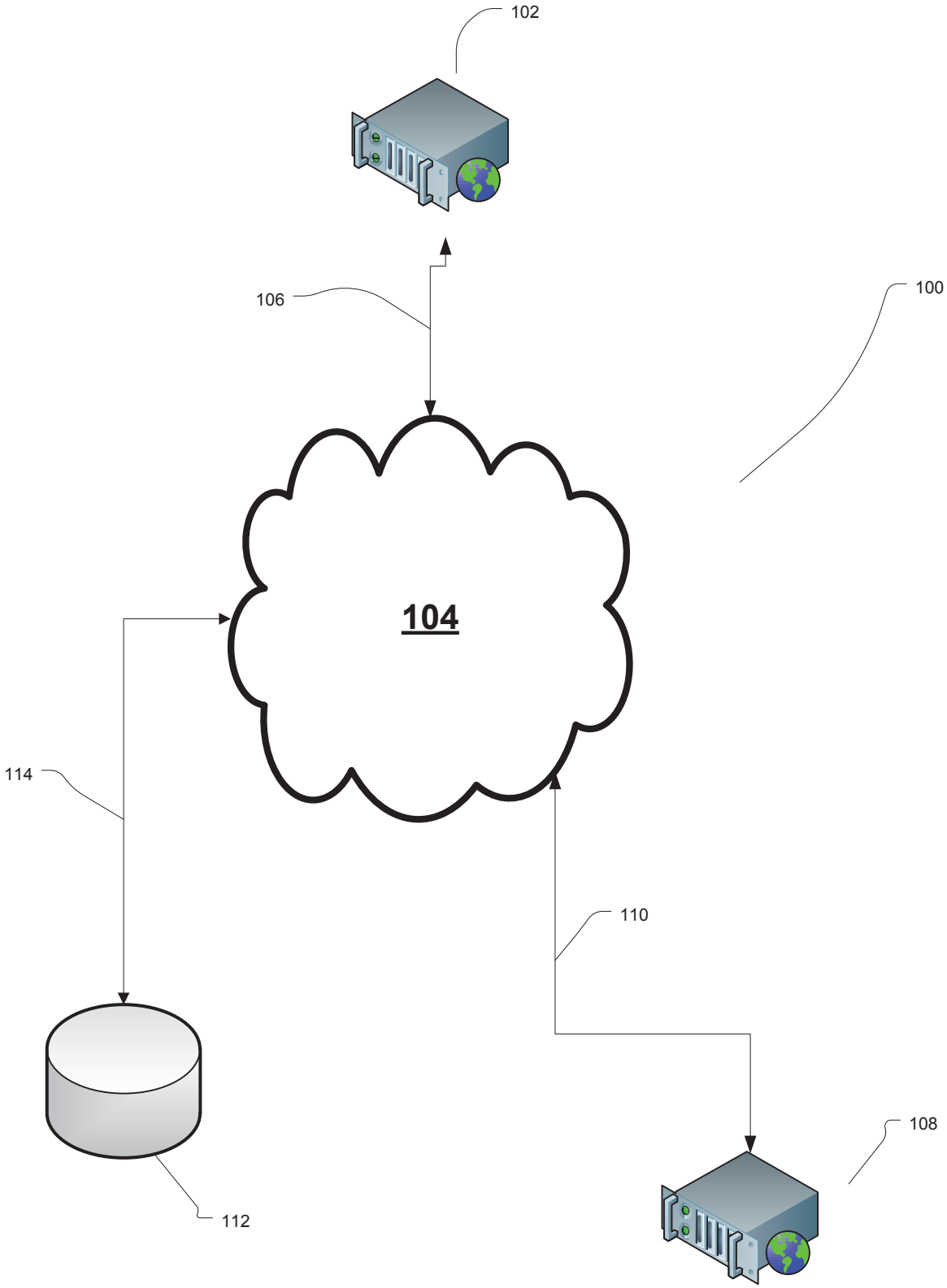


FIG. 1A

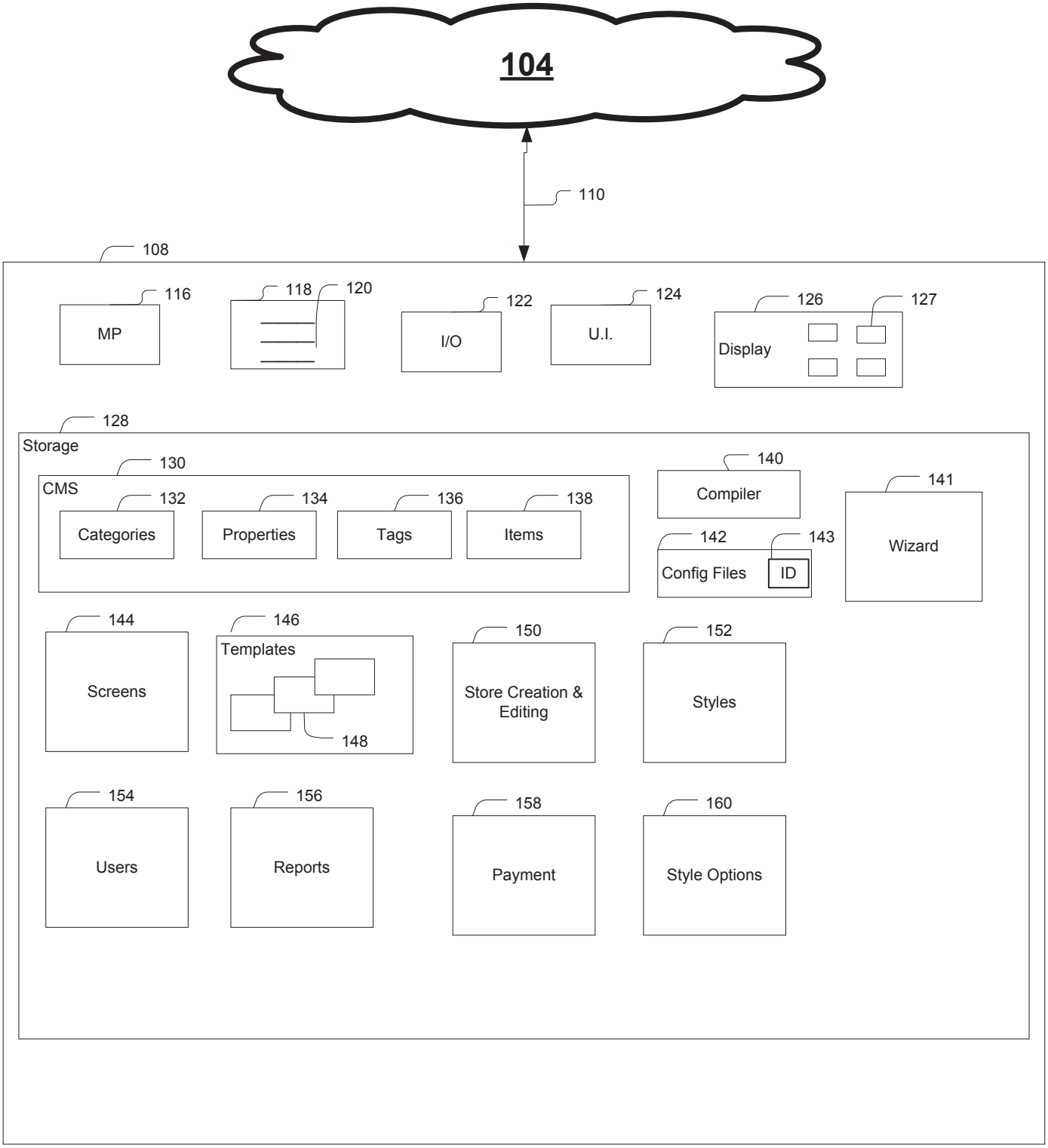

104
110
108
116
MP
118
120
122
I/O
124
U.I.
126
127
Display
128
Storage
130
CMS
132
Categories
134
Properties
136
Tags
138
Items
140
Compiler
141
Wizard
142
Config Files
143
ID
144
Screens
146
Templates
148
150
Store Creation & Editing
152
Styles
154
Users
156
Reports
158
Payment
160
Style Options

