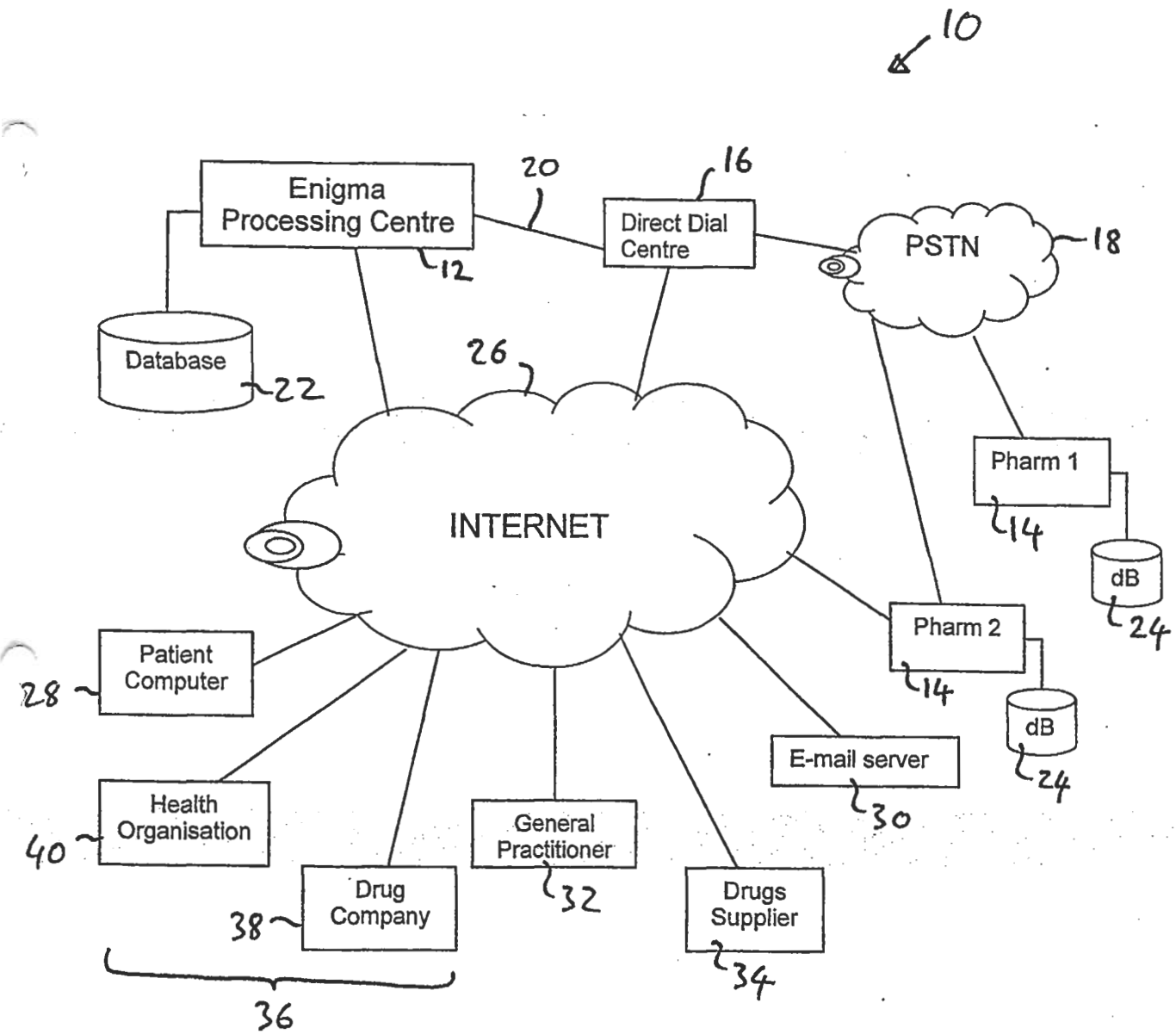

10
Enigma Processing Centre
12
20
16
Direct Dial Centre
PSTN
18
Database
22
26
INTERNET
Pharm 1
14
dB
24
Pharm 2
14
dB
24
Patient Computer
28
E-mail server
30
Health Organisation
40
General Practitioner
32
Drug Company
38
Drugs Supplier
34
36

