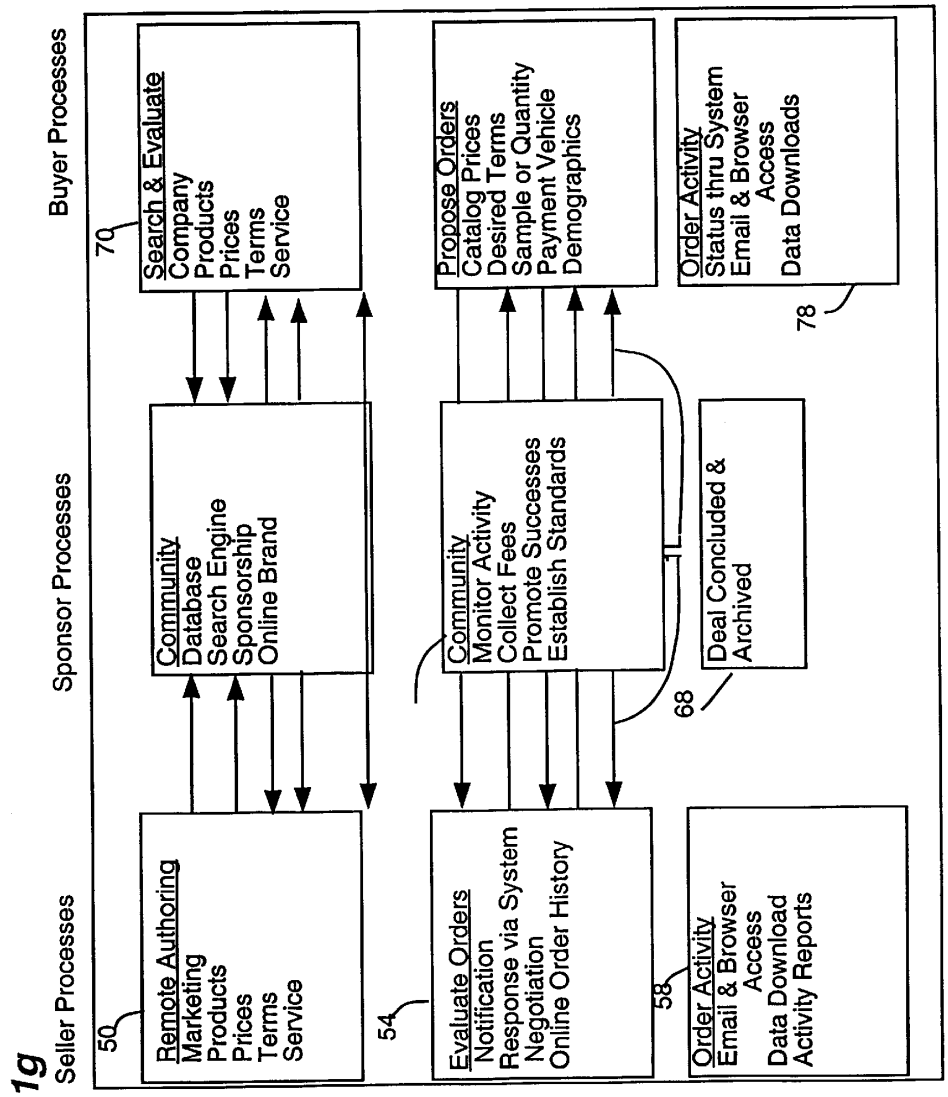

Seller Processes
Sponsor Processes
Buyer Processes
Remote Authoring
Marketing
Products
Prices
Terms
Service
50
Community
Database
Search Engine
Sponsorship
Online Brand
Search & Evaluate
Company
Products
Prices
Terms
Service
70
Evaluate Orders
Notification
Response via System
Negotiation
Online Order History
54
Community
Monitor Activity
Collect Fees
Promote Successes
Establish Standards
Propose Orders
Catalog Prices
Desired Terms
Sample or Quantity
Payment Vehicle
Demographics
Deal Concluded &
Archived
68
Order Activity
Email & Browser
Access
Data Download
Activity Reports
58
Order Activity
Status thru System
Email & Browser
Access
Data Downloads
78

Fig. 1g

Fig. 1h

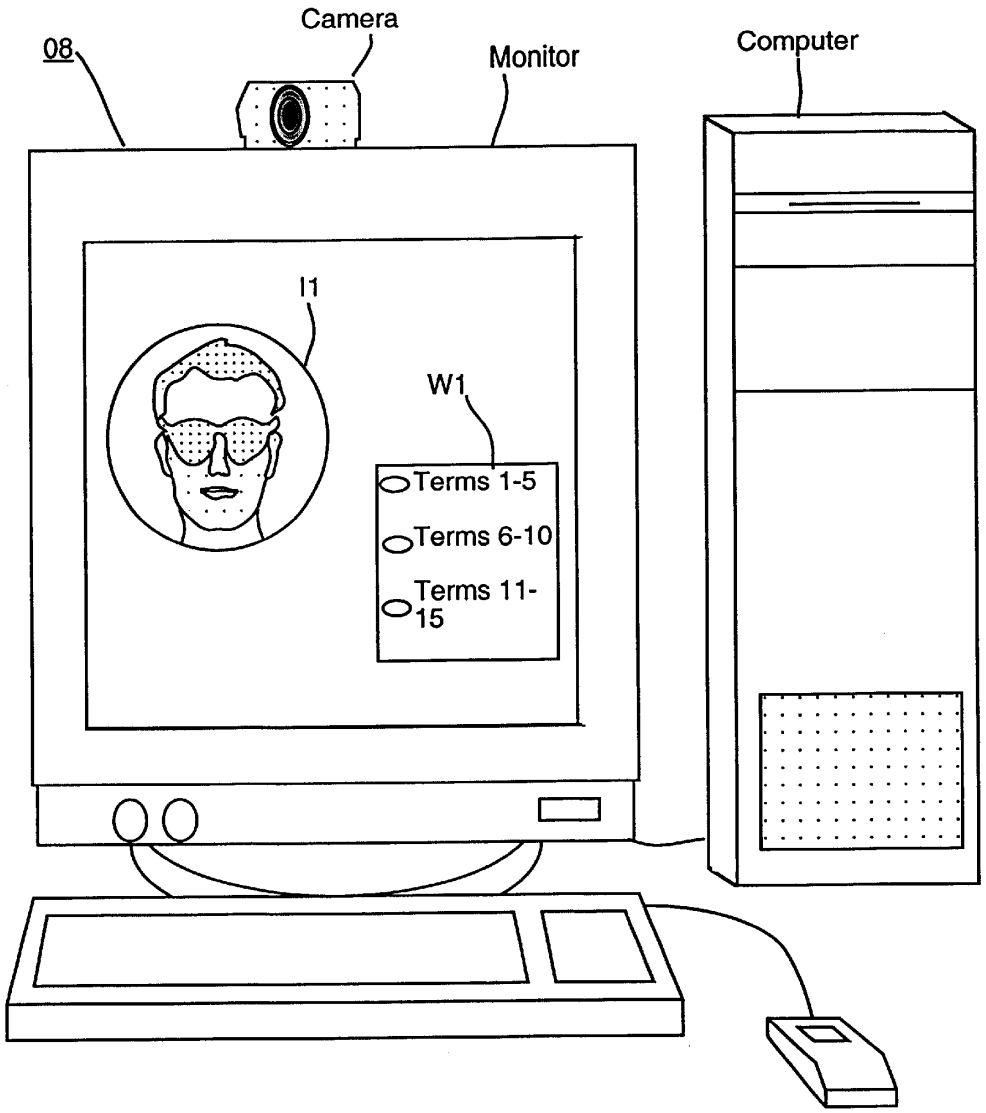

Camera
08
Monitor
Computer
I1
W1
Terms 1-5
Terms 6-10
Terms 11-15

Fig. 1i

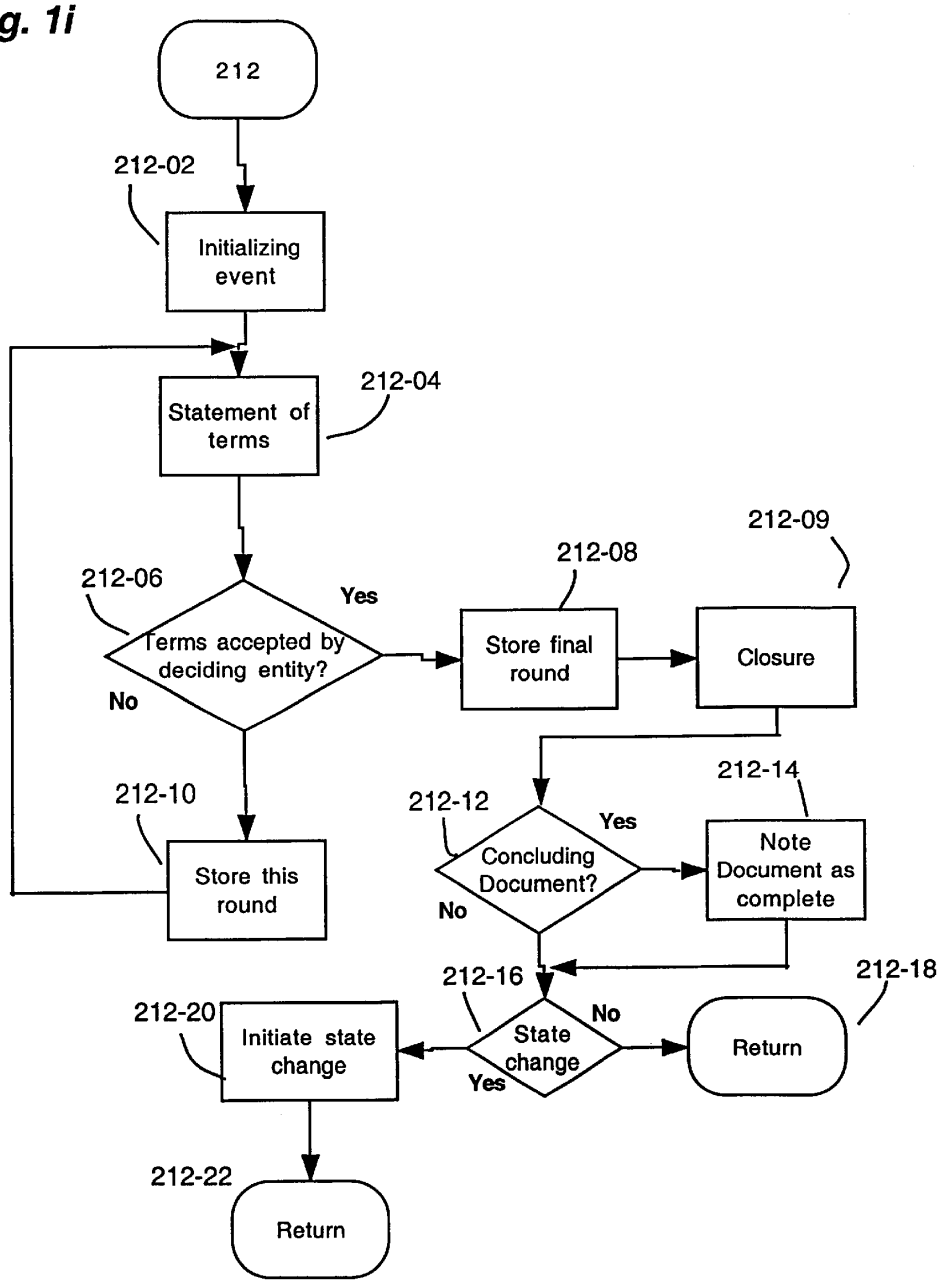

212
212-02
Initializing event
212-04
Statement of terms
212-06
Terms accepted by deciding entity?
Yes
No
212-08
Store final round
212-09
Closure
212-10
Store this round
212-12
Concluding Document?
Yes
No
212-14
Note Document as complete
212-16
State change
No
Yes
212-18
Return
212-20
Initiate state change
212-22
Return

Fig. 1j

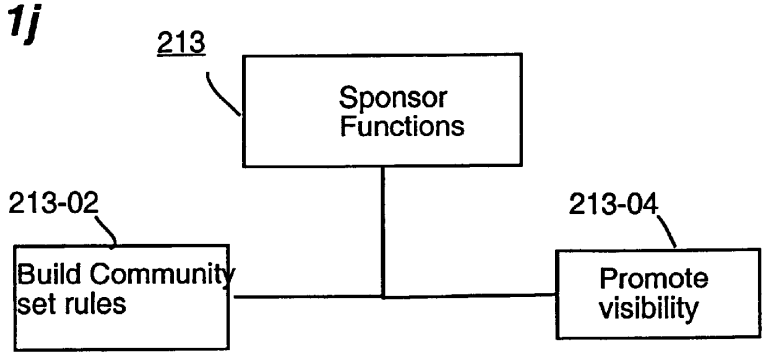

213
Sponsor Functions
213-02
Build Community set rules
213-04
Promote visibility

Fig.1k

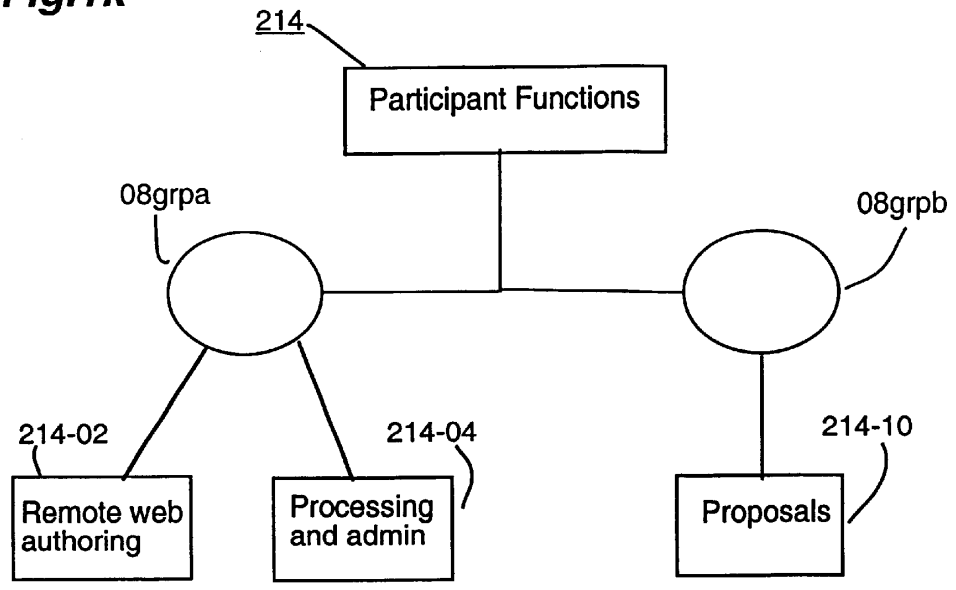

214
Participant Functions
08grpa
08grpb
214-02
Remote web authoring
214-04
Processing and admin
214-10
Proposals

Fig. 1L

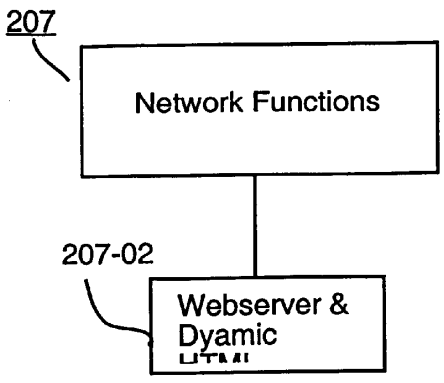


Fig. 1m

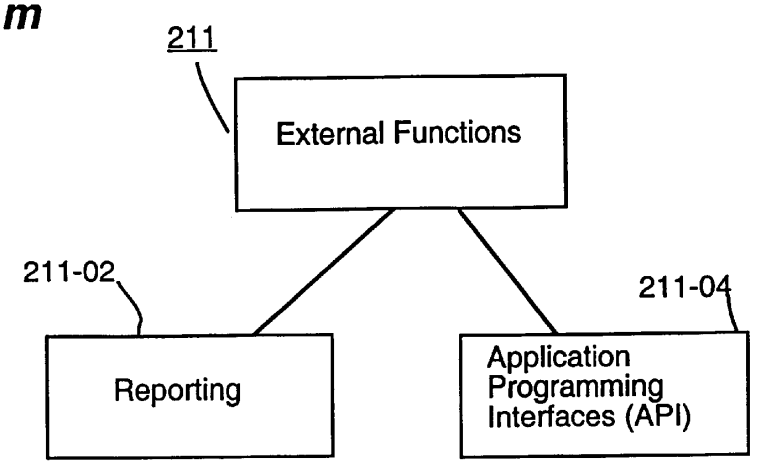


Fig. 1n

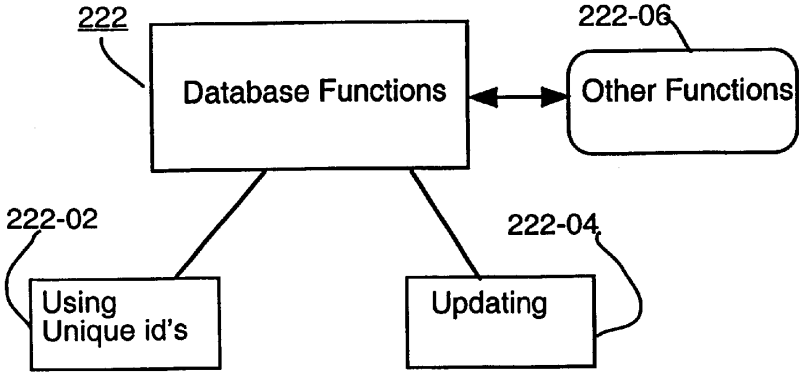


Fig. 1o

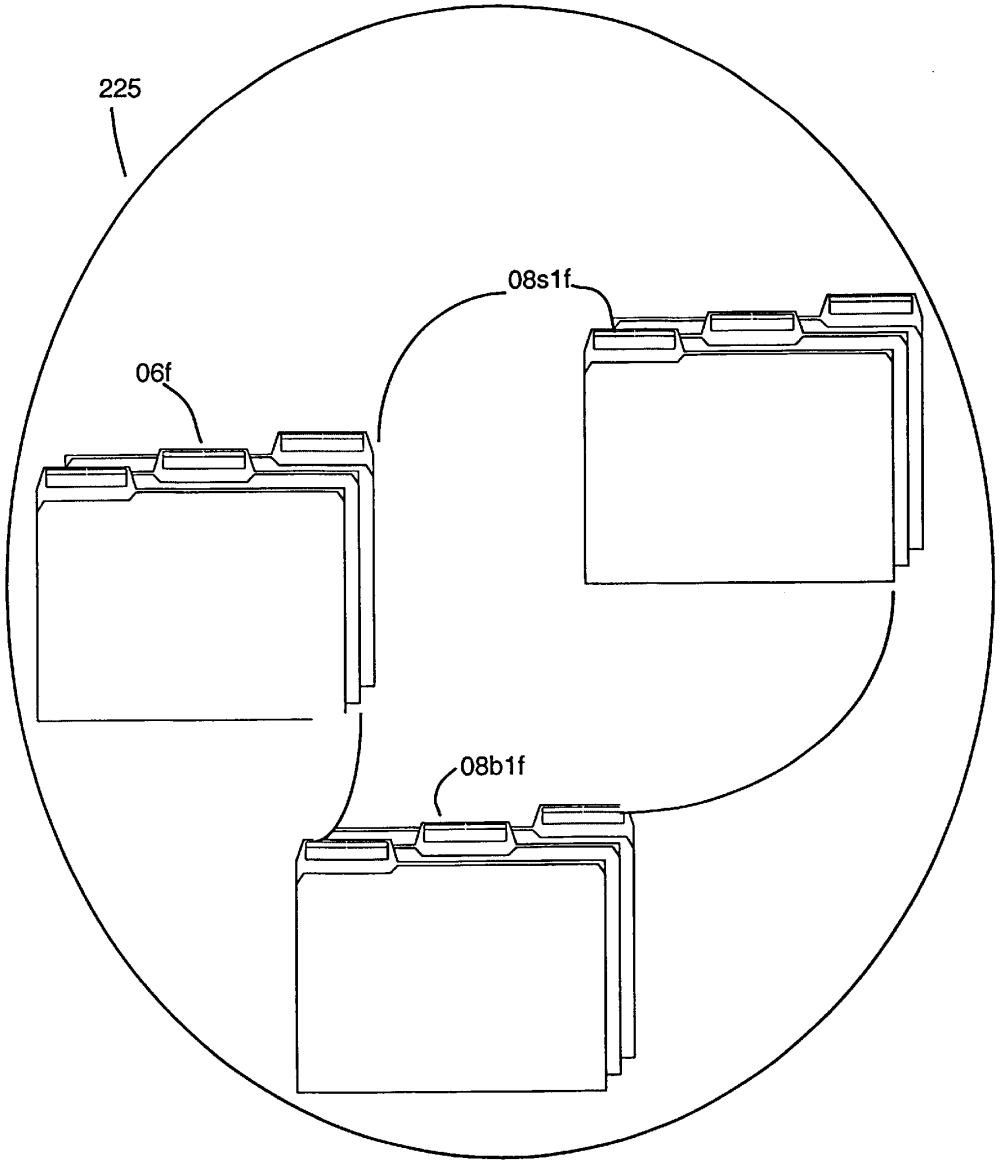


Fig. 2 a (Prior Art)

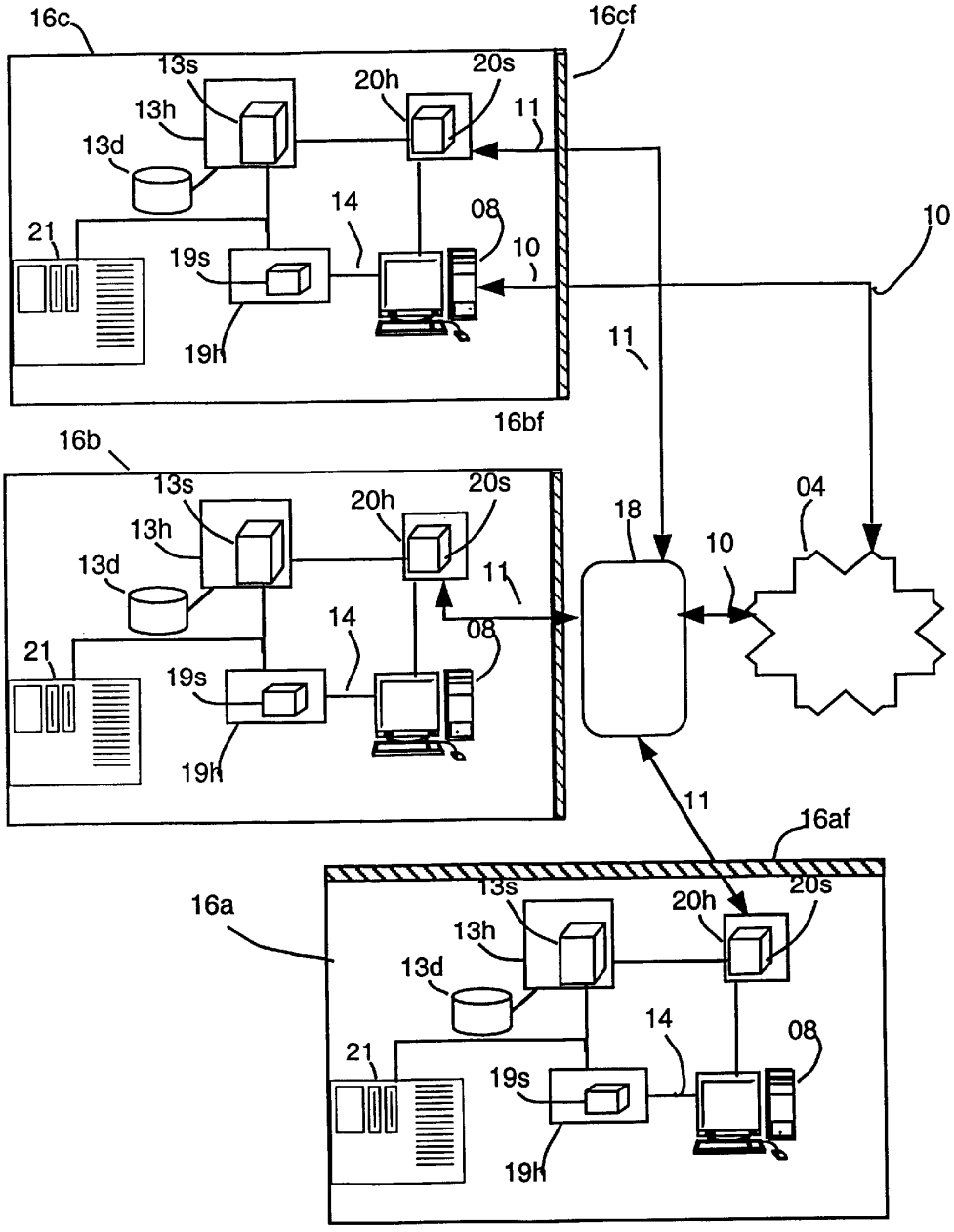


Fig. 2b (Prior Art)

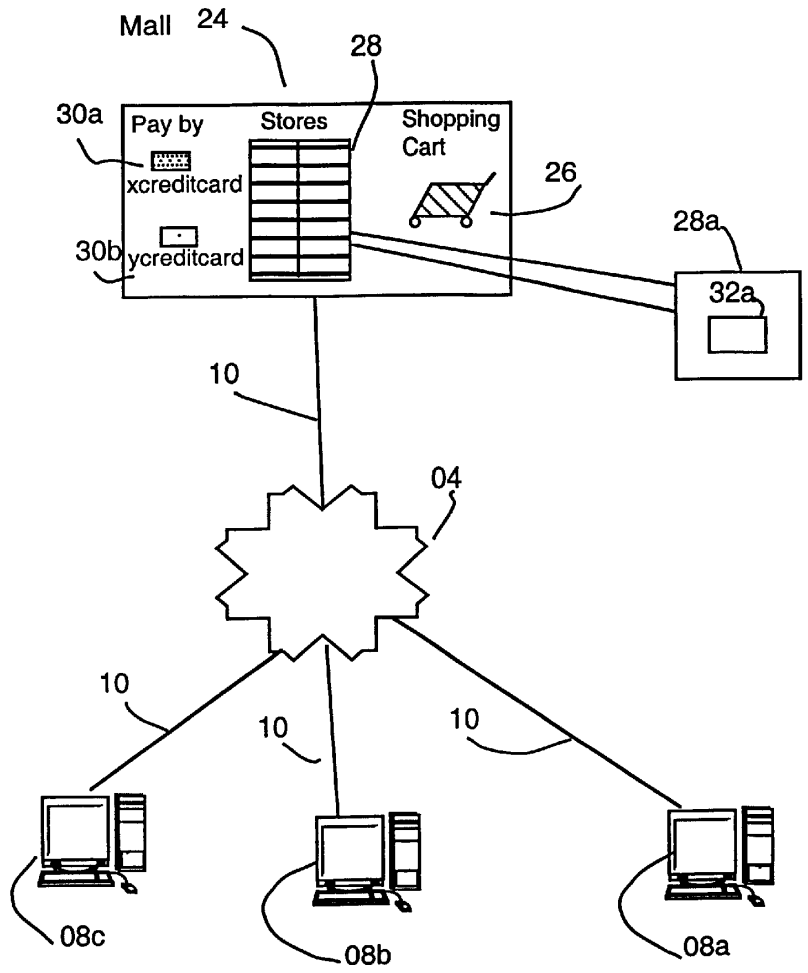


Fig. 2c(Prior Art)