FIG. 1B

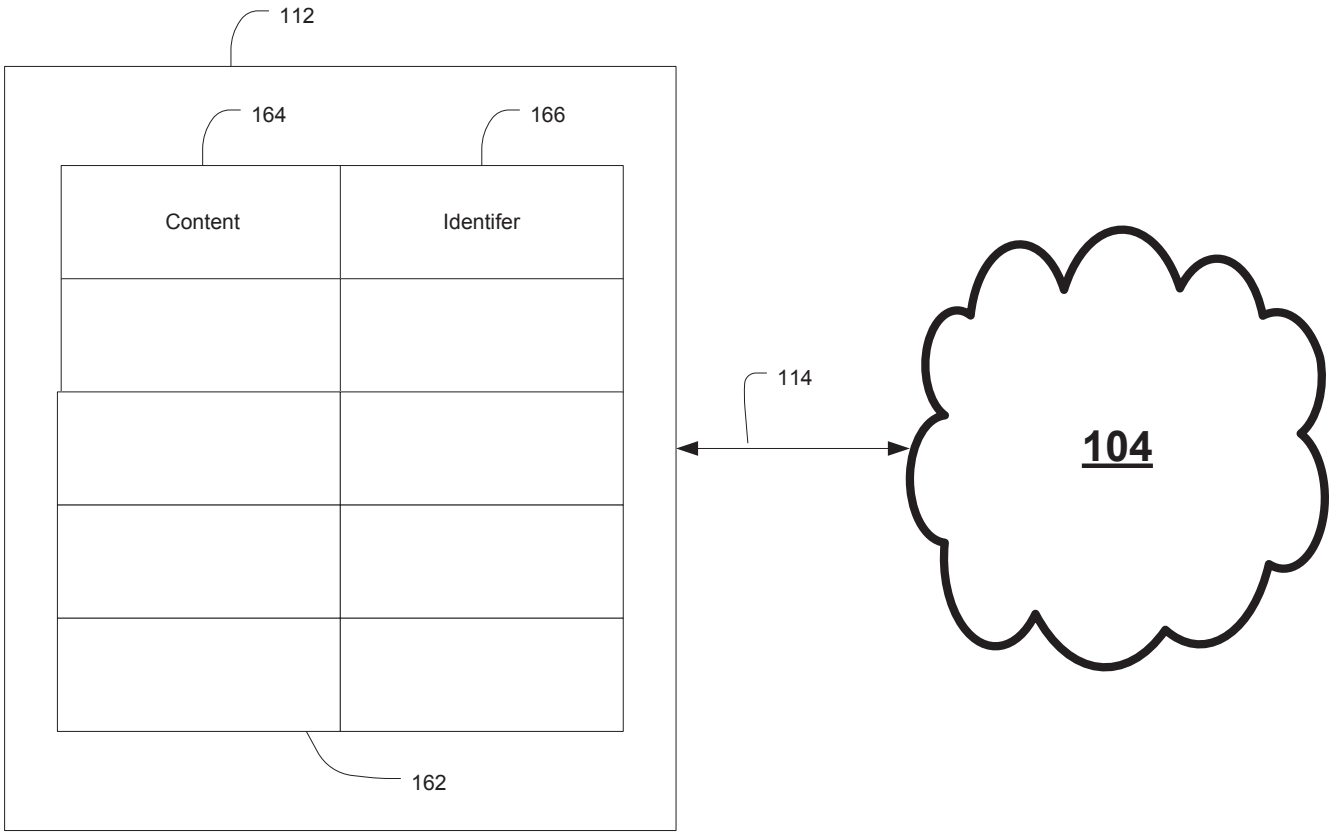


FIG. 1C

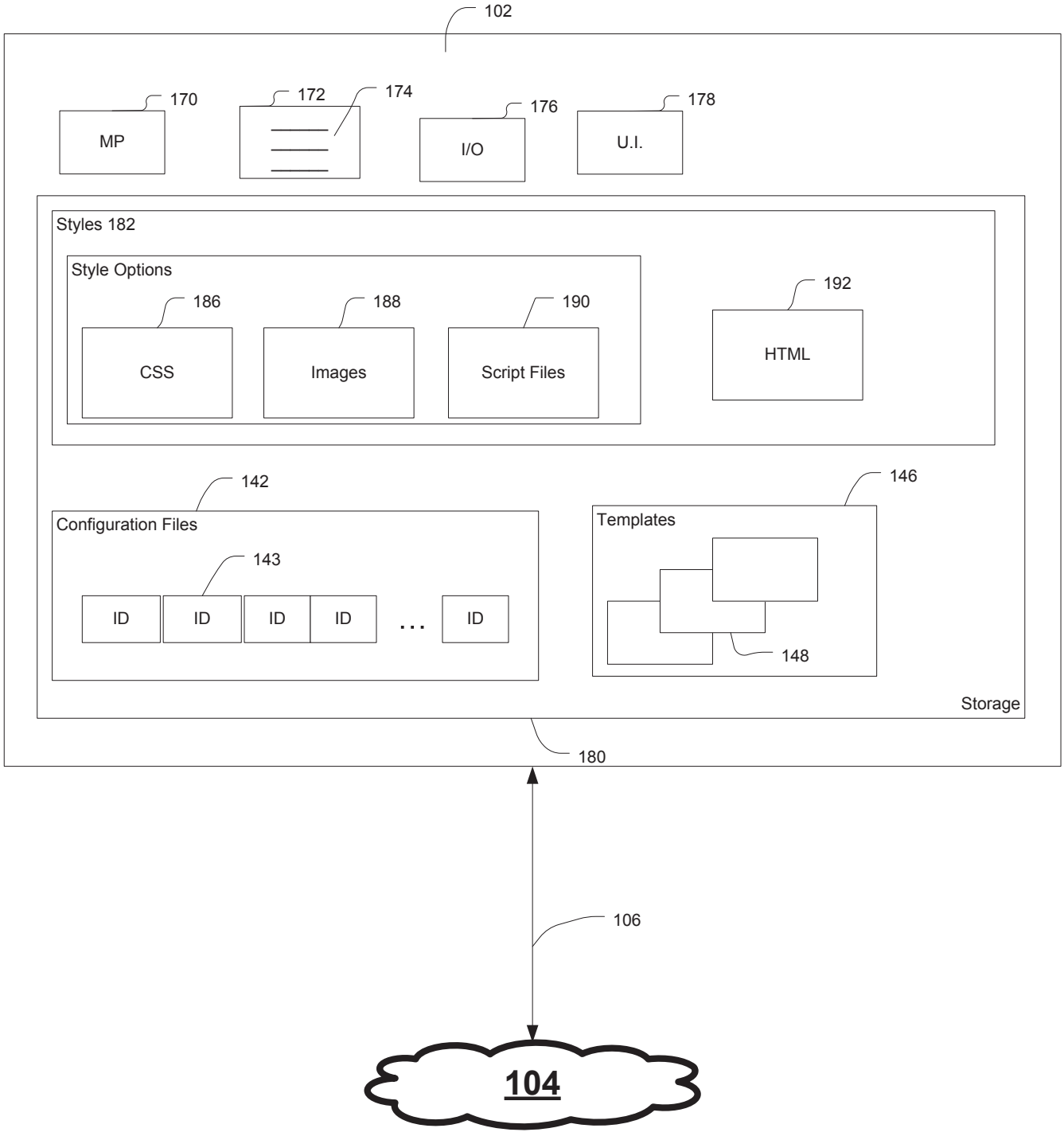

102
170
MP
172
174
176
I/O
178
U.I.
Styles 182
Style Options
186
CSS
188
Images
190
Script Files
192
HTML
142
Configuration Files
143
ID
ID
ID
ID
...
ID
146
Templates
148
Storage
180
106
104

FIG. 1D

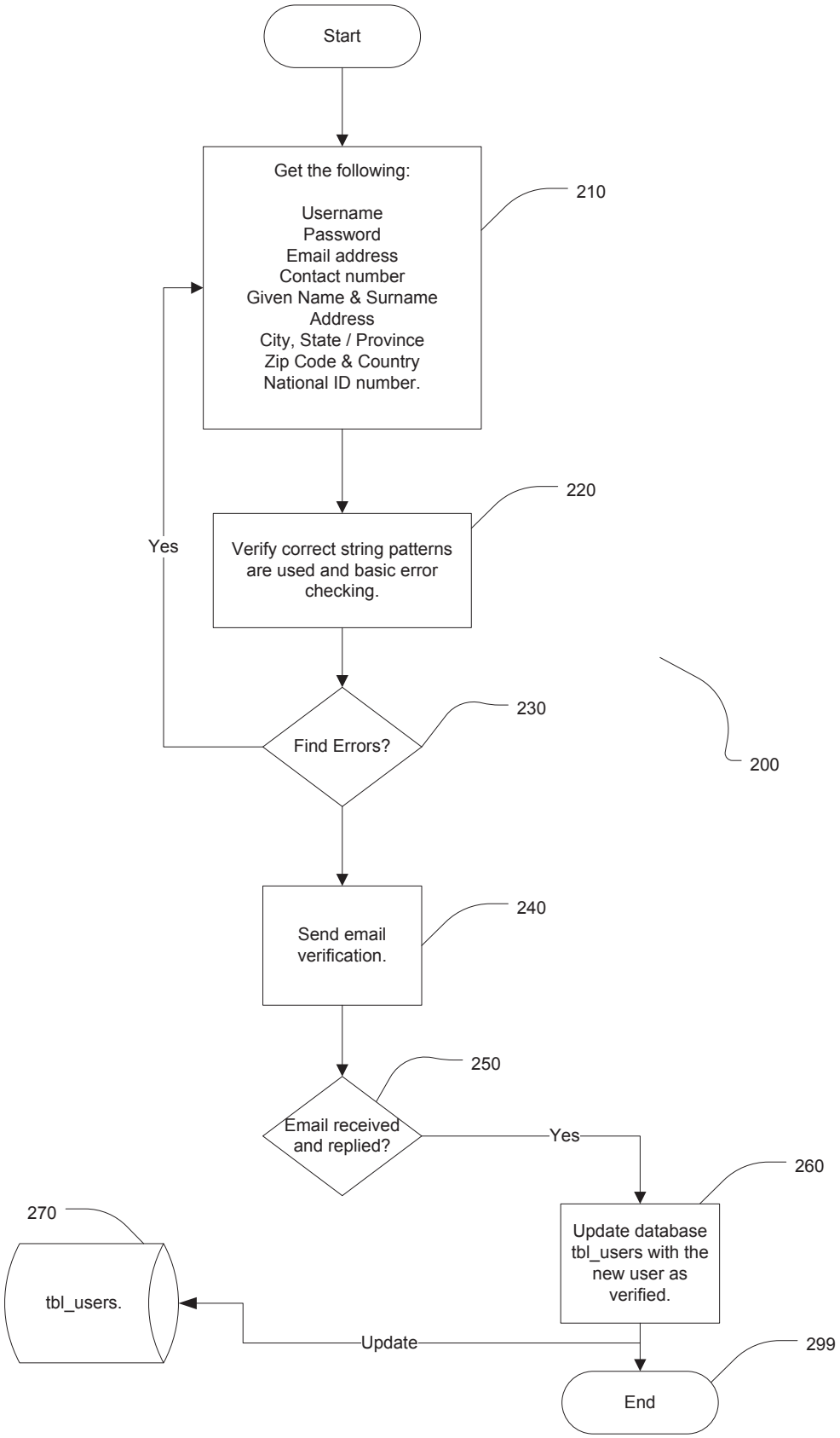

Start
Get the following:
Username
Password
Email address
Contact number
Given Name & Surname
Address
City, State / Province
Zip Code & Country
National ID number.
210
220
Verify correct string patterns are used and basic error checking.
Yes
Find Errors?
230
200
Send email verification.
240
Email received and replied?
250
Yes
260
Update database tbl_users with the new user as verified.
270
tbl_users.
Update
299
End

