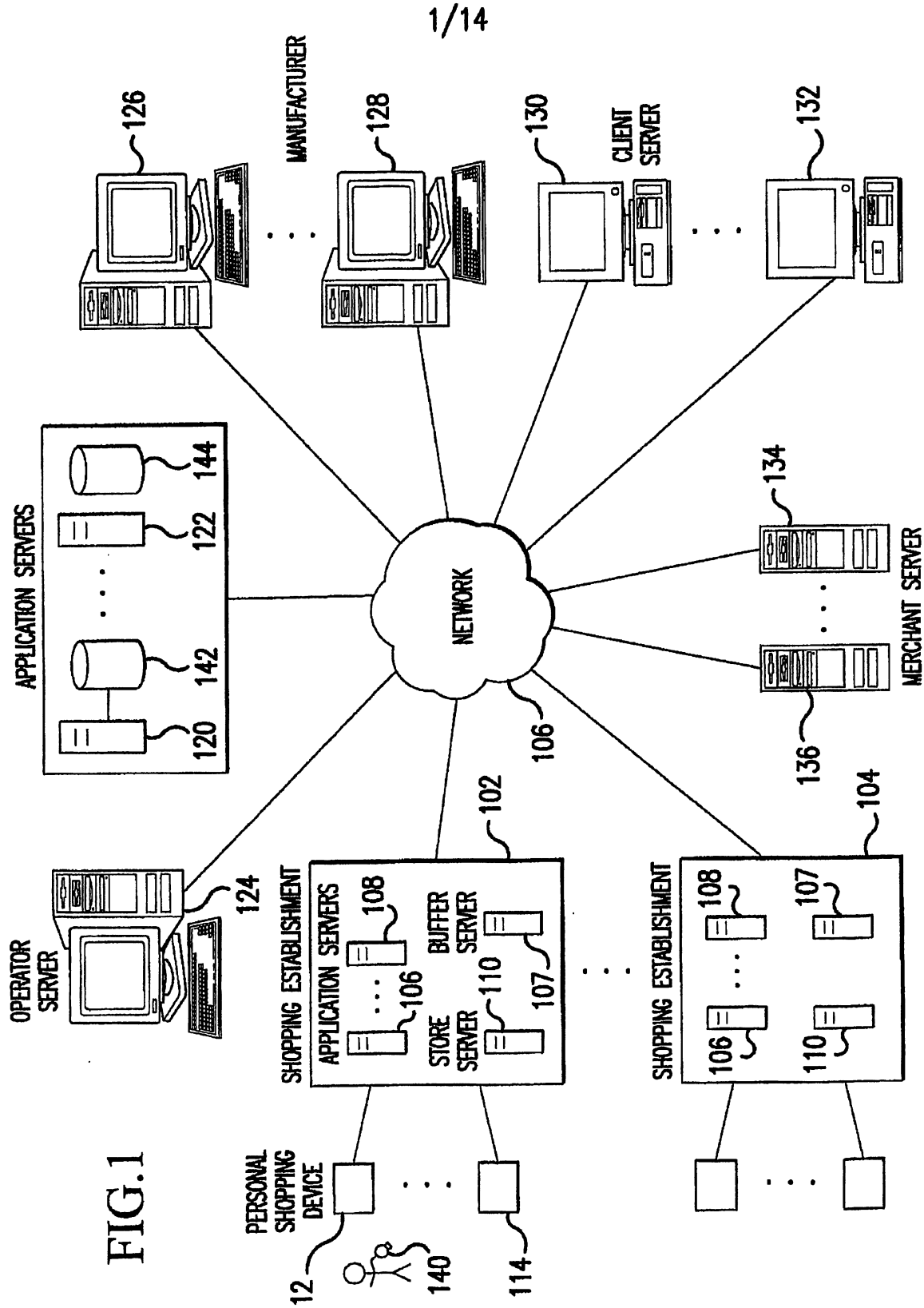

126
MANUFACTURER
128
130
CLIENT SERVER
132
APPLICATION SERVERS
144
122
142
120
NETWORK
134
MERCHANT SERVER
136
106
102
104
OPERATOR SERVER
124
SHOPPING ESTABLISHMENT
APPLICATION SERVERS
108
106
STORE SERVER
110
BUFFER SERVER
107
SHOPPING ESTABLISHMENT
108
107
106
110
PERSONAL SHOPPING DEVICE
112
140
114

FIG.1

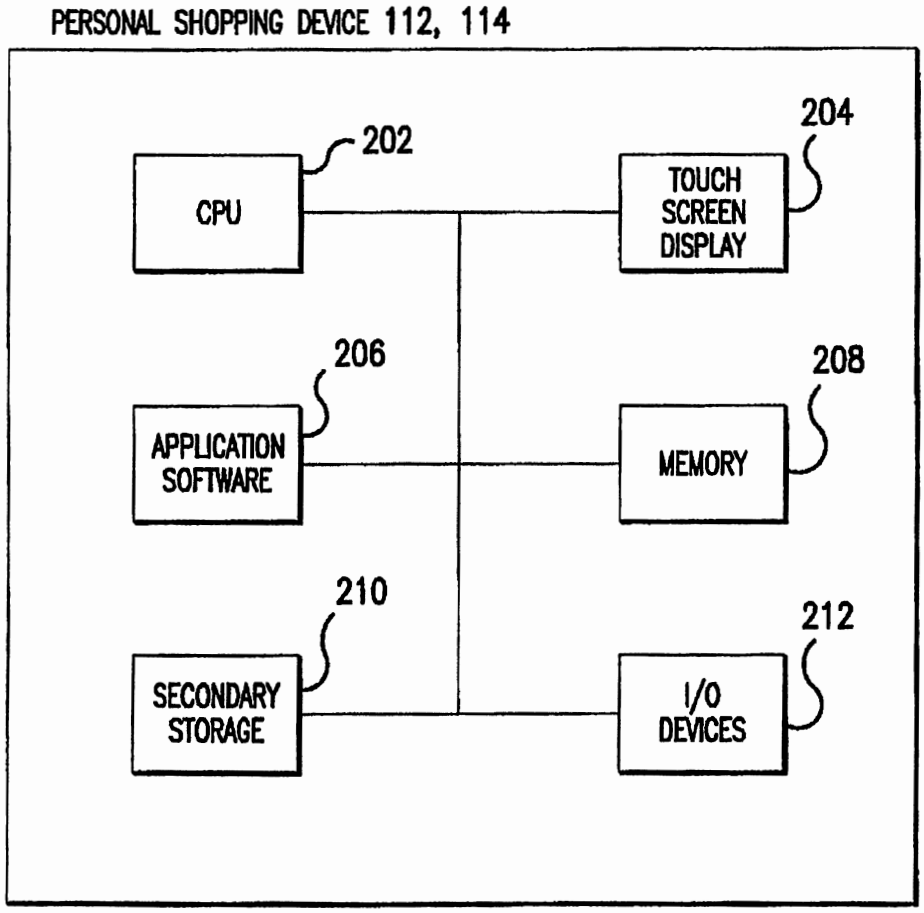

PERSONAL SHOPPING DEVICE 112, 114
CPU
202
TOUCH SCREEN DISPLAY
204
APPLICATION SOFTWARE
206
MEMORY
208
SECONDARY STORAGE
210
I/O DEVICES
212