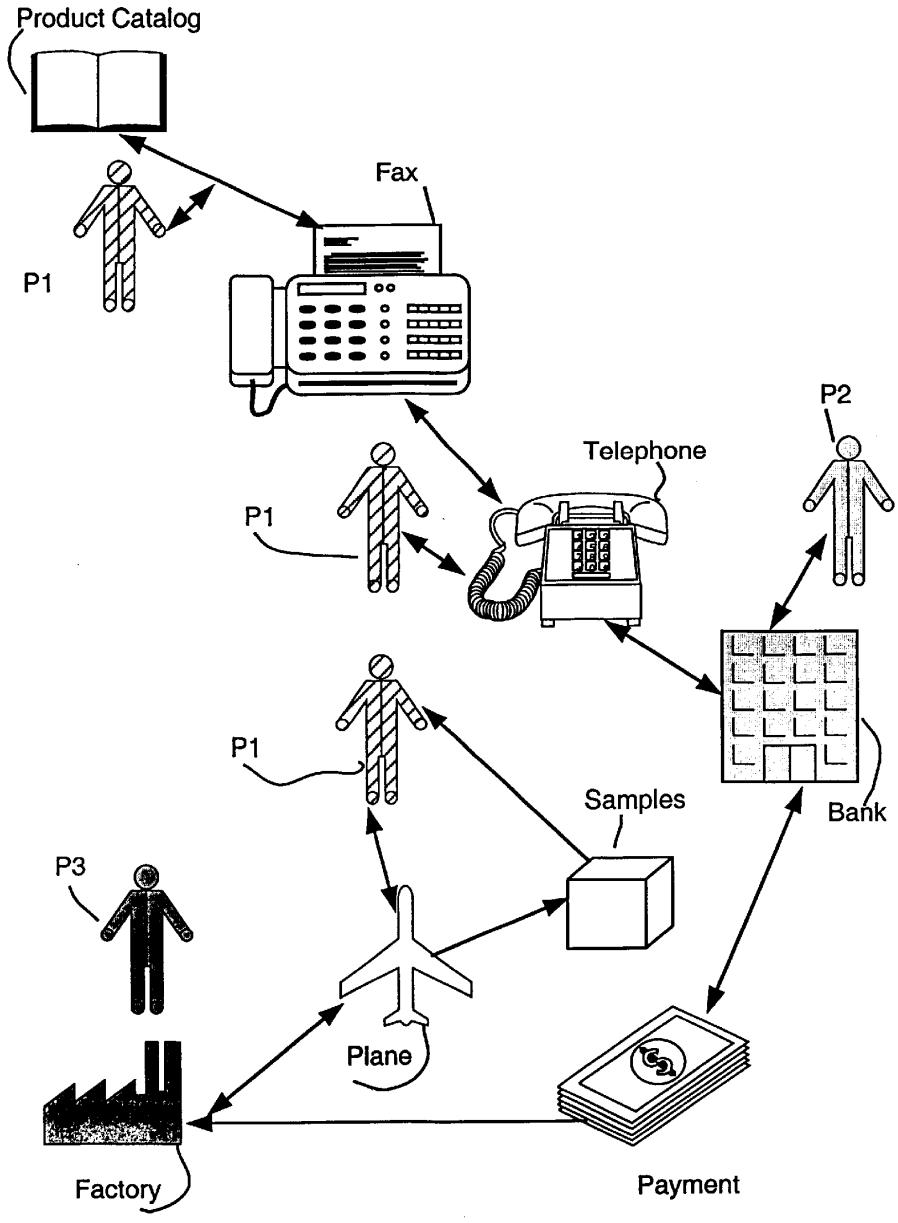


FIG. 3

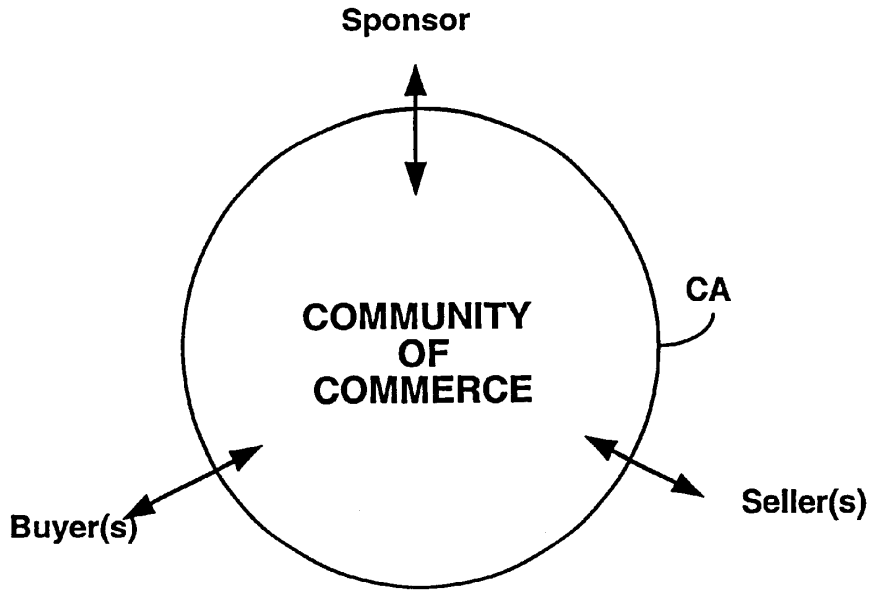


FIG. 4a

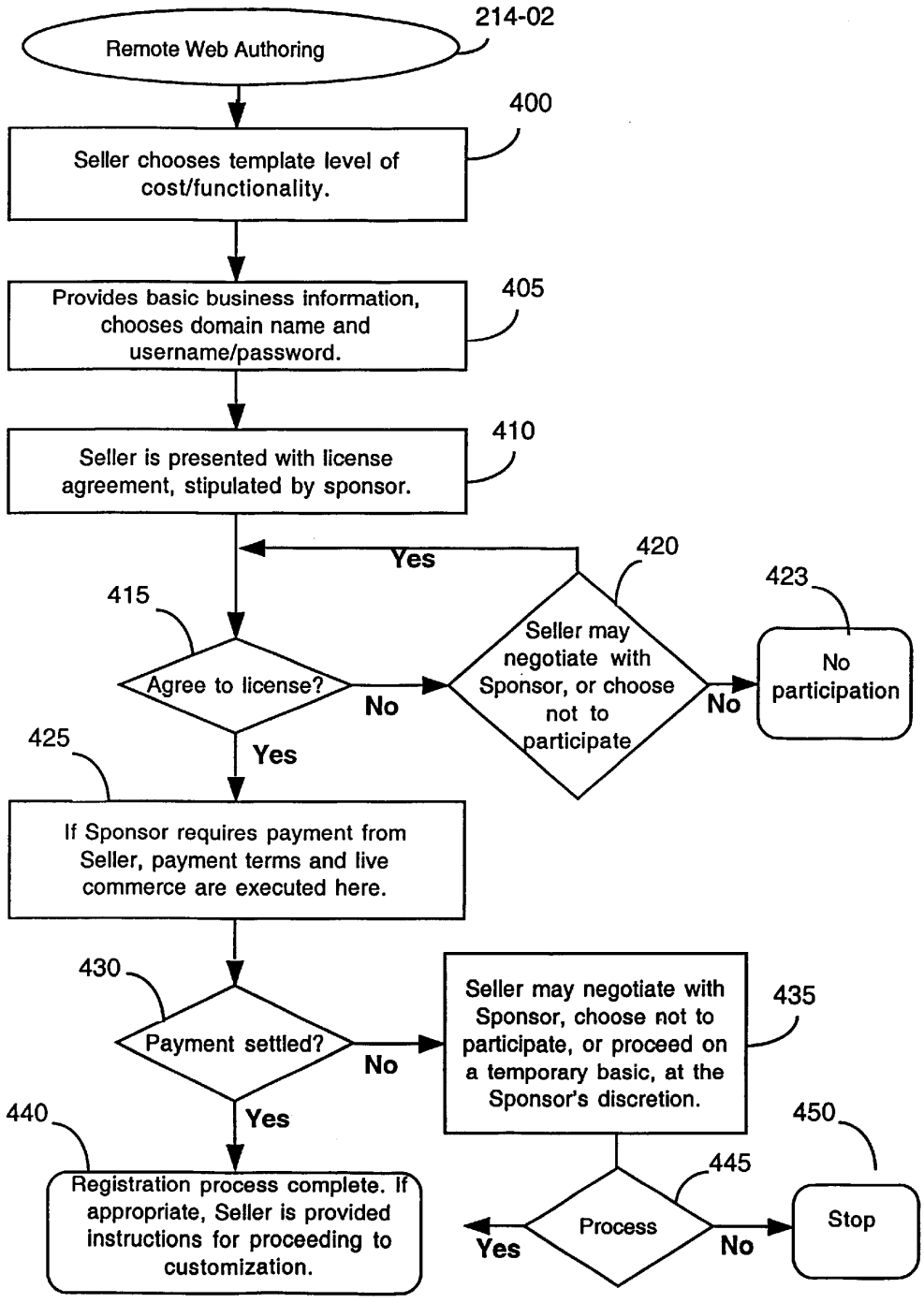

214-02
Remote Web Authoring
400
Seller chooses template level of cost/functionality.
405
Provides basic business information, chooses domain name and username/password.
410
Seller is presented with license agreement, stipulated by sponsor.
Yes
420
423
415
Agree to license?
No
Seller may negotiate with Sponsor, or choose not to participate
No
No participation
Yes
425
If Sponsor requires payment from Seller, payment terms and live commerce are executed here.
430
Payment settled?
No
Seller may negotiate with Sponsor, choose not to participate, or proceed on a temporary basic, at the Sponsor's discretion.
435
Yes
440
450
445
Registration process complete. If appropriate, Seller is provided instructions for proceeding to customization.
Process
Yes
No
Stop

Fig. 4b

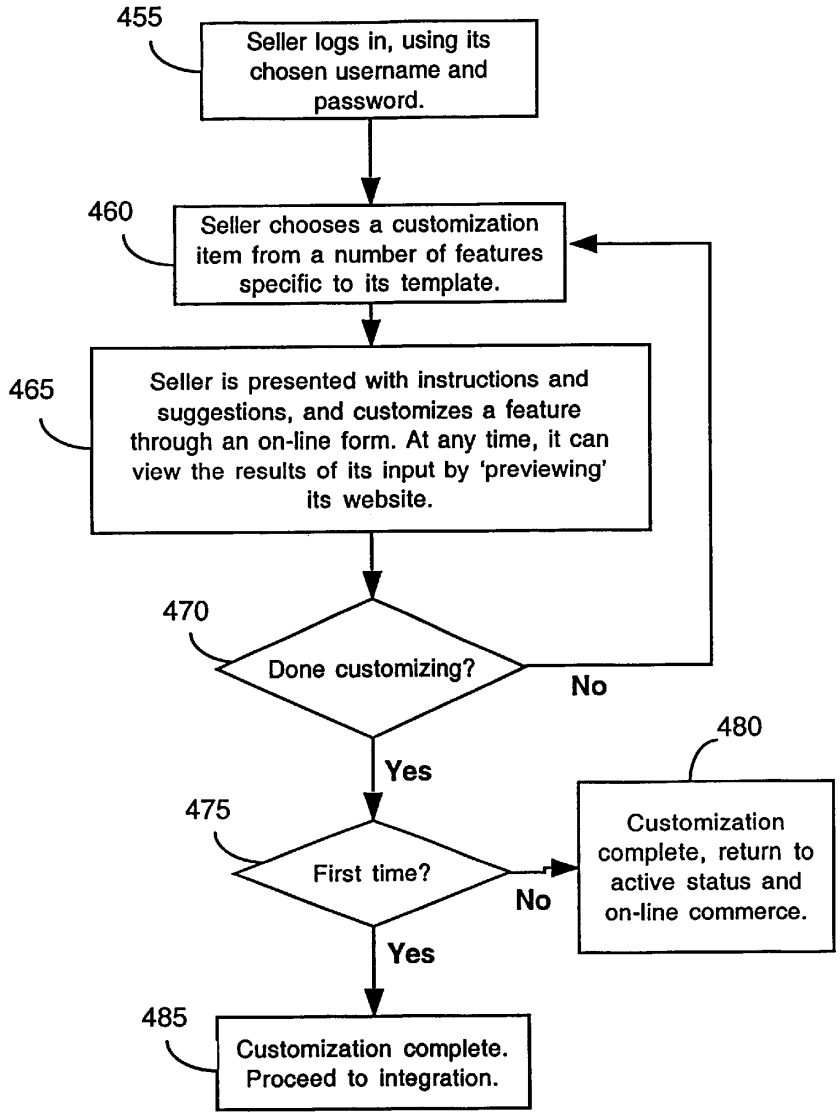

455
Seller logs in, using its chosen username and password.
460
Seller chooses a customization item from a number of features specific to its template.
465
Seller is presented with instructions and suggestions, and customizes a feature through an on-line form. At any time, it can view the results of its input by 'previewing' its website.
470
Done customizing?
No
Yes
480
475
First time?
Customization complete, return to active status and on-line commerce.
No
Yes
485
Customization complete. Proceed to integration.

FIG. 5a

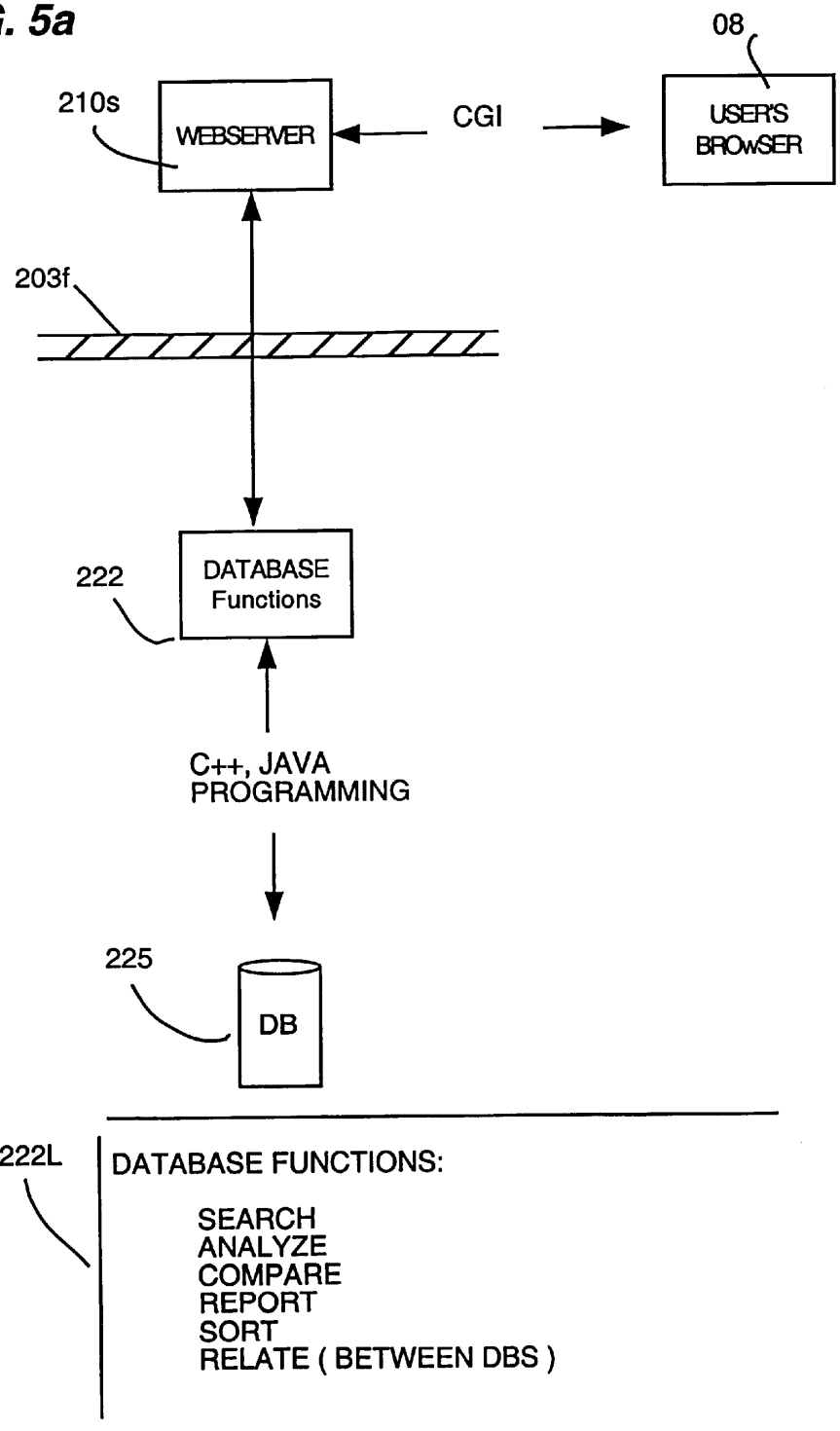

08
210s
WEBSERVER
CGI
USER'S BROWSER
203f
222
DATABASE Functions
C++, JAVA PROGRAMMING
225
DB
222L
DATABASE FUNCTIONS:
SEARCH
ANALYZE
COMPARE
REPORT
SORT
RELATE (BETWEEN DBS)

FIG. 5b

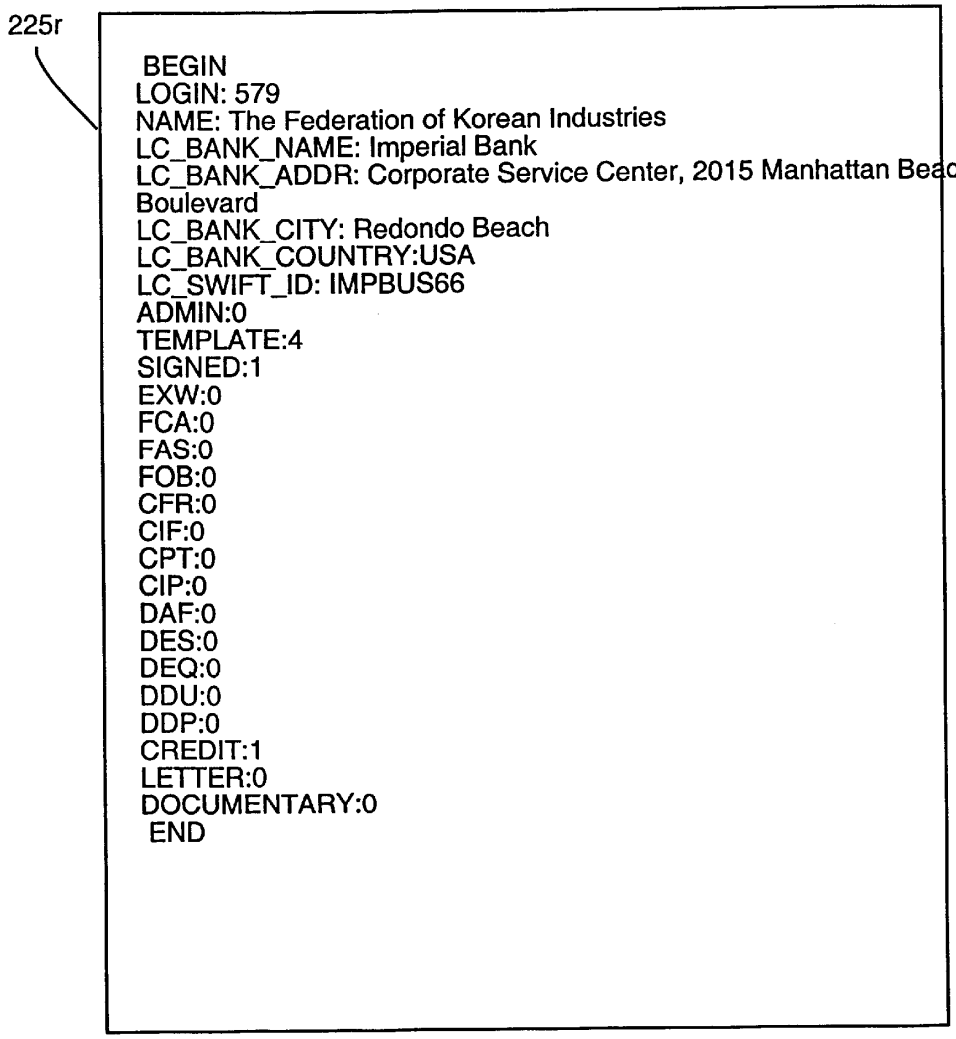

225r
BEGIN
LOGIN: 579
NAME: The Federation of Korean Industries
LC_BANK_NAME: Imperial Bank
LC_BANK_ADDR: Corporate Service Center, 2015 Manhattan Beach Boulevard
LC_BANK_CITY: Redondo Beach
LC_BANK_COUNTRY:USA
LC_SWIFT_ID: IMPBUS66
ADMIN:0
TEMPLATE:4
SIGNED:1
EXW:0
FCA:0
FAS:0
FOB:0
CFR:0
CIF:0
CPT:0
CIP:0
DAF:0
DES:0
DEQ:0
DDU:0
DDP:0
CREDIT:1
LETTER:0
DOCUMENTARY:0
END

FIG. 6

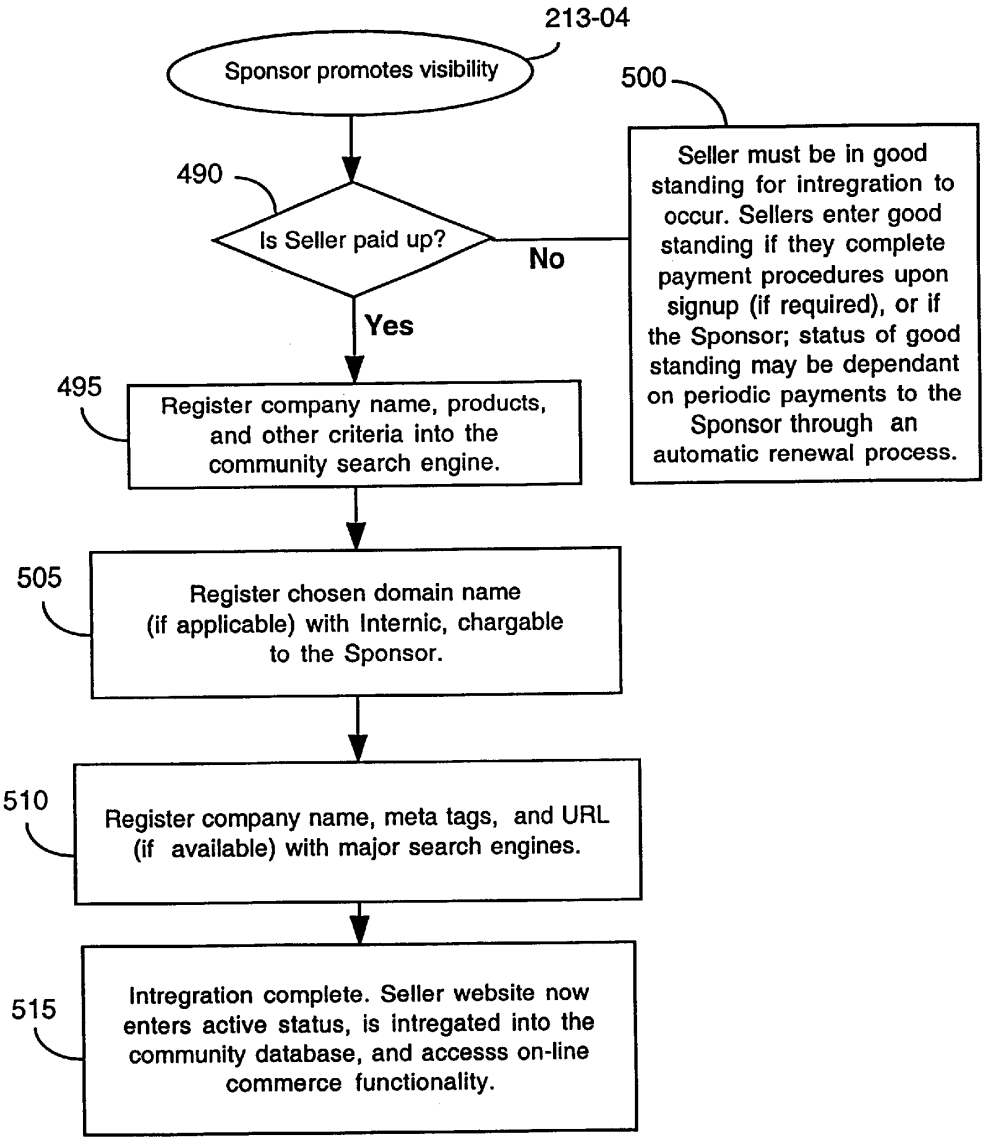

213-04
Sponsor promotes visibility
500
Seller must be in good standing for intregration to occur. Sellers enter good standing if they complete payment procedures upon signup (if required), or if the Sponsor; status of good standing may be dependant on periodic payments to the Sponsor through an automatic renewal process.
490
Is Seller paid up?
No
Yes
495
Register company name, products, and other criteria into the community search engine.
505
Register chosen domain name (if applicable) with Internic, chargable to the Sponsor.
510
Register company name, meta tags, and URL (if available) with major search engines.
515
Intregration complete. Seller website now enters active status, is intregated into the community database, and accesss on-line commerce functionality.

FIG. 7

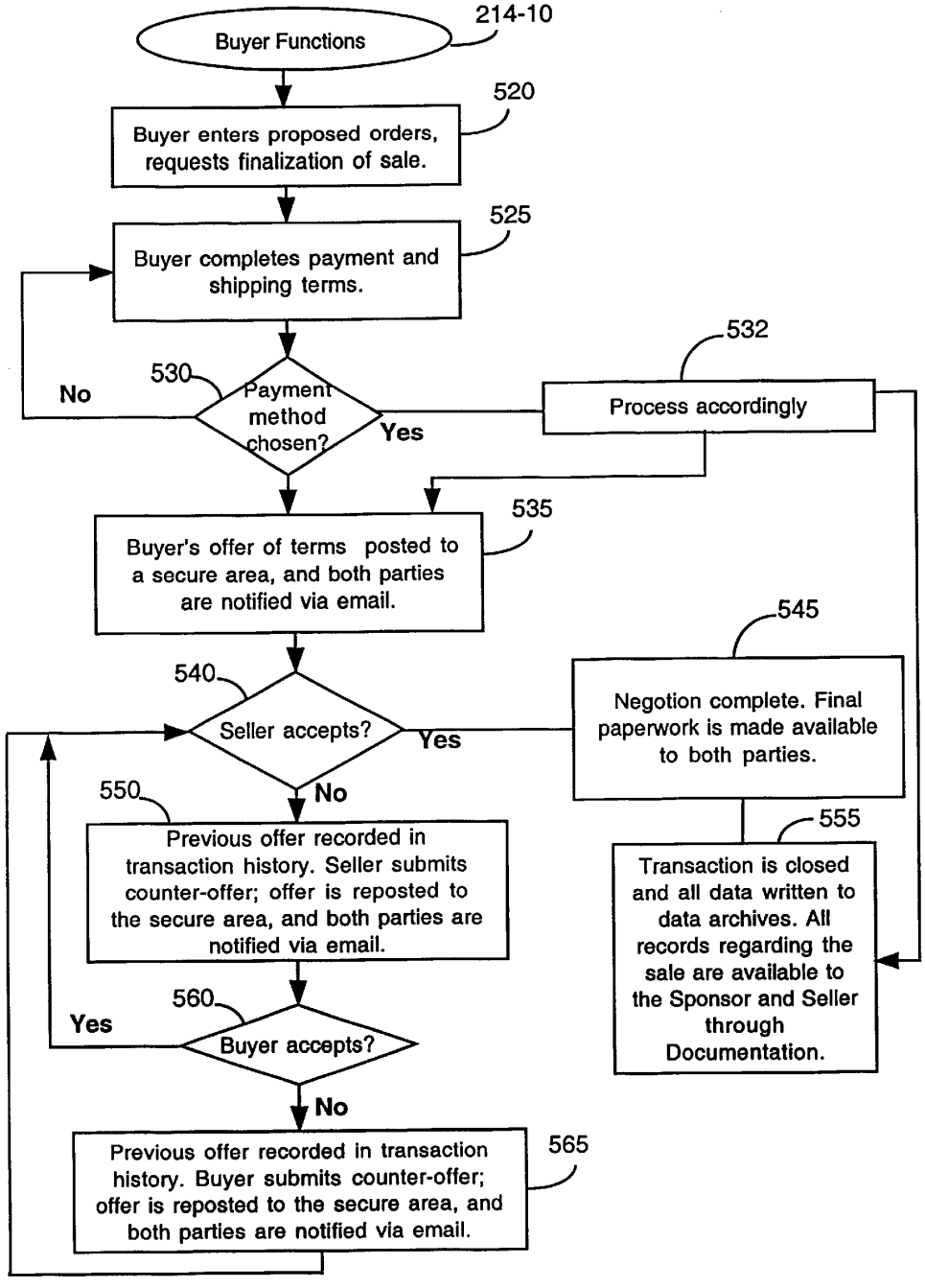

Buyer Functions
214-10
Buyer enters proposed orders, requests finalization of sale.
520
Buyer completes payment and shipping terms.
525
Payment method chosen?
530
No
Yes
Process accordingly
532
Buyer's offer of terms posted to a secure area, and both parties are notified via email.
535
Seller accepts?
540
Yes
No
Negotion complete. Final paperwork is made available to both parties.
545
Previous offer recorded in transaction history. Seller submits counter-offer; offer is reposted to the secure area, and both parties are notified via email.
550
Transaction is closed and all data written to data archives. All records regarding the sale are available to the Sponsor and Seller through Documentation.
555
Buyer accepts?
560
Yes
No
Previous offer recorded in transaction history. Buyer submits counter-offer; offer is reposted to the secure area, and both parties are notified via email.
565

FIG. 8

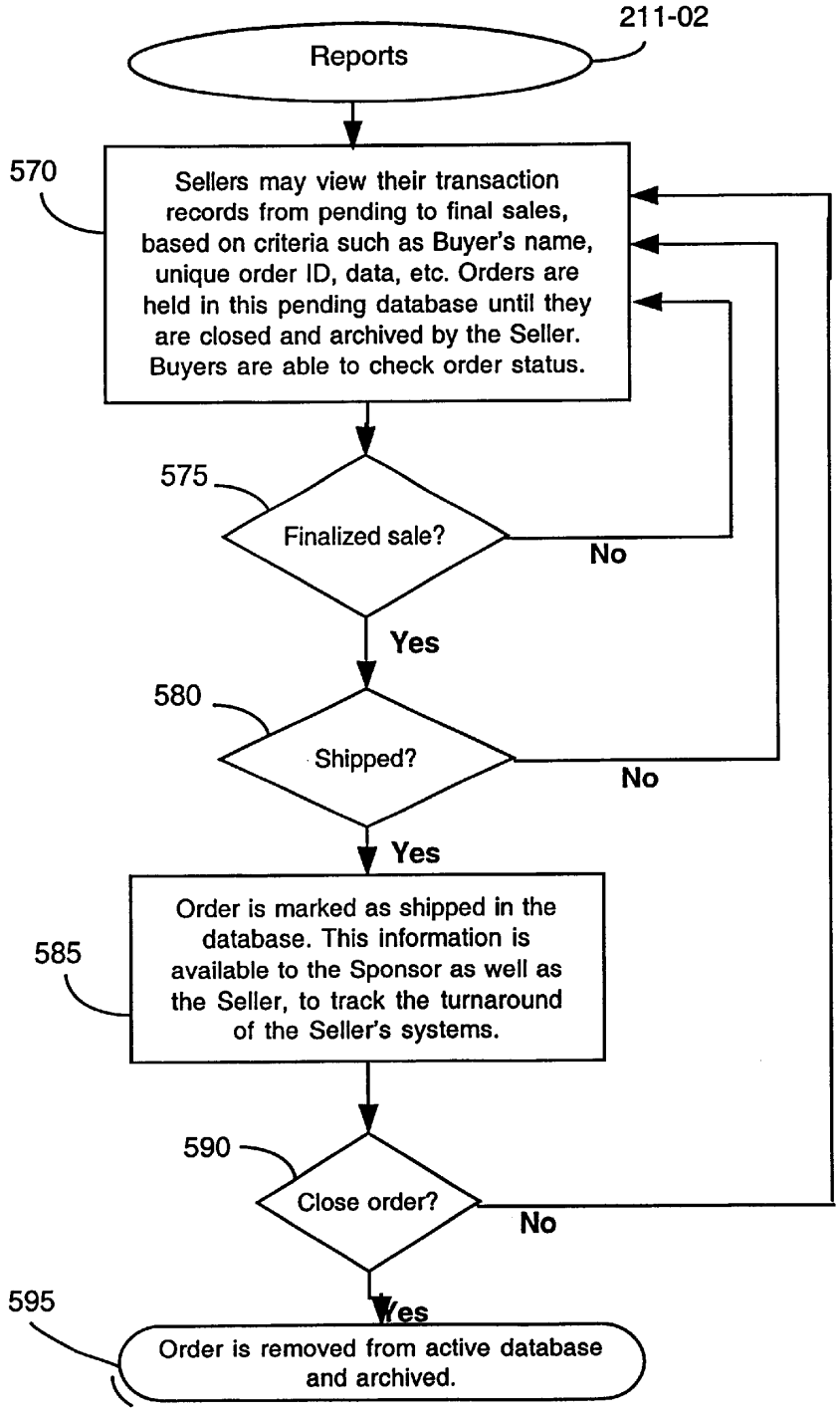

211-02
Reports
570
Sellers may view their transaction records from pending to final sales, based on criteria such as Buyer's name, unique order ID, data, etc. Orders are held in this pending database until they are closed and archived by the Seller. Buyers are able to check order status.
575
Finalized sale?
No
Yes
580
Shipped?
No
Yes
585
Order is marked as shipped in the database. This information is available to the Sponsor as well as the Seller, to track the turnaround of the Seller's systems.
590
Close order?
No
Yes
595
Order is removed from active database and archived.