FIG. 2

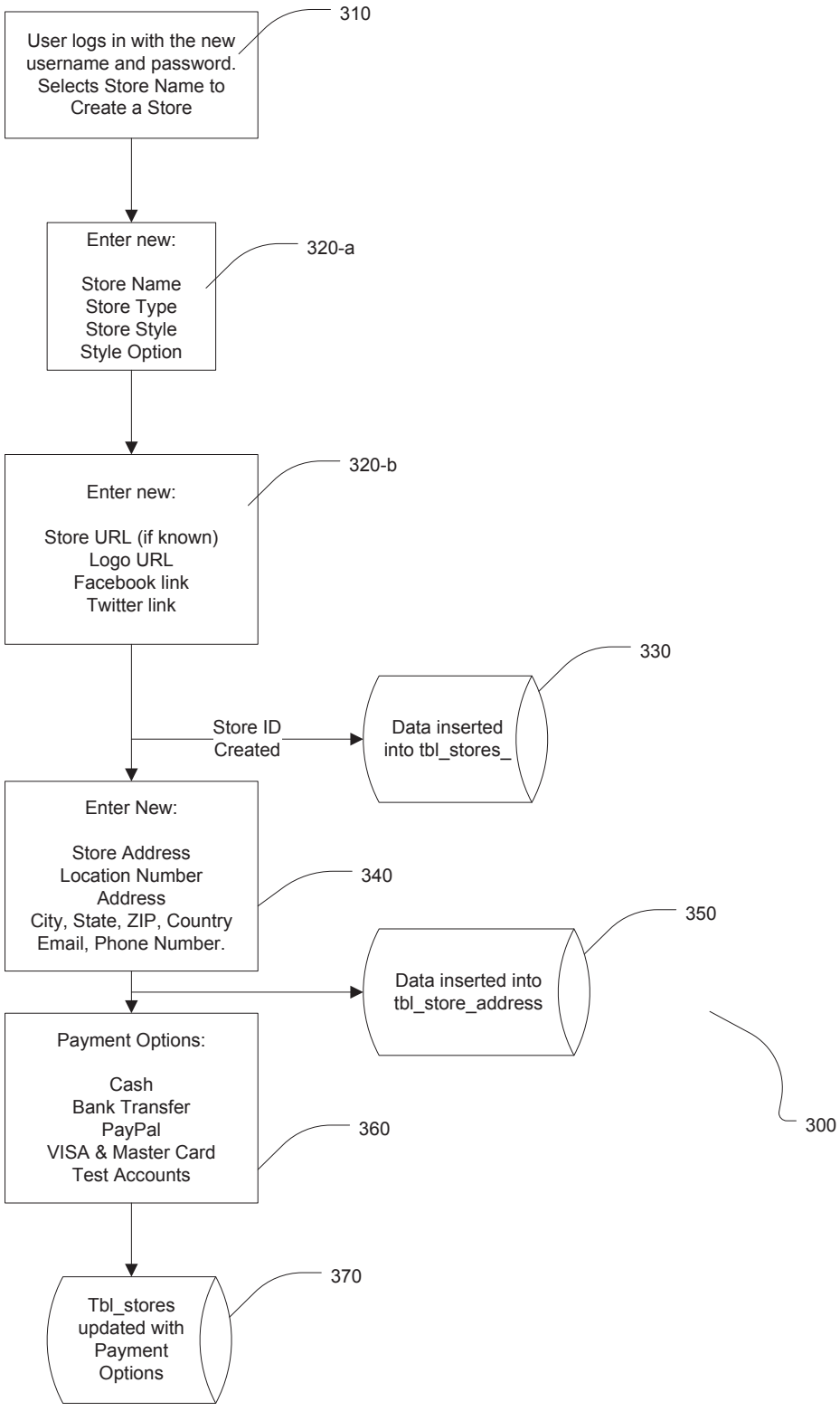

User logs in with the new username and password. Selects Store Name to Create a Store
310
Enter new:
Store Name
Store Type
Store Style
Style Option
320-a
Enter new:
Store URL (if known)
Logo URL
Facebook link
Twitter link
320-b
Store ID Created
Data inserted into tbl_stores_
330
Enter New:
Store Address
Location Number
Address
City, State, ZIP, Country
Email, Phone Number.
340
Data inserted into tbl_store_address
350
Payment Options:
Cash
Bank Transfer
PayPal
VISA & Master Card
Test Accounts
360
Tbl_stores updated with Payment Options
370
300

FIG. 3

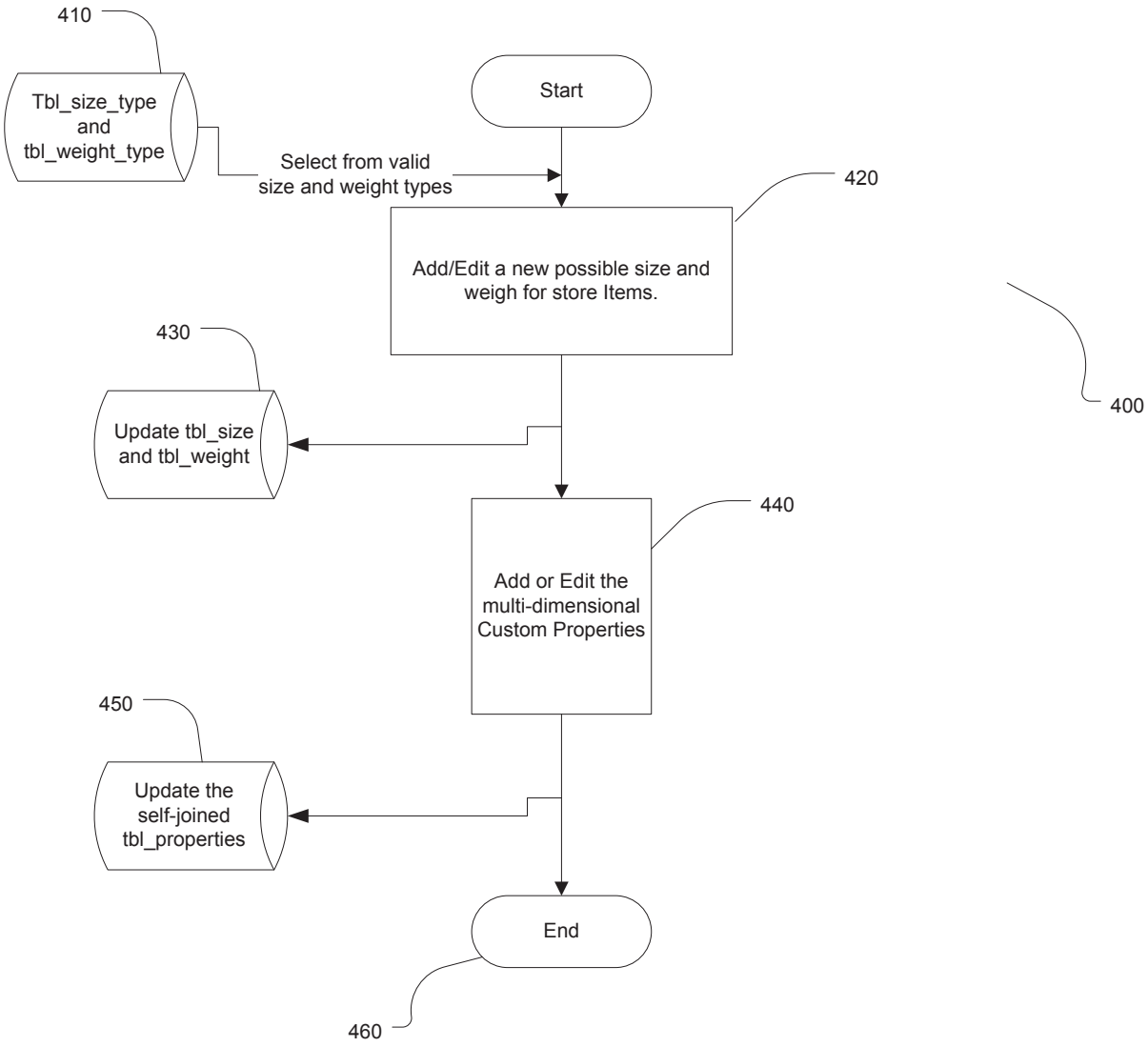
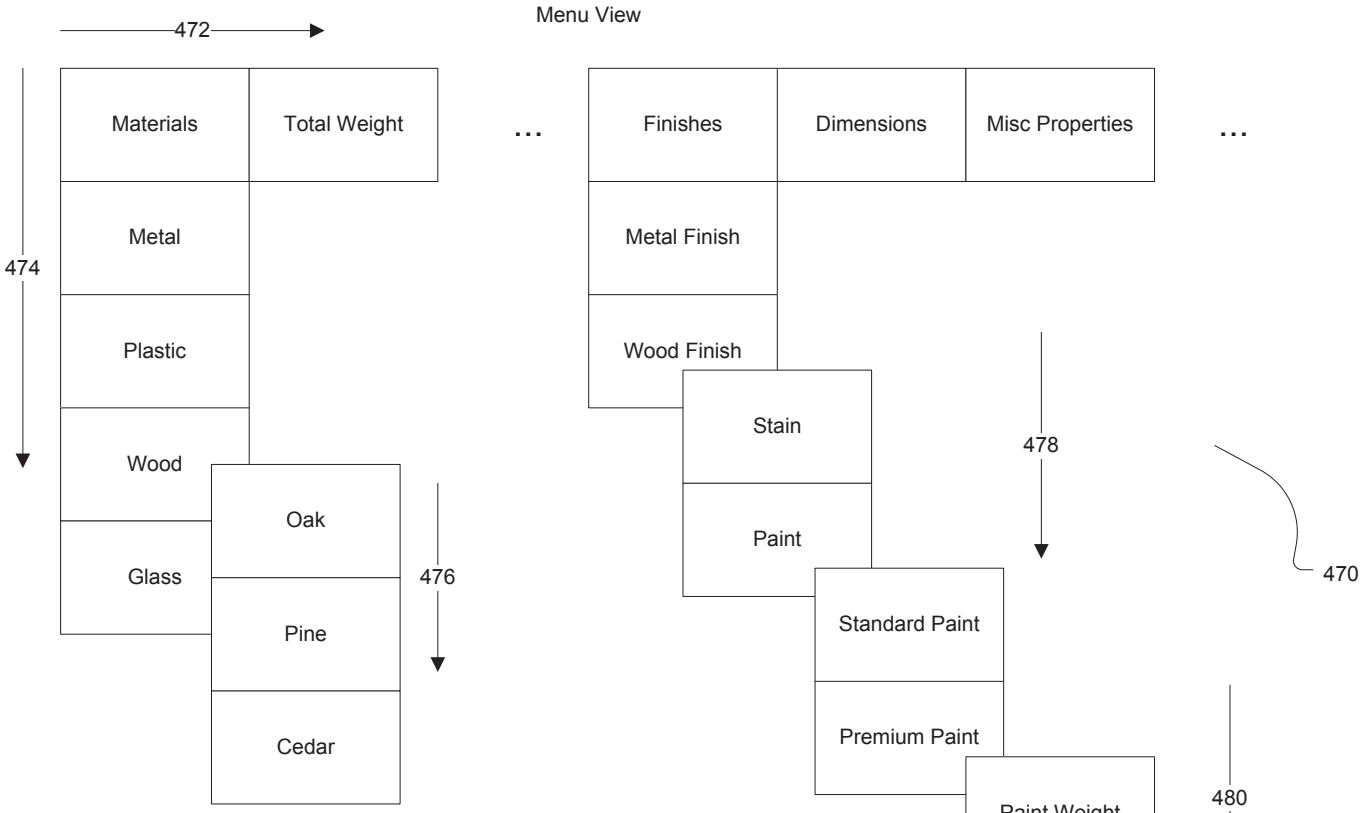

410
Tbl_size_type
and
tbl_weight_type
Start
Select from valid
size and weight types
420
Add/Edit a new possible size and
weigh for store Items.
400
430
Update tbl_size
and tbl_weight
440
Add or Edit the
multi-dimensional
Custom Properties
450
Update the
self-joined
tbl_properties
End
460

FIG. 4A



Same Data:
Tree View

Materials
- Metal
- Plastic
- Wood
  - Oak
  - Pine
  - Cedar
- Glass

Weight
...
Finishes
- Metal Finish
- Wood Finish
  - Stain
    - ...
  - Paint
    - Standard Paint
    - Premium Paint
      - Paint Weight
        - ...
      - Paint Colour
        - Red
        - Green
        - Blue
      - Paint reflection
        - …