FIG.2

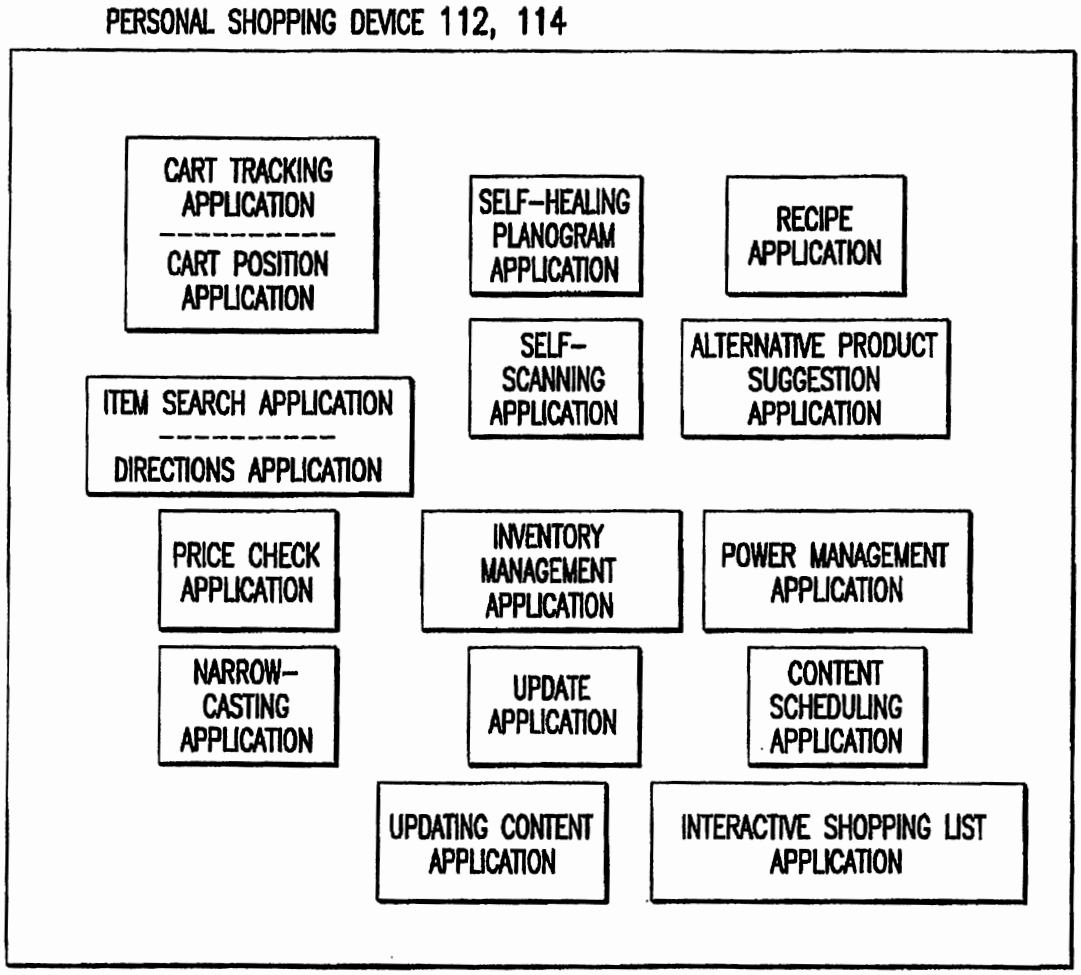

PERSONAL SHOPPING DEVICE 112, 114
CART TRACKING APPLICATION
CART POSITION APPLICATION
SELF-HEALING PLANOGRAM APPLICATION
RECIPE APPLICATION
SELF-SCANNING APPLICATION
ALTERNATIVE PRODUCT SUGGESTION APPLICATION
ITEM SEARCH APPLICATION
DIRECTIONS APPLICATION
PRICE CHECK APPLICATION
INVENTORY MANAGEMENT APPLICATION
POWER MANAGEMENT APPLICATION
NARROW-CASTING APPLICATION
UPDATE APPLICATION
CONTENT SCHEDULING APPLICATION
UPDATING CONTENT APPLICATION
INTERACTIVE SHOPPING LIST APPLICATION