FIG. 9

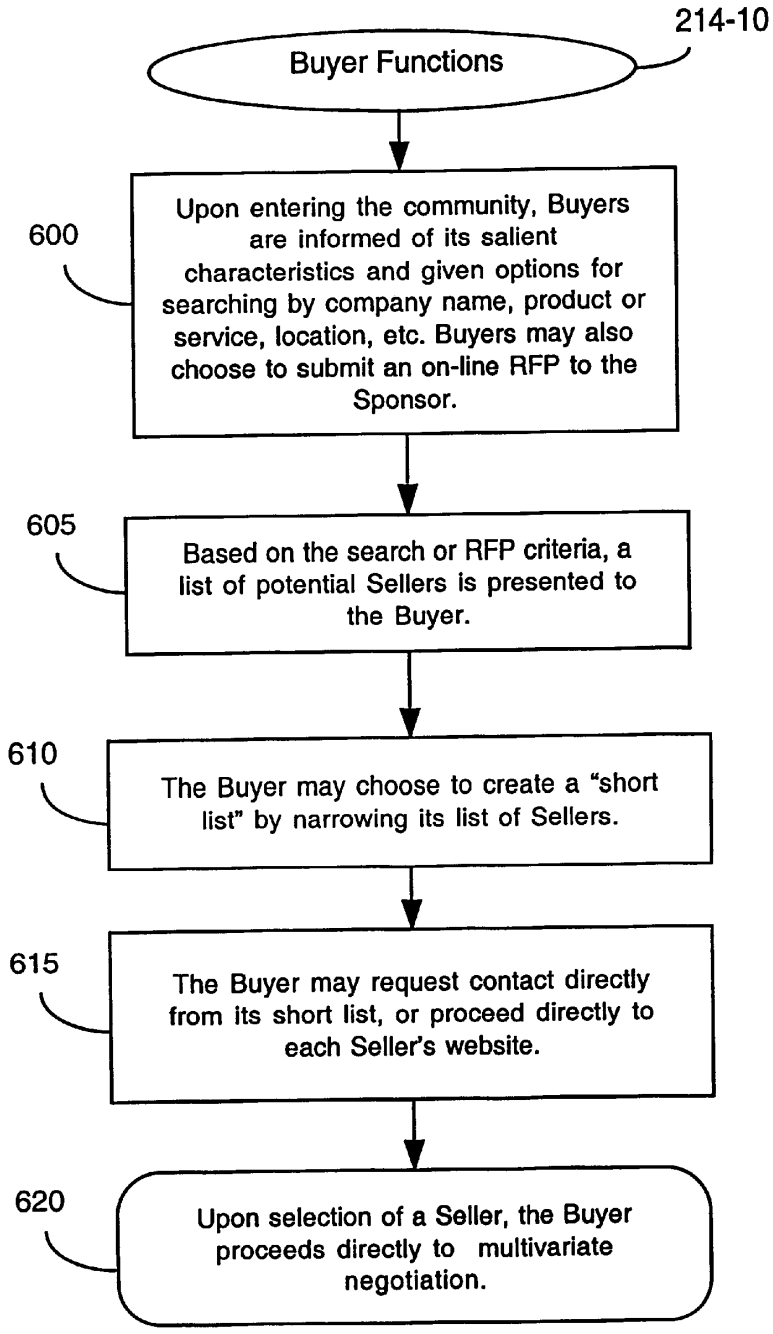

214-10
Buyer Functions
600
Upon entering the community, Buyers are informed of its salient characteristics and given options for searching by company name, product or service, location, etc. Buyers may also choose to submit an on-line RFP to the Sponsor.
605
Based on the search or RFP criteria, a list of potential Sellers is presented to the Buyer.
610
The Buyer may choose to create a "short list" by narrowing its list of Sellers.
615
The Buyer may request contact directly from its short list, or proceed directly to each Seller's website.
620
Upon selection of a Seller, the Buyer proceeds directly to multivariate negotiation.

FIG. 10 -1

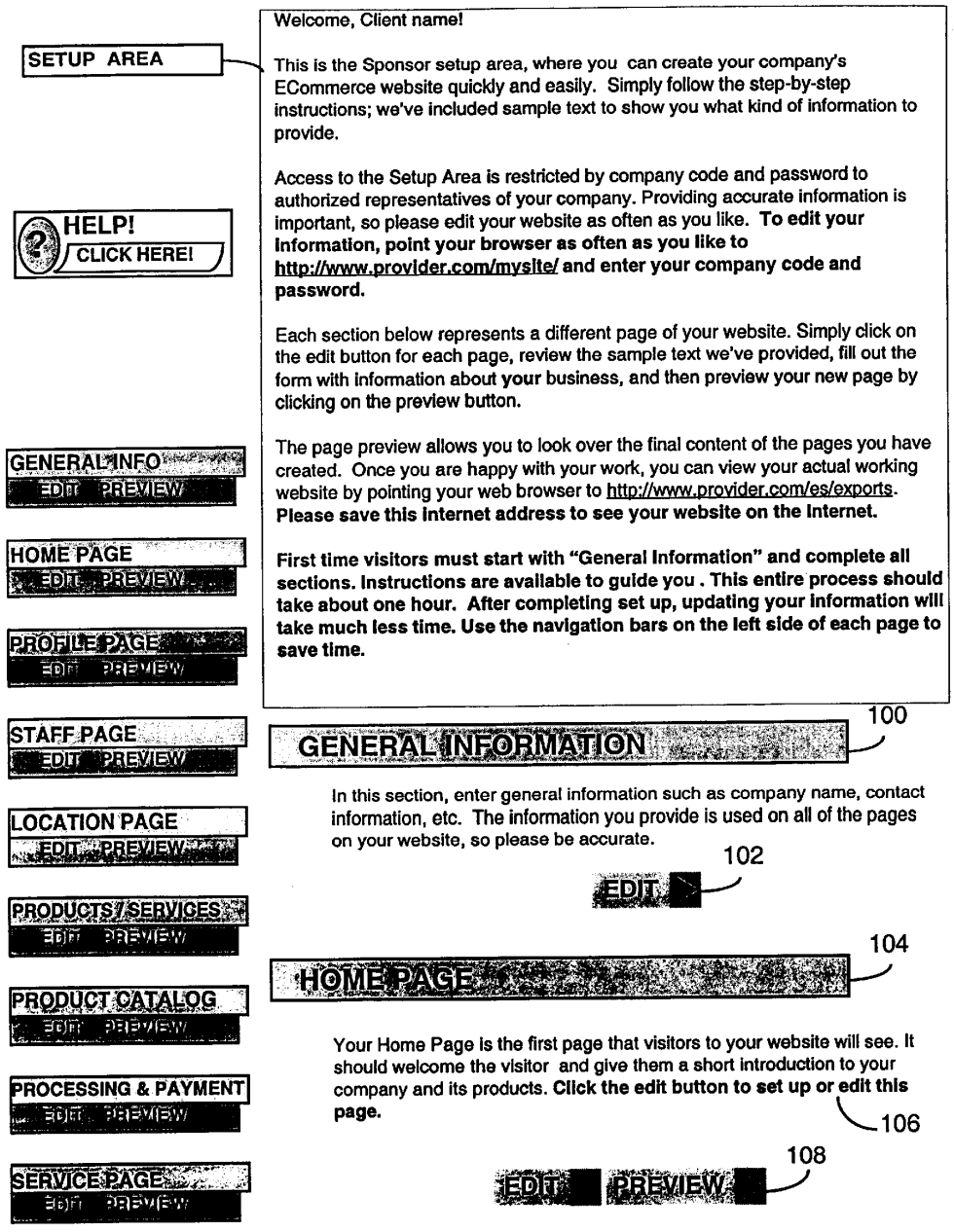

SETUP AREA
HELP!
CLICK HERE!
GENERAL INFO
EDIT PREVIEW
HOME PAGE
EDIT PREVIEW
PROFILE PAGE
EDIT PREVIEW
STAFF PAGE
EDIT PREVIEW
LOCATION PAGE
EDIT PREVIEW
PRODUCTS/SERVICES
EDIT PREVIEW
PRODUCT CATALOG
EDIT PREVIEW
PROCESSING & PAYMENT
EDIT PREVIEW
SERVICE PAGE
EDIT PREVIEW
Welcome, Client name!
This is the Sponsor setup area, where you can create your company's ECommerce website quickly and easily. Simply follow the step-by-step instructions; we've included sample text to show you what kind of information to provide.
Access to the Setup Area is restricted by company code and password to authorized representatives of your company. Providing accurate information is important, so please edit your website as often as you like. To edit your information, point your browser as often as you like to http://www.provider.com/mysite/ and enter your company code and password.
Each section below represents a different page of your website. Simply click on the edit button for each page, review the sample text we've provided, fill out the form with information about your business, and then preview your new page by clicking on the preview button.
The page preview allows you to look over the final content of the pages you have created. Once you are happy with your work, you can view your actual working website by pointing your web browser to http://www.provider.com/es/exports. Please save this internet address to see your website on the Internet.
First time visitors must start with "General Information" and complete all sections. Instructions are available to guide you . This entire process should take about one hour. After completing set up, updating your information will take much less time. Use the navigation bars on the left side of each page to save time.
GENERAL INFORMATION
100
In this section, enter general information such as company name, contact information, etc. The information you provide is used on all of the pages on your website, so please be accurate.
102
EDIT
HOME PAGE
104
Your Home Page is the first page that visitors to your website will see. It should welcome the visitor and give them a short introduction to your company and its products. Click the edit button to set up or edit this page.
106
108
EDIT
PREVIEW

FIG. 10 - 2

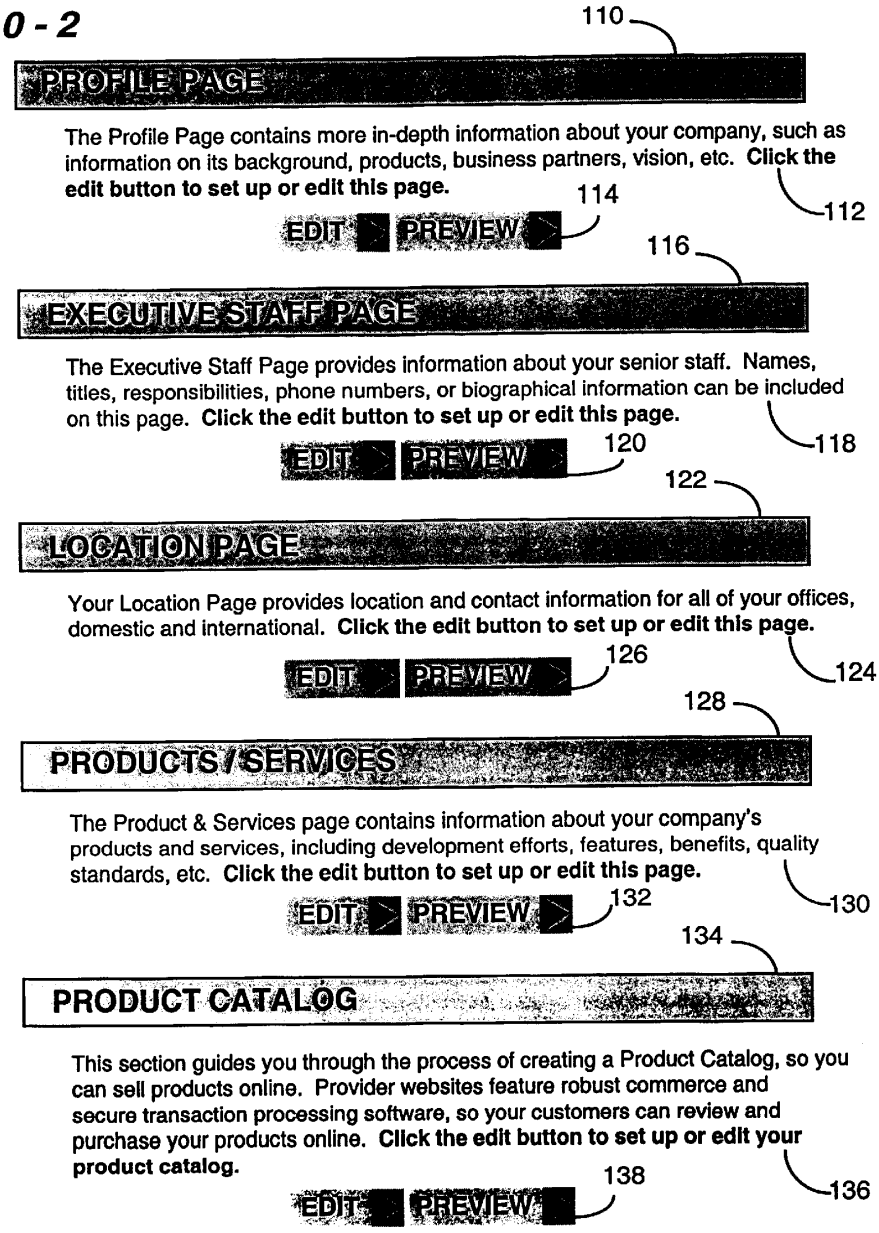

110
PROFILE PAGE
The Profile Page contains more in-depth information about your company, such as information on its background, products, business partners, vision, etc. Click the edit button to set up or edit this page.
112
114
EDIT
PREVIEW
116
EXECUTIVE STAFF PAGE
The Executive Staff Page provides information about your senior staff. Names, titles, responsibilities, phone numbers, or biographical information can be included on this page. Click the edit button to set up or edit this page.
118
120
EDIT
PREVIEW
122
LOCATION PAGE
Your Location Page provides location and contact information for all of your offices, domestic and international. Click the edit button to set up or edit this page.
124
126
EDIT
PREVIEW
128
PRODUCTS / SERVICES
The Product & Services page contains information about your company's products and services, including development efforts, features, benefits, quality standards, etc. Click the edit button to set up or edit this page.
130
132
EDIT
PREVIEW
134
PRODUCT CATALOG
This section guides you through the process of creating a Product Catalog, so you can sell products online. Provider websites feature robust commerce and secure transaction processing software, so your customers can review and purchase your products online. Click the edit button to set up or edit your product catalog.
136
138
EDIT
PREVIEW

FIG. 10 - 3

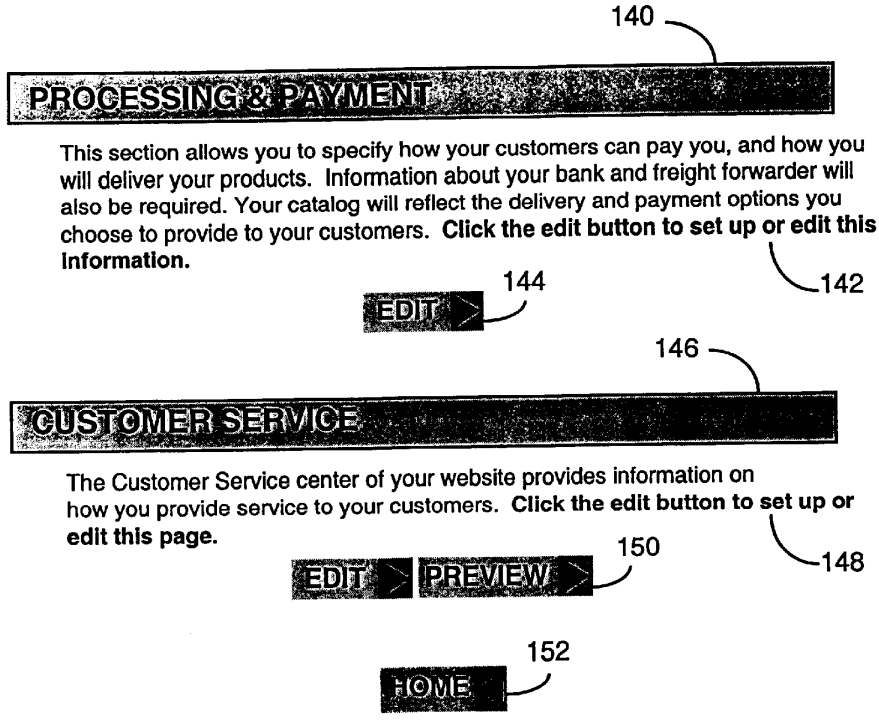

140
PROCESSING & PAYMENT
This section allows you to specify how your customers can pay you, and how you will deliver your products. Information about your bank and freight forwarder will also be required. Your catalog will reflect the delivery and payment options you choose to provide to your customers. Click the edit button to set up or edit this information.
142
144
EDIT
146
CUSTOMER SERVICE
The Customer Service center of your website provides information on how you provide service to your customers. Click the edit button to set up or edit this page.
148
150
EDIT
PREVIEW
152
HOME

Fig. 11a-1

To:	Jeff Jones, CEO <Buyer> Purchasing Department, M/s 897,229 Berkely Street, Boston, Ma 02116 In accordance with the terms of our Purchase Order number EX05 dated 09/20/1998 please issue an irrevocable documentary letter of credit (subject to UCP500) by cable with the following terms and conditions:
Advising Bank:	Imperial Bank <Seller> Corporate Service Center, 2015 Manhattan Beach Boulevard Redondo Beach USA SWIFT ID: IMPBUS66
Beneficiary:	ABC,Inc.
Amount:	$25000.00 usd +/- 10%
Payment Terms:	Sight Payment
Latest Shipment:	1/1/99
Expiration Date:	10/20/98
Presentation:	Documents must be presented no later than 21days from B/L
Partial Shipments:	Permitted
Transshipment:	Permitted

FIG. 11a-2

3rd Party Docs:	Not Permitted
Merchandise:	per Buyer's Order Number EX05
Ship Terms as per INCOTERMS 1990:	CIP
PORTS:	ORIGIN: UNKNOWN, DESTINATION: BOSTON
INSURANCE:	PAID BY APPLICANT
FREIGHT:	PAID BY APPLICANT
OTHER TERMS:	NEGOTIATING BANKS AUTHORIZATION TO DEDUCT 5% from the proceeds and pay to: ABC,Inc. Business & Information Services, Inc. 229 Berkeley Street Boston, MA 02116 617-450-9405 indicating documents value less commision net proceeds due
Documents Required:	Commercial Invoice: 1 Original, 3 Copies Packing List: 1 Original, 1 Copy Clean On Board Ocean B/L: 3 Originals, 1 Copy Air Waybill: 1 Original, 1 Copy Forwarders Cargo Receipt: 1 Original, 1 Copy Certificate of Origin: 1 Original, 1 Copy BENEFICIARY'S STATEMENT AUTHORIZING THE DEDUCTION CALCULATED AT 5% FROM THE INVOICE AMOUNT BEING AGENTS COMMISSION PAYABLE TO:

FIG. 11a-3

ABC,Inc. Business & Information
Services, Inc.
229 Berkeley Street
Boston, MA 02116
617-450-9405

Charges:

Issuing Bank charges for: Applicant
Advising Bank charges for: Beneficiary
Reimbursing Bank charges for: Applicant
Acceptance Commssion for: Beneficiary
Discount charge for: Applicant

FIG. 11b

>From www@harvard.net Sat May 9 01:11:28 1998
Date: Sat, 9 May 1998 01:16:45 - 0400 (EDT)
From: info@mvn.com
To: davef@swave.com, info.mvn.com@postoffice.harvard.net
Sub;ect: Membership form Nu-Seller

The following user requested a website; however, it entered an invalid Company Code, and could not be found in the database. Its website has been activated. Please respond by verifying their access and requesting an invoice from the appropriate sponsor representative, or by deleting their access through administration.

----------DEMOGRAPHICS

Date:	19950413
Name:	Girish Panjwani
Title:	Deputy Manager
Company:	Nu-Seller, Ltd.
Product Chosen:	International BusinessStarter A
Cost:	9,999 Rupees
Company Code:	EIC1043
Address:	14, Commercial Complex
City:	New Delhi
Region:	New Delhi
Postal Code:	110 048
Phone:	6445521
Fax:	6431929
Email:	gpanjwani@nu-seller.co.in

Message:

Dear Sponsor Representative:

The above individual/company has agreed to and acknowledged the MVN Listing Agreement, and has selected the above product at the above price to set up on the MVN Web Site. By proceeding with the setup process on this Web Site, the above company hereby agrees that it will promptly pay the invoice submitted by you.

Thank you.

FIG. 12

ADMINISTRATION

Below is a list of orders. Click on any order to view the order in more detail and for further options

ID	STATUS	Buyer Order NUMBER	BUYER	PAYMENT	ITEMS	TOTAL
Test Account						
1	In Negotiation	DA01	ABC	Letter Of Credit	1	$ 897.00
12	Incomplete	DA02	Socjjdk	Letter Of Credit	2	$ 2290.00
Exports Inc.						
2	Incomplete	EX01	Tool Inc.	Wire Transfer	1	$12500.00
3	Incomplete	EX02	company	Letter Of Credit	1	# 12500.00
4	Incomplete	EX03	hjk	Wire Transfer	1	$12500.00
5	Incomplete	EX04	hjk	Letterr Of Credit	1	$12500.00
6	In Negotiation	EX05	TradeAccess Inc.	Letter Of Credit	1	$25000.00
7	In Negotiation	EX06	x	Letter of Credit	1	$25000.00
8	In Negotiation	EX07	TradeAccess Inc.	Letter Of Credit	1	$25000.00
9	In Negotiation	EX08	Buyers Inc.	Letter Of Credit	1	$25000.00
10	Incomplete	EX09	Baskets Inc.	Credit Card	1	$ 200.00
11	In Negotiation	EX10	EMI	Letter Of Credcit	1	$25000.00

FIG. 13

SPONSOR

Order #:	6
Buyer's Order ID:	EX05
Company Code:	exports
Status:	In Negotiation (awaiting vendor)
Payment:	Letter of Credit
Delivery:	CIP
Buyer ID:	oKmYfWlv
Buyer:	Jeff Jones, CEO ABC,Inc. , Inc. Purchasing Department M/s 897 229 Berkeley Street Boston, MA 02116 Phone: 617-450-9405 Fax: 617-450-9409 Email: info/abcinc.com Bank Name: BankBoston Bank Swift: BB12345 Bank Address: One Financial Place, Boston
SHIP TO:	Henry Smith Shipping Clerk ABC, Inc. Shipping Department M/s 897 229 Berkeley Street Boston MA 02116 Phone: 617-450-9405 Fax: 617-450-9409 Email: info@abcinc.com
Freight:	DHL 123 Cargo Street Boston, MA 02116 Phone: 617-345-4500 Fax: 617-345-8700 Email: ships@dhl.com
Items:	*10 Grade 100 Widgets (ID:EX100) at $2500.00
Total:	$25000.00

FIG. 14

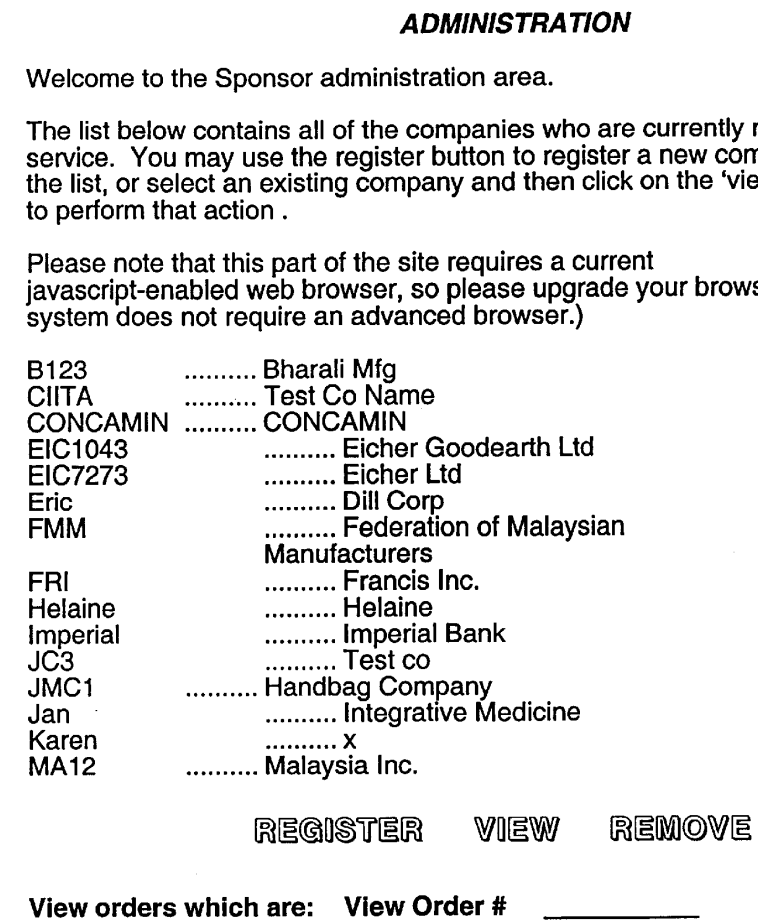

ADMINISTRATION
Welcome to the Sponsor administration area.
The list below contains all of the companies who are currently registered with the service. You may use the register button to register a new company for inclusion in the list, or select an existing company and then click on the 'view' or 'remove' button to perform that action .
Please note that this part of the site requires a current javascript-enabled web browser, so please upgrade your browser! (The rest of the system does not require an advanced browser.)
B123 ..... Bharali Mfg
CIITA ..... Test Co Name
CONCAMIN ..... CONCAMIN
EIC1043 ..... Eicher Goodearth Ltd
EIC7273 ..... Eicher Ltd
Eric ..... Dill Corp
FMM ..... Federation of Malaysian Manufacturers
FRI ..... Francis Inc.
Helaine ..... Helaine
Imperial ..... Imperial Bank
JC3 ..... Test co
JMC1 ..... Handbag Company
Jan ..... Integrative Medicine
Karen x
MA12 ..... Malaysia Inc.
REGISTER VIEW REMOVE
View orders which are: View Order #

FIG. 15a

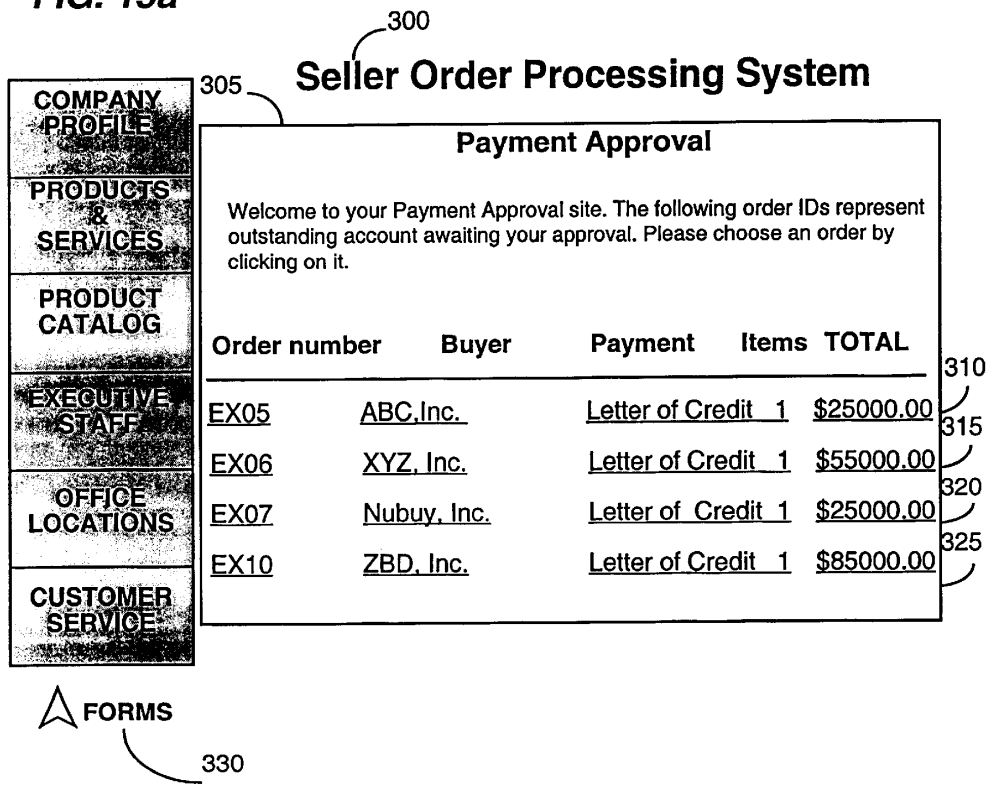

300
Seller Order Processing System
305
COMPANY PROFILE
PRODUCTS & SERVICES
PRODUCT CATALOG
EXECUTIVE STAFF
OFFICE LOCATIONS
CUSTOMER SERVICE
FORMS
330
Payment Approval
Welcome to your Payment Approval site. The following order IDs represent outstanding account awaiting your approval. Please choose an order by clicking on it.
Order number Buyer Payment Items TOTAL
EX05 ABC,Inc. Letter of Credit 1 $25000.00
EX06 XYZ, Inc. Letter of Credit 1 $55000.00
EX07 Nubuy, Inc. Letter of Credit 1 $25000.00
EX10 ZBD, Inc. Letter of Credit 1 $85000.00
310
315
320
325