FIG. 4B

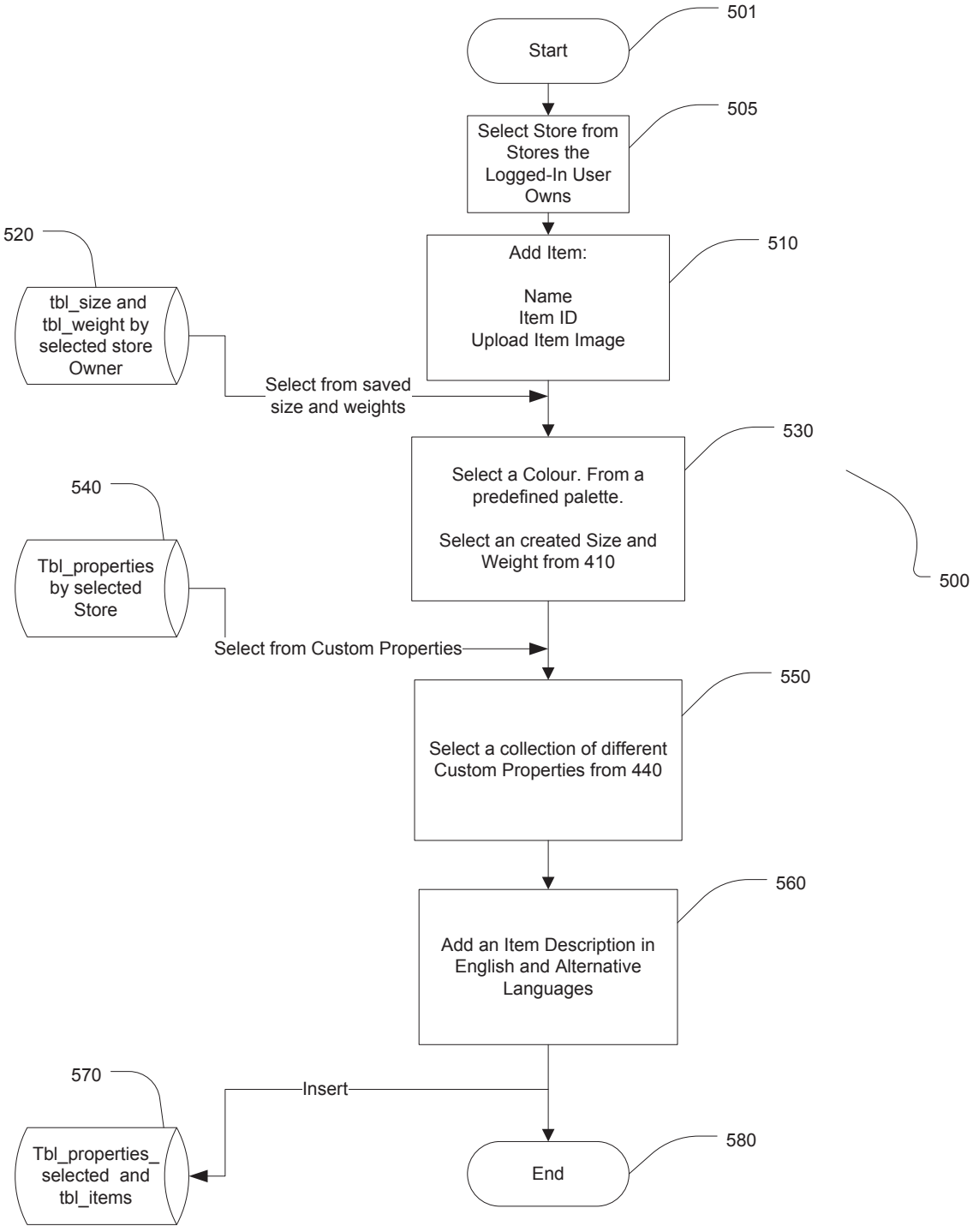

Start
501
Select Store from Stores the Logged-In User Owns
505
Add Item:
Name
Item ID
Upload Item Image
510
520
tbl_size and tbl_weight by selected store Owner
Select from saved size and weights
530
Select a Colour. From a predefined palette.
Select an created Size and Weight from 410
500
540
Tbl_properties by selected Store
Select from Custom Properties
550
Select a collection of different Custom Properties from 440
560
Add an Item Description in English and Alternative Languages
570
Insert
Tbl_properties_ selected and tbl_items
End
580

FIG. 5

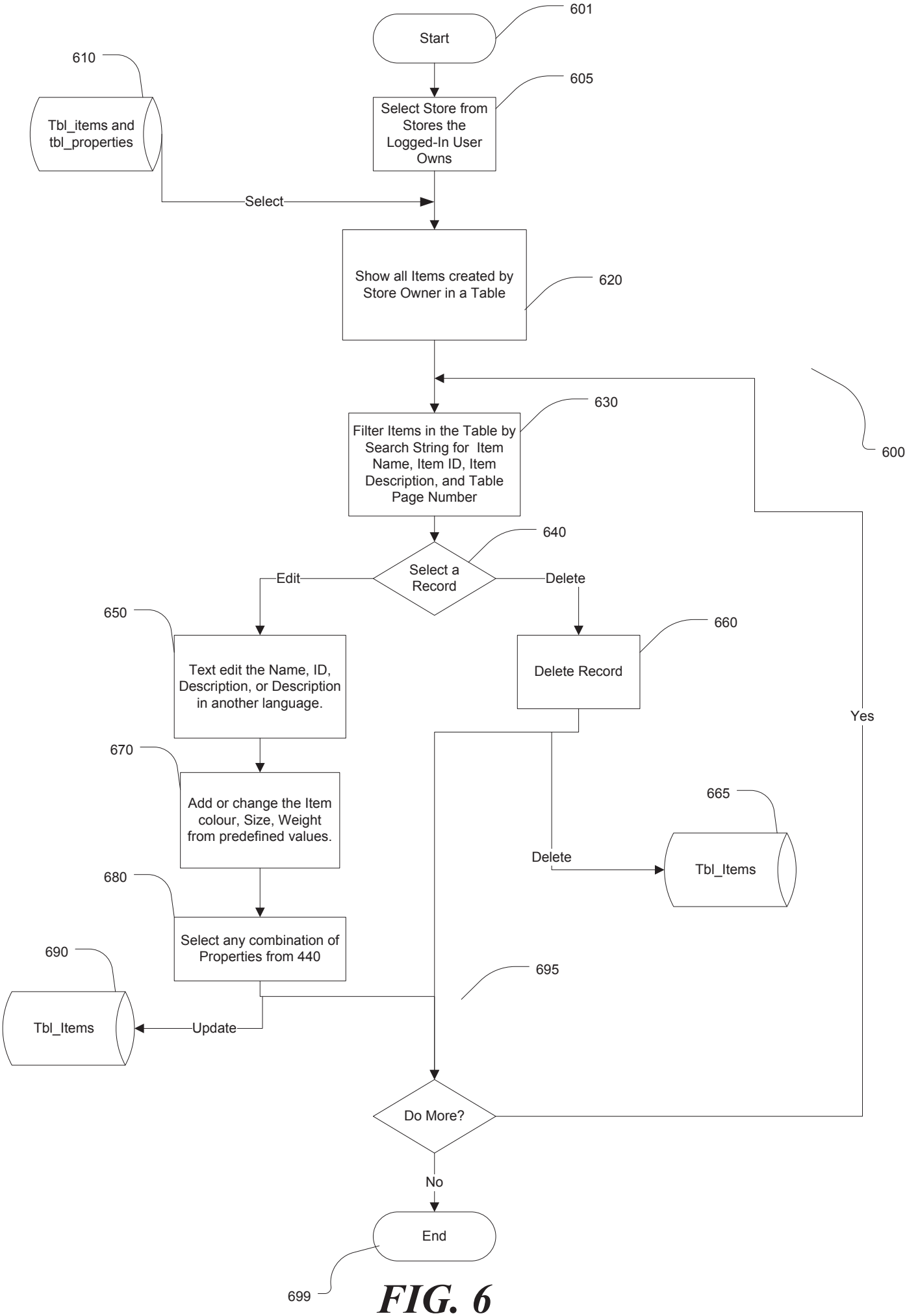

601
Start
610
Tbl_items and tbl_properties
605
Select Store from Stores the Logged-In User Owns
Select
Show all Items created by Store Owner in a Table
620
630
Filter Items in the Table by Search String for Item Name, Item ID, Item Description, and Table Page Number
600
640
Select a Record
Edit
Delete
650
Text edit the Name, ID, Description, or Description in another language.
660
Delete Record
Yes
670
Add or change the Item colour, Size, Weight from predefined values.
665
Delete
Tbl_Items
680
Select any combination of Properties from 440
690
695
Tbl_Items
Update
Do More?
No
End
699

FIG. 6

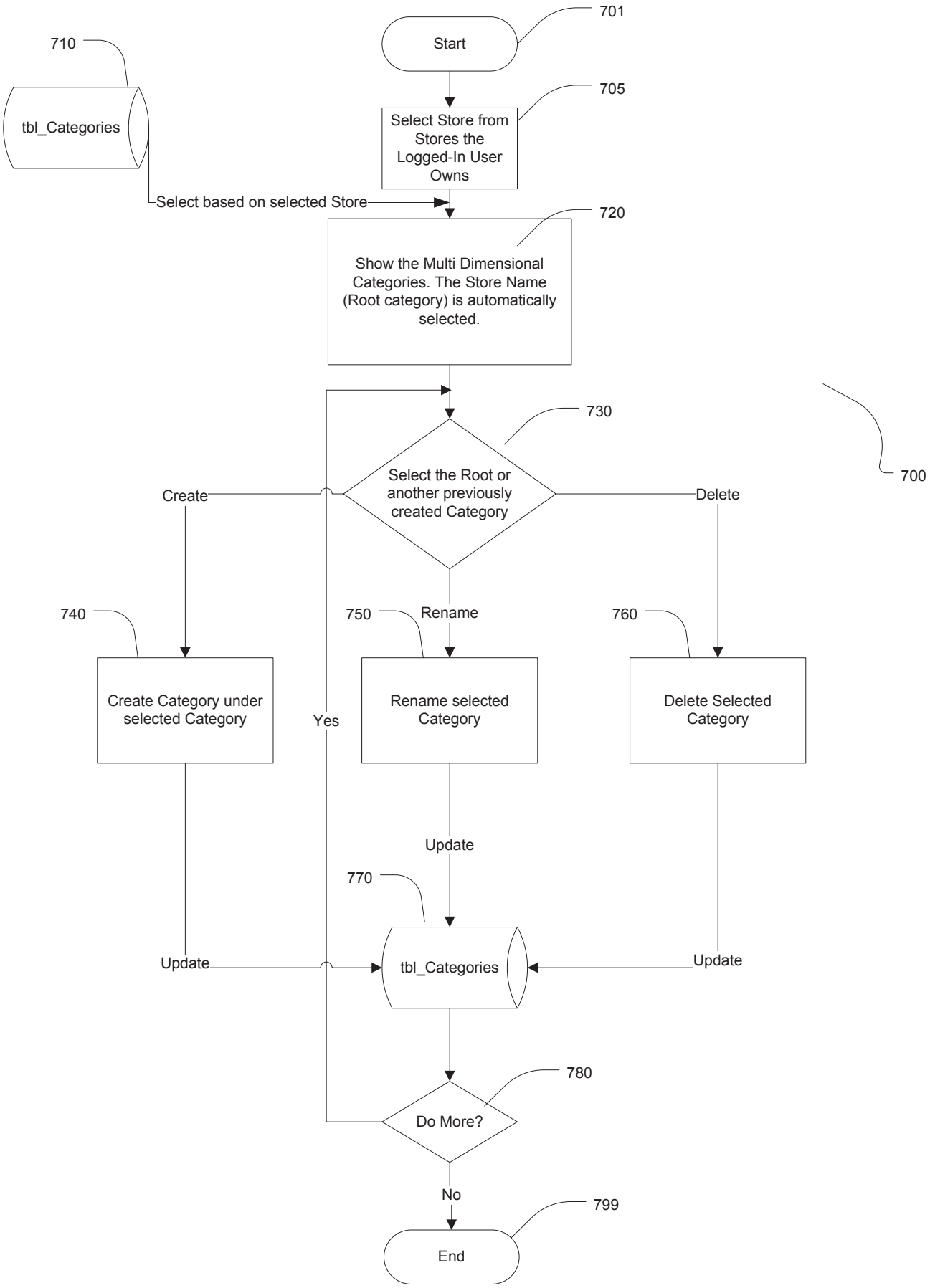

701
Start
710
tbl_Categories
705
Select Store from Stores the Logged-In User Owns
Select based on selected Store
720
Show the Multi Dimensional Categories. The Store Name (Root category) is automatically selected.
730
700
Select the Root or another previously created Category
Create
Delete
Rename
740
750
760
Create Category under selected Category
Rename selected Category
Delete Selected Category
Yes
Update
770
Update
tbl_Categories
Update
780
Do More?
No
799
End