FIG.2A

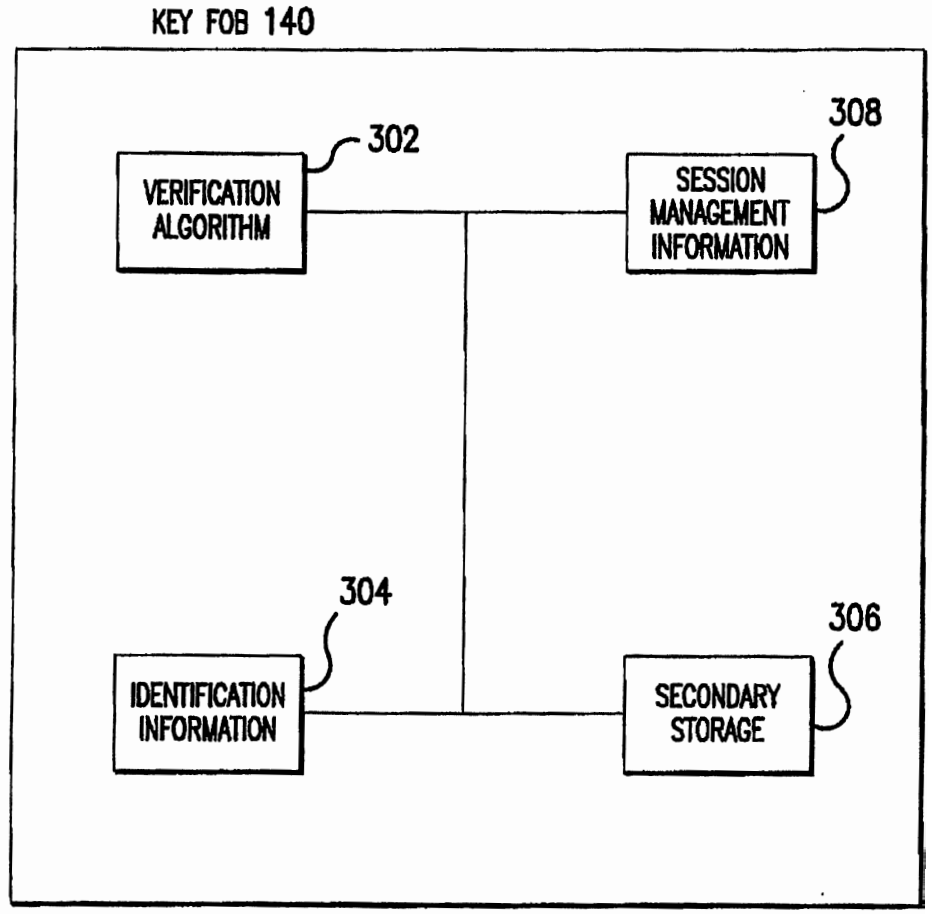

KEY FOB 140
302
VERIFICATION ALGORITHM
308
SESSION MANAGEMENT INFORMATION
304
IDENTIFICATION INFORMATION
306
SECONDARY STORAGE

FIG.3

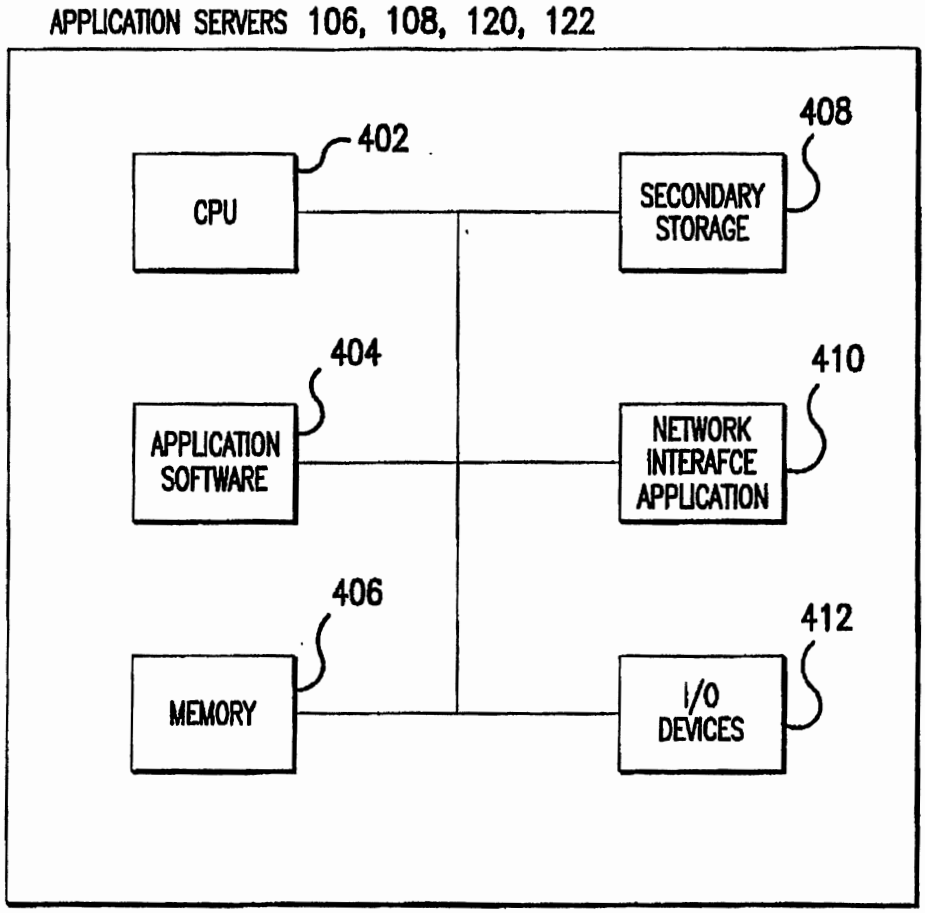

APPLICATION SERVERS 106, 108, 120, 122
CPU
402
SECONDARY STORAGE
408
APPLICATION SOFTWARE
404
NETWORK INTERAFCE APPLICATION
410
MEMORY
406
I/O DEVICES
412