FIG. 15b

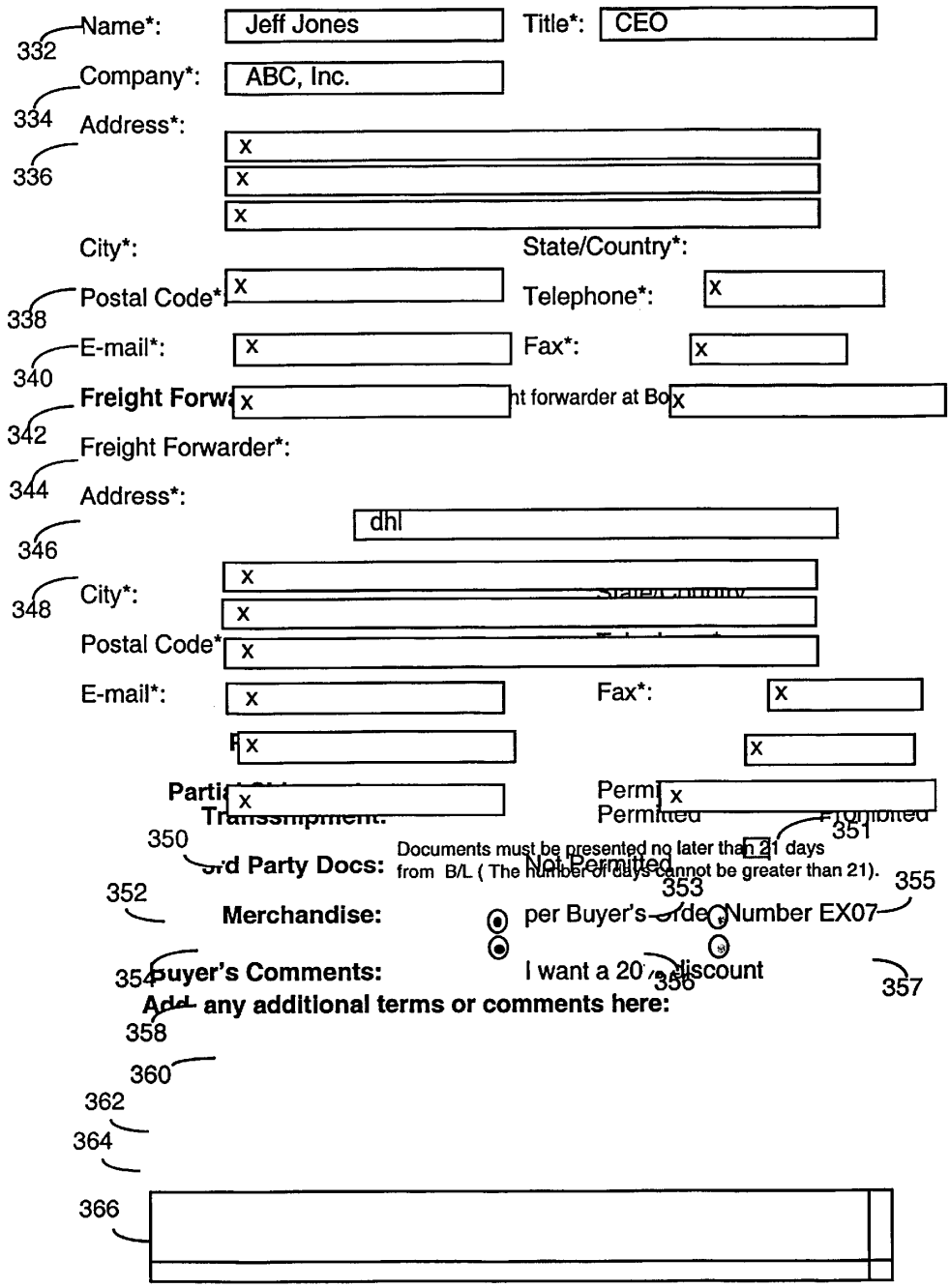
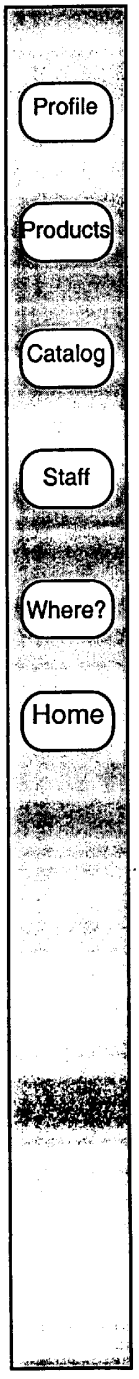

Name*:
Jeff Jones
Title*:
CEO
332
Company*:
ABC, Inc.
334
Address*:
336
City*:
State/Country*:
Postal Code*:
338
Telephone*:
E-mail*:
340
Fax*:
Freight Forwarder at Bo
342
Freight Forwarder*:
344
Address*:
dhl
346
City*:
348
Postal Code*
E-mail*:
Fax*:
Permitted
Prohibited
350
Documents must be presented no later than 21 days from B/L (The number of days cannot be greater than 21).
351
Not Permitted
352
Merchandise:
per Buyer's Order Number EX07
353
355
354
Buyer's Comments:
I want a 20% discount
356
357
Add any additional terms or comments here:
358
360
362
364
366

FIG. 15 C-1



ORDER PROCESSING SYSTEM

LETTER OF CREDIT

Please fill out the following form completely. Fields marked with an astereick (*) are mandatory. When finished, press the 'submit' button to propose your Letter of Credit.

General Information

Buyer: John Smith,Director,ABC inc.
8 Oak Street, South Polema, MA 02166
Seller: Exports Inc.
Advising Bank: Imperial Bank,Corporate Service Center,
2015 Manhattan Beach Boulevard
Redondo Beach, USA
SWIFT ID: IMPBUS99
Expiration Date: _____

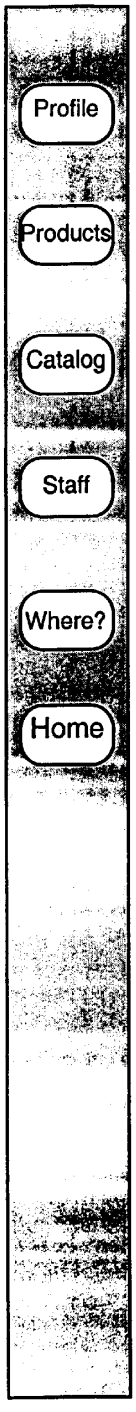
Payment Information

Buyer's Order Number: _____ **Total $25000.00 usd**
Payment Terms: __Sight __ Acceptance __ Deferred Payment
Tenor: ___days Sight ___ Bill of Lading date: _____
Other _____
(Ignore tenor if using sight payment)

Delivery Informatioin

Latest Shipment: _____
Ship Terms as per INCOTERMS 1990: CIP
Destination Port: _____
Insurance: __Paid by Applicant ___Paid by Beneficiary
Freight: __Paid by Applicant ___ Paid by Beneficiary

FIG. 15 C-2



LETTER OF CREDIT - CONTINUED

SHIPPING INFORMATION

Ship to*: John Smith Title: Director
Company*: ABC Inc.
Address*: 8 Oak Street

City*: South Polema State/Country*: MA
Postal Code*: 02166 Telephone*: 617-555-1023
E-mail*: john@abc.com Fax*: 617-555-0191

Freight Forwarder Information: (Freight fowarder at Boston)
Freight Forwarder*: _____
Address*: _____

City*: _____
Postal Code*: _____ Telephone*: _____
E-mail*: _____ Fax*: _____

DOCUMENTS & CHARGES

Documents must be presented no later than 21 days from B/L.

Presentation: (The number of days can be decreased but cannot be increased.)

Partial Shipments: ___Permitted ___ Prohibited
Transshipment: ___Permitted ___ Prohibited
3rd Party Docs: Not Permitted
Merchandise: per Buyer's Order Number EX27

OTHER

Add any additional terms or comments here:

_____

_____

FIG.16

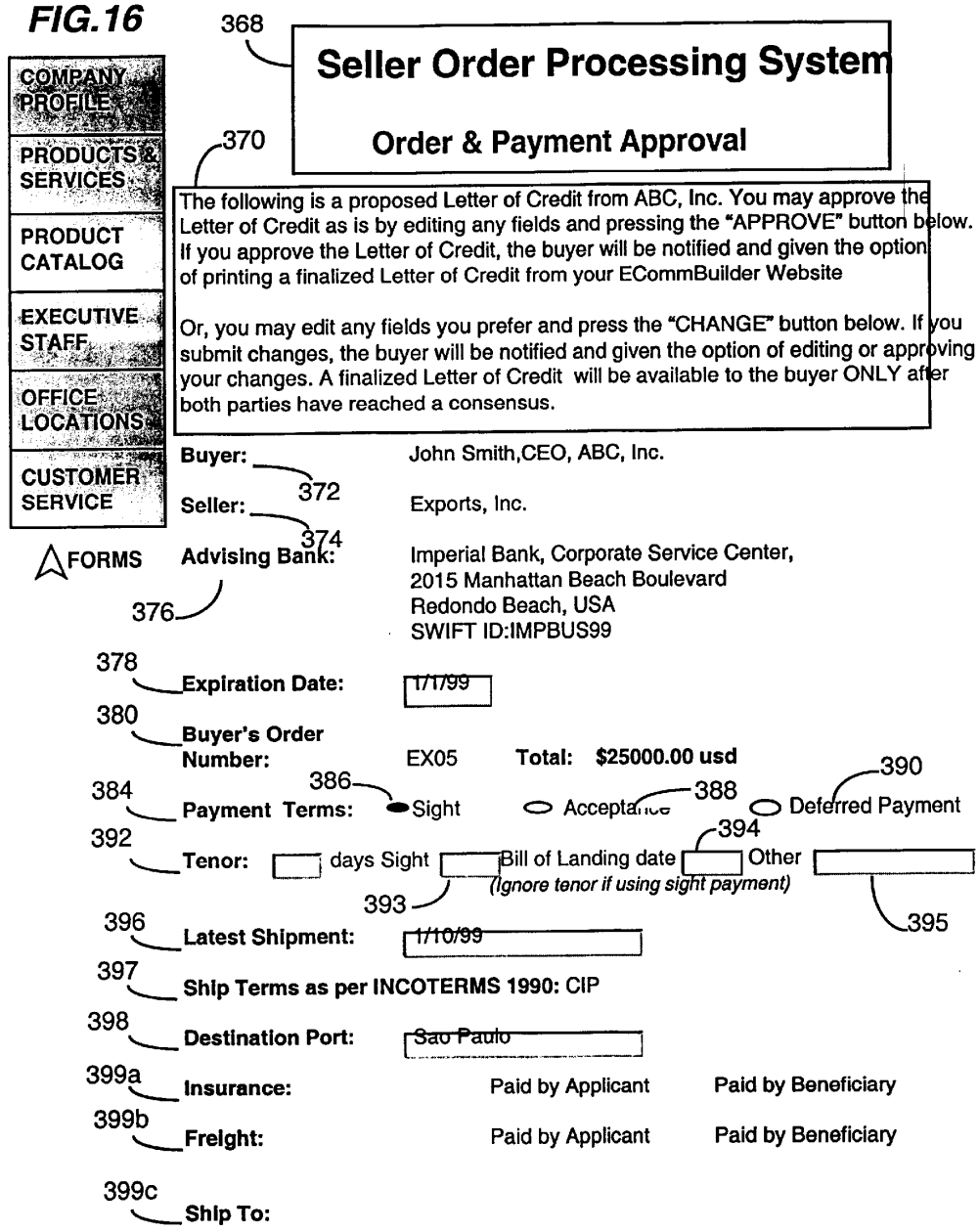

368
Seller Order Processing System
Order & Payment Approval
370
COMPANY PROFILE
PRODUCTS & SERVICES
PRODUCT CATALOG
EXECUTIVE STAFF
OFFICE LOCATIONS
CUSTOMER SERVICE
FORMS
The following is a proposed Letter of Credit from ABC, Inc. You may approve the Letter of Credit as is by editing any fields and pressing the "APPROVE" button below. If you approve the Letter of Credit, the buyer will be notified and given the option of printing a finalized Letter of Credit from your ECommBuilder Website
Or, you may edit any fields you prefer and press the "CHANGE" button below. If you submit changes, the buyer will be notified and given the option of editing or approving your changes. A finalized Letter of Credit will be available to the buyer ONLY after both parties have reached a consensus.
Buyer: John Smith,CEO, ABC, Inc.
372
Seller: Exports, Inc.
374
Advising Bank: Imperial Bank, Corporate Service Center, 2015 Manhattan Beach Boulevard Redondo Beach, USA SWIFT ID:IMPBUS99
376
378
Expiration Date: 1/1/99
380
Buyer's Order Number: EX05 Total: $25000.00 usd
384
386
Payment Terms: Sight
388
Acceptance
390
Deferred Payment
392
Tenor: days Sight
393
Bill of Landing date
394
Other
(Ignore tenor if using sight payment)
395
396
Latest Shipment: 1/10/99
397
Ship Terms as per INCOTERMS 1990: CIP
398
Destination Port: Sao Paulo
399a
Insurance: Paid by Applicant Paid by Beneficiary
399b
Freight: Paid by Applicant Paid by Beneficiary
399c
Ship To:

FIG. 17

Web Generation

Order Processing System

Thank You

You will receive confirmation immediately that your proposed Letter of Credit has been sent to us. Once we have reviewed your proposed terms, you will receive an Email response from us, providing details on the terms we will accept and the procedures for printing your final Letter of Credit form.

To check the status of your order, and for all further actions regarding this order, please visit our Order Information Center. Please use the following information when prompted to idenify yourself to our server:

LOGIN: **RaLuYKtr**
PASSWORD: **vPmAgecp**

Please print out this page or write down the above information for future use. If you have any questions or concerns, or forget your login password, please do not hesitate to contact us.

HOME

FIG. 18

From: System
To: Buyer
From: MVNsystem

"NOTIFICATION OF PURCHASE ORDER ACCEPTANCE"

(seller) has accepted your Purchase Order (number). Your order is now confirmed. Full details of the order and necessary payment documentation can be printed from (order URL). Further questions regarding this order should be directed to (seller's email address).

FIG. 19

Generated by System to Buyer

To: Buyer
From: MVNsystem
Subject: Email #3
Bcc:
x-Attachments

"(seller)" has responded to your proposed Purchase Order (number). Full details on the order can be reviewed at (order URL)

FIG. 20

To: Seller
From: MVNsystem
Subject: #2 email text
Bcc:
x-Attachments

A SALE HAS BEEN GENERATED BY SPONSOR FOR Seller Company name.
Sponsor has processed a proposed purchase order on behalf of your company. Please log into your customization area. Review the terms of this order and follow the instructions provided there to respond to the proposed buyer. MVN system will then process your response directly to the buyer.

Order Summary:

- Items Sought: (catalog ID and Description?)
- Amount of Order: ($)
- Buyer's Country:

FIG. 21

To: Buyer
From: MVNsystem to Buyer
Subject: #2 email text
Bcc:
x-Attachments:

"Thank you for proposing your order (number assigned to the PO) to (name of seller). Your order has been submitted for review; (name of seller) will respond to your proposed order by email submitted directly to this account, including instructions on how to proceed with your order at that time. For any questions regading the processing of this order, please contact orders@mvn.com.

Thank you for using MVN."

This is an automatic email notification, no reply is necessary.

FIG. 22

Date: Fri, 2 Oct 1998 21:05:02 -0400 (EDT)
From: MVNsystem to Vendor upon registration
To: davef@swave.com
Subject: Thank you for registering

Thank you registering for this Community. The following email has been sent to sponsor for processing of your invoice and Listing Agreement.

COMPANY DEMOGRAPHICS

Date:	October 2, 1998
Name:	David Foucher
Title:	President
Company:	Shockwave Productions
Company Address:	8 Pleasant Street, South Natick, MA 01760

ECommBuilder

Product Chosen:	International BusinessDeveloper
Cost:	28,000 Rupees
Unique URL Cost:	10,000 Rupees
Username:	"test"

FIG. 23

Date: Wed, 30 SEP 1998 12:30:41 -0400 (SDT)
From: MVNsystem to Vendor
Subject: Sales action for Exports Inc.
Apparently-To: info@tradeacess.com

VENDOR: Exports Inc.
ADDRESS:
COMPANY CODE: exports

ACTION NOTICE FOR THIS ACCOUNT

Please note that MVN has registered action by the following user, for the following products:

USER: Arne K
ADDRESS: x,x,x,New York x x

ACTION DATE: Wed Sep 30 12:30:41 1998

PRODUCTS:
1 of item SAMPLE-EX100 at $200.00/ea

ORDER TOTAL: $200.00

This is an automated message from MVN. Please do not respond to this message.

Fig. 24

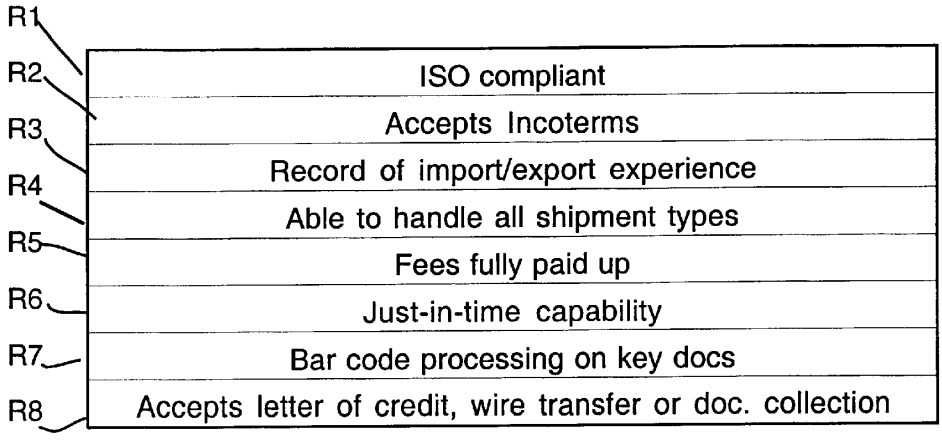

R1
R2
R3
R4
R5
R6
R7
R8
ISO compliant
Accepts Incoterms
Record of import/export experience
Able to handle all shipment types
Fees fully paid up
Just-in-time capability
Bar code processing on key docs
Accepts letter of credit, wire transfer or doc. collection

Fig. 25

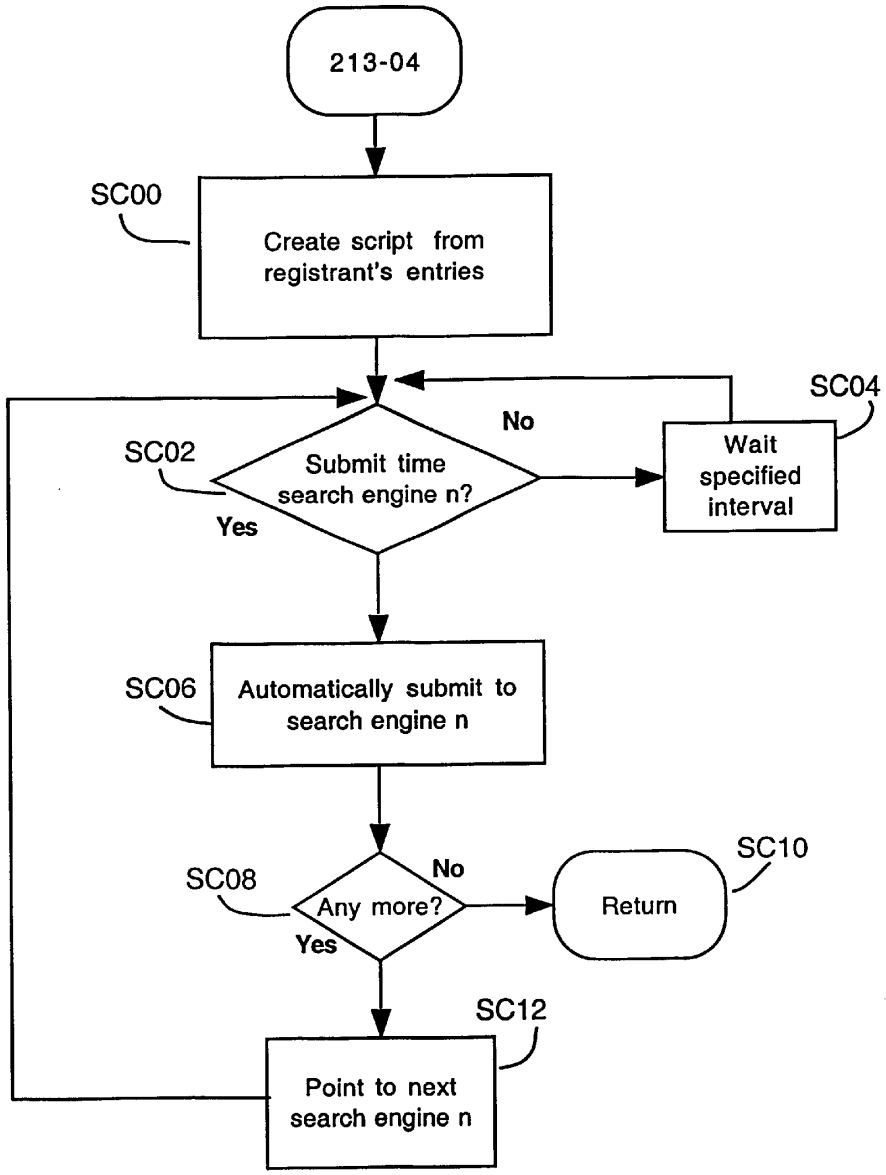

213-04
SC00
Create script from registrant's entries
SC04
No
SC02
Submit time search engine n?
Wait specified interval
Yes
SC06
Automatically submit to search engine n
SC10
No
SC08
Any more?
Return
Yes
SC12
Point to next search engine n

Fig. 26

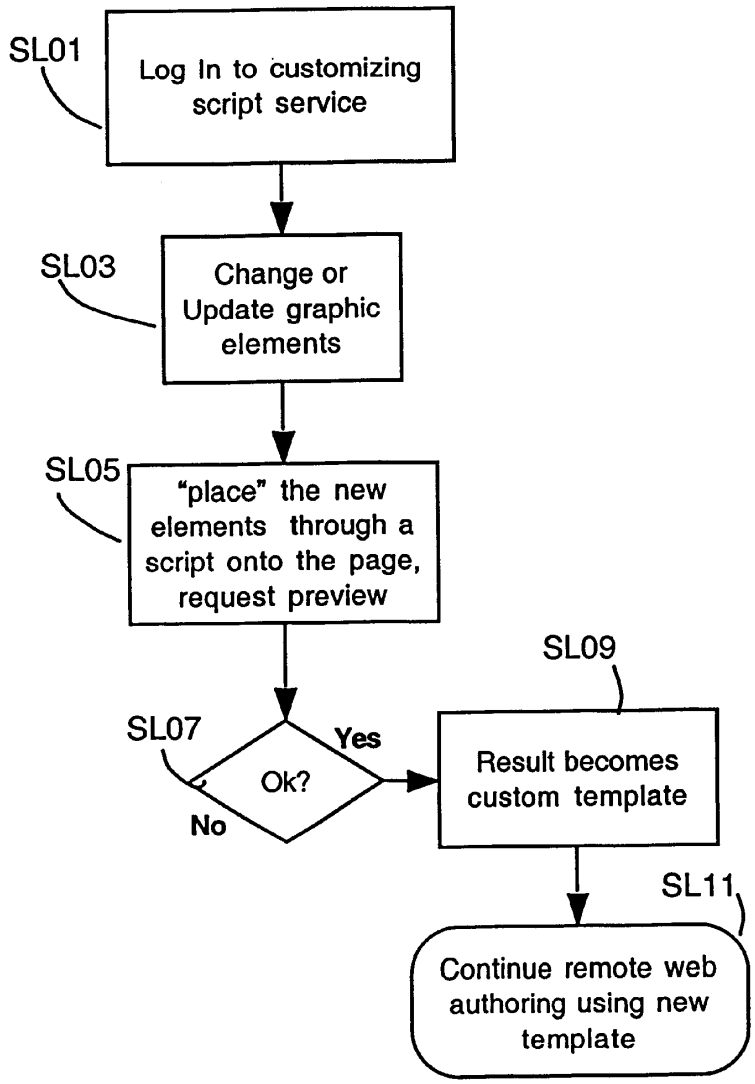

SL01
Log In to customizing script service
SL03
Change or Update graphic elements
SL05
"place" the new elements through a script onto the page, request preview
SL07
Ok?
Yes
No
SL09
Result becomes custom template
SL11
Continue remote web authoring using new template

Fig. 27

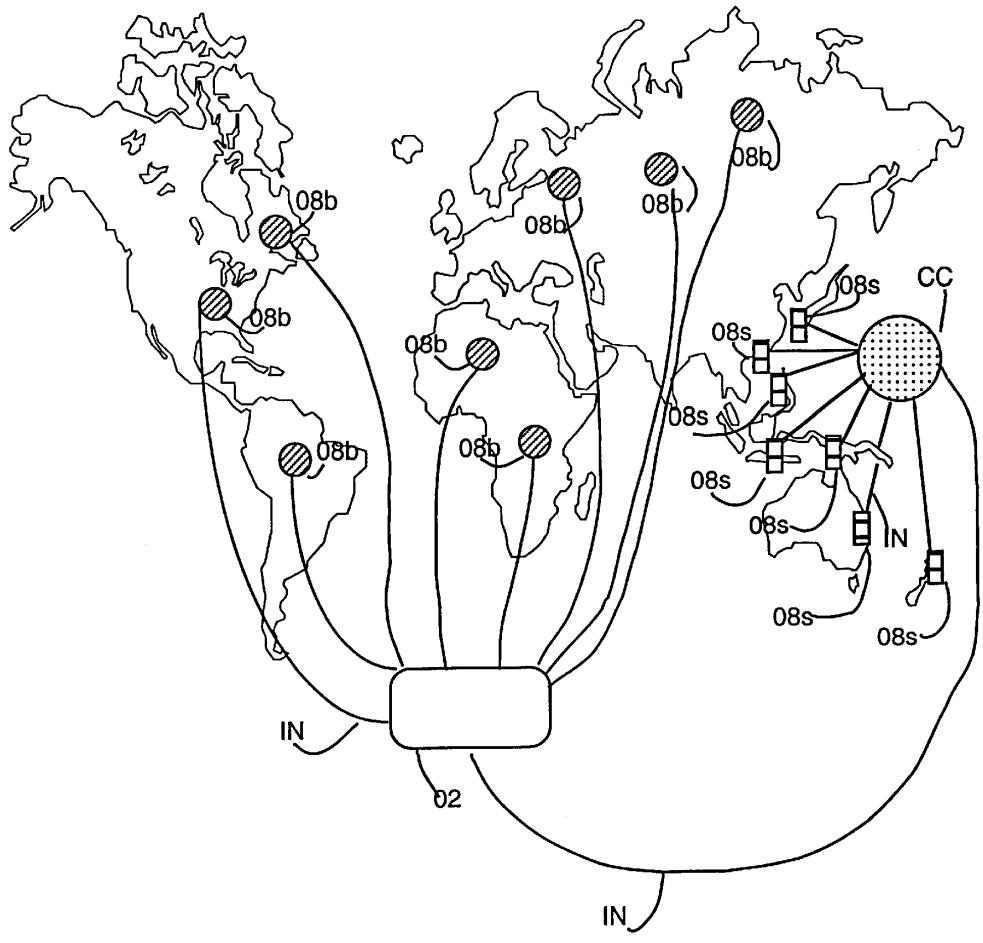

08b
08b
08b
08b
08b
08b
08b
08b
08b
08s
08s
08s
08s
08s
08s
08s
CC
IN
IN
IN
02

Fig. 28

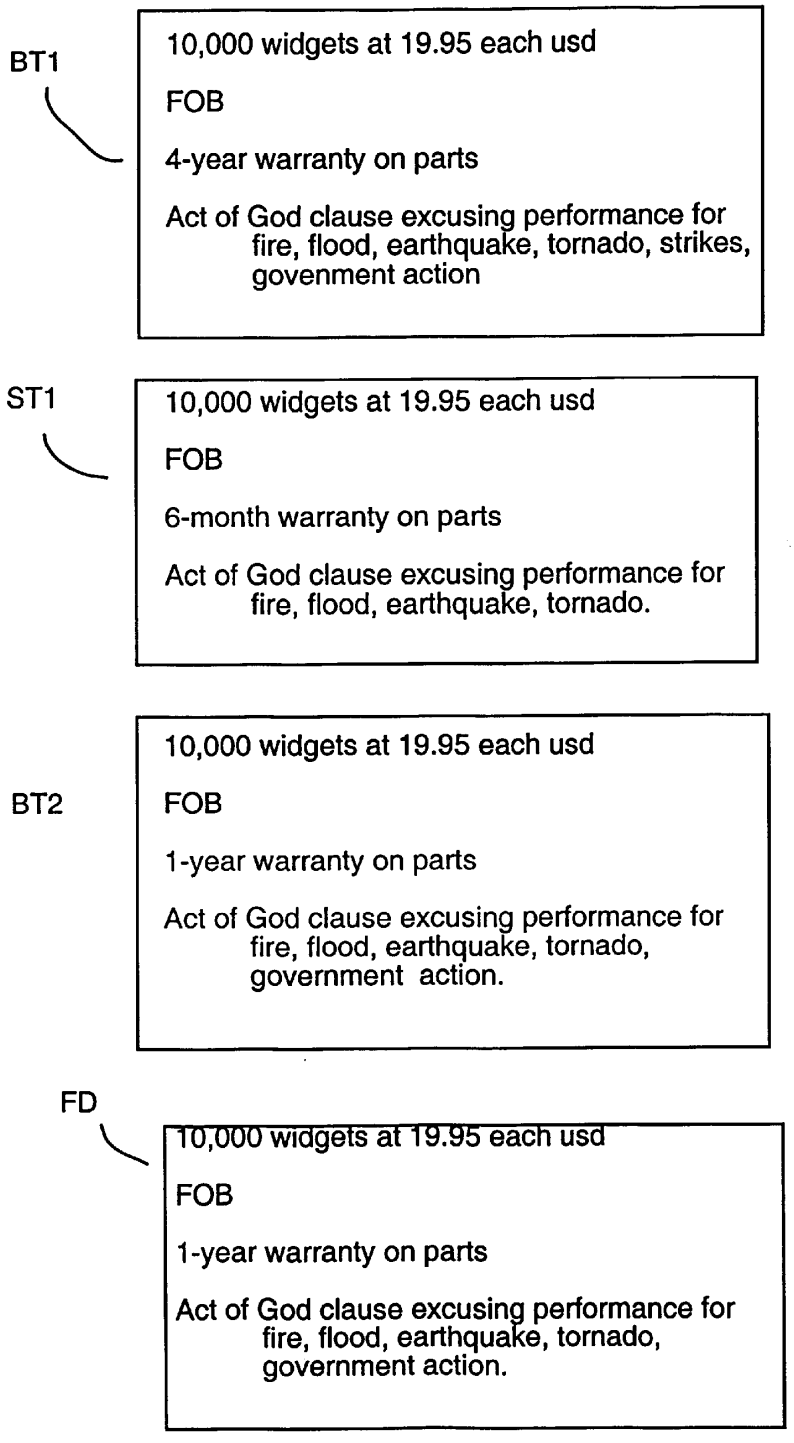

BT1
10,000 widgets at 19.95 each usd
FOB
4-year warranty on parts
Act of God clause excusing performance for fire, flood, earthquake, tornado, strikes, govenment action
ST1
10,000 widgets at 19.95 each usd
FOB
6-month warranty on parts
Act of God clause excusing performance for fire, flood, earthquake, tornado.
BT2
10,000 widgets at 19.95 each usd
FOB
1-year warranty on parts
Act of God clause excusing performance for fire, flood, earthquake, tornado, government action.
FD
10,000 widgets at 19.95 each usd
FOB
1-year warranty on parts
Act of God clause excusing performance for fire, flood, earthquake, tornado, government action.