FIG. 7

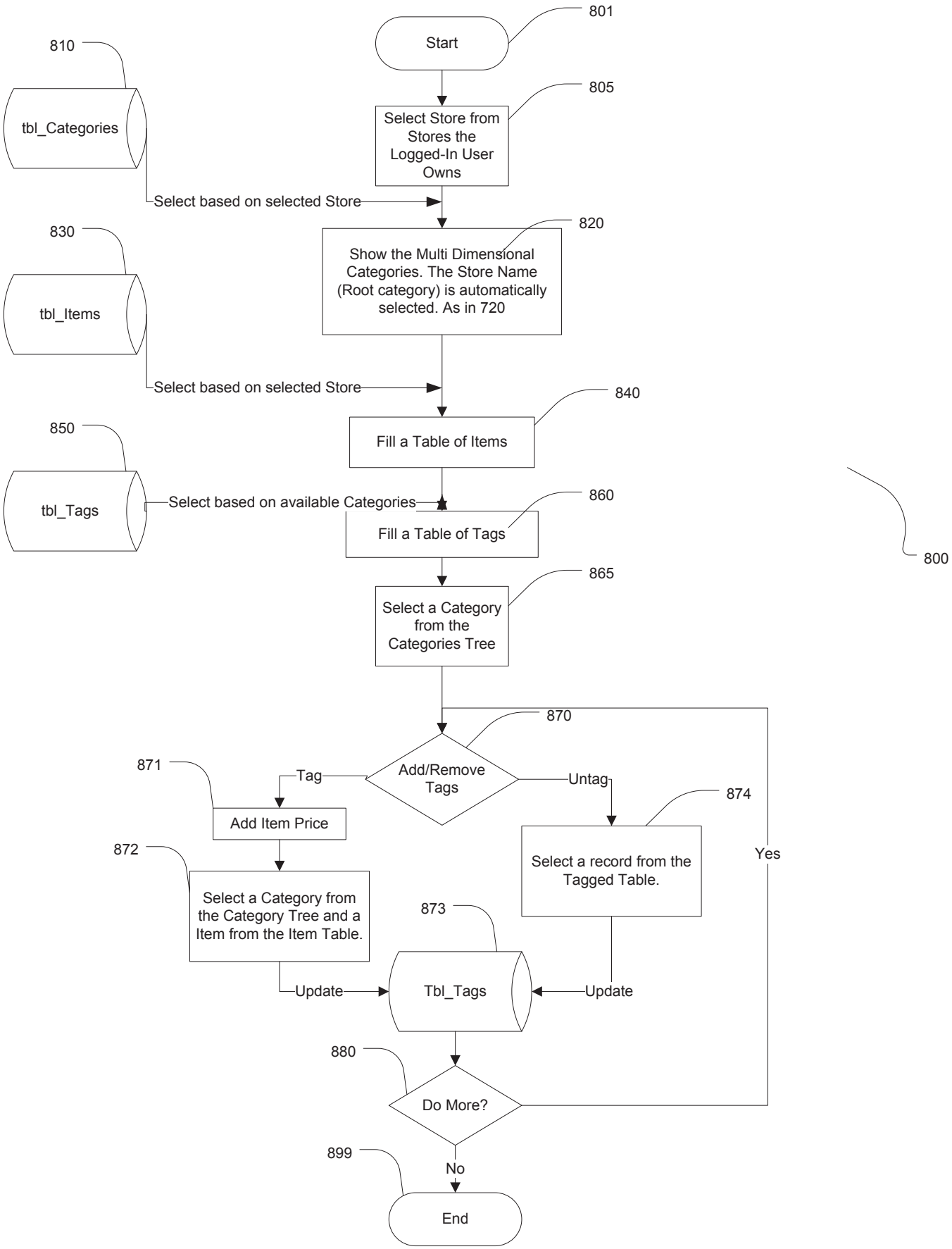

801
Start
805
Select Store from Stores the Logged-In User Owns
810
tbl_Categories
Select based on selected Store
820
Show the Multi Dimensional Categories. The Store Name (Root category) is automatically selected. As in 720
830
tbl_Items
Select based on selected Store
840
Fill a Table of Items
850
tbl_Tags
Select based on available Categories
860
Fill a Table of Tags
800
865
Select a Category from the Categories Tree
870
Add/Remove Tags
871
Tag
Untag
874
Add Item Price
Select a record from the Tagged Table.
Yes
872
Select a Category from the Category Tree and a Item from the Item Table.
873
Update
Tbl_Tags
Update
880
Do More?
899
No
End

FIG. 8

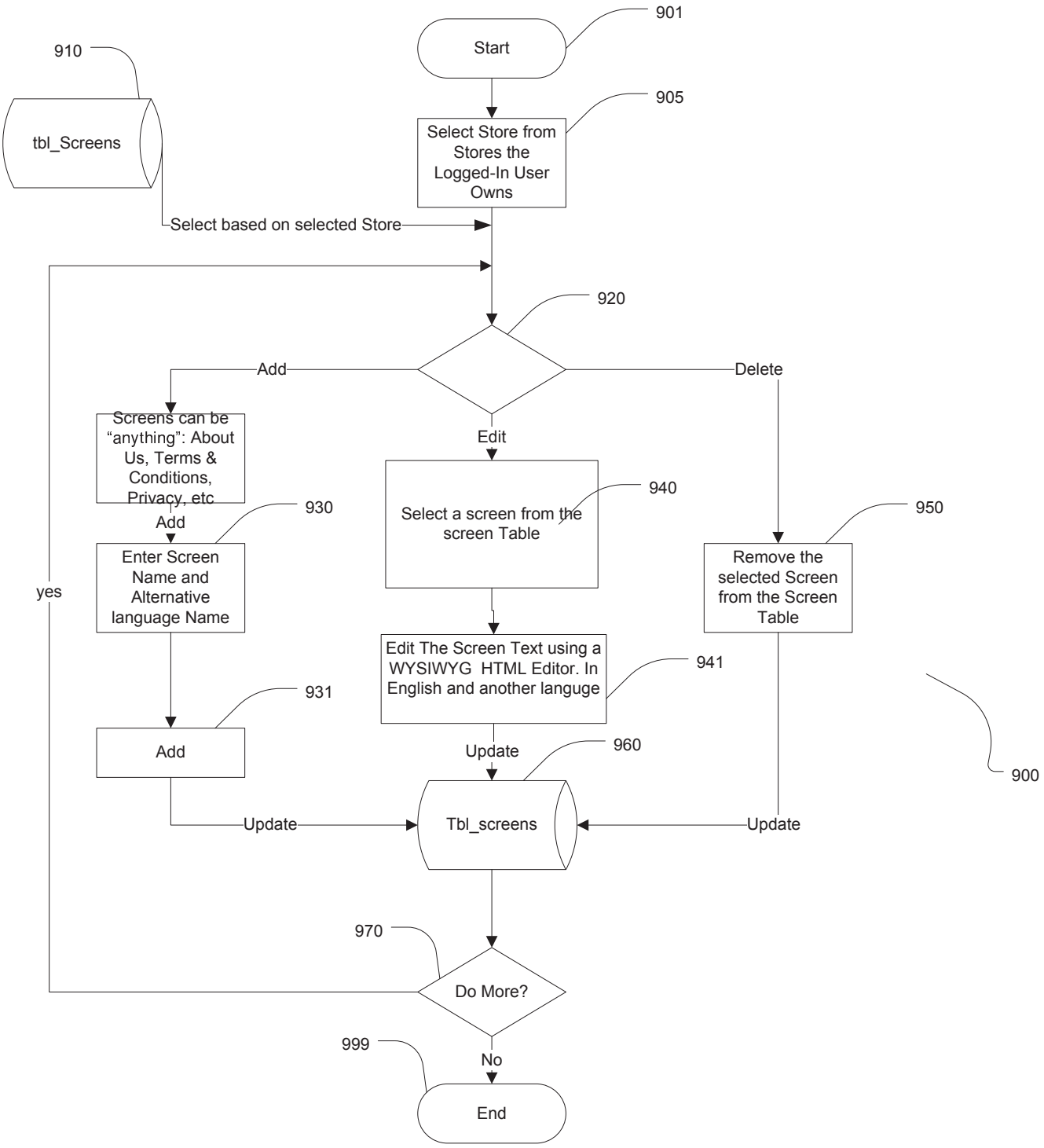

901
Start
910
tbl_Screens
905
Select Store from Stores the Logged-In User Owns
Select based on selected Store
920
Add
Delete
Edit
Screens can be "anything": About Us, Terms & Conditions, Privacy, etc
Add
930
Enter Screen Name and Alternative language Name
940
Select a screen from the screen Table
950
Remove the selected Screen from the Screen Table
yes
Edit The Screen Text using a WYSIWYG HTML Editor. In English and another languge
941
931
Add
Update
960
Update
Tbl_screens
Update
900
970
Do More?
999
No
End