FIG.4

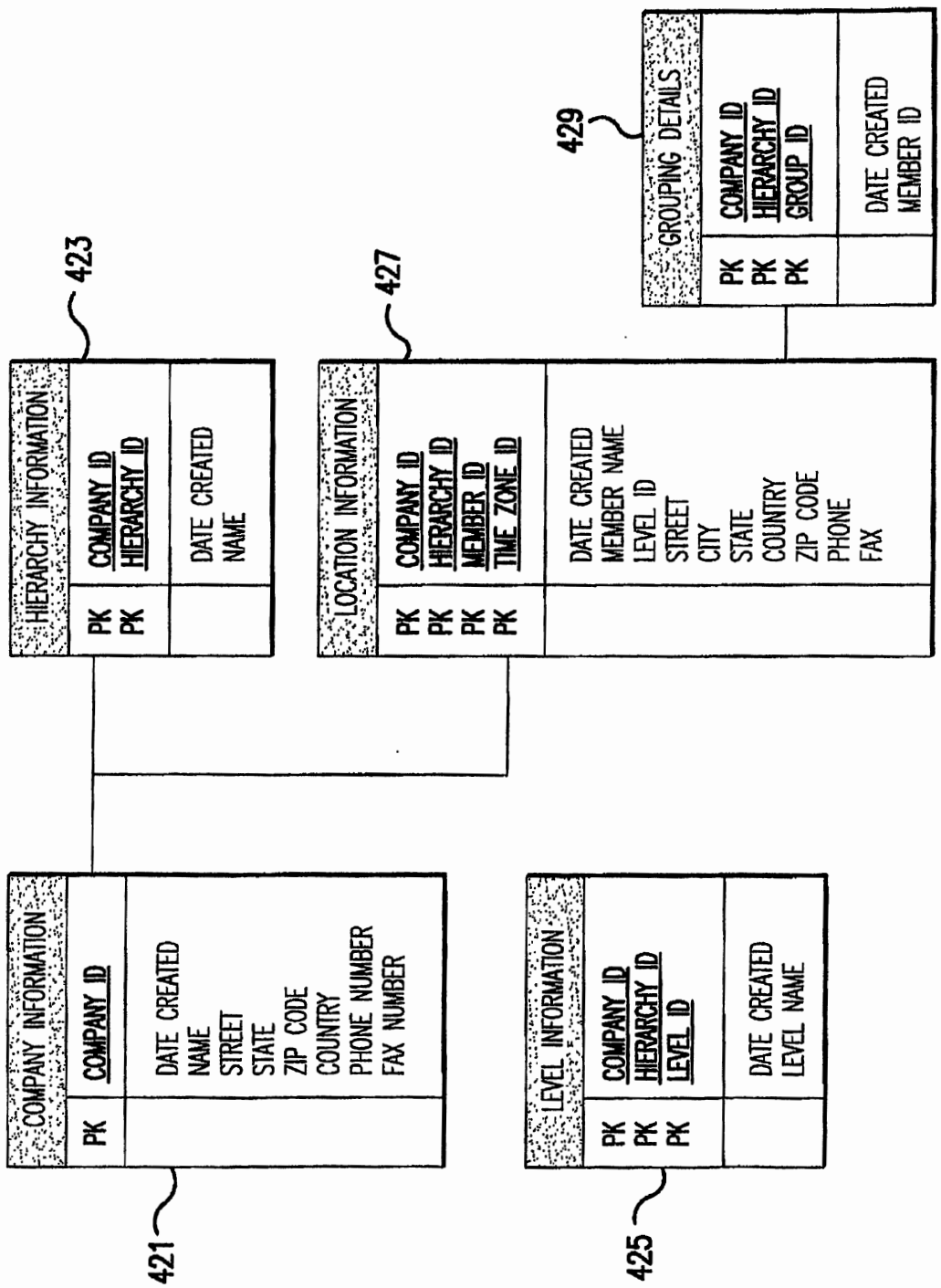

COMPANY INFORMATION
PK COMPANY ID
DATE CREATED
NAME
STREET
STATE
ZIP CODE
COUNTRY
PHONE NUMBER
FAX NUMBER
421
HIERARCHY INFORMATION
PK COMPANY ID
PK HIERARCHY ID
DATE CREATED
NAME
423
LEVEL INFORMATION
PK COMPANY ID
PK HIERARCHY ID
PK LEVEL ID
DATE CREATED
LEVEL NAME
425
LOCATION INFORMATION
PK COMPANY ID
PK HIERARCHY ID
PK MEMBER ID
PK TIME ZONE ID
DATE CREATED
MEMBER NAME
LEVEL ID
STREET
CITY
STATE
COUNTRY
ZIP CODE
PHONE
FAX
427
GROUPING DETAILS
PK COMPANY ID
PK HIERARCHY ID
PK GROUP ID
DATE CREATED
MEMBER ID
429

FIG.4A

COMPANY INFORMATION

COMPANY ID	DATE CREATED	NAME	STREET	CITY
1	MONDAY, AUGUST 23, 2004	ACME RETAILER	5931 SEA LION PLACE, SUITE 109	CARLSBAD
2	FRIDAY, DECEMBER 09, 2005	BIG BOX RETAILER	207 QUEEN'S QUAY W., SUITE 320	TORONTO
3	TUESDAY, MARCH 14,2006	LITTLE BOX RETAILER	4 BARNABY PRIVATE	OTTAWA

LOCATION INFORMATION

COMPANY ID	HIERARCHY ID	MEMBER ID	TIMEZONE ID	DATE CREATED
1	1	1001	1	MONDAY, AUGUST 23, 2004
1	1	1002	2	MONDAY, AUGUST 23, 2004
1	1	1003	3	MONDAY, AUGUST 23, 2004
1	1	10001	0	MONDAY, AUGUST 23, 2004
1	1	10002	0	MONDAY, AUGUST 23, 2004
1	1	1000000	0	MONDAY, AUGUST 23, 2004

LEVEL INFORMATION

COMPANY ID	HIERARCHY ID	LEVEL ID	DATE CREATED	LEVEL NAME
1	1	1000	MONDAY, AUGUST 23, 2004	LOCATION
1	1	10000	MONDAY, AUGUST 23, 2004	ZONE
1	1	1000000	MONDAY, AUGUST 23, 2004	NATIONAL

HIERARCHY INFORMATION

COMPANY ID	HIERARCHY ID	DATE CREATED	HIERARCHY NAME
1	1	MONDAY, AUGUST 23, 2004	STANDARD HIERARCHY

GROUPING DETAILS

COMPANY ID	HIERARCHY ID	GROUP ID	DATE CREATED	MEMBER ID
1	1	10001	MONDAY, AUGUST 23, 2004	1001
1	1	10001	MONDAY, AUGUST 23, 2004	1002
1	1	10002	MONDAY, AUGUST 23, 2004	1003
1	1	1000000	MONDAY, AUGUST 23, 2004	10001
1	1	1000000	MONDAY, AUGUST 23, 2004	10002

FIG.4B

COMPANY INFORMATION (CONT.)				
STATE	ZIP CODE	COUNTRY	PHONE NUMBER	FAX NUMBER
CA	92010	USA	(999) 999-9999	(999) 999-9999
ON	M5J 1A7	CANADA	(999) 999-9999	(999) 999-9999
ON	K1K 4S4	CANADA	(999) 999-9999	(999) 999-9999

LOCATION INFORMATION (CONT.)								
MEMBER NAME	LEVEL ID	STREET	CITY	STATE	ZIP CODE	COUNTRY	PHONE NUMBER	FAX NUMBER
STORE SAN JOSE CALIFORNIA	1000	1233 BIRCH STREET	SAN JOSE	CA	920113	USA	(999) 999-9999	(999) 999-9999
STORE-OAKLAND CALIFORNIA	1000	111 MAIN STREET	OAKLAND	CA	92012	USA	(999) 999-9999	(999) 999-9999
STORE-SAN DIEGO CALIFORNIA	1000	123 LOWE AVENUE	SAN DIEGO	CA	92011	USA	(999) 999-9999	(999) 999-9999
ZONE-CALIFORNIA NORTH	10000	UNKNOWN	UNKNOWN	CA	0	USA	(999) 999-9999	(999) 999-9999
ZONE-CALIFORNIA SOUTH	10000	UNKNOWN	UNKNOWN	CA	0	USA	(999) 999-9999	(999) 999-9999
NATIONAL-ACME RETAILER	1000000	5931 SEA LION PLACE, SUITE 109	CARLSBAD	CA	92010	USA	(999) 999-9999	(999) 999-9999