Fig. 29

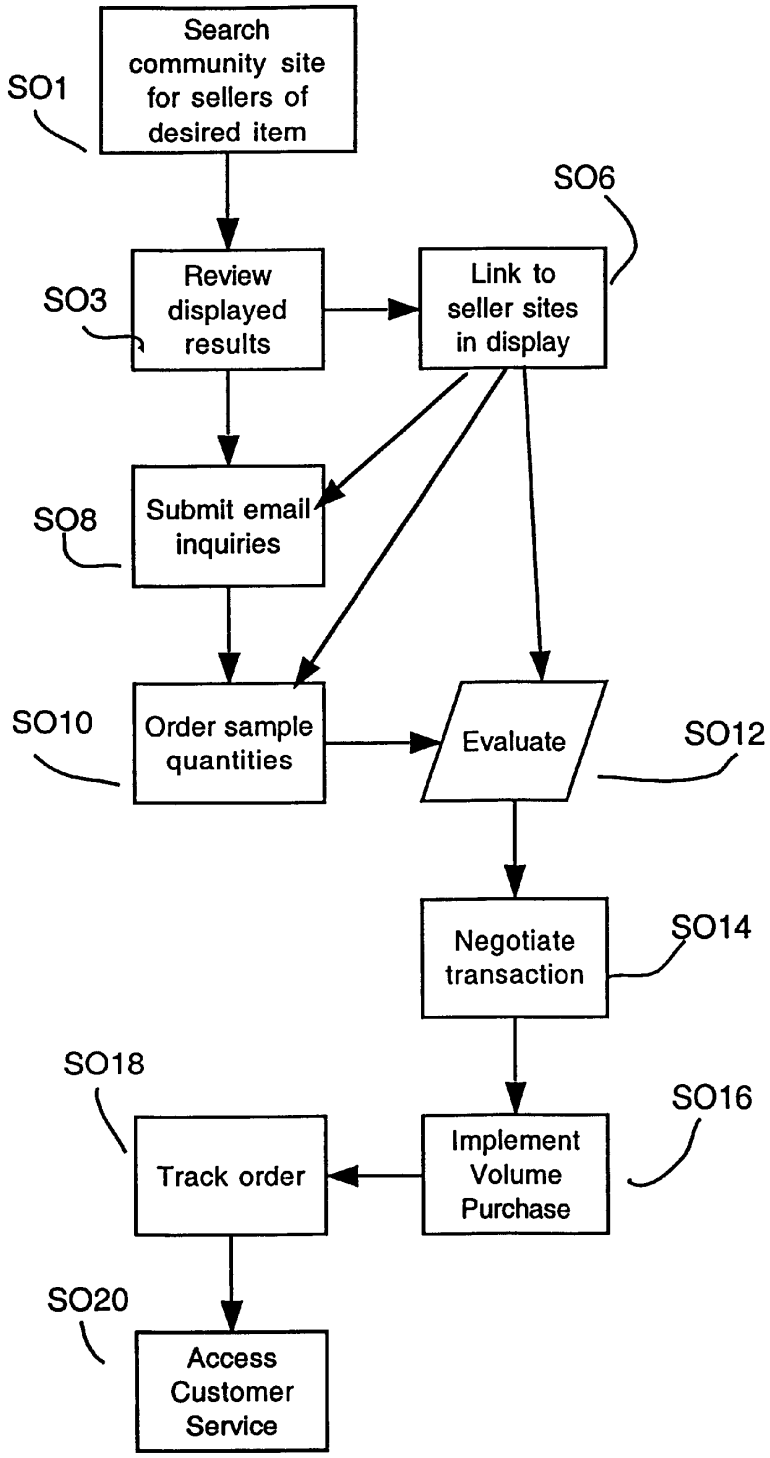
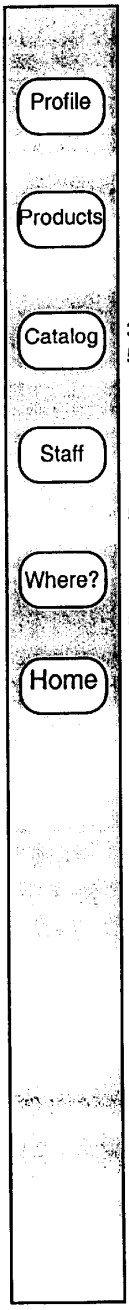

Search community site for sellers of desired item
SO1
SO6
Review displayed results
SO3
Link to seller sites in display
Submit email inquiries
SO8
Order sample quantities
SO10
Evaluate
SO12
Negotiate transaction
SO14
SO18
SO16
Track order
Implement Volume Purchase
SO20
Access Customer Service

FIG. 30



Order Processing System

Wire Transfer

PLEASE PRINT OUT THIS FORM AND TAKE IT TO YOUR BANK, WHICH MUST FOLLOW THESE INSTRUCTIONS IN REMITTING PAYMENT BY WIRE TRANSFER FOR YOUR ORDER

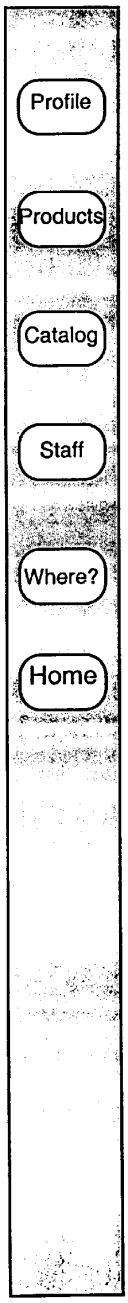
INSTRUCTIONS FOR U.S. DOLLAR PAYMENTS- SWIFT MT 100 FORMAT

32 A:	_____, USD4000.00
50:	ORDERING CUSTOMER:
	John Smith 8 Oak Street MA 02166
56 A:	INTERMEDIARY BANK:
	AEIBUS33 (AMERICAN EXPRESS BANK, NEW YORK)
57 A:	ACCOUNT WITH INSTITUTION
	/01111111
	IMPBUS11
	IMPERIAL BANK
	LOS ANGELES
59:	BENFICIARY CUSTOMER:
	ABC COMPANY, INC.
70:	DETAILS OF PAYMENT:
	FURTHER CREDIT TO Exports Inc., REFERENCE BUYER'S ORDER NUMBER EX26 LESS ABC COMPANY, INC.'S COMMISSION OF 5% OF ORDER AMOUNT /VENDORD/exports/EX26
71 A:	DETAILS OF CHARGES:
	OUR

FIG. 31a


Profile
Products
Catalog
Staff
Where?
Home
Exports, Inc.
Welcome to our Web Site!
Exports Inc. is a leading New Hampshire area export company that produces widgets.
The Exports Inc. team hopes you enjoy exploring our Website for all your Widget News.
Thank You!
To learn more, please contact us.

FIG.31b



Exports Inc.

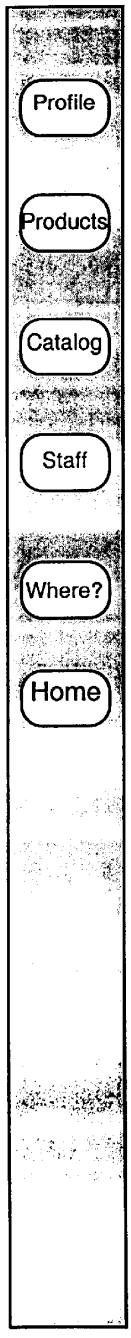
PRODUCT CATALOG

Please take a moment to browse our product catalog. below. If you wish to place an order, select the quantity of each item in the text boxes at the side of the catalog and click on the 'Review Order and Availability' button at the bottom of the page.

Quantity Ordered	*Product #*	*Item*	*Description*	*Unit*	*Price/Unit*
_____	EX300	Grade 300 Widgets	Yellow plastic widgets, certified compliant	20 Doz.	$4000.00 usd
_____	Samples of this product (quantity: 1 Dozen) are available for $185.00 per order.				
_____	EX400	Grade 400 Widgets	Red plastic widgets, certified compliant	15 Doz.	$6000.00 usd
_____	Samples of this product (quantity: 1 Dozen) are available for $400.00 per order.				
_____	EX500	Wooden Chairs	Curved seat, wooden spindles, oak, etc.	2 Doz.	$950.00 usd
_____	Samples of this product (Quantity: 1) are available for $45.00 per order.				
_____	EX200	Grade 200 Widgets	Green plastic widgets, certified compliant	10 Doz.	$2500.00 usd
_____	Samples of this product (Quantity: 1 Dozen) are available for $225.00 per order.				
_____	EX100	Grade 100 Widgets	Blue plastic widgets, certified compliant	10 Doz.	$2500.00 usd
_____	Samples of this product (Quantity: 1 Dozen) are available for $200.00 per order.				

Our named port of departure is Boston (ship); Boston (air).
Our international freight forwarder is Evergreen;DHL.

FIG. 31c



Exports Inc.

CUSTOMER SERVICE

Dear Exports Inc. Customers,

Thank you for taking the time to visit the service and support section of our Web Site. Exports Inc. is pleased to provide our customers with online access to our Customer Service staff, who will be pleased to assist you with any questions regarding our products or services.

When contacting us, please take a moment to provide the information requested on our Email form so we may better assist you. A Customer Service Representative will reply to your inquiry as soon as possible.

Exports Inc. is committed to providing outstanding Customer Service, and we look forward to assisting you.

Sincerely,
John Smith
VP of Customer Service

Customer service inquiries may be submitted using our online form.

FIG. 31d

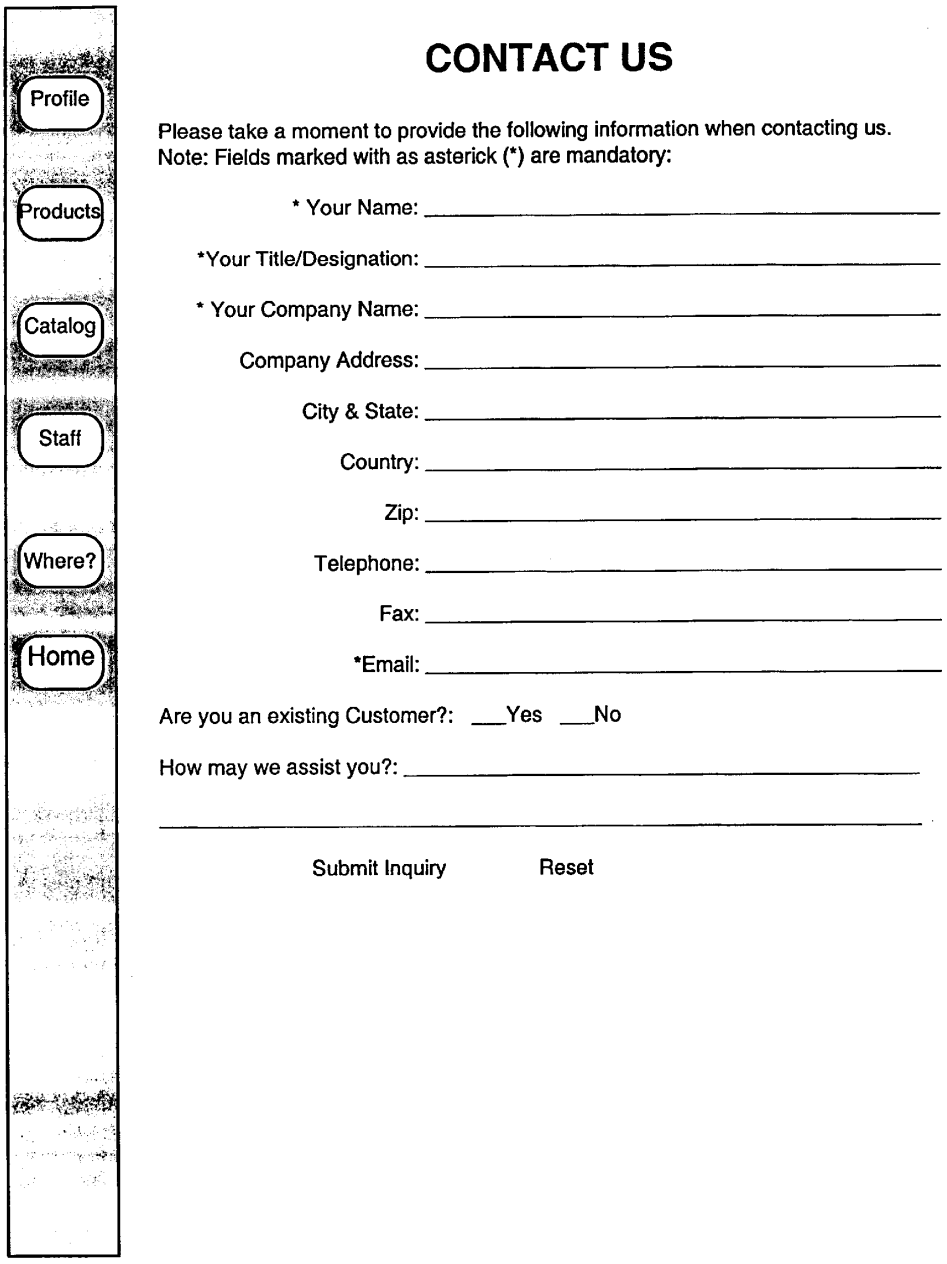
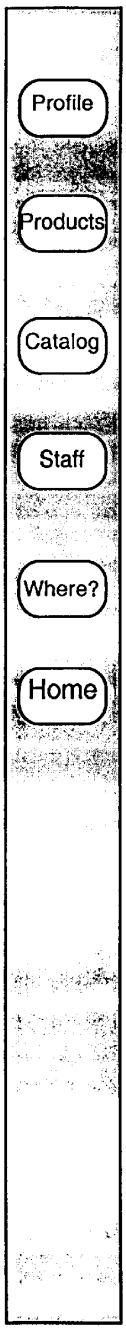

EXPORTS INC.
CONTACT US
Profile
Products
Catalog
Staff
Where?
Home
Please take a moment to provide the following information when contacting us.
Note: Fields marked with as asterick (*) are mandatory:
* Your Name:
*Your Title/Designation:
* Your Company Name:
Company Address:
City & State:
Country:
Zip:
Telephone:
Fax:
*Email:
Are you an existing Customer?: ___Yes ___No
How may we assist you?:
Submit Inquiry
Reset

FIG. 32



PRODUCT CATALOG

You may use this page to view or change any of this product's information. If you make changes, please make sure that the fields in red are properly filled in before clicking the 'submit' button. You can return to the product list by clicking on the 'back' button below.

Catalog #: EX400
(must be unique)

Product Name: Grade 400 Widgets

Description: Red plastic widgets, certified compliant

Unit Size: 15 Dozen
(kilos, tons, litres, etc.)

Price ($USD): 6000.00
(no symbols or commas, please)

Samples: x Samples Available
Quantity: 1 Dozen
Price: 400.00

Quantities up to 25 units - ship within 30 days.
Quantities up to 30 units - ship within 60 days.
Quantities up to 40 units - ship within 90 days.
Quantities up to 50 units - ship within 100 days.

SUBMIT
BACK

SYSTEM AND METHOD FOR PROVIDING AND UPDATING USER SUPPLIED CONTEXT FOR A NEGOTIATIONS SYSTEM

BACKGROUND OF THE INVENTION

1. Technical Field

This invention relates generally to systems for negotiating transactions and more particularly to systems for conducting negotiations and transactions internationally, over the Internet or other international network.

2. Background

Business entities have tried for years to adapt computers and networks for use in sophisticated intercompany negotiations for commercial purchase and sales transactions, but with results that usually fall far short of expectations. Early mainframe computer attempts, for example, usually involved one corporation's allowing its existing suppliers and quantity buyers to connect to its internal private, proprietary network, using specially written locally developed application programs and private, proprietary network connections. These private systems were usually extremely costly to develop and maintain (often costing in the multi-millions of dollars) and very often did not meet all the needs and changing requirements of the participating businesses. Since many corporations had different internal networks and computer systems, considerable effort went into working around incompatibilities. Additionally, these systems had to be based on already existing, close relationships between buyers and sellers and usually were also based on previously negotiated agreements. Thus, the systems did not help in searching for information about new buyers and sellers, nor with the evaluation or negotiation processes, nor with the documenting of those processes from the beginning. They were not interactive, but typically batch processing systems, and usually accepted alphanumeric text only, not the inclusion of graphics or sound files. They usually addressed ongoing relationships previously worked out manually, for which extremely expensive custom systems were developed at buyers' or vendors sites.

Most business (and many other) negotiation processes are usually multivariate. That is, a business negotiation deals with many variable items, such as price, quantity, quality, shippers, insurance, warranty, schedules, returns and so on. The above solutions typically did not automate multivariate negotiations in any way, since they had to be built on agreements whose terms had all been previously negotiated.

With the advent of the Internet and the World Wide Web (Web), the exchange of information amongst companies was greatly enhanced, with the use of Web technologies. However, even with chat rooms, bulletin boards, and forum websites most of this data and information exchange is simply that—not a multivariate negotiations process nor an online, electronic commerce process.

While some of the Web devices, such as chat rooms and bulletin boards are interactive, each essentially allows two or more people to have conversations over the Internet, in the same way they might speak over the telephone or several might speak over an old-fashioned party line telephone. While the chat room or bulletin board may store these conversations, no other action takes place as a result of the process. Consequently, privacy and security questions aside, these are not effective devices to use to negotiate a number of variable terms, reach agreement on each and document the results. Just as telephone conversations about negotiations can be recorded on tape, but do not produce a contract document on paper, online chat or bulletin board discussions about negotiations cannot easily be used to make a contract on the network, even if they are archived.

Extranet Web technology has been developed to enable a corporation to "talk to" (but not negotiate multiple variables in iterative bargaining with) its suppliers and buyers over the Internet as though the other companies were part of the corporation's internal "intranet." This information exchange is done by using client/server technology, Web browsers, and hypertext technology used in the Internet, on an internal basis, as the first step towards creating intranets and then, through them, extranets.

In typical intranet client/server technology, one computer acts as a Web server computer to perform complex tasks, while other, smaller computers or terminals are "clients" that communicate with the Web server. In typical client/server intranets the client requests data and performance of tasks from the Web server computer. A Web server program runs on the Web server computer to provide Web server functions. The communications between these intranet clients and Web servers is in Hypertext, or HyperText Markup Language (HTML)—the "language" of the Internet's World Wide Web.

Usually, for intranets, at the Web server site, one or more people would create documents in hypertext format and make them available at the Web server. In many companies, employees have personal computers or terminals at their desks connected to the internal network. In an "intranet" these employees would use a Web browser on their terminals to see what hypertext documents are available at the internal corporate Web server site.

While this has been an advance for internal communications over a private network, it does not usually provide any interactive, iterative, multivariate negotiations capabilities and it requires personnel familiar with HyperText Markup Language (HTML) to create hypertext links in documents to create and maintain the "internal" Web pages. If a more interactive approach is desired, an Information Technology (IT) specialist in some form of scripting, such as CGI, or PERL is needed who can create forms documents and procedures to allow users to ask for information from the Web server. Again, this is custom programming at the user's site, and still does not provide multivariate negotiations or commerce capabilities.

Corporations that share information internally can also use workgroup software such as IBM's LOTUS NOTES™ software on the internal network. However, this, too, requires special programming and scripting for the unique needs of the organization, and normally does not address multivariate negotiations, even on an internal basis.

Since extranets simply extend a company's intranet to include selected other companies, the extranet concept usually does not provide any negotiations capabilities, either, much less electronic commerce capabilities.

To date, most attempts at adapting Internet technology to negotiations and commerce, even in small measure, have been focused on solving the problem from inside a corporation's systems going out and with the emphasis on the seller, not the buyer. Consequently, Intranet/Extranet options usually do not provide electronic commerce, only more sophisticated information distribution and sharing.

For corporations that sell at retail, one technique for selling goods over the Internet **04** is shown in FIG. **2***b* (Prior Art). This scheme uses the concept of a hosting "mall" **24** Website that enables buyers to browse through stores **28** (individual participating selling corporate Websites or aggregated catalog systems) and use a "shopping cart" **26**

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feature for selecting items to purchase. Participating sellers in a mall **24** create their own Websites which list items for sale and prices. The mall usually provides the shopping cart technique for the buyer to use to select items to buy. Such Internet **04** sales techniques also use security systems for transmitting payments by credit card **30***a* and **30***b* or CYBERCASH™ payment methods (not shown). Most of these mall Website are significantly limited in the interaction, if any, they allow between buyers and sellers. A few allow limited price negotiations between buyers and sellers, but none allow iterative, multivariate negotiation and bargaining for both price and terms, such as availability, shipping, carrier, payment methods, risk of loss, etc.

Similarly, for non-retail business buyers and sellers, the mall concept above has limited value, since it usually does not connote much about the integrity or capability of the participating businesses, nor provide all of the various payment options a business might want to use. Most of the present Internet and World Wide Web systems for commerce are directed to consumer purchases of retail items in small quantities, not to business to business transactions or consumer transactions negotiating for goods and services in large quantities on national or international terms.

The companies that do provide more of a business to business focus over the Internet usually do so by offering special enterprise application server software **19**s, as shown in FIG. **2***a* (Prior Art) for installation inside an enterprise's private corporate network. These programs fit into a category of software called front-office applications or application servers—so called because they sit close to the user end inside an enterprise and are customized to interface with the back-office applications **21** inside the enterprise, which include commercial products from software suppliers as well as custom developed applications that handle internal business functions such as inventory tracking, financials, human resources and supplies, and similar Enterprise Resource Planning (ERP) systems.

As seen in FIG. **2***a* (Prior Art), three separate corporations **16***a*, **16***b* and **16***c* are shown using the services of an enterprise commerce site provider **18**. Each corporate site **16** has a firewall **16***af*, **16***bf*, and **16***cf*. Firewalls are a combination of hardware and software designed to prevent unwanted intrusion into a private corporate network by unauthorized personnel. A firewall usually puts a specially programmed computer system between its internal network and the Internet. It also prevents the company's internal computer users from gaining direct access to the Internet, since the access to the Internet provided by the firewall computer is usually indirect and performed by software programs known as proxy servers.

Note that, as shown in FIG. **2***a* (Prior Art), in a typical implementation of an enterprise commerce site provider **18**, the enterprise commerce site provider **18** breaks through the firewalls **16***af*–**16***cf* of each of its customers. Normally this is done in such a way as to provide secure access. Occasionally, if the commerce site provider **18** allows its customers to be linked for certain transactions over the Internet **04**, over a common external link **10** to the Internet, internal security may be comprised, if the customer's firewall is configured incorrectly and the Internet transmission results in a breach.

Still in FIG. **2***a* (Prior Art), note that the typical enterprise commerce site provider **18** must have each customer **16** install the provider's application server software **19***s*, on an application server computer **19***h* inside the corporation's private network **14**. Thus, in order to have access to the commerce site, corporation **16***a* would have an individual working at a desktop computer **08**, for example, connect to the corporation's internal Web server computer(s) **20***h* over internal private network **14**. The corporate employee thus accesses the enterprise commerce site provider **18** through his or her corporation's Web server computer **20***h*, running the enterprise commerce site provider **18**'s application server software **19***s*. From the Web server **20***h*, application server software **19***s*, possibly running on its own application server computer **19***h* communicates through the firewall **16***af* with enterprise commerce site provider **18**, and ultimately, through that site to other corporate subscribers to the enterprise commerce site provider, **18** usually over a private leased network **11**. The corporation's internal network **14** links the desktop computers **08** with not only the internal application server **19**, but also to the internal corporate back-office internal computers **21**.

Many, if not most, of the implementations of the enterprise commerce systems shown in FIG. **2**B(Prior Art) may also require the corporation to install a special database application server **13***h*, to run special database application software **13***s* along with the application server software **19***s*. Thus, if the corporation already has a Web server computer **20**, and the corresponding software **20***s*, it still has to purchase at least the application server software **19***s*, possibly an additional computer to act as the application server computer **19***h*, and possibly yet another combination of database server computer **13***h* and database server software **13***s*, in order to use the enterprise commerce provider **18**'s system.

Because application server products **19***h* and **19***s*, and possibly additional database server hardware and software as seen in FIG. **2***a* (Prior Art), have to be installed inside each participating corporation, customized to that corporation's internal back office systems **21**, and backed by appropriate internal training support, it can cost in the several hundred thousands or millions of US dollars to purchase and install the systems and train internal people on their use. While a few of these applications connect buyers and sellers over the Internet, usually both the sellers and the buyers must also install and customize the application server software **19***s* inside their internal networks **14**—another reason why these systems are so expensive, difficult to implement and costly to maintain. The traditional approach has been to design systems that will interface with the corporation's own internal computers and systems. Since these vary from one company to another, this is another reason why the application server software **19***s* can be costly, as extensive modifications to it may be necessary to interface with each customer corporation's own systems.

Payment options in an enterprise application server approach may be a little broader than those in a mall, in that they include not only credit cards (for those following the US banking systems) or CYBERCASH™ payments, but also procurement cards or specially agreed upon and custom programmed electronic authorization methods that allow a buyer to order items from a seller. However, for both enterprise application server and the mall Website approaches, payment processing, especially by credit card, is complicated.

In order to process a credit card transaction, a number of communications need to occur between selling Website and the bank/credit card processor. If the bank/credit card processor accepts "international" payments, any currency translations are done in separate steps, not online or in real time. That is, they are usually done on a special processing basis, rather than part of an online transaction, if they can be done

at all in some countries. A general overview of the steps required for credit card handling is shown below:

Enterprise server/mall Website	Bank/credit card processor
1. transport the credit card information securely to processor or bank over a private network; 3. post the item details back to the bank/credit card processor over the private network;	2. verify the card is legitimate and the amount exists; send authorization to online merchant over the private network; 4. transport item details to card issuer for debit to the holder's account over private network 5. make necessary currency translation (usually offline) 6. credit the merchant account 7. deduct significant fees, usually a percentage or more per transaction from the merchant account; 8.archive details.

Credit cards are issued to buyers relatively easily, but merchant identifiers (merchant ID's), which allow the merchant to accept and process the cards are not as easy to obtain, especially for online transactions, and online merchants are usually charged premium processing fees to authorize online processing and the handling of international transactions.

Procurement cards or other custom programmed electronic authorization methods that allow a buyer to order items from a seller are usually more expensive in that they usually require special negotiations and some custom programming. Any time custom programming is required, along with local installation and training at the corporation's site, costs go up significantly.