FIG. 9

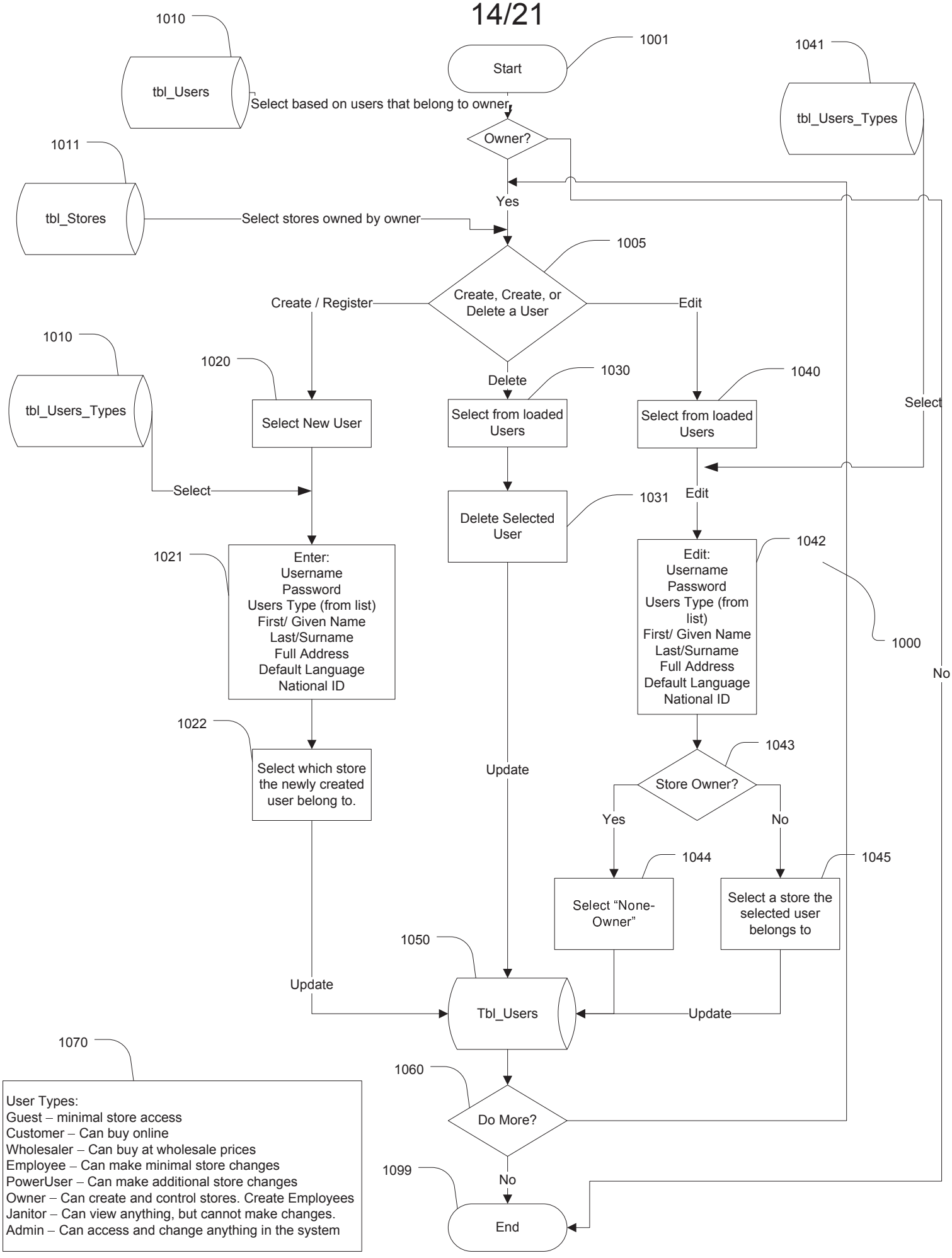

1010
tbl_Users
Select based on users that belong to owner
1001
Start
1041
tbl_Users_Types
Owner?
1011
tbl_Stores
Select stores owned by owner
Yes
1005
Create, Create, or Delete a User
Create / Register
Edit
Delete
1010
tbl_Users_Types
1020
Select New User
1030
Select from loaded Users
1040
Select from loaded Users
Select
Select
1031
Delete Selected User
Edit
1021
Enter:
Username
Password
Users Type (from list)
First/ Given Name
Last/Surname
Full Address
Default Language
National ID
1042
Edit:
Username
Password
Users Type (from list)
First/ Given Name
Last/Surname
Full Address
Default Language
National ID
1000
No
1022
Select which store the newly created user belong to.
Update
1043
Store Owner?
Yes
No
1044
Select “None-Owner”
1045
Select a store the selected user belongs to
1050
Update
Tbl_Users
Update
1070
User Types:
Guest – minimal store access
Customer – Can buy online
Wholesaler – Can buy at wholesale prices
Employee – Can make minimal store changes
PowerUser – Can make additional store changes
Owner – Can create and control stores. Create Employees
Janitor – Can view anything, but cannot make changes.
Admin – Can access and change anything in the system
1060
Do More?
No
1099
End

FIG. 10

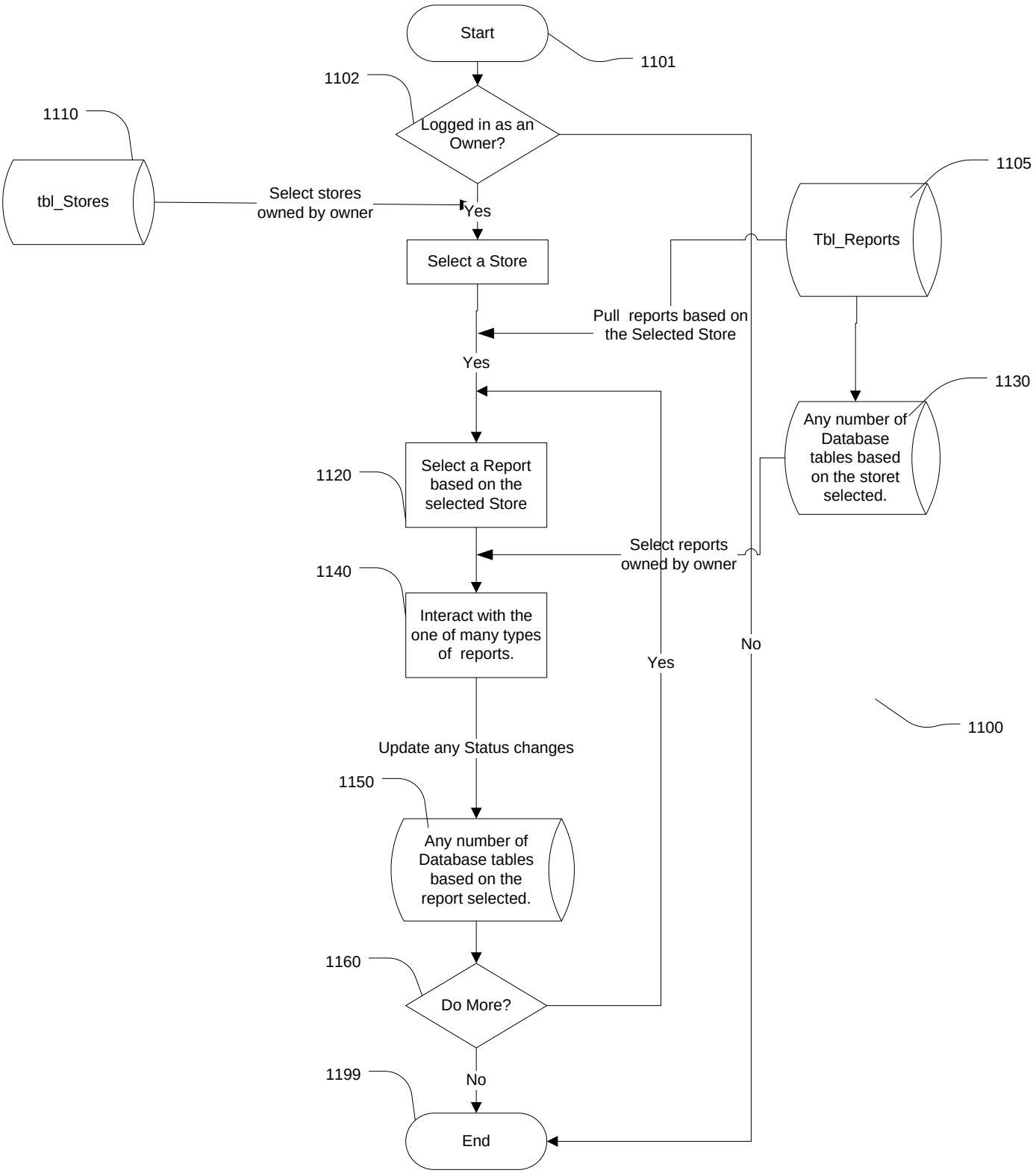

Start
1101
1102
Logged in as an Owner?
1110
tbl_Stores
Select stores owned by owner
Yes
Select a Store
1105
Tbl_Reports
Pull reports based on the Selected Store
Yes
1130
Any number of Database tables based on the storet selected.
1120
Select a Report based on the selected Store
Select reports owned by owner
1140
Interact with the one of many types of reports.
No
Yes
1100
Update any Status changes
1150
Any number of Database tables based on the report selected.
1160
Do More?
1199
No
End

FIG. 11

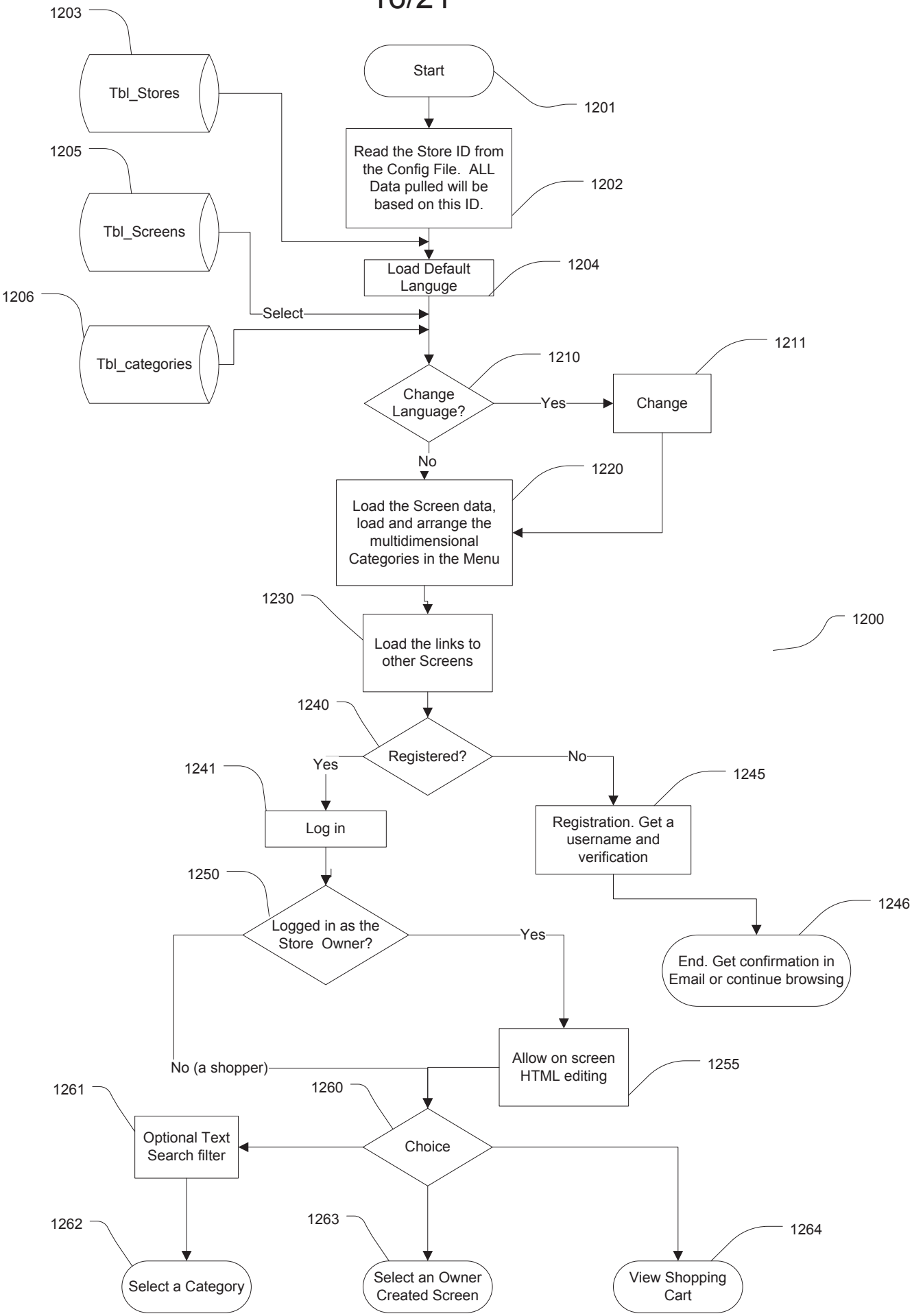

1203
Tbl_Stores
Start
1201
Read the Store ID from the Config File. ALL Data pulled will be based on this ID.
1202
1205
Tbl_Screens
Load Default Languge
1204
1206
Select
Tbl_categories
1210
Change Language?
Yes
Change
1211
No
1220
Load the Screen data, load and arrange the multidimensional Categories in the Menu
1230
Load the links to other Screens
1200
1240
Registered?
Yes
No
1241
1245
Log in
Registration. Get a username and verification
1250
Logged in as the Store Owner?
Yes
1246
End. Get confirmation in Email or continue browsing
Allow on screen HTML editing
1255
No (a shopper)
1261
1260
Optional Text Search filter
Choice
1262
1263
1264
Select a Category
Select an Owner Created Screen
View Shopping Cart