FIG.4C

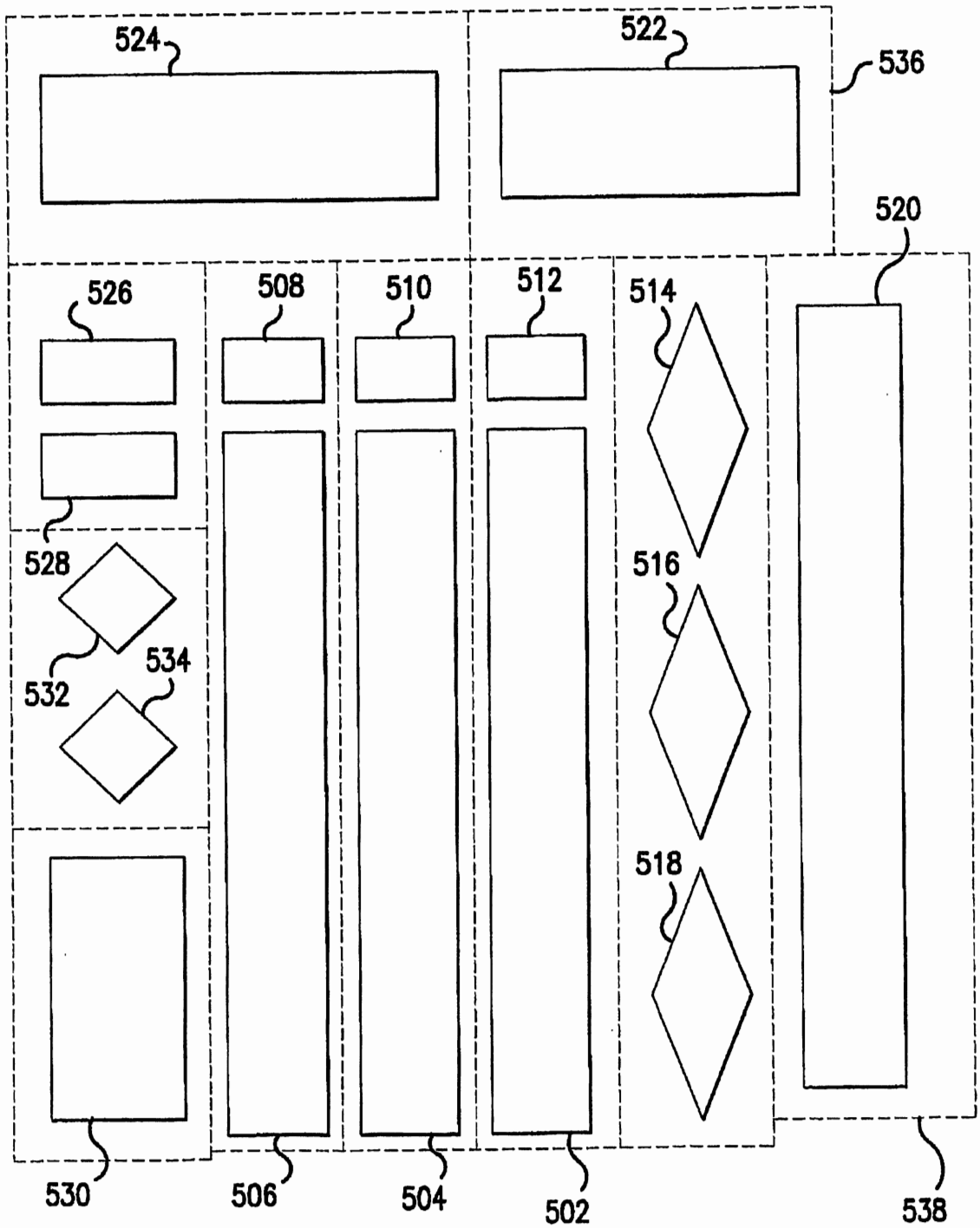

524
522
536
520
526
508
510
512
514
528
516
532
534
518
530
506
504
502
538

FIG.5

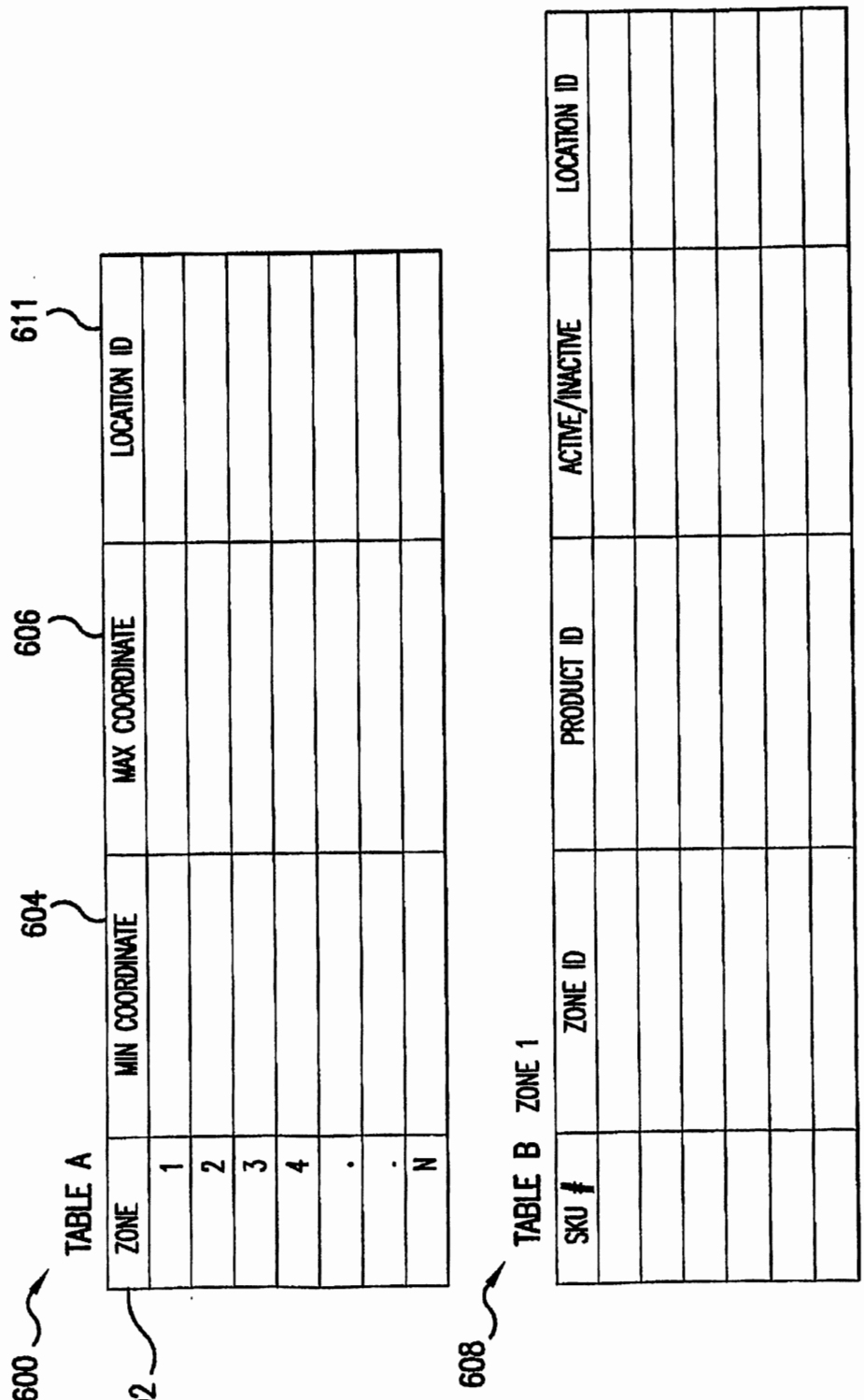

600
TABLE A
602
ZONE
MIN COORDINATE
604
MAX COORDINATE
606
LOCATION ID
611
1
2
3
4
.
.
N
608
TABLE B ZONE 1
SKU #
ZONE ID
PRODUCT ID
ACTIVE/INACTIVE
LOCATION ID

FIG.6

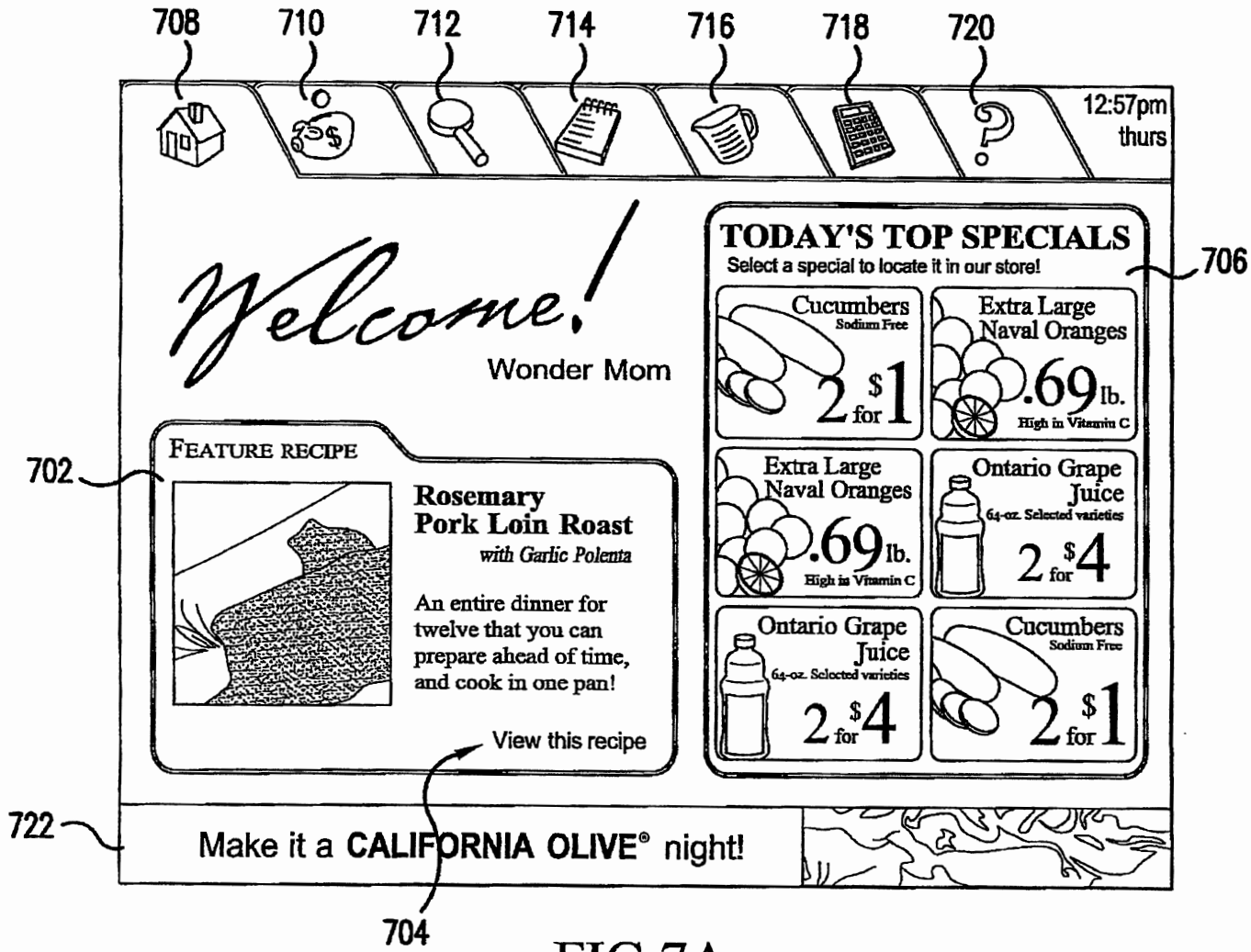

708
710
712
714
716
718
720
12:57pm
thurs
Welcome!
Wonder Mom
TODAY'S TOP SPECIALS
Select a special to locate it in our store!
706
Cucumbers
Sodium Free
2 for $1
Extra Large
Naval Oranges
.69 lb.
High in Vitamin C
Extra Large
Naval Oranges
.69 lb.
High in Vitamin C
Ontario Grape
Juice
64-oz. Selected varieties
2 for $4
Ontario Grape
Juice
64-oz. Selected varieties
2 for $4
Cucumbers
Sodium Free
2 for $1
FEATURE RECIPE
702
Rosemary
Pork Loin Roast
with Garlic Polenta
An entire dinner for
twelve that you can
prepare ahead of time,
and cook in one pan!
View this recipe
704
722
Make it a CALIFORNIA OLIVE® night!