Because of this expense, enterprise application server systems, such as those provided by CONNECTINC.COM and TRADE'EX.COM are designed to work with existing relationships between buyers and sellers, in which the detailed terms have already been negotiated for ongoing purchases and to prevent "wild card purchasing" inside the organization. These are usually referred to as maintenance, repair and operations (MRO) or administrative purchasing. Generally, administrative purchasing only represents about 20% of a company's purchasing efforts. Within this administrative level of purchasing, procurement cards and specially constructed payment methods are used more for the low value transactions. More important MRO transactions are usually paid for by company checks or wire transfers. Most of a corporation's purchasing efforts, nearly 80% in many cases, are directed to production purchasing, which is usually not addressed by the above types of enterprise systems.

In marketing literature, for example, TRADE'EX states that its TRADE'EX procurement system is specifically designed to be an MRO system which "frees buyers to concentrate on more important tasks such as vendor selection and contract negotiation." That is, it does not handle production purchasing and negotiations.

Production purchasing is normally defined as the purchasing of components, subassemblies or parts that a company assembles and repackages into its own products. If a company manufactures automobiles, for example, production purchasing for it includes the purchasing done for all the components of its automobiles—tires, batteries, electrical systems, seats, engine parts, raw materials for frames, etc. For an auto manufacturer, MRO or administrative purchasing would handle such lower priority items as office supplies, office furniture, etc., or established longstanding items such as stock tires for automobiles for which all the terms had previously been negotiated without the benefit of automation.

Production purchasing includes the selection of new vendors, the evaluation of them and their products, conducting contract negotiations and so on. It is also of strategic importance to a business because it has a very direct impact on manufacturing and product costs, and sales prices. Thus, while the enterprise application server products do tend to reduce the internal transaction costs and time associated with MRO or administrative purchasing, they are usually affecting the smallest part of the purchasing effort, leaving the bulk of the endeavor, and often the most strategically important part to existing manual methods.

Credit cards are essentially ways to pay cash in advance for goods and services, and thus, would not be suitable for production purchasing either, where delivery, payment, and inspection schedules are usually negotiated to occur over time. Thus, in a production purchasing agreement, a buyer may only to agree to pay the seller in installments, after the seller has shipped a monthly quantity and the buyer has had a chance to inspect and accept them. Once the buyer has accepted a shipment, the seller would usually like the fastest payment possible. Even if credit card payments could be made after the fact, they are usually not handled online for international transactions.

In addition, obtaining real time card authorization for international transactions online is a major undertaking, because online card processing and bank to bank connectivity does not exist on the Internet in many countries. Also, transactions denominated in most non-G7 currencies are not likely to be processed in real time online because the international banking system is not capable of doing real time, online, Internet currency transactions. Consumers who travel and use credit cards to make payments in other countries, and other currencies, may think these transactions are being handled online, but they are not. Most of the currency exchange processing is done by the connecting banks offline, and most of it that is done electronically is done on private bank and interbank networks.

Many of the major credit card issuers also do not allow a merchant to use its merchant identifier (ID) to process transactions on behalf of related entities. This is a significant problem for mall operators, in particular. To add a new store to the mall, the mall Website operator must ask the store to get its own merchant ID, offline. It can take weeks to get a merchant ID, but without one, the seller in the mall cannot accept any online transactions at all.

For international processing there are other payment methods available, but these are usually done manually or offline. For example, wire transfers allow bank-to-bank payments for international transactions in any tradable currency. However, these are done over private bank networks and usually between companies which have already established a purchasing relationship—i.e. for MRO or administrative purchasing. Wire transfers are used more often in international trade than company checks, because the processing time for a wire transfer is faster than check processing and the fees charged by the banks are often lower. The participating banks usually handle the currency conversion as part of the process. Again, however, this usually requires some fairly sophisticated interbanking networks in the applicable countries.

Letters of credit (L/C) are another payment vehicle used for international transactions, once they have been negoti-

ated. It usually takes 6 weeks or longer to negotiate one. Negotiations take so long because the issuing bank (the buyer's bank) assumes the total credit risk by agreeing absolutely to pay the seller so long as the transaction documents match the terms of the letter of credit itself. Most disputes about the payment of letters of credit have to do with discrepancies in the L/C terms, including such simple things as typographical errors. As seen in FIG. **2***c* (Prior Art) heretofore, letters of credit were negotiated primarily by telephone calls and facsimile exchanges between a buyer **P1** and a bank **P2** which can easily result in both substantive and typographical errors. Banks which process the letters of credit, often use a private network known as the SWIFT system, which provides 128 bit encryption for data sent between points on the SWIFT network. The United States Department of Commerce continues to regulate encryption controls required by US laws, and limits this full level of encryption to US and Canadian banks. Other systems are allowed to use 56 bit encryption outside the US and Canada.

Another form of payment often used by business for production purchasing is known as documentary collection. It is midway between a letter of credit and a wire transfer. With this method, the issuing bank does not assume the absolute credit risk and obligation to pay. It only agrees to assist the transaction as a sort of "honest broker." Consequently, the bank fees are lower. However, this method is normally used between parties that have already established a course of dealing, but want a structured payment vehicle processed through their respective banks.

Still another payment method often used in business transactions is the purchase order (PO) issued against a previously agreed upon master purchase agreement. Some of the MRO or administrative systems which go beyond credit card payments, enable a buyer and seller to use the terms of a previously negotiated master purchase agreement as a governing document for each purchase order issued. In this approach, a purchase order represents a buyer company's obligation to pay according to the master agreement, and the seller has to accept the risk that the buyer will actually pay the purchase order per the originally negotiated payment terms. As with letters of credit, this form of payment usually involves the transmission of facsimiles and telephone calls between the businesses—an error-prone process.

For purchase orders, as with letters of credit, and similar techniques, one of the difficulties for businesses is known as the "battle of the forms." If a buyer issues a purchase order, or ships goods against a letter of credit with different or additional terms stated or implied, in many jurisdictions it is not clear which contract terms will govern the transaction. Frequently forms get lost, or the exact order and dates of transmission and receipt are not known, or the contents are rendered unreadable by carbon copies or facsimile machines. There is usually no simple, reliable way to track all the steps involved in the transaction. Thus, transactions may be repudiated by buyers or sellers because the paperwork is incomplete or erroneous.

While some attempts have been made to address repudiation arising from terms sent fraudulently by other than the authorized buyer or seller, these attempts typically focus on obtaining some form of electronic signature or certificate of authenticity to avoid some of the difficulties. However these do not clear up unreadable terms or track down all the terms negotiation steps.

As mentioned above, some existing MRO systems provide MRO application server software at both the seller's and buyer's sites, which is installed and customized at those sites, to the internal systems used by each—the cost of such installation and customization is usually high.

In addition to the cost of the internal software installation and customization, enterprise MRO electronic commerce products usually do little or nothing to help a seller find new buyers (or the buyer find better, more cost efficient suppliers) or simplify the initial purchase and multivariate contract negotiation process. Most buyers want to be able to evaluate new suppliers readily. The negotiation of a major purchasing agreement with a new vendor for a new product may take anywhere from 6–12 months or more, if done manually. Since the existing enterprise application server products tend to focus on integrating with existing internal administrative/MRO corporate systems, very little, if anything is done by them to simplify the launching or negotiation of new buyer/seller relationships.

In many corporations, the selection of a new supplier for production purchases usually involves the creation of a team from purchasing, engineering, and manufacturing to evaluate all potential sellers. The team usually flies to potential vendor sites to evaluate capabilities and production facilities, obtain samples, and then return home to evaluate the samples.

For new product developments, the ability to evaluate actual samples as part of the buyer's new product may be critical to the buyer corporation's overall development strategy and product timetable, and thus, the bottom line. A mass storage device manufacturer that is developing a faster, cheaper, higher capacity disk drive, may need to find high capability read/write heads. Read/write heads with the characteristics needed by the mass storage device manufacturer may not be available from anyone on the market yet. However, the manufacturer probably knows several firms that make high quality read/write heads for existing devices. If these firms have new heads under development, they would usually be willing to provide evaluation samples to such a manufacturer. The manufacturer needs the samples to verify that the new disks it is building will work reliably and at full speed with the heads being developed by the other firm. If these tests can be performed and the results are good, the manufacturer knows it is likely to be able to meet a new product shipment date of x, with a price of y. If samples cannot be obtained and evaluated, the manufacturer's product development cycle may slip by months or years, thus costing potential millions in lost revenues and market shares.

Once a short list of vendors with acceptable samples has been qualified, the team would be represented by the purchasing buyer who negotiates with the different representatives from the vendor short list. When the buyer has selected a seller to buy from, it may still take 6 to 12 months or more to negotiate prices, sales terms, quantities, inspection and replacement terms, availability dates, shipping costs, carrier, risk of loss and insurance, payment options, etc. Most of these terms are critical for production purchasing. The cost of reaching agreement on all terms can come to thousands or tens of thousands of dollars worth of labor, travel, and other expenses normally associated with the typical production purchase negotiation, in addition to the delays caused to the buyer's development and production cycles.

As another example, if an automobile manufacturer plans to build x thousand new cars and trucks each month on its production line, it needs to be sure that the firm(s) from which it purchases the new types of batteries needed for new models can deliver the required quantity each month, on

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time, with excellent quality and reasonable prices. The auto maker could lose millions in sales if its assembly line is stopped because of part shortages. Thus, while price is important in production purchase negotiations, it is only one small part of an overall set of purchase term variables that are strategically important to the auto maker and its cost of goods sold. If the seller uses unreliable shippers and carriers or does not know how to import or export its goods to the manufacturer's assembly plants, the best price on the market will be worth very little to a manufacturer which has to halt production because of missed schedules, shipments, or quantities.

Obtaining samples from vendors known to the production buyer is significant in itself, as seen above. However, in today's international trade, the overwhelming majority of potential buyers and sellers are not aware of each other's existence. Yet international trade is increasing by double digit numbers each year, so an obvious need exists for more capability. Many countries are taking advantage of the "leapfrog" effect by using the Internet and the latest in information technology (IT) to build instant infrastructures for competing in international commerce. Some countries and trade regions have set up inspection services for potential outside buyers, so that a buyer can obtain an independent assessment of a particular vendor's production facilities from such services. This saves some time and travel expense. However, it still does not provide a buying team with samples for evaluation. With current Internet commerce systems there is no effective way to order such samples. By the time terms and conditions for a sample order have been negotiated manually at such distances, the samples are not likely to be relevant any longer to the buyer company's development goals.

At the same time, most sellers of such products may need time to ramp up their production (especially for new or improved products) in order to meet quantity terms and dates, and they may need to incur additional costs if they have to change shippers to meet the buyer's needs. A seller does not want to have its goods rejected arbitrarily as defective or damaged if this is not the case. So inspection, return and refund policies need to be negotiated. All of these terms are usually variable and may frequently interrelate. If a seller's shipping costs go up—so might its prices. If a buyer is unable to meet its quantity goals because too many of the seller's goods are defective, the buyer's internal costs go up, and the buyer may have to buy from another source.

Production purchasing negotiations such as these are usually done by telephone, on-site visits, faxes and other non-automated means of conducting a negotiation today. This work is labor intensive, and if travel is involved, expenses climb. If the transaction is an international one between two countries with different currencies, customs, and trade practices, it can take even longer and cost more to conduct the negotiations.

In today's global markets, while international sourcing is becoming more and more important, it is expensive for a buyer team to travel to sites in another country to evaluate them, buy samples for engineering evaluation at home, and to conduct the negotiation through occasional visits between buyer and seller. While most use facsimile machines or computer fax modems to submit drafts of agreements back and forth, face to face negotiations may be needed more frequently for international negotiations, because business practices in the two countries may differ significantly and errors or misreadings caused by poor fax reproductions may further complicate the process.

In other words, application server approaches do not offer any real solutions to the production purchasing, non-retail, problems.

Returning now for a moment to FIG. **2***b* (Prior Art), as mentioned above, Websites such as retail malls **24** or standalone Websites are used by some corporations which sell at retail. While many tools exist to allow companies to design Websites, there are not as many that allow a company to design one for automatic integration into a Website in a mall or with online catalogs. Since most companies want to maintain control over the appearance of their corporate and brand names, those mall or catalog sites that do provide Web tools for their business subscribers, usually do not provide complete common interfaces or templates for the companies to use, nor do they integrate the sites with multiple features and services. Instead, they usually only provide access to a shopping cart **26** feature and a secure credit card **30** payment feature with a catalog product and price list that is searchable. Some may also provide manual help to the seller in listing its Website in relevant search engines used on the Internet. Normally, however, it is the seller's responsibility to do so. In either case, the registration with search engines is usually done manually. Some may also require the seller to arrange for payment processing separately, offline. As mentioned before, obtaining a merchant ID can take weeks, thus limiting what the seller can do online until then.

Presently, on the Internet, search engines such as Compaq Corporation's ALTAVISTA™, Yahoo corporation's YAHOO™ and so on, have different schedules for accepting and adding new sites to their search lists. It can take anywhere from 4–8 weeks or more for a site to be registered with each search engine. Many Internet search engines also add entries to their lists by "spidering" around the Internet to gather all Website addresses. Depending on the search engine, spidering may take much longer or not be as complete as a user requested registration. For example, ALTAVISTA's Website states:

> The Altavista search engine starts by spidering your entire site with its spider Scooter. Scooter may take up to three months to spider and index your entire site. It normally spiders about 2 pages per site in any week . . . Best bet is to submit your pages manually at the rate of no more than 30 per week.

As can be seen, the costs to a seller to establish a Website can be significant both in time and money. IDC Corporation reported in 1997 that the average cost of creating a fully enabled domestic US business to business electronic commerce standalone, single, retail Website for a large Fortune 1000 business was approximately $600,000.00 (Six Hundred Thousand USD.)

BUSINESS MARKETING MAGAZINE™, published by ADVERTISING AGE™, reported in 1998 that median prices for creating a single Website averaged as follows:

Company/Website Size	Average Lost
Small	$44,500
Medium	$99,750
Large	$302,975

To add electronic commerce to the site, costs averaged as follows:

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Company/ Website Size	Average Cost
Small	$25,000 (online ordering by fax but no transaction or payment processing)
Medium	$33,000 (online ordering with credit card processing)
Large	$78,000 (database searches, online ordering, credit card processing)

Creating a single Website can take anywhere from 1–8 weeks to 6–8 months or more. Creating one that is able to handle simple electronic commerce transactions may take even longer as merchant accounts for credit cards need to be obtained, integrating CYBERCASH™ or similar realtime payment methods must be provided for, search engine registrations need to be requested and so on.

As noted above, generally accepted electronic methodologies for handling international commerce online other than on a simple credit card or CYBERCASH™ payment basis for retail sales do not exist. Many countries do not have bank procedures in place to accept international credit card transactions in real time. In such countries, trying to adjust the current banking systems may well be impossible and completely new systems would be needed.

Thus, most existing electronic commerce sites are designed to work with existing proprietary banking networks such as the United States VISA™ and MC MASTERCARD™ real-time card authorization and processing interbanking systems. As noted above, these are known as SWIFT-compatible private networks which use 128 key encryption for security. This often limits a buyer or seller's market potential unnecessarily. Since many countries do not have banking systems comparable to the SWIFT interbanking system, payments in such countries may only be made by manually negotiated letters of credit and so on. It can take from 4–6 weeks simply to negotiate the terms of a letter of credit, when using the same manual techniques of phone calls and fax machines. In a global economy, when manufacturers in one country may want to source parts and components from the Pacific rim, sell them in the United States, Europe or South America, or Pacific Rim, a system that does not address the complexities of international purchasing is very limiting.

Similarly, the companies that provide Web hosting for a mall **24** on the Internet as shown in FIG. **2***b* (Prior Art) usually address only retail sales of consumer articles, with little or no control over the individual businesses that subscribe as sellers or the consumers who browse as buyers. In many business transactions, buyers want to know that the sellers meet some minimum standards and requirements and sellers want to know that fraudulent or inappropriate requests will not be tolerated.

Most World Wide Web mall or commerce sites do not offer this kind of site integrity for their business transactions, since most of them are directed primarily to retail sales in which a consumer can usually rely on consumer protection laws and some credit card "insurance" practices, for protection from the unscrupulous.

The few enterprise electronic commerce providers that go beyond the mall concept do so with the addition of a governor or administrator feature which coordinates with the enterprise application servers. The governor sets up and administers the rules for the site and can act as a broker. This usually entails a customized, specially programmed matching of participating companies' computer systems to coordinate authorization and payment approval so orders flow between firms. However, this technology can cost millions and it can take as much as two years to program the computers and set up the necessary processes and equipment at all the participating company sites. Most of the components for doing this are sold by major computer hardware and software vendors who also sell application server software, hardware, and consulting services to install the "front-end" application server at the participating business's site. Thus, while the Internet may be used to connect the companies participating, most of the work is done by the application server software installed on private, proprietary networks at the various company sites, and the Internet serves as a simple external telecommunications link.

Another complication of some of the seller-centric and enterprise application server products designed for commerce is that they may only work with certain forms of electronic data interchange (EDI) technology, which is 7 to 10 times more costly to use than other methods. Existing EDI technologies use private networks and charge per call and by the bit of information transmitted. Depending on the approach used attempting to change such systems to use other forms of data interchange can be very costly, because of the number of installed software application servers at the participating company sites which must be radically changed. Because of the expense associated with most EDI technologies, only about 2% of companies worldwide attempting to do business over a network use them.

Existing business to business enterprise application software servers tend to have more of a sellers' focus, and, as mentioned above, they tend not to focus on a buyer's need for finding and evaluating new sellers, nor for negotiating and bargaining with the new suppliers. Similarly, most of the mall Websites which focus on retail sales are seller-centric. That is, they focus on letting a seller list its wares and prices, and decide how much to disclose about itself and its products and only allow the buyer to select from listed items and prices. Little or no seller marketing, product, terms or service evaluation information is available to the buyer. As mentioned before, a buyer on a mall Website is usually not permitted to negotiate anything, simply to select from prices and payment options provided by the seller. Buyers using the enterprise application server software products cannot use them to negotiate new production purchases, but simply to process maintenance, repair or operation (MRO) orders against existing, already negotiated agreements.

Even with the seller-centric focus, most companies that provide a mall or enterprise application server business to business site offering, do not help with the marketing or promotion of the participating sellers' brands. Thus, the value of these services for the participants are often limited by the power of each company's individual brand. If the seller participants have products that are not well-recognized by brand name, an electronic commerce mall or business to business enterprise application server software service usually does not provide much added visibility or market reach. A few sites have attempted to address this by organizing along vertical market segments, such as malls devoted to the steel industry, but this alone does not provide that much additional visibility, primarily because it does not address some of the basic needs a buyer has for multivariate negotiations.

The production purchasing buyer needs to be able to collect information about sellers, and it would help to know that some entity has screened them and monitors them for adherence to some known set of standards and reputability. Additionally, production buyers today usually have to travel to a seller's physical location to get sample products. If the

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buyer is in the US and the seller is in Malaysia, this might costs thousands of dollars in airfares and travel expenses, just to get samples. Most existing products and services do not help with these tasks. As noted above, samples of newly engineered component parts may be critical for the buyer company's completion of its product. New systems being built by a computer maker may need power supplies or heat dissipation systems that are also new and unproven. The engineers developing the new computer systems need to be able to test their prototypes with sample, new component parts to know the whole system will work. None of the existing methods of buying over the Internet address this kind of need. Most systems are not designed from the buyer's viewpoint.

One system does attempt to address a few things from a buyer's viewpoint. This is the Priceline.com system which is described in U.S. Pat. No. 5,794,207 Method and Apparatus for a Cryptographically Assisted commercial Network System Designed to Facilitate Buyer-driven Conditional Purchase Offers, issued Aug. 11, 1998, to Walker et al., assigned to Walker Asset Management Limited. This is essentially an online bidding process in which a buyer specifies the price it desires to pay for an object, such as an airplane reservation or a car. The bid is submitted over the Internet to a central site which analyzes a database of sellers of that type of item to find one or more selling the object at close to the bid price. These matches or near-matches are presented to the buyer, who can then select from them and place a conditional purchase offer. If the seller accepts, the sale is made. A buyer can initiate another round of bidding if there is no good result from the initial one. While this system has benefits for certain types of purchases, usually of completed, commodity items, it does not address the needs of production buyers outlined above. It does not provide iterative bargaining between the buyer and seller on all aspects of a multivariate transaction, nor does it connote much, if anything about the participating sellers. It is similar to other auction sites on the World Wide Web which allow you to submit bids to a seller or auctioneer, but do not provide the opportunity to bargain interactively with the seller on all the terms. A bid submission process is quite different from a price and terms negotiation process. Bid submission systems are usually designed to assist a seller in disposing of excess inventory. Hence, some malls and enterprise server applications provide limited electronic commerce, but none provide true multivariate negotiation ability.

Finally, both the mall concept and the enterprise server concepts use databases for storing and indexing product and price lists and catalogs, along with final orders.

However, since very little is offered in the way of iterative bargaining, other than a simple order/confirmation process, little or nothing is known, and consequently stored about the negotiation process on a step by step basis. Again, any information that is collected is likely to be of interest primarily to the seller, not the buyer, since most of the systems in existence are focused on the seller.

It is an object of this invention to provide a system for iterative bargaining and purchasing over a network which enables buyers and sellers to negotiate prices, terms, and conditions iteratively until an agreement is reached on all points.

It is another object of this invention to provide an iterative bargaining and purchasing system that is economical to use.

Still another object of this invention is providing an iterative bargaining and purchasing system that enables the creation of knowledgeable communities of commerce.

Yet another object of this invention is providing a means for storing, archiving and accessing all transactions and documents as they are formed over the system.

SUMMARY OF THE INVENTION

These and other objects are achieved by a multivariate negotiations engine for international transaction processing which: enables a sponsor to create and administer a community between participants such as buyers and sellers having similar interests; allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms, request sample quantities, and track activity; allows a seller/participant to use remote authoring templates to create a complete Website for immediate integration and activation in the community, to evaluate proposed buyer orders and counteroffers, and to negotiate multiple variables such as prices, terms, conditions etc., iteratively with a buyer. The system provides secure databases, search engines, and other tools for use by the sponsor, which enable the sponsor to define the terms of community participation, establish standards, help promote the visibility of participating companies, monitor activity, collect fees, and promote successes. All this is done through a multivariate negotiations engine system operated at the system provider's Internet site, thus requiring no additional software at the sponsors', or participant sellers', or buyer's sites. This also allows buyers and sellers to use and negotiate payment options and methods that are accepted internationally. The system maintains internal databases that contain the history of all transactions in each community, so that sponsors, buyers and sellers may retrieve appropriate records to document each stage of interaction and negotiation. Documents are created by the system during the negotiation process.

It is an aspect of the present invention that it provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction—not just the price.

It is another aspect of the present invention that, in a preferred embodiment, the negotiations engine uses software that is installed at the commerce system provider's site, thus eliminating the need for installation of any application server hardware, application server software, database server hardware or database server software at the buyer's, the seller's, or the sponsor's site.

Still another aspect of the present invention is that, in a preferred embodiment, all demographic, payment and negotiation information is transmitted using secure sockets over an open architecture network such as the Internet's Terminal Control Protocol-Internet Protocol (TCP-IP) network, thus eliminating the need for more expensive private leased lines or proprietary networks for the iterative bargaining between buyers and sellers amongst themselves or for communications with the sponsor.

Yet another aspect of the present invention is that the data collected about all transactions is kept in databases in a secure location inside an internet protocol (IP) firewall at the commerce provider's site, thus eliminating the need for additional, expensive database server hardware and database server software and firewall hardware and software at buyer and seller and sponsor sites.

Still another aspect of the present invention is that the costs for buyers, sellers and sponsors are greatly reduced by orders of magnitude over existing systems which cost much more and offer much less functionality.

Yet another aspect of the present invention is that complete histories of each stage of the negotiation processes are available for tracking and analysis which promotes non-repudiation of negotiated terms.

Still another aspect of the present invention is that it provides handling for international transaction and payment processing online.

Another aspect of the present invention is that remote authoring templates are integrated with the search and negotiations engines so that a seller in a community can create a Website incorporating its corporate logos and descriptions, while the system automatically integrates products, and other items with the community's promotional and other activities so that the seller can go online immediately.

Still another aspect of the present invention is that sponsors can perform many more functions, such as establishing standards, basic contract terms for the community (if desired), removing non-compliant participants, changing the structure of the seller and buyer databases, and so on than existing systems allow any administrator to perform.

Another aspect of the present invention is that it enables buyers to immediately purchase sample quantities of goods for evaluation purposes without the need to travel to the seller's location or to place telephone or fax orders.

Yet another aspect of the present invention is that while all transaction data is stored in a secure database at the negotiations engine system's site, the system provides multiple levels of privacy and access for each individual company, so that the records of transactions between a given buyer and seller are available only on a protected basis at appropriate levels of authorization for the buyer, the seller and the sponsor.

Another aspect of the invention is that databases are integrated with the complete electronic system, providing simplification in the capture and speed of transactions and other functions of the system.

Yet another aspect of the present invention is that it allows a seller to specify and manage the terms of trade it wants applied to its sales, such as using the full range of Incoterms or other established trade terms.

BRIEF DESCRIPTIONS OF THE DRAWINGS

FIG. **1***a* is a block diagram of the present invention showing its use by one sponsored commerce community.

FIG. **1***b* is a block diagram of a configuration of the present invention.

FIG. **1***c* is a logical diagram showing several communities created using the present invention.

FIG. **1***d* is a block diagram of the present invention showing its main functions.

FIG. **1***e* is a block diagram illustrating a main process of the present invention.

FIG. **1***f* is a block diagram illustrating database structures of the present invention.

FIG. **1***g* is a block diagram showing some of the main interactions enabled by the present invention.

FIG. **1***h* is a schematic drawing of a multi-media embodiment of the present invention.

FIG. **1***i* is a flow diagram of the multivariate negotiations engine of the present invention.

FIG. **1***j* is a block diagram of sponsor functions of the present invention.

FIG. **1***k* is a block diagram of participant functions of the present invention.

FIG. **1**L is a block diagram of network functions of the present invention.

FIG. **1***m* is a block diagram of external functions of the present invention.

FIG. **1***n* is a block diagram of database functions of the present invention.

FIG. **1***o* is a block diagram logical overview of database functions of the present invention.

FIG. **2***a* (Prior Art) is a block diagram of a prior art enterprise application software server system.

FIG. **2***b* (Prior Art) is a block diagram of a prior art Internet mall site.

FIG. **2***c* (Prior Art) is a block diagram of prior art sample quantity purchasing techniques.

FIG. **3** is block diagram of a type of community enabled by the present invention.

FIG. **4***a* is a flow diagram of remote Web authoring of the present invention.

FIG. **4***b* is a flow diagram of the customization of the remote Web authoring of the present invention.

FIG. **5***a* is a block diagram of the database functions of the present invention.

FIG. **5***b* is a block diagram of a database entry of the present invention.

FIG. **6** is a flow diagram of illustrative sponsor promotion activities of the present invention.

FIG. **7** is a flow diagram illustrating a buyer entering negotiations.

FIG. **8** is a flow diagram of illustrative reporting features of the present invention.

FIG. **9** is a flow diagram illustrating a buyer participant's preparation for purchasing.

FIGS. **10-1** through **10-3** are schematic diagrams of interactive Web authoring screens of the present invention.

FIGS. **11***a*-**1** through **11***a*-**3** show a completed letter of credit negotiated using the present invention.

FIG. **11***b* is a sample email notification of the present invention.

FIG. **12** is a block diagram of a seller's administrative database of the present invention.

FIG. **13** is an illustrative block diagram of a database entry for a community sponsor, showing status of a negotiation.

FIG. **14** is a block diagram of another sponsor administrative area of the present invention.

FIG. **15***a* is a block diagram of part of a seller's order processing using the present invention.

FIG. **15***b* is a block diagram illustrating a buyer's proposed terms using the present invention.

FIGS. **15***c*-**1** through **15***c*-**2** are block diagrams showing a proposed letter of credit using the present invention.

FIG. **16** is a block diagram of a seller's view of a proposed order with payment by letter of credit using the present invention.

FIG. **17** is a block diagram illustrating seller's order processing using the present invention.

FIGS. **18**–**23** are illustrative e-mail notifications of the present invention.

FIG. **24** is a block diagram of an illustrative set of community rules using the present invention.

FIG. **25** is a flow diagram of the present invention's automation of search engine submissions.

FIG. **26** is a flow diagram of a customizable language process for remote web authoring of the present invention.

FIG. **27** is a block diagram illustrating International transaction processing using the present invention.

FIG. **28** is a block diagram showing records archived by the present invention.

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FIG. **29** is a flow diagram of sample quantity ordering using the present invention.

FIG. **30** is a block diagram showing a wire transfer negotiated according to the method and apparatus of the present invention.

FIGS. **31***a* through **31***d* are block diagrams of remotely authored Web pages created using the present invention.

FIG. **32** is a block diagram showing sample quantity ordering with the present invention.

DETAILED DESCRIPTION OF THE INVENTION

Overview

In FIG. **1***a*, a block diagram of the present invention shows a multivariate negotiations engine system **02** communicating over telecommunications link **10***a* to the Internet **04**. A community sponsor **06** is shown also communicating over a telecommunications link **10***b* to the Internet **04**. Participants **08** in this community are shown at **08***a*–**08***h*. For commercial implementations each participant is either a buyer or a seller (or in some cases, both) in the community. Participants **08** connect to community sponsor **06**, through the Internet **04** and multivariate negotiations engine system **02**. Multivariate negotiations engine system **02** contains all the software needed to create sponsored communities, communicate with sponsors, and with all participants and store the results. Each sponsor or participant only needs a standard Internet browser such as those commonly available from Netscape Corporation or Microsoft Corporation, among others, and a commonly available desktop computer or other terminal, workstation, or computer to activate the browser over any commonly available link to the Internet. Typically, these browsers are distributed free of charge by their suppliers.