FIG. 12

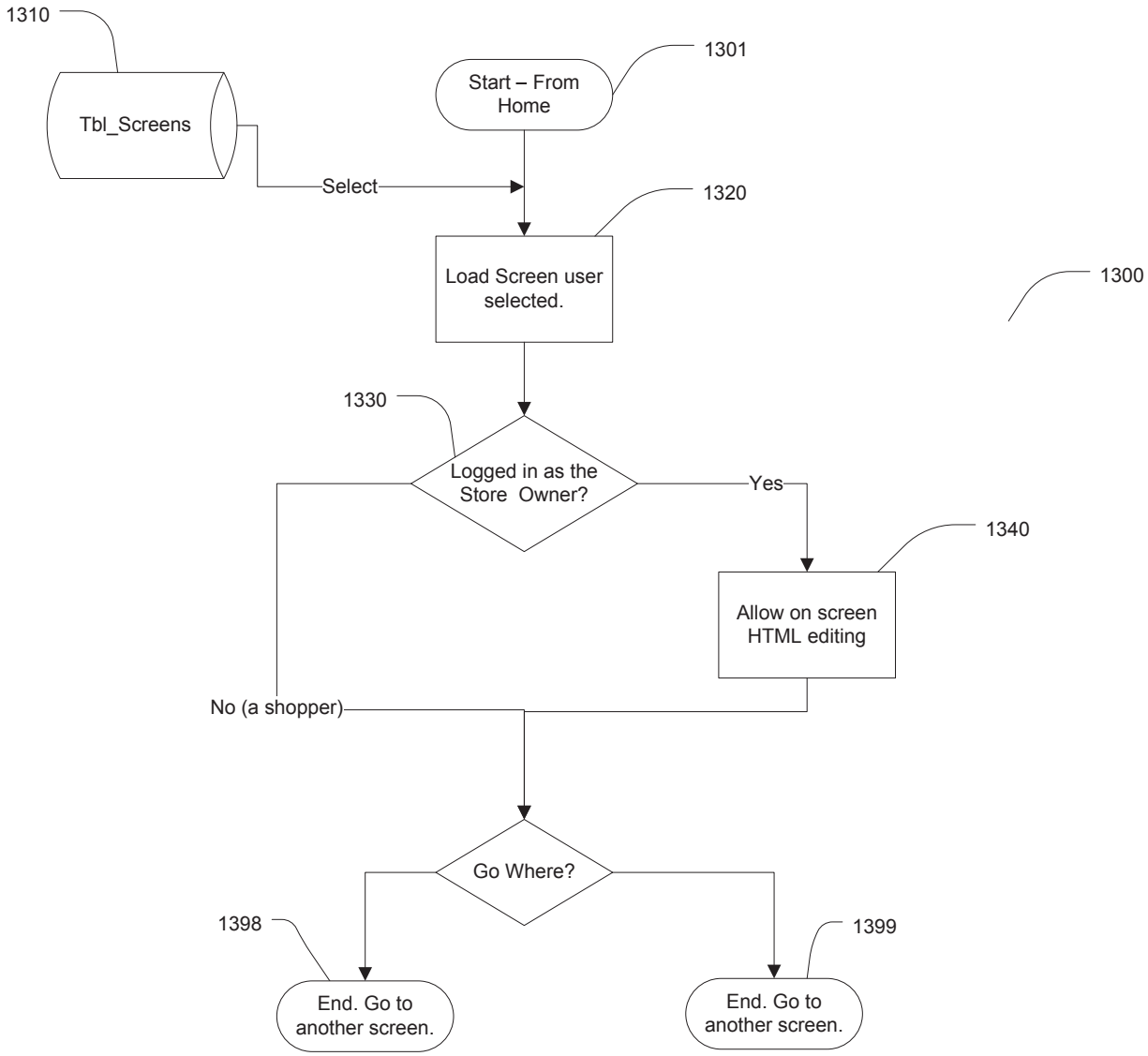

1310
Tbl_Screens
Start – From Home
1301
Select
1320
Load Screen user selected.
1300
1330
Logged in as the Store Owner?
Yes
1340
Allow on screen HTML editing
No (a shopper)
Go Where?
1398
1399
End. Go to another screen.
End. Go to another screen.

FIG. 13

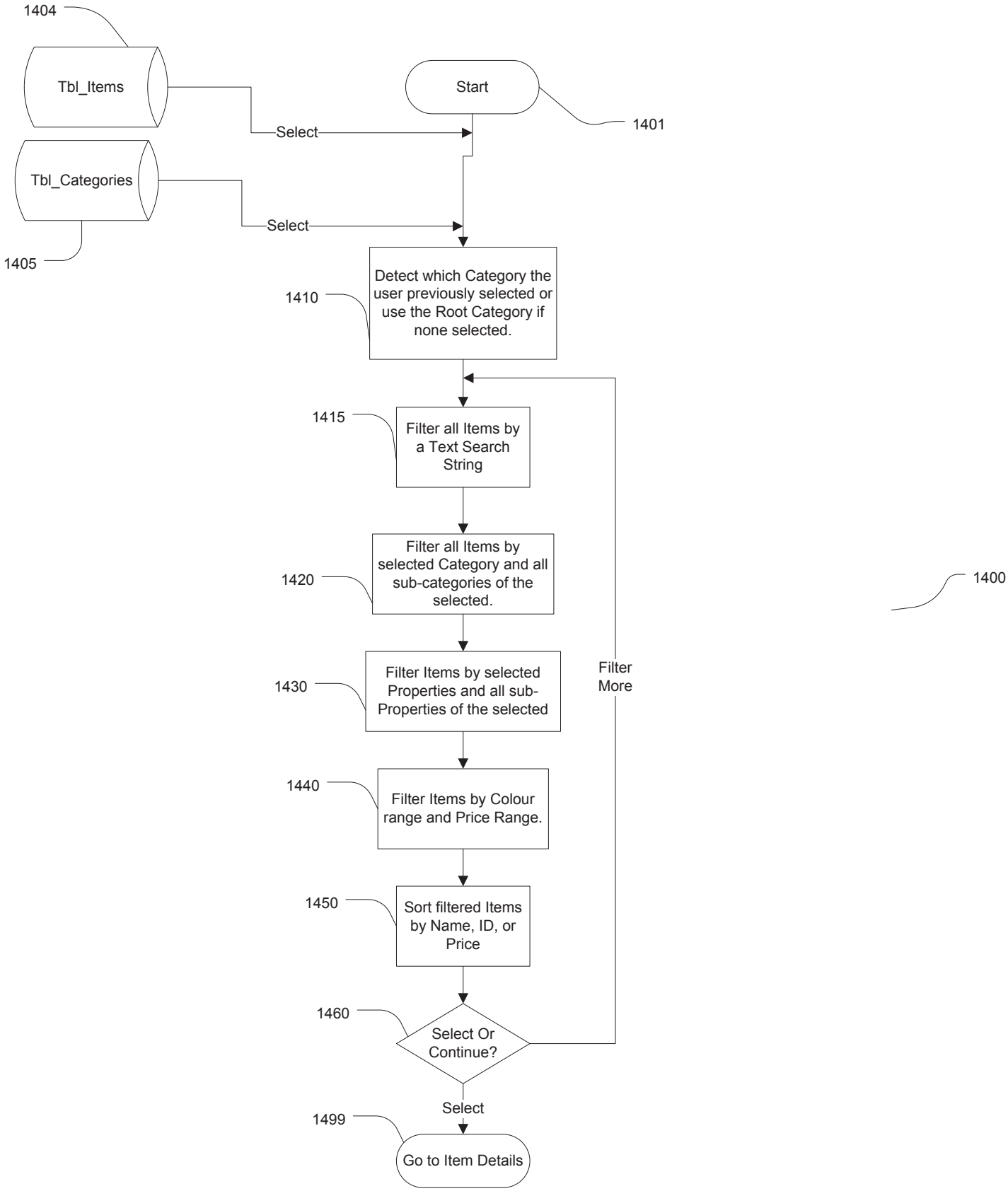

1404
Tbl_Items
Start
1401
Select
Tbl_Categories
Select
1405
Detect which Category the user previously selected or use the Root Category if none selected.
1410
1415
Filter all Items by a Text Search String
Filter all Items by selected Category and all sub-categories of the selected.
1420
1400
Filter Items by selected Properties and all sub-Properties of the selected
1430
Filter More
1440
Filter Items by Colour range and Price Range.
1450
Sort filtered Items by Name, ID, or Price
1460
Select Or Continue?
Select
1499
Go to Item Details