FIG.7A

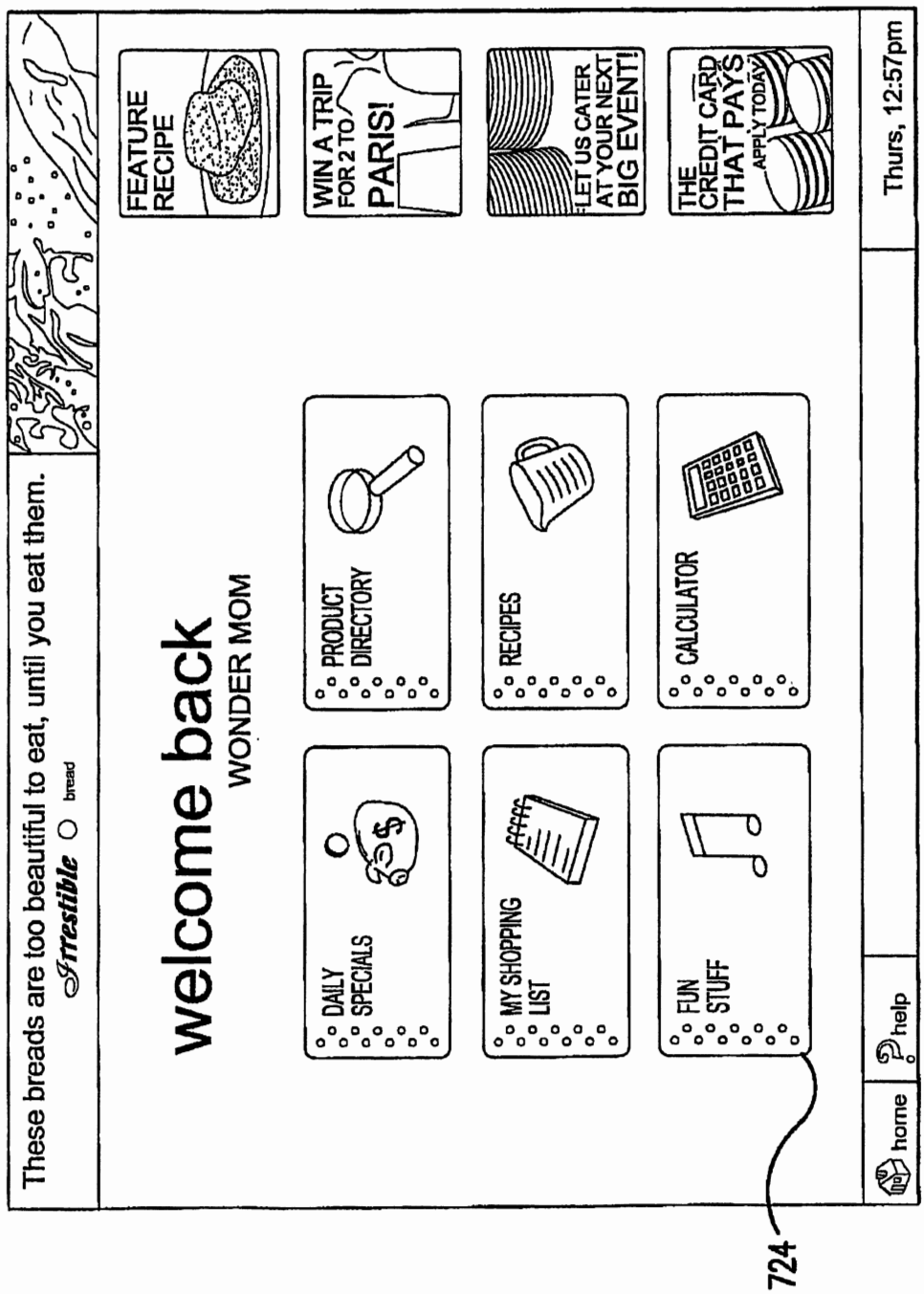

These breads are too beautiful to eat, until you eat them.
Irrestible bread
welcome back
WONDER MOM
DAILY SPECIALS
PRODUCT DIRECTORY
MY SHOPPING LIST
RECIPES
FUN STUFF
CALCULATOR
FEATURE RECIPE
WIN A TRIP FOR 2 TO PARIS!
LET US CATER AT YOUR NEXT BIG EVENT!
THE CREDIT CARD THAT PAYS
APPLY TODAY
home
help
Thurs, 12:57pm
724