Multivariate negotiations engine system **02** can be used for other types of sponsored communities where interactive, iterative negotiations of a number of interrelated, variable items amongst the participants over the Internet is desired.

For example, manufacturers in the computer industry might want to agree on a set of multi-part, multi-tiered industry standards for a new computer bus. A computer industry association or a standards association might be the community sponsor, and the computer and peripheral manufacturers might be the participants who need to iteratively negotiate with each other and/or the standards body to agree upon the standards. The sponsoring standards body establishes the community, proposes initial standards, sets the rules for negotiations, encourages and monitors negotiations, and concludes with a finally agreed upon set of standards, with each step of each negotiation that occurred along the way archived. Since no additional hardware or software needs to be installed at the sponsor's site or at those of any of the participants, the present invention provides a much more economical and speedy way to negotiate complex, multivariate items such as complex standards specifications.

Additionally, while one form of sponsored community addresses corporate buyers and sellers engaged in production purchasing, other commerce communities could be implemented. For example, stock or commodity trading over the Internet might be conducted using the present invention. A sponsor, such as a traditional stock exchange or a newer type of securities body could establish the standards for accepting stockbrokers into the community. Such standards might include compliance with applicable securities regulations and so on. The sponsor can monitor and regulate actual iterative multivariate negotiations such as options, puts, calls, at the market or not at the market, etc., for buying and selling of commodities or securities electronically over the Internet. Or a trade show organizer might sponsor a community for allocating and iteratively negotiating accommodations, placement, footage, signage, facilities, etc., amongst vendors and suppliers at the show site.

Participants in a community can also ask the sponsor to appoint a moderator for their negotiations, if stumbling blocks arise. The moderator can monitor the negotiations and suggest next steps at any time in the process to one or several of the participants.

Many other types of communities can be created with the present invention. For example, governmental agencies might sponsor trade commerce communities for regional trade development efforts. International organizations might sponsor a community to assist countries in negotiating complex treaties.

Commonly available video conferencing and other multimedia techniques can be added to multivariate negotiations engine system **02**. For these embodiments, it is possible that both sponsors and participants would have to add hardware or software for the multi-media features at their sites, if such features are not already present. FIG. **1***h* illustrates the use of commonly available videoconferencing equipment such as a camera positioned at the top of a monitor connected to a simple desktop computer. With existing videoconferencing products, an image **I1** of a participant at another site is displayed on the monitor at the same time the Web browser interface **W1** to multivariate negotiations engine system **02** displays a list of the terms being negotiated. Those skilled in the art appreciate that most existing videoconferencing products also include voice communications as well. Thus, the negotiating participants can see and hear each other and the complex, multiple variables they are negotiating at the same time. Multivariate negotiations engine system **02** can archive the multimedia sessions as video and audio files to be stored with the text.

The present invention allows the creation of one or more sponsored communities of any number of types for conducting iterative negotiations over a network. As seen in FIG. **1***a*, the network used is the present-day Internet with TCP-IP protocols and formats, but those skilled in the art will appreciate that it could also be implemented on any future open network(s) which might replace or supplement the Internet, or it could be implemented inside current, private networks within a corporation, if desired.

Turning now to FIG. **1***c*, a logical diagram of several different sponsored communities is shown. Sponsored community CA might be a community of farm equipment buyers and sellers, while sponsored community CC might be a community of stockbrokers CC**08**br and traders CC**08**tr. Sponsored community CB might include computer manufacturers CB**08**m and peripheral makers CB**08**p in a standards community CB. Existing enterprise electronic commerce systems would require each member of such a community to install special Webserver, application server and database server software at each sponsor site, and at all or some participant sites in a community such as sponsored community CC. The present invention, however only requires that each sponsor, and participant in a community have a standard Web browser (not shown here), and a connection to the Internet **04**. All of the processing software and hardware needed to handle transactions for each community CA-CC shown here is provided at the multivariate negotiations engine system **02**'s site.

The above aspect of the present invention is particularly important in business to business negotiations. Use of the

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Internet architecture helps both sponsors and participants keep their separate brand identifications through their individual URLs and Websites, and the use of http addressing and protocols enables near-instantaneous pulling of text and object files in response to any queries, whether in the same country or around the world.

Now in FIG. **1***f*, in many cases, sponsor **06** database **225** will be perceived by the participants and any visitors to the site, as the general site database for the sponsored community. In this capacity, the present invention includes site services such as collecting data on the number of visitors to the site, their demographics, and maintaining similar server logs and analysis of the site traffic.

Now turning to FIG. **1***g*, the present invention can be viewed as a series of interrelated processes as shown here. For a commercial community, there are seller processes, sponsor processes and buyer processes. Remote authoring **50**, is a seller process which enables a registered seller in the community to create a seller Website within the community on which to include the seller's marketing and product information, along with pricing, terms, service offerings and so on. Information generated or created in this remote authoring process **50** is automatically integrated with the community databases and listings. Promotion and brand identifying actions (such as registering the Web page with search engines) are taken automatically on behalf of the seller as well.

Still in FIG. **1***g*, a seller, once registered and having completed remote Web authoring, can immediately evaluate orders **54** and other inquiries and respond to them. The present invention alerts sellers (and buyers) that a pending offer or counteroffer has been submitted, so that they may return to the system to negotiate or resume negotiations. Finally, another seller process is order activity **58** which allows the seller to follow the activity by e-mail or browser or similar means, and request data downloads or activity reports on transaction data.

The sponsor processes of FIG. **1***g* include maintaining databases, registering community and seller domain names, and submitting Web uniform resource locators (URLs) to multiple search engines so that both the community Website and each seller Website within it can be found by search engines such as Compaq's ALTAVISTA™ among others. Sponsor **06** also monitors activity, collects fees, establishes standards or rules (or both) for the community, and promotes successes. Once a deal is concluded it is archived **68**, by multivariate negotiations engine **212** on behalf of seller. The present invention also allows the collection and analysis of direct e-mail demographic information, such as company name, title and location. This data helps the present invention screen out frivolous or fraudulent inquirers. For example, a high school student attempting to propose an order might be intercepted when the present invention determines that no company name or title has been provided and no other authorization for such a request has been provided for.

Buyer processes shown in FIG. **1***g* include search and evaluate processes **70**, which enable a prospective buyer to find companies and their products in the community and investigate their prices, terms and service offerings. If a buyer is interested in opening negotiations with a particular seller, the propose orders processes can be based on catalog prices or desired price and other terms, special orders for samples or small quantities, proposed payment vehicles, and can include information about the buyer. A buyer in this community can use order activity processes **78** to determine an order's status in the system, etc. Note that access to relevant information by each type of community member (sponsor, buyer, seller) is protected by password security and access levels.

Turning now to FIG. **1***k* participant functions **214** are outlined. In a commerce community, the participants might be grouped as sellers **08**grpa and buyers **08**grpb. Seller participant **08**grpa functions include automatically integrated remote Web authoring **214-02** and processing and administration **214-04**. In remote Web authoring **214-02**, the present invention allows a seller registering with the sponsored community, to automatically create a seller's Website within the community, on completion of registration. The seller selects from several Website format templates provided by the present invention and as the seller "fills in the blanks" in a selected template, the information is automatically integrated with the rest of the system, so that orders can be processed and accepted immediately and more efficient registration with search engines is automatically initiated. A seller's processing and administrative steps **214-04** includes such tasks as uploading product catalogs, customizing the Website from time to time, and similar processing.

Still in FIG. **1***k*, participant functions for buyer participants **08**grpb could be as simple as proposals **214-10**. A buyer might either propose negotiations of order terms based on a seller's catalog and price lists or send out a request for proposal (RFP) to all or some of the seller's in the community, or send out a request for a quote (RFQ) to all or some of the sellers in a community, asking sellers to respond with the best, most comprehensive terms each seller can offer. The present invention also provides prospective buyers with the ability to make e-mail inquiries through the system, which are logged by the system.

Next, in FIG. **1**L, network functions **207** of the present invention are shown. As mentioned above, most of the functions of multivariate negotiations engine **212** are actually implemented as part of Webserver software **210***s*. As data is sent to and from the Internet **04** by Webserver **210**W, Webserver software **210***s* interprets the TCP-IP protocol and transfers the contents to multivariate negotiations engine **212**'s Webserver and dynamic HTML functions **207-02**. In one embodiment, these functions cause dynamic HTML text to be created to implement and communicate with the other functions of the present invention. Those skilled in the art will appreciate that Java, Java scripting, XML, or any of a number of other languages could also be used for such communications.

FIG. **1***m*, shows the external functions **211** of the present invention. Reporting **211-02** is one type of external function **211**. When participants have concluded a negotiation, one or both of them may wish to have the final documents and current status of the deal reported back to them. The present invention protects the documents with separate user names, passwords and access levels for each inquirer. That is, a sponsor may be able to see the broadest or deepest levels of a transaction in the community using its master user name and password. A seller may be able to see all transactions relevant to it, proposed orders pending for it from one or all members of the community, using sellers own user id and password. A buyer may only be able to see orders it has proposed or concluded with one or all members of the community, using buyers separate user name and password.

Another external function **211** of the present invention shown in FIG. **1***m*, is the ability to incorporate application programming interfaces (API's) **211-04**. Since the present invention is designed from the "outside looking in" (from the network looking into the enterprise) as it were, the data from transactions completed using it might have to be

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transferred manually to internal seller and buyer system formats without API **211-04** functions. With API **211-04** functions, the data that is stored internally by the present invention, can be reformatted by an API designed for a particular seller or buyer's internal systems. For example, if a seller has accepted all the terms of an open buying agreement against which a buyer has now placed an order, the seller might use an API **211-04** to "translate" that data into a format the seller's internal ERP systems can accept for order processing. For many participants and sponsors, standard APIs **211-04** can be created to interface with standard internal ERP systems, such as ORACLE or SAP Corporations' databases and so on. For other participants and sponsors, custom API's may need to be created to interface the present invention with their existing internal systems. In all cases, however, no API's are required to enable sponsors and participants to use the services provided by multivariate negotiations engine **212**.

Now turning to FIG. **1***n*, database functions **222** are shown. First, database functions **222** are able to communicate with all other functions and services of the present invention and vice-versa. For example, as a remote Web authoring **214-02** request is handled by participant functions **214**, Webserver software **210***s* fields the request and communicates it through IP firewall **203***f* to database functions **222**, asking the database server software managing database functions **222** to process the request and return the appropriate information. The database server software performs searches, analysis, and any computations needed to hand back the correct data. Webserver software **210***s* formats the returned data, and through conventional common gateway interface scripting techniques, creates dynamic HTML (or XML or Java or Java-compatible, etc.) text for ultimate display. This formatted data, in turn, is transmitted to the appropriate sponsor or participants' browsers over the Internet.

Unique id's feature **222-02** is used to insure the proper data is found and transmitted. That is, the present invention associates unique identifiers (id's) with each sponsor, participant, and type of data or transaction. Since database functions **222** are integrated directly with the other functions of the invention, faster processing and updating of the database is enabled.

FIG. **1***o* shows a logical diagram of the relational structuring of database (s) **225** created according to the method and apparatus of the present invention. As seen here, logical folders, such as **06***f*, **08**s**1***f*, and **08**b**1***f*, are created for the sponsor **06** and for participants. A seller folder **08**s**1***f* is referenced from sponsor **06**'s community database folders **06***f*, and from a buyer's folders **08**b**1***f*. Databases **225** created according to the present invention use a combination of record, field, relational names and delimiters to interrelate the elements within. Those skilled in the art of relational databases will appreciate that a number of additional references and folders can be interrelated.

System

Turning to FIG. **1***b*, multivariate negotiations engine system **02**'s site contains all the software, hardware and database functions to create and support complete operations of communities. As seen there, the multivariate negotiations engine system **02**'s Website has a Webserver **210***w* containing standard Webserver software. In one embodiment the public domain Apache Webserver software is used, but those skilled in the art will appreciate that any of a number of other Webserver software products could be used, such as that provided by Microsoft Corporation's Internet Information Server (IIS) product or Netscape Corporation's Fasttrack or Enterprise Server products or any of several of UNIX™ Operating system server software products available from many vendors.

Still in FIG. **1***b*, Webserver **210***w* enables communications in the TCP-IP format, to be received from the Internet **04** and forwarded into multivariate negotiations engine system **02**'s site, which is here shown including server farm **230**. Data in these communications is transferred through IP firewall **203***f*. Those skilled in the art will appreciate that IP firewalls, that is, firewalls such as those supplied by RAPTOR™ IP firewalls from Axent Technology Corporation, SOLSTICE 1™ and SOLSTICE 2™ IP firewalls from Sun Microsystems, Inc., and PIX™ Firewalls **510** and **520** from Cisco Systems, Inc. among others, are capable of screening the incoming and outgoing information at all the levels of the TCP-IP OSI 7-layer model. Thus they provide greater security than simpler router or proxy server firewall approaches. Webserver **210***w*, also transmits out to Internet **04**, when transmissions are sent out from multivariate negotiations engine system **02**'s site. Thus, the data about negotiations and transactions in a community is kept safe behind IP firewall **203***f* at multivariate negotiations engine system **02**'s site. Data is kept secure by IP firewall **203***f* and communications over the Internet **04** are kept secure by Secure Socket Layer (SSL) encryptions.

Returning to FIG. **1***a*, all the components of multivariate negotiations engine system **02** are installed at a site separate from any sponsor **06** or participant **08** sites. This eliminates the need for any installation of software at a sponsor **06** or participant **08**'s site or the need for any customizing of software at those sites, thus greatly reducing the associated installation, customizing and training costs that either the sponsor or the participants or both might have incurred with other systems.

As will be apparent to those skilled in the art, if a sponsor or a participant wishes to have some of the applicable system software installed locally, this can also be done. A sponsor **06**, for example, may have already spent half a million dollars or more creating its own Website and would prefer to operate the community from there. This can be accomplished with the present invention by installing the invention's core libraries on the sponsor's Webserver just as it is installed at multivariate negotiations engine system **02**'s site. A sponsor desiring such local installation would usually require a firewall and database server locally, too, dedicated to the community. Once these are in place the present invention can be installed at the sponsor's site in the same way it is installed at multivariate negotiations engine system **02**'s site. Depending on the configuration desired by the sponsor for the local site, additional customization may be required.

While the ability to operate the community from a sponsor's existing local Website is thus available, it is likely to be more costly to install than simply using the services provided at multivariate negotiations engine system **02**'s site.

Similarly, a seller may wish to use a Website it has previously created at great expense. Multivariate negotiations engine system **02** enables this by providing a customizable scripting language as shown in FIG. **26**, and described in more detail below. Using this language, multivariate negotiations engine system **02** helps a seller create a Website which is, in effect, a mirror of the seller's original Website. A seller might choose to place its product catalog there and have the rest of its Website remain external to multivariate negotiations engine system **02**'s site. Thus, the existing seller external Website retains its existing domain name and

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URL, is linked to by the present invention as described above, and requests to see the product catalog are linked back to multivariate negotiations engine system **02**'s site where the product catalog is kept.

A more detailed view of multivariate negotiations engine system **02**'s site is shown in FIG. **1***d*, As seen there, the Website **200** includes Webserver hardware **210***w*, IP firewall **203***f*, server farm **230** and database server hardware **220**. As shown in FIG. **1***d*, most of the functions needed to implement the present invention are implemented outside IP firewall **203***f* as part of the Webserver software used with Webserver hardware **210***w*. In this embodiment, the database server software **222** and the data **225** are the only items behind IP firewall **203***f*. Those skilled in the art will appreciate that all of multivariate negotiations engine system **02**'s functions could also be placed behind a firewall if virtual private networks (VFN) or tunneling or similar techniques known in the art used for implementation.

Still in FIG. **1***d*, the principal functions of the present invention operate as part of Webserver software **210***s* executing in Webserver hardware **210***w*. Multivariate negotiations engine **212** is the central function, with sponsor functions **213**, participant functions **214**, external functions **211** and network functions **207** working in cooperation with it. All of these, in turn, communicate through the IP firewall **203***f*, to database functions **222**, operating with database server system **220**, to maintain database(s) **225**. Security of sponsor and participants' communications is provided at the Webserver level through secured socket layer (SSL) encryption schemes offered by most Webserver software products, while an additional layer of security is provided by restricting access to database server computers **230**, where databases **225** resides, by use of IP firewall **203***f*. Thus, the present invention enables the collection and storing of negotiations and results data in a highly secure hosting environment over a public network.

FIG. **1***i* is a flow diagram of the steps of iterative multivariate negotiations engine **212** of the present invention. At step **212-02** an initializing event occurs, such as participant **08** proposing terms to another participant on an initiating terminal (or desktop computer or workstation, etc.) over the Internet **04** through multivariate negotiations engine system **02**, thereby creating a communications path which is ultimately directed by multivariate negotiations engine system **02** over the Internet **04** to the destination terminal at which the selected other participant **08** is active. The terms could be the placement of an order from a buyer, or a seller's response to a general request for proposal (RFP), and so on. In initializing step **212-02** multivariate negotiations engine **212** recognizes that these two participants are negotiators and also determines that a deciding entity has been appointed either by the sponsor or by the rules established for this community.

For simple order processing, the seller may be designated the deciding entity by default. For an RFP, the buyer might be designated the deciding entity. In non-commercial communities, such as standards communities or treaty negotiation communities, a sponsor **06** may wish to designate multiple deciding entities for each issue under consideration. In such an implementation, a sponsor **06** will usually want to establish more detailed rules for the ordering and processing of proposals.

Still in FIG. **1***i*, the next step **212-04** is a statement of multiple terms by one of the negotiating participants. The terms could be formatted in any of a number of ways, such as pre-formatted forms, open field boxes, text areas, and so on. [See FIG. **15***b*, for example] At step **212-04**, the proposed terms are evaluated by the other participant. If the other participant is also the deciding entity and the terms are accepted, the last set of terms proposed is stored and processing proceeds to step **212-08**, closure.

However, if the terms are not accepted, multivariate negotiations engine **212** stores this set of proposed terms at step **212-10** and processing loops back up to step **212-04**, where terms are proposed again, usually with some variations from the previous set proposed. This iterative process continues between steps **212-04** and **212-10** until the deciding entity accepts the terms and closure is reached at step **212-08**.

Multivariate negotiations engine **212** keeps track of each set of changes and can display them so that the changes proposed at each step of the negotiations are clearly and accurately recorded.

Still in FIG. **1***i*, once closure is reached at step **212-08**, multivariate negotiations engine **212** checks to see if a concluding document is desired. For most transactions in most communities, some form of final document (such as contract document **242** above) is desired to reflect the participants' agreement. However, it is possible that the participants may only wish to reach closure and that they will rely on the recorded rounds of negotiation to memorialize the terms they agreed on. If a concluding document is requested, it is created and noted as complete at step **212-04**. Whether or not a concluding document is requested, the system automatically displays the changes so they can be easily seen and the present invention also checks to see whether a state change is needed at step **212-16**. If a state change is needed it is initiated at step **212-20**. Depending on the community, the participants, and the transactions involved, state changes could be as simple as payment authorizations sent electronically or as complex as multi-step processes desired by the participants.

Also as mentioned above, API functions can be used to integrate the present invention with a seller's or buyer's internal ERP systems, if desired.

While some users of the present invention may want to install parts of it locally, it is another advantage of the present invention that it can also be used for a "one-time" or "nearly instantaneous" community negotiation. Turning briefly to FIG. **1***c*, if the sponsor of community CB is a standards body, it could create a community Website for the negotiation of a particular standard, enlist participants, and encourage and monitor the negotiations without anyone having to buy or install additional local hardware or software. When the negotiation is complete and the concluding agreed upon standards document can be made available to all concerned, the community could be "dismantled" and the participants could disband without wasting any hardware or software installations and expenses. In other words, the present invention could be operated as a one-time service for a fee, as well as an ongoing systems. In either case, the costs of the system's fees are likely to be dwarfed by the costs the users would otherwise have incurred if they had to create their own Websites and mechanisms.

Iterative Multivariate Negotiations.

With reference now to FIG. **1***e*, the steps of multivariate negotiations engine **212** are shown. While a sponsor **06**, is desirable, multivariate negotiations engine **212** can operate with only a deciding entity DE and another initiating entity OE. If this is a commerce community, deciding entity DE is usually the seller and the other initiating entity OE is usually the buyer. However, even in this situation, other designations are possible. For example, if the buyer is sending out a request for proposal to which sellers must reply and

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negotiate, then the buyer may be the deciding entity and the seller(s) the other negotiating entity. For many master agreements or open to buy agreements, both negotiating partes may be deciding negotiating entities.

In any case, as described in more detail below, one of the entities initiates a negotiation process and the participants negotiate terms iteratively, back and forth through multivariate negotiations engine **212** until the deciding entity accepts and closure **240** is reached. In a commercial community, closure **240** usually results in a contract document **242** and probably some state changes **244** associated with activating production, shipments, payments, order handling and so on.

To operate, multivariate negotiations engine **212** shown in FIG. **1***e*, need involve only two entities, one with decision-making authority and one to propose different or additional terms, with the goal of their actions being closure on a final set of terms. Multivariate negotiations engine **212** can also help participants check out market conditions through inquiries and proposals where closure **240** may not result in any contract document **242** but only in an accurate assessment of market conditions. For example, when there is rumored to be a shortage of goods of a certain type, a buyer may want to know whether it can purchase such a product in high quantities at a reasonable price from any seller. If not, then the buyer may believe the shortage does, in fact, exist.

Returning now to FIG. **1***e*, it can be seen that as few as two participants can use the iterative multivariate negotiation features of the present invention. At least one must be designated or identified as the deciding entity DE. Both can propose terms back and forth (see FIG. **1***i*) until closure **240** is reached.

Now referring to FIG. **15***b*, a typical proposal form for a buyer is shown. As seen here, the buyer identifies himself, his title, his company, and the company's location at lines **332-342**. At lines **344-350** information about the buyer's designated freight forwarder is given. At line **350**, document presentation terms are specified, as well as at line **352**, **354**, **358** and so on, the detailed terms of the buyer's preferences for shipment. Note that at box **362**, buyer's comments, the buyer has said "I want a 20% discount." Open text box **366** can be used by the buyer to type in or cut and paste in from another document any additional terms the buyer would like to see. This might include warranty and indemnity terms favorable to the buyer, provisions for acts of God, and so on. If purchase orders of bulk order terms are being negotiated they can be included here. Letter of Credit (L/C) or other internationally standard payment vehicle terms such as wire transfer, documentary collection are being proposed, the negotiation can be structured around them.

Once the buyer has sent its proposal, the seller is alerted by the system by email (as seen in FIG. **20**) that a proposal is available on the system for review and negotiation. In one embodiment, the email notification includes links to multivariate negotiations engine system **02**'s site. Once the seller (using its browser) becomes aware from the e-mail that a proposal is available it jumps immediately, using the link mentioned above in the email, to view a browser screen such as that shown in FIG. **16**, which shows a proposed order with payment by letter of credit from the above buyer. According to the present invention, the seller must still use its user id and password for such viewing, thus preserving security of the data. In this approach, the email notification does not contain any sensitive or confidential data. It serves simply as a notifier. Note that email notices of the present invention do not contain any confidential information. Confidential data is transmitted securely to the browser through SSL techniques. Access to the data is by user name and password.

All participants in a negotiation are continually notified by e-mail as the negotiations progress. In this embodiment, the participants are required to enter their e-mail addresses in order to use the present invention. When participants log into their protected areas in the system's databases **225**, they are also presented with information regarding the latest developments, if any, which have occurred in their respective negotiations.

International Transaction Processing

One of the paradoxes of international trade now is that as today's global economy expands exponentially the number of potential buyers and sellers, it becomes correspondingly difficult for them to find each other and negotiate agreements. The present invention addresses this in a number of ways. First, a sponsored community increases the visibility of member companies which are sellers. The methods described below in connection with functions to promote visibility for the sponsored community and its members significantly increase the likelihood that a buyer, searching for a new supplier over the Internet will find members of such sponsored communities and that they will be more likely to meet the buyer's needs. For example, trade development communities can be established using the present invention, including as sellers only those that meet the qualifications outlined by the sponsor. This simplifies a prospective buyer's search and evaluation task significantly. The sample order quantity purchasing features (also described in more detail below) of the present invention, significantly reduce the time it takes for a buyer to qualify a new supplier or seller anywhere in the world.

As mentioned above, most companies would prefer not to pay for volume goods with credit cards, since that it the equivalent of paying cash in advance. When that is coupled with the difficulties encountered by those attempting to pay for merchandise online, especially in countries that do not handle credit card transactions, it can be seen that the sample ordering and multiple payment vehicle features of the present invention also contribute to improved international transaction processing. This is especially true for buyers and sellers that are new to each other.

With reference now to FIG. **27**, an overview block diagram illustrating the international transaction processing features of the present invention is shown. As seen there, multivariate negotiations engine system **02** is connected over an international network IN, such as the Internet **04**. Those skilled in the art appreciate it could also be a proprietary network or virtual private network, if desired. For international processing, sponsored community CC might be a community of sellers of electronic components **08***s* located in Pacific rim countries. Prospective buyers **08***b* can be located anywhere in the world, such as Russia, Europe, Africa, South America, North America, and so on.

Since, as mentioned above, credit card online payment vehicles are difficult or impossible to implement in some countries, the present invention enables the use of several internationally accepted payment methods and automates the negotiation of them, along with the negotiation of the overall agreement. The payment vehicle most commonly used when the buyer and the seller are complete strangers to each other is the letter of credit (L/C).

In a proposed letter of credit, such as that shown in FIG. **16**, the buyer's bank assumes the full credit risk, and is absolutely obligated to pay the seller, provided the seller ships goods in a way that conforms in every detail to the terms of the letter of credit. Minor errors such as typographi-

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cal or facsimile reproduction blurring of a document are one of the most frequent causes for letter of credit payment disputes between buyers and sellers.

The present invention enables, as part of the negotiations process, the negotiation of the terms of a letter of credit as seen in FIG. **16**. The letter of credit shown there, if accepted by the deciding entity DE as part of the negotiations, can be transmitted over a SWIFT compatible network to the advising bank, for immediate implementation. Thus, if the participants are unwilling to pay using credit cards or CYBERCASH™ payment methods, (which are essentially cash payments in advance) a seller can still activate a Website automatically and take volume orders if it is willing to negotiate letters of credit, wire transfers, documentary collection procedures or to accept a buyer's purchase order.

FIG. **30** illustrates a wire transfer negotiated using the present invention. Wire transfers shift the risks from the bank to the participants. Documentary collection payment methods, purchase order payment methods, procurement cards and similar methods can also be used and negotiated using the present invention.

Remote Web Authoring

FIG. **10-1** shows the Web authoring features of the present invention as they are displayed to a participant seller through the sponsor's Web setup area. As can be seen there, Web page buttons, such as general information button **100**, home page button **104**, and so on, can be selected by the user at its browser to edit or preview a particular part of the website. Thus, the setup area takes advantage of existing web browser technology to simplify the authoring process.

In FIG. **4***a* a flow diagram of the initial part of remote Web authoring **214-02** is shown. In this diagram, it is assumed that a seller is registering for the first time with a sponsored commerce community. Other types of communities might vary this processing. First, at step **400**, the seller chooses from one or more templates provided by multivariate negotiations engine system **02**, based on the level of cost and functionality the seller desires. Sample website pages constructed from such templates by a hypothetical company named Exports, Inc., are shown in FIGS. **31***a* to **31***d*.

Next, at step **405** in FIG. **4***a* the seller provides basic information as prompted by the system through a setup screen such as that shown in FIGS. **10-1**–**10-3**. Portions of the demographic information collected there, along with other data collected later is automatically formatted along with the META tags and Meta Keywords for automatic submission to search engines. At step **410** in FIG. **4***a*, the system presents the community's standard license agreement and terms to the seller. If the seller agrees to the terms at decision block **425**, processing continues. If the seller does not agree, the seller may proceed to block **420** to negotiate with sponsor or elect not to participate.

Still in FIG. **4***a*, if the seller has agreed to the sponsor's terms for participation at step **425** payment terms are executed if the sponsor requires online payment. Any of a number of payment options provided by the system can be used. If payment has not been settled, as determined at block **430**, the seller and sponsor can negotiate some more, or the seller may again elect not to participate at block **445**. If the seller chooses not to participate, remote Web authoring **214-02** stops. If payment has been settled, the sponsor provides instructions at step **440** to the seller for proceeding to the creation and customization of the Website.

Turning now to FIG. **4***b*, processing steps for the customization of the seller's Website in the community are shown. At step **455**, the seller logs into this part of multivariate negotiations engine system **02** using the username and passwords it selected when entering demographic data in the previous registration steps. At step **460**, the seller, having already selected a general template for a Website, selects a customization item from those that are specific to its template. At step **465**, the seller is presented with instructions and suggestions as it customizes features using an online form such as that shown in FIGS. **10-1**–**10-3**. Sellers with a small inventory of goods can simply create a product catalog online using the web authoring features of the present invention.

Sellers with existing digital versions of their product catalogs or inventory tracking systems are able to integrate them with the present invention using application programming interfaces (APIs), file transfer protocols (FTP), or extensible markup language (XML), which latter method is in the final stages of becoming a standard language for the Web.

At any time in this process, the seller can preview the Website to see what it looks like so far. At decision block **470** the system checks to see if the seller has completed customizing. If it has, the system enables the seller for active status and online commerce at step **480**. If customization is not complete, processing continues from step **460**.