FIG. 14

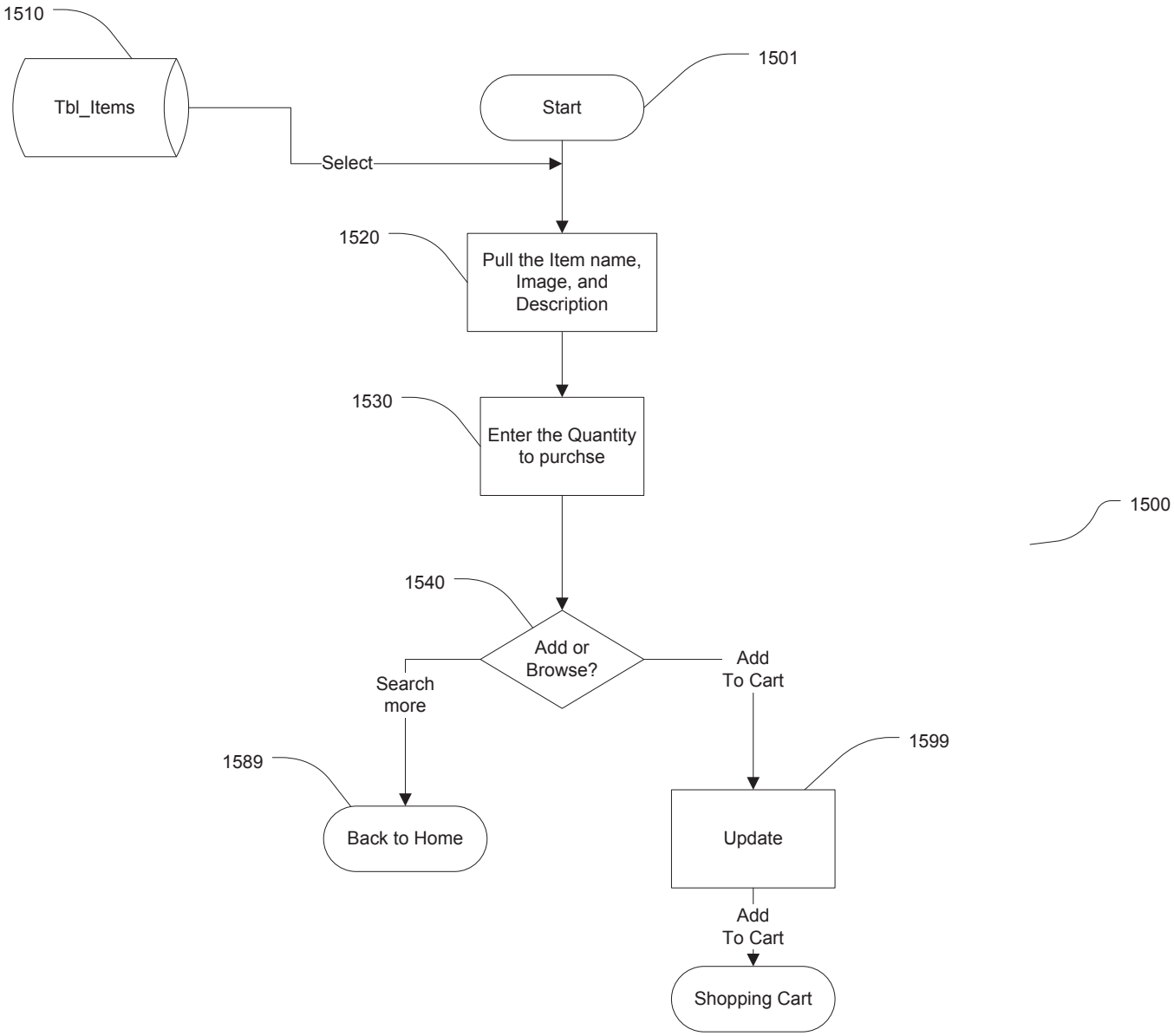

1510
Tbl_Items
1501
Start
Select
1520
Pull the Item name, Image, and Description
1530
Enter the Quantity to purchse
1500
1540
Add or Browse?
Search more
Add To Cart
1589
Back to Home
1599
Update
Add To Cart
Shopping Cart

FIG. 15

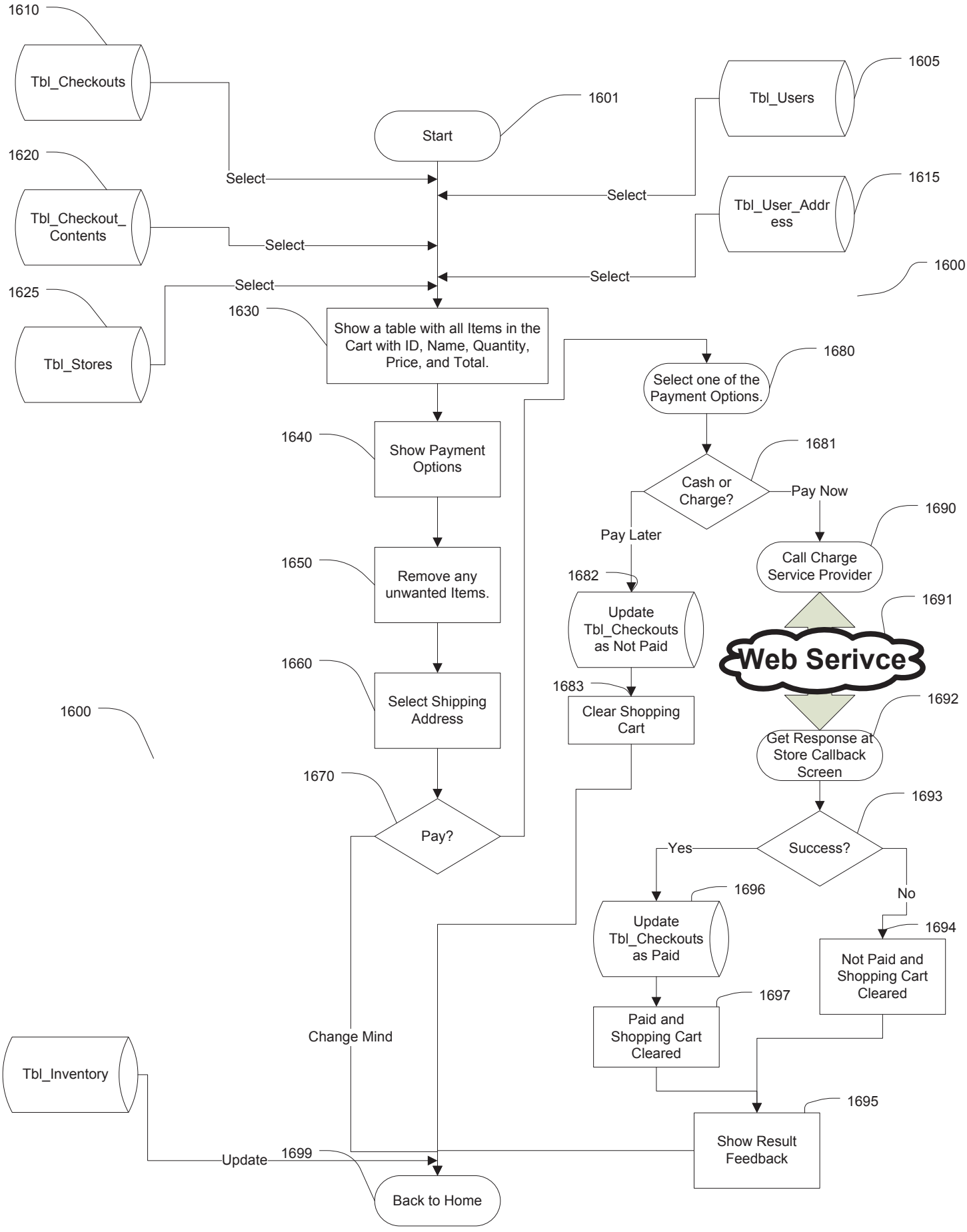

1610
Tbl_Checkouts
1620
Tbl_Checkout_ Contents
1625
Tbl_Stores
Tbl_Inventory
1601
Start
1605
Tbl_Users
1615
Tbl_User_Addr ess
Select
Select
Select
Select
Select
1600
1630
Show a table with all Items in the Cart with ID, Name, Quantity, Price, and Total.
1640
Show Payment Options
1650
Remove any unwanted Items.
1660
Select Shipping Address
1670
Pay?
Change Mind
Update
1699
Back to Home
1680
Select one of the Payment Options.
1681
Cash or Charge?
Pay Now
Pay Later
1682
Update Tbl_Checkouts as Not Paid
1683
Clear Shopping Cart
1690
Call Charge Service Provider
1691
Web Serivce
1692
Get Response at Store Callback Screen
1693
Success?
Yes
No
1696
Update Tbl_Checkouts as Paid
1697
Paid and Shopping Cart Cleared
1694
Not Paid and Shopping Cart Cleared
1695
Show Result Feedback

FIG. 16

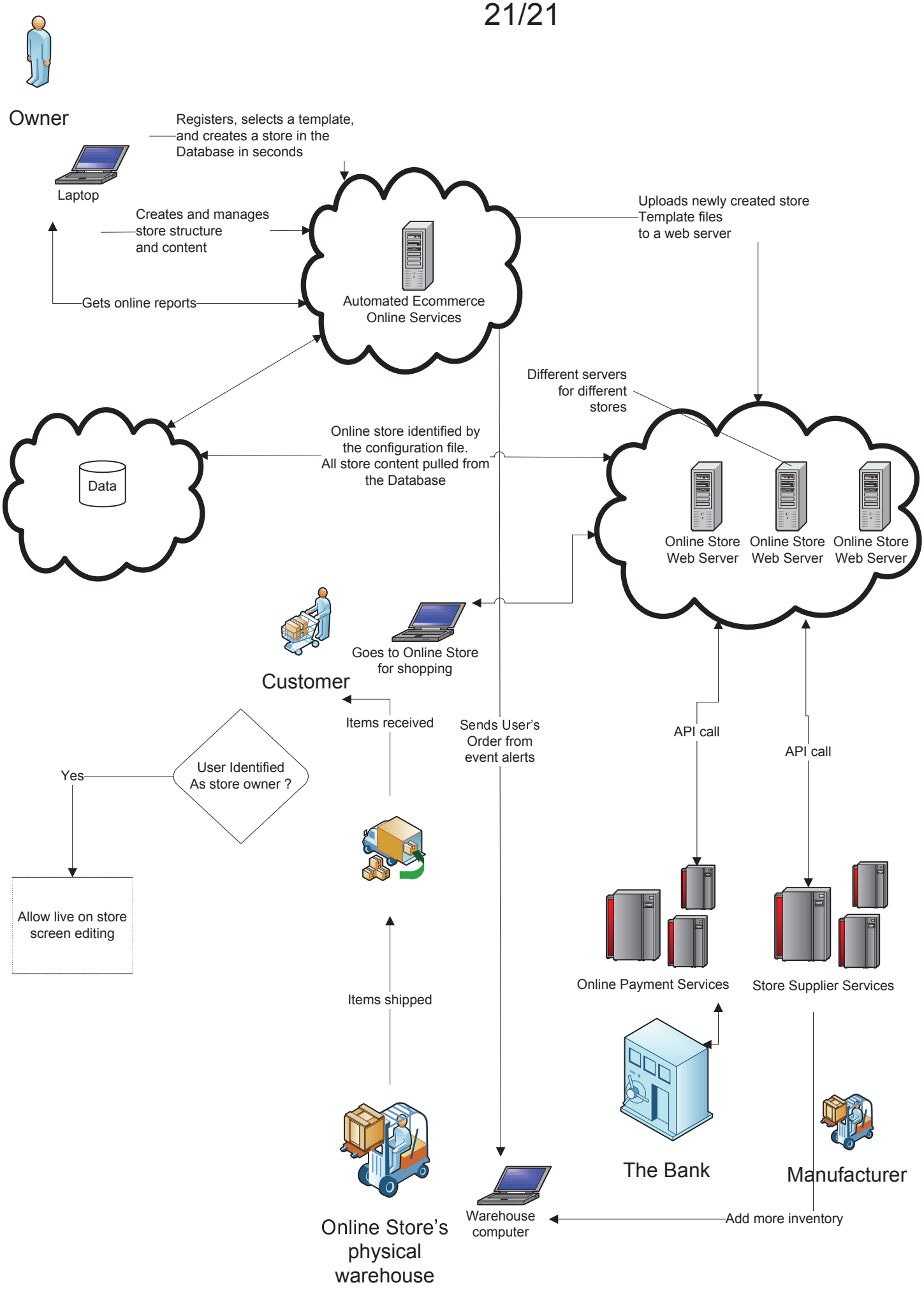

Owner
Registers, selects a template, and creates a store in the Database in seconds
Laptop
Creates and manages store structure and content
Gets online reports
Automated Ecommerce Online Services
Uploads newly created store Template files to a web server
Different servers for different stores
Online store identified by the configuration file. All store content pulled from the Database
Data
Online Store Web Server
Online Store Web Server
Online Store Web Server
Goes to Online Store for shopping
Customer
Items received
Sends User's Order from event alerts
API call
API call
User Identified As store owner ?
Yes
Allow live on store screen editing
Items shipped
Online Payment Services
Store Supplier Services
The Bank
Manufacturer
Warehouse computer
Add more inventory
Online Store's physical warehouse

Fig 17