FIG. 7B

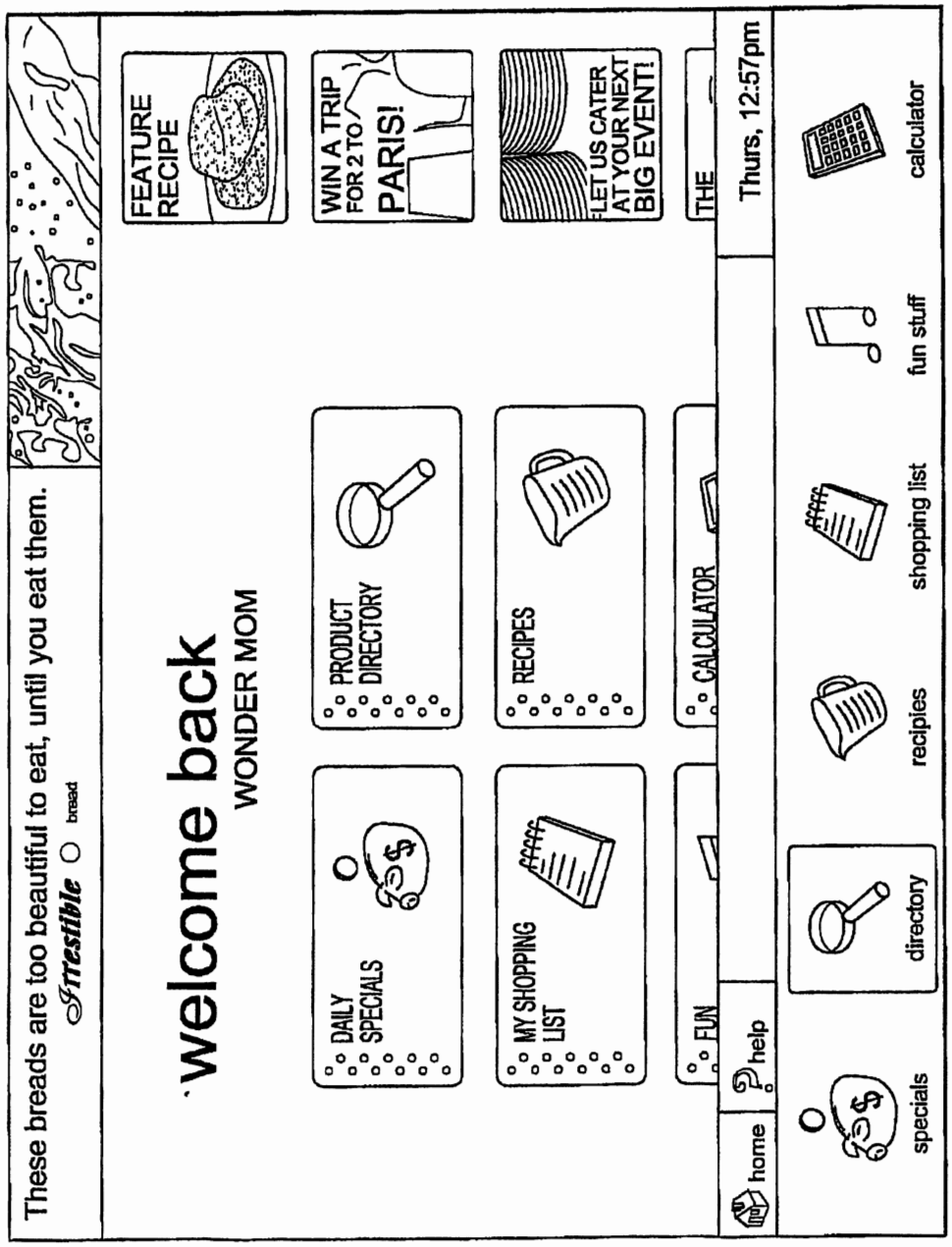

These breads are too beautiful to eat, until you eat them.
Irresistible
bread
welcome back
WONDER MOM
DAILY SPECIALS
PRODUCT DIRECTORY
MY SHOPPING LIST
RECIPES
FUN
CALCULATOR
FEATURE RECIPE
WIN A TRIP FOR 2 TO PARIS!
LET US CATER AT YOUR NEXT BIG EVENT!
THE
home
help
Thurs, 12:57pm
specials
directory
recipies
shopping list
fun stuff
calculator

FIG.7C

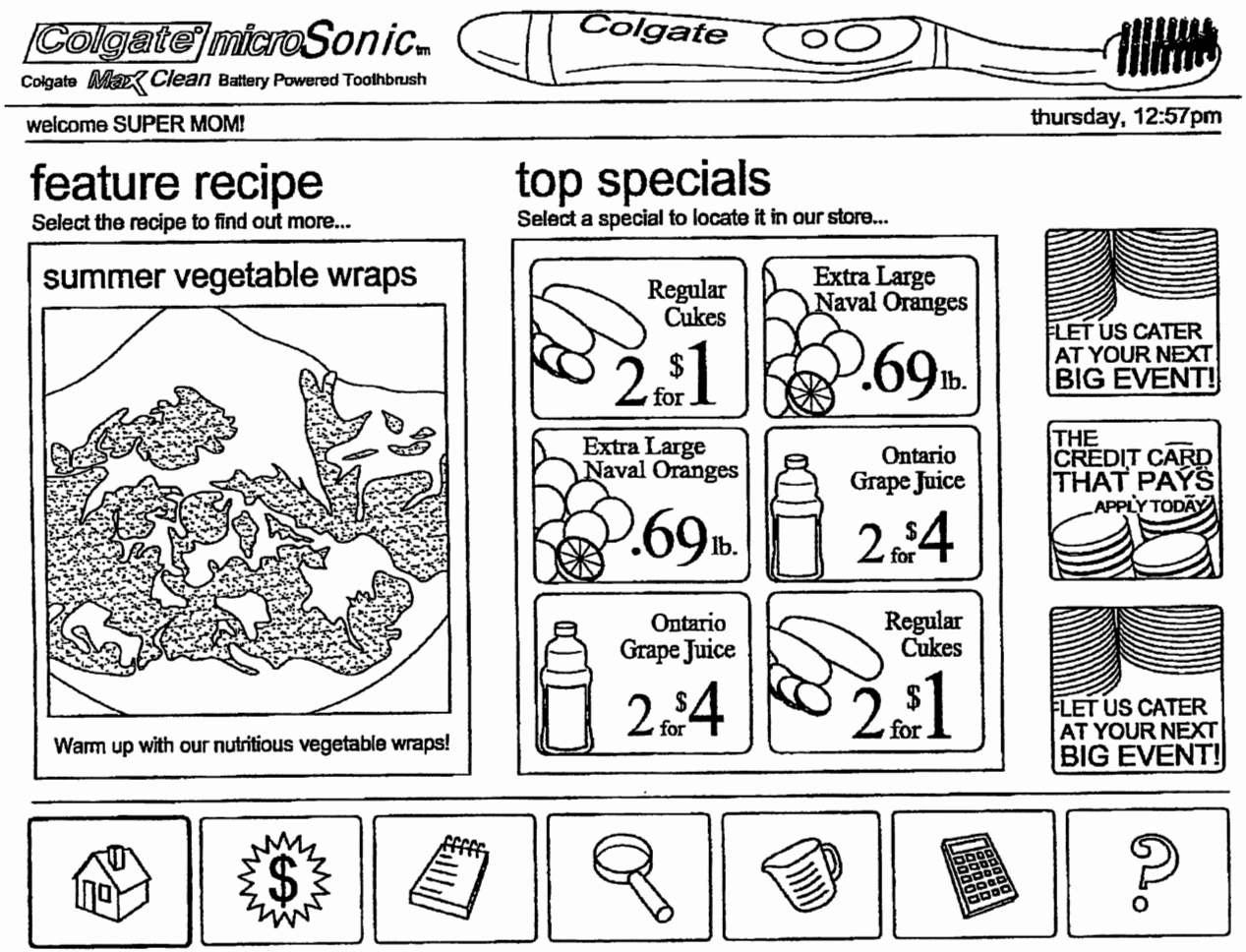

Colgate microSonic tm
Colgate MaxClean Battery Powered Toothbrush
Colgate
welcome SUPER MOM!
thursday, 12:57pm
feature recipe
Select the recipe to find out more...
summer vegetable wraps
Warm up with our nutritious vegetable wraps!
top specials
Select a special to locate it in our store...
Regular Cukes 2 for $1
Extra Large Naval Oranges .69 lb.
Extra Large Naval Oranges .69 lb.
Ontario Grape Juice 2 for $4
Ontario Grape Juice 2 for $4
Regular Cukes 2 for $1
LET US CATER AT YOUR NEXT BIG EVENT!
THE CREDIT CARD THAT PAYS
APPLY TODAY
LET US CATER AT YOUR NEXT BIG EVENT!

FIG.7D