Sponsored Community

With reference now to FIG. **1***j*, a diagram of the sponsor functions **213** is shown. Generally speaking, a sponsor **06** builds a community and establishes its rules **213-02**. In one embodiment, a sponsor **06** can create the community Website from templates available from multivariate negotiation system **02**'s site. In other embodiments, a sponsor may have already invested millions of dollars in the creation of its own database(s) and Website, and simply wants to have the community enabled from there, using applications programming interfaces (API's) or the new XML language when it is standardized. The present invention permits either or both methods of creating or enabling a community Website.

As seen in FIG. **24**, the rules or standards for the community can be as comprehensive or as simple as the sponsor **06** desires. For a commercial site, for example, sponsor **06** may want to require all sellers to be compliant with a particular standards organization's applicable quality standards, such as the International Standards Organization (ISO), shown as R**1** here. Additionally, sponsor **06** may want to insure that all fees due to sponsor from sellers are paid in full and kept up to date—rule R**5**. As another example, a sponsor for a regional trade development community may want to insure that each seller is able to handle importing and exporting of goods—rule R**3**, meets some specified minimum performance capabilities such as rule R**6**, just-in-time capability or rule R**7**, bar code processing, or rule R**8**, ability to handle specified payment methods.

As seen in FIG. **6**, the sponsor functions **213-04** are also involved in the remote Web authoring functions **214-02**. At step **490**, after sponsor determines the seller is in good standing, sponsor register's seller's company name, products and other data with the community's internal search engine. Next, at step **505**, sponsor registers the seller's name with Internic, the corporation established for assigning domain names and URLs. At step **510**, sponsor automatically submits seller's name and data to major external search engines on the Internet. At step **515**, the sponsor completes the integration of the new seller into the community, enables it for active status, includes it at the top of the list of any vendor databases and allows the seller's Website access to the online community's functions.

Returning to FIG. **1***j*, another principal sponsor function is promoting visibility **213-04**. In this capacity, a sponsor **06**

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may submit its own Website and URL's to a number of Internet search engines and submit each selling participants' Websites and URL's to such search engines as soon as the seller is registered and has created a Website. A typical sponsor's promote visibility functions **213-04** formats the URL's and domain names (as provided by the system registration forms which are automatically integrated into the system) into the META Tags and Meta Keywords or similar formats and submission schedules most likely to speed up registration with the search engines. For example, the ALTAVISTA™ search engine Web site states that:

> The Altavista indexer gives higher priority for keywords located in submit tags (META Tags and Meta Keywords), a higher priority for keywords that are located near the top of the page, and also gives a tad higher ranking for keywords appearing closer to each other on the page text. It adds up the occurrences of the keyword in the page for higher scoring. If META keyword tags are not present, it indexes the first 30–40 words of the page as the page description.

Since, as noted above, it may take the ALTAVISTA™ search engine and others, as many as three months or more to index a site on a purely random basis, submissions such as this can significantly improve the visibility of the new seller Websites from the outset. Automating submissions to them further speeds up this process. In addition, aggregating all of the submissions under the sponsor community hierarchy is likely to generate exponentially more traffic as it takes advantage of the Internet's architecture and search engine indexing capabilities. Traffic, such as inquiries by potential buyers against any of the keywords submitted for the community site will come into the community environment.

FIG. **25** is a flow diagram illustrating how the present invention automates this notification process. As seen at step k**1**, promote visibility function **213-04** creates a script in any of the scripting languages used on the Web, from the information supplied when a participant **08**, such as a seller, registers with the community for the first time. In this embodiment, the script is written to take the seller's data and create META Tags and Meta Keywords to assist with the location of the URL's.

Next, at step k**2**, promote visibility function **213-04** checks to see if it is time to submit the data to a selected search engine n. As noted above, some search engines accept submissions only on a weekly basis, at specified times. If search engine n is not accepting data at this time promote visibility function **213-04** proceeds to step k**3** to wait the specified interval. If it is the right time to submit visibility data to search engine n, promote visibility function **213-04** does so at step k**4**. At step k**5** a check is made to see if any more submissions should be made to search engines. If there are several more to process, promote visibility function **213-04** finds the address of the next search engine, which now becomes search engine n, and returns to decision block k**2**. If it has been determined at step k**5** that submissions have been made to all search engines, promote visibility function **213-04** returns at step k**6**. Those skilled in the art will appreciate that these submission steps can be scheduled to repeat on a regular basis until all of the visibility data for a new participant registrant has been submitted to all the search engines. The present invention also schedules updating submissions on a regular basis to insure most search engines place community sites near the top of their index lists.

Those skilled in the art will also appreciate that other promote visibility functions **213** might be implemented for participants. For example, advertisements could be uploaded from a participant's local computer systems for inclusion in the participant's Website in the community, if allowed by the rules of the community. Such advertisements could be forwarded or submitted to related sites as another promote visibility function **213**, if allowed by the community rules.

Still other promotional activities for the community can be performed by the sponsor's promote visibility functions **213-04**. For example, many sponsors may want to create links to and from other Websites to direct more "traffic" to the sponsor's Website, and either directly or indirectly all the seller's Websites within. This is useful when sellers or sponsors or both already have established brand name identities and traffic patterns through their own individual traditional and Web-based brand recognition marketing efforts.

Non-repudiation

Referring again to FIG. **1***i*, it can be seen at step **212-10** of the multivariate negotiations engine **212**'s processing, that each "round" or step of negotiations is stored and archived by the present invention. This is of special benefit to any participants negotiating a binding agreement who may later disagree as to the exact intent or content of the final terms. This archival processing allows either side or the sponsor or moderator (using the appropriate usernames and passwords) to view the steps leading up to the final document. The likelihood of potential disputes arising over what has been historically referred to as the "battle of the forms" can be greatly reduced, or even eliminated using this archival feature. These non-repudiation features of the present invention are likely to significantly reduce the incidence of "inadvertent lapses of memory", since "memory" can easily be refreshed from the archives. This, coupled with other security and validation features of the present invention mentioned above, provides a more complete non-repudiation system than is presently available.

That is, the present invention provides authentication by validating the identity of the participants through user names and passwords; maintains confidentiality by using SSL encryption and decryption to ensure that confidential information is not intercepted during transmission; provides security of the data stored at multivariate negotiation engine system **02**'s site through use of IP firewall **203***f*; and by virtue of the archival features, provides documentary non-repudiation by ensuring that transactions, as they are negotiated and committed are fully documented. Those skilled in the art will appreciate that existing security techniques such as public key encryption (PKI) systems, certificates of authentication, among others can also be used to enhance the integrity of the documentary archives.

FIG. **28** illustrates this in simple overview format. As seen in FIG. **28**, buyer terms BT**1** include an order for 10,000 widgets, etc, requesting a 4-year warranty on parts and that buyer's performance or payment be excused for acts of God which are here proposed to include strikes and government actions. Using the present invention, these terms are stored for review by the seller. Seller terms ST**1** indicate the seller would prefer to offer only a 6 month warranty on parts and would not include strikes or government actions under the heading of acts of God which would excuse the buyer from paying for the goods. The buyer responds with proposed buyer terms **2**, BT**2**, which ask for a 1 year warranty and the inclusion of government actions as an act of God.

In this example, the seller accepts buyer terms BT**2** and this is reflected in the final deal terms FD. If, at some later time, the seller demands payment from the buyer at a time when the buyer is unable to send money out of the country

because of government action, these non-repudiation features make it clear that the seller had agree to excuse performance in that circumstance. Thus, the seller cannot say "I was positive we had eliminated two of your requested terms for inclusion as acts of God, and since our copy of the final terms has been destroyed, and you cannot find yours, I demand you pay." The present invention significantly increases the likelihood of preventing such not uncommon occurrences as disputes arising from lost or misplaced copies of documents.

Sample Ordering

For production purchasers, sample orders can be placed at the outset of vendor selection processes by a production buyer. If the sponsor desires to include this feature in the community, it will make arrangements with each seller for the payment for the samples. In order to enable a seller to "go live" immediately upon the creation of the seller's Website, a sponsor might authorize payments for such sample purchases through the Sponsor's own merchant id or similar arrangements for online payment processing. This eliminates the need for the seller to wait several weeks for a merchant Id in order to accept credit card payments for small value transactions such as sample orders.

Often a seller's ability to accept sample orders in specified quantities upon agreed upon payment terms will be one of the rules of the community. Once a buyer has placed an order for sample quantities, the system automatically sends a notification to that effect to the seller, as seen in FIG. **23**. The seller, having previously agreed to accept sample orders is now obligated to ship the quantity of the items as specified by the buyer. In a typical implementation of this feature, the seller's normal shipping and handling terms apply. If the sponsor and sellers agree to accept payment for samples by credit card or procurement card, the sponsor can process the payments online using its own accounts, and then remit the proceeds from the payments, less its fees for handling, to the seller by wire transfer or other standard payment methods.

Referring briefly to FIG. **2***c* (Prior Art), it can be seen that the prior methods of ordering sample quantities were heavily labor intensive. A person **P1**, from the prospective buyer organization would look through a hard copy product catalog, place an order by facsimile or telephone, and possibly fly to the seller's factory, where face to face negotiations might occur with seller's representative **P3**. Buyer **P1** might also have to negotiate by fax and telephone a letter of credit with its bank representative **P2**, before all price, payment, and other terms are completed so that payment can be arranged to occur upon shipment of the sample quantities. As noted in the background section above, this traditional approach is usually lengthy, costly and labor-intensive.

Referring now to FIG. **29**, the present invention enables a prospective buyer to electronically search a sponsored community site at step SO**1** for sellers of goods meeting buyers needs. As mentioned under international transaction processing, above, this ability to find new, possibly prequalified suppliers over the internet is a significant advantage for production buyers.

At step SO**3**, the sponsored community displays to the buyer the sellers with goods meeting the needs. At step SO**6** the buyer can link to the sites of the sellers listed in the display, and either send email inquiries to them (step SO**6**), or directly order sample quantities from them (step SO**10**) or evaluate them at step SO**12**. If the buyer likes the samples and wishes to negotiate terms for placing an order in volume, it can proceed to Steps SO**14** through SO**20** to do so.

As mentioned above, this ability to order and receive sample quantities quickly has special benefit for production buyers looking for goods to use in new developments. If samples of such goods can be brought in and tested by the engineering developers, significant improvements are possible in getting new products ready for market.

Integrated Database.

Turning now to FIG. **1***f*, databases **225** as they might be logically depicted for a commercial sponsored community CC are shown. In this view, sponsor database DB**1** includes not only sponsor-specific information, but pointers to: a database of registered seller participants **08**gra, an administrative database DBa, perhaps a larger database of potential vendors DBb, as well as a buyer participants database **08**grb, and a rules database DBc.

Still in FIG. **1***f*, there are usually logical interrelationships amongst the various databases in a community, as well. For example, seller participant **08S1** has its products database **08S1**prd. Seller participant **08S1**in this example has just been linked to buyer participant **08***b***1**, because of a contract document **242** the participants have just completed negotiating through the system. This, in turn, enables buyer participant **08***b***1** to include seller participant **08S1** in buyer participant's qualified, online vendor list maintained by the present invention in database **08***b***1**qvl. In production purchasing, once a seller has achieved the status of inclusion in the buying company's qualified vendor list (QVL), it usually makes it easier to have future negotiations between the two companies. The present invention not only allows the QVL list to be maintained online, it can also automatically add a seller to it if a major agreement such as the type designated by buyer has been completed between the two of them through the system. Similarly, the buyer in the above example is likely to be entered in several of the seller's databases.

A typical sponsor **06**'s administrative database DBa, in FIG. **1***f*, includes such things as templates, procedures, and charges for registering new sellers, procedures for recognizing and assigning passwords to buyers, procedures for automatic renewal, details of each sellers required banking information, and so on. Sponsor **06**'s vendor database DBb, might be a listing of all the potential vendors in this general market. For example, if the general market for which sponsored community CC was created is the market for power supplies for electronic equipment, then all the makers of power supplies might be included in a brief listing in this database. As a manufacturer of power supplies for this market registers with the sponsor **06**, agreeing to meet all the conditions specified for inclusion by sponsor **06**, it is automatically placed, by multivariate negotiations engine system **02**, at the top of a list of vendors in vendor database DBb. Thus, when potential buyers are browsing through the community Website CC, they will find the registered sellers at the top of vendor database list DBb, with others listed in lower priority order.

Typical sponsor vendor database Dbb includes text, images, sound files, etc. When information from one or more of these databases is called for, the present invention pulls such associated files and graphics for display to the requester. Typical sponsor **06** databases **225** also include demographic data about registered sellers, such as company name, title, and locations. If certificates of authenticity, customer identification numbers, or electronic signatures such as those conventionally used for non-repudiation purposes are collected, they can also be stored in a sponsor database **225**. Consequently, the services available from a typical sponsor **06** using the present invention, can make

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production purchasing more efficient for a buyer and provide direct access to potential buyers for all registered sellers.

As seen in FIGS. **1***f* and **1***o*, database **225** of the present invention is automatically integrated with the functions of the multivariate negotiations engine system **02**. As HTML text is received, requests and data are extracted from it (as described in more detail below) into dynamic HTML for storage in database **225** in the appropriate "folders" for the respective members.

With reference now to FIG. **5***a*, it can be seen that database functions **222** communicate directly with webserver **210***s* through IP firewall **203***f* in the present invention. The traditional approach to addressing database concerns over the Internet usually involve a webserver, an application server software product, and a database software server product. As can be seen in FIG. **5***a*, this embodiment of the present invention does not use an application server software product. Instead the functionality that is needed to receive and transmit information to and from a participant **08**, over a communications path through webserver **210***s* of multivariate negotiations engine system **02** is accomplished by using common gateway interface (CGI) programming such as per, C++ and Java. Those skilled in the art will appreciate that other scripting and programming languages could be used as well.

As seen in FIG. **5***a*, CGI programming is used between participant **08**'s browser software at the participant's site, to handle communications between participant **08** and multivariate negotiations engine system **02**'s webserver **210***s*. CGI programming is used to dynamically create Web pages based upon the participant's request.

In the embodiment shown in FIG. **5***a*, communications between webserver **210***s* and database functions **222** are conducted directly also using languages Java, pern and C++, without the use of an intervening application server software product. Most of the functions of an applications server product are thus programmed directly either into webserver **210***s* or database functions **222** using web-based programming techniques. This approach tends to save both space and time and has the advantage of simplifying the operations at both ends, since functions can be streamlined. In particular, reporting can be more flexible than if a standard application server software program were interposed between webserver **210***s* and database functions **222**. Those skilled in the art will appreciate that more traditional application server software products could still be used, if desired, as could other languages or scripting languages.

For example, and still in FIG. **5***a*, if a buyer participant **08** wishes to place a proposed order, the browser encrypts it at the browser's secure socket layer and webserver **210***s* decrypts the proposed order upon receipt at multivariate negotiations engine **02**'s site. Webserver **210***s* next analyzes the proposed order to understand it and formats into a request sent to database functions **222**. In addition to basic read and write functions, database functions **222** shown in FIG. **5***a*, include operations such as search, analyze, compare, report, sort and relate (between databases.) Formatting can be as simple as "use=username" etc. A request such as "find user=username, return catalog" might be sent through IP firewall **203***f*. Using object-oriented techniques, the database is ordered more compactly to provide faster search capabilities. Those skilled in the art will appreciate that traditional flat file and relational or other database structures could be used as well.

FIG. **5***b*, for example is an illustrative database entry as it might be stored for a listing in a vendor database DBb. In this example, login is shown as **579**—the unique ID assigned by multivariate negotiations engine **02** to this particular vendor. The remote web authoring template chosen by this vendor is shown as template **4**, the vendor's letter of credit bank information is listed, and so on.

Those skilled in the art will appreciate that the embodiments described above are illustrative only, and that other systems in the spirit of the teachings herein fall within the scope of the invention.

What is claimed is:

1. An apparatus for providing user supplied context for processing of multivariate negotiations, comprising:

an international network;

a multivariate negotiations system including storage space, and negotiations software, such negotiations software including an automated negotiations engine for analyzing terms, the analysis of terms comprising understanding the purpose of the terms, formatting the terms according to the purpose, selecting certain of the terms to be processed according to internationally accepted methods, and placing them into user supplied context for use by a user, the multivariate negotiations system being connected to the international network and responsive to terminals communicating along a communications path over the international network;

a destination terminal for a first user connected to the international network, the destination terminal including software for sending and receiving terns along a communications path over the international network which flows through the multivariate negotiations system;

an initiating terminal for a second user connected to the international network, the initiating terminal including software for sending and receiving terms along a communications path over the international network which flows through the multivariate negotiations system, during iterative processing the automated negotiations engine recognizing the users at the destination terminal and the initiating terminal as negotiators and recognizing one of the users as a deciding entity, such automated negotiations engine further recognizing any changes in the terms and storing in the storage space the terms each terminal proposes, and recognizing the terminal to which proposed terms are being sent as the indicated terminal, sending terms to the indicated terminal, the automated negotiations engine indicating any changes in the terms until a set of terms is acted upon in a final manner by the deciding entity.

2. The apparatus of claim **1**, wherein the multivariate negotiations system further comprises sponsored community software which establishes community participation rules.

3. The apparatus of claim **1**, wherein the multivariate negotiations system further comprises remote web authoring software which enables a user to create and customize its own website within the multivariate negotiations system.

4. The apparatus of claim **1**, wherein the storage space further comprises space for storing each set of proposed terms from each terminal, thereby providing documentary non-repudiation.

5. The apparatus of claim **1**, wherein the multivariate negotiations system further comprises software for ordering sample quantities.

6. The apparatus of claim **1**, wherein the storage space further comprises a database integrated with the multivariate negotiations system.

7. The apparatus of claim **1**, wherein the internationally accepted methods include payment by a letter of credit.

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8. The apparatus of claim 1, wherein the internationally accepted methods include payment by a wire transfer.

9. The apparatus of claim 1, wherein the internationally accepted methods include payment by documentary collection.

10. The apparatus of claim 1, wherein the multivariate negotiations system further comprises a transmission terminal connected to the international network for transmitting a negotiated international payment to an advising bank over a communications path.

11. A method for providing user supplied context for processing of multivariate negotiations, comprising the steps of:

establishing communications paths over an international network,

connecting a multivariate negotiations system including storage space and negotiations software to the international network, such negotiations software including an automated negotiations engine for analyzing terms, the analysis of terms comprising understanding the purpose of the terms, formatting the terms according to that purpose, selecting certain of the terms to be processed according to internationally accepted methods and placing them into user supplied context for use by a user;

connecting a destination terminal for a first user to the international network, the destination terminal including software for sending and receiving terms along a communications path over the international network which flows through the multivariate negotiations system;

connecting an initiating terminal for a second user to the international network, the initiating terminal including software for sending and receiving terms along a communications path over the international network which flows through the multivariate negotiations engine system, during iterative processing the automated negotiations engine recognizing the users at the destination terminal and the initiating terminal as negotiators and recognizing one of the users as a deciding entity, such automated negotiations engine further recognizing any changes in the terms and storing in the storage space the terms each terminal proposes, and recognizing the terminal to which proposed terms are being sent as the indicated terminal, sending terms to the indicated terminal, the automated negotiations engine indicating any changes in the terms until a set of terms is acted upon in a final manner by the deciding entity.

12. The method of claim 11, wherein the step of connecting a multivariate negotiations system further comprises the step of sponsoring a community with established community participation rules.

13. The method of claim 11, wherein the step of connecting a multivariate negotiations system further comprises the step of enabling a user to create and customize its own website within the multivariate negotiations engine system through use of remote web authoring software.

14. The method of claim 11, wherein the step of connecting a multivariate negotiations system further comprises the step of storing each set of proposed terms from each terminal to provide documentary non-repudiation.

15. The method of claim 11, wherein the step of connecting a multivariate negotiations system further comprises the step of ordering sample quantities.

16. The method of claim 11, wherein the step of connecting a multivariate negotiations system further comprises the step of integrating a database with the multivariate negotiations system.

17. The method of claim 11, wherein the step of selecting certain of the terms to be processed according to internationally accepted methods further comprises the step of processing negotiation of a letter of credit.

18. The method of claim 11, wherein the step of selecting certain of the terms to be processed according to internationally accepted methods further comprises the step of processing negotiation of a wire transfer.

19. The method of claim 11, wherein the step of selecting certain of the terms to be processed according to internationally accepted methods further comprises the step of processing negotiation of a documentary collection.

20. The method of claim 11, wherein the step of selecting certain of the terms to be processed according to internationally accepted methods further comprises the step of activating a transmission terminal connected to the international network for transmitting a negotiated international payment to an advising bank over a communications path.

21. An apparatus for providing user supplied context for processing of multivariate negotiations, comprising:

a network;

a multivariate negotiations system including storage space, and negotiations software, such negotiations software including sponsored community software and including an automated negotiations engine for analyzing terms, the analysis of terms comprising understanding the purpose of the terms, formatting the terms according to the purpose, selecting certain of the terms to be processed as community participation rules, and placing them into user supplied context for use by a user, the multivariate negotiations system being connected to the network and responsive to terminals communicating along a communications path over the network;

a destination terminal for a first user connected to the network, the destination terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations system;

an initiating terminal for a second user connected to the network, the initialing terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations system, during iterative processing the automated negotiations engine recognizing the users at the destination terminal and the initiating terminal as negotiators and recognizing one of the users as a deciding entity, such automated negotiations engine further recognizing any changes in the terms and storing in the storage space the terms each terminal proposes, and recognizing the terminal to which proposed terms are being sent as the indicated terminal, sending terms to the indicated terminal the automated negotiations engine indicating any changes in the terms until a set of terms is acted upon in a final manner by the deciding entity.

22. The apparatus of claim 21, wherein the sponsored community software integrates new members desiring to participate in multivariate negotiations.

23. The apparatus of claim 22, wherein the integration of new members desiring to participate in multivariate negotiations further comprises automatically registering such new members with a sponsored community search engine.

24. The apparatus of claim 22, wherein the integration of new members desiring to participate in multivariate negotiations further comprises automatically submitting a new member's name to appropriate external network search engines.

25. The apparatus of claim 22, wherein the integration of new members desiring to participate in multivariate negotiations further comprises automatically submitting a new member's name to appropriate identifying agencies.

26. The apparatus of claim 22, wherein the integration of new members desiring to participate in multivariate negotiations further comprises automatically including the new member's name at the top of any vendor databases listed in the sponsored community.

27. The apparatus of claim 22, wherein the integration of new members desiring to participate in multivariate negotiations further comprises automatically allowing the new member access to the sponsored community's one functions.

28. The apparatus of claim 22, wherein the integration of new members desiring to participate in multivariate negotiations further comprises automatically promoting the visibility of the new member.

29. The apparatus of claim 28, wherein automatically promoting the visibility of the new member further comprises:

means for formatting sponsored community names, member names, and uniform resource locators into appropriate formats;

means for selecting search engines;

means for selecting submission schedules more likely to speed up registration with the selected search engines; and

means for aggregating submissions of sponsored community names, member names, and uniform resource locators to optimize registration and visibility and automatically submitting the aggregated submissions to the selected search engines on the selected schedules.

30. A method for providing user supplied context for processing of multivariate negotiations, comprising the steps of:

establishing communications paths over a network;

connecting a multivariate negotiations system including storage space and negotiations software to the network, such negotiations software including sponsored community software and including an automated negotiations engine for analyzing terms, the analysis of terms comprising understanding the purpose of the terms, formatting the terms according to that purpose, selecting certain of the terms to be processed as community participation rules, and placing them into user supplied context for use by a user;

connecting a destination terminal for a first user to the network, the destination terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations system;

connecting an initiating terminal for a second user to the network, the initiating terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations engine system, during iterative processing the automated negotiations engine recognizing the users at the destination terminal and the initiating terminal as negotiators and recognizing one of the users as a deciding entity, such automated negotiations engine further recognizing any changes in the terms and storing in the storage space the terms each terminal proposes, and recognizing the terminal to which proposed terms are being sent as the indicated terminal, sending terns to the indicated terminal, the automated negotiations engine indicating any changes in the terms until a set of terms is acted upon in a final manner by the deciding entity.

31. The method of claim 30, wherein the step of connecting a multivariate negotiations system further comprises the step of integrating new members desiring to participate in multivariate negotiations.

32. The method of claim 31, wherein the step of integrating new members desiring to participate in multivariate negotiations further comprises the step of automatically registering such new members with a sponsored community search engine.

33. The method of claim 31, wherein the step of integrating new members desiring to participate in multivariate negotiations further comprises the step of automatically submitting a new member's name to appropriate external network search engines.

34. The method of claim 31, wherein the step of integrating new members desiring to participate in multivariate negotiations further comprises the step of automatically submitting a new member's name to appropriate identifying agencies.

35. The method of claim 31, wherein the step of integrating new members desiring to participate in multivariate negotiations further comprises the step of automatically including the new member's name at the top of any vendor databases listed in the sponsored community.

36. The method of claim 31, wherein the step of integrating new members desiring to participate in multivariate negotiations further comprises the step of automatically allowing the new member access to the sponsored community's online functions.

37. The method of claim 31, wherein the step of integrating new members desiring to participate in multivariate negotiations further comprises the step of automatically promoting the visibility of the new member.

38. The method of claim 37, wherein the step of automatically promoting the visibility of the new member further comprises the steps of:

formatting sponsored community names, member names, and uniform resource locators into appropriate formats;

selecting search engines;

selecting submission schedules more likely to speed up registration with the selected search engines; and

aggregating submissions of sponsored community names, member names, and uniform resource locators to optimize registration and visibility and automatically submitting the aggregated submissions to the selected search engines on the selected schedules.

39. The method of claim 30, wherein the step of selecting certain of the terms to be processed as community participation rules further comprises the step of managing negotiations according to the community participation rules.

40. The method of claim 30, wherein the step of selecting certain of the terms to be processed as community participation rules further comprises the step of incorporating generally accepted laws and customs applicable to the sponsored community.

41. An apparatus for providing user supplied context for processing of multivariate negotiations, comprising;

a network;

a multivariate negotiations system including storage space, a website, and negotiations software, such negotiations software including remote web authoring software, sponsored community software, and including an automated negotiations engine for analyzing terms, the analysis of terms comprising understanding

the purpose of the terms, formatting the terms according to the purpose, selecting certain of the terms to be processed as website modifications, and placing them into user supplied context for use by a user, the multivariate negotiations system being connected to the network and responsive to terminals communicating along a communications path over the network;

a destination terminal for a first user connected to the network, the destination terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations system;

an initiating terminal for a second user connected to the network, the initiating terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations system, during iterative processing the automated negotiations engine recognizing the users at the destination terminal and the initiating terminal as negotiators and recognizing one of the users as a deciding entity, such automated negotiations engine further recognizing any changes in the terms and storing in the storage space the terms each terminal proposes, and recognizing the terminal to which proposed terms are being sent as the indicated terminal, sending terms to the indicated terminal, the automated negotiations engine indicating any changes in the terms until a set of terms is acted upon in a final manner by the deciding entity.

42. The apparatus of claim **41**, wherein the remote web authoring software enables a user at a terminal to use the automated negotiations engine to register the website with a sponsoring community and negotiate terms of participation.

43. The apparatus of claim **41**, wherein the remote web authoring software enables the user at a terminal to customize the website for participation in the sponsored community.

44. The apparatus of claim **43**, wherein the remote web authoring software enables the user at a terminal to preview the customized website.

45. The apparatus of claim **43**, wherein the remote web authoring software enables the user at a terminal to integrate existing electronic versions of relevant user supplied context data into the customized website using applications programming interfaces.

46. The apparatus of claim **43**, wherein the remote web authoring software enables the user at a terminal to integrate existing electronic versions of relevant user supplied context data into the customized website using file transfer protocols.

47. The apparatus of claim **43**, wherein the remote web authoring software enables the user at a terminal to integrate existing electronic versions of relevant user supplied context data into the customized website using extensible markup language (XML).

48. A method for providing user supplied context for processing of multivariate negotiations, comprising the steps of:

establishing communications paths over a network;

connecting a multivariate negotiations system including storage space, a website, and negotiations software to the network, such negotiations software including remote web authoring software, sponsored community software and including an automated negotiations engine for analyzing terms, the analysis of terms comprising understanding the purpose of the terms, formatting the terms according to that purpose, selecting certain of the terms to be processed as website modifications, and placing them into user supplied context for use by a user;

connecting a destination terminal for a first user to the network, the destination terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations system;

connecting an initiating terminal for a second user to the network, the initiating terminal including software for sending and receiving terms along a communications path over the network which flows through the multivariate negotiations engine system, during iterative processing the automated negotiations engine recognizing the users at the destination terminal and the initiating terminal as negotiators and recognizing one of the users as a deciding entity, such automated negotiations engine further recognizing any changes in the terms and storing in the storage space the terms each terminal proposes, and recognizing the terminal to which proposed terms are being sent as the indicated terminal, sending terms to the indicated terminal, the automated negotiations engine indicating any changes in the terms until a set of terms is acted upon in a final manner by the deciding entity.

49. The method of claim **48**, wherein the step of connecting an initiating terminal further comprises the step of enabling a user at the initiating terminal to use the automated negotiations engine to register the website with a sponsoring community and negotiate terms of participation.

50. The method of claim **48**, wherein the step of connecting an initiating terminal further comprises the step of enabling a user at the initiating terminal to customize the website for participation in the sponsored community.

51. The method of claim **50**, wherein the step of customizing the website further comprises the step of enabling the user at the initiating terminal to preview the customized website.

52. The method of claim **50**, wherein the step of customizing the website further comprises the step of enabling the user at the initiating terminal to integrate existing electronic versions of relevant data into the customized website using applications programming interfaces.

53. The method of claim **50**, wherein the step of customizing the website further comprises the step of enabling the user at the initiating terminal to integrate existing electronic versions of relevant data into the customized website using file transfer protocols.

54. The apparatus of claim **50**, wherein the step of customizing the website further comprises the step of enabling the user at the initiating terminal to integrate existing electronic versions of relevant data into the customized website using extensible markup language (XML).

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