Figure 1

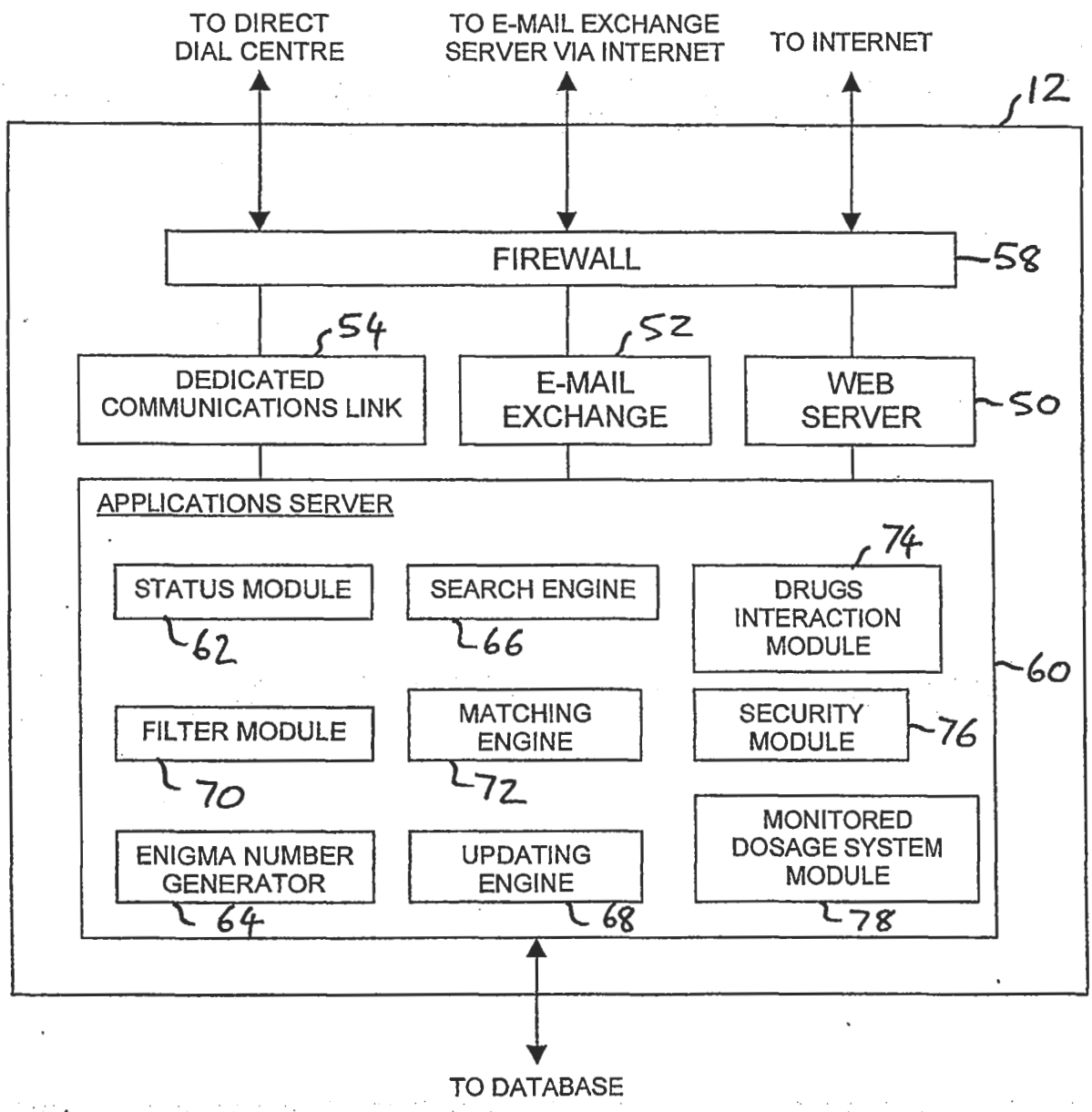

TO DIRECT DIAL CENTRE
TO E-MAIL EXCHANGE SERVER VIA INTERNET
TO INTERNET
12
FIREWALL
58
54
52
DEDICATED COMMUNICATIONS LINK
E-MAIL EXCHANGE
WEB SERVER
50
APPLICATIONS SERVER
74
STATUS MODULE
62
SEARCH ENGINE
66
DRUGS INTERACTION MODULE
60
FILTER MODULE
70
MATCHING ENGINE
72
SECURITY MODULE
76
ENIGMA NUMBER GENERATOR
64
UPDATING ENGINE
68
MONITORED DOSAGE SYSTEM MODULE
78
TO DATABASE

Figure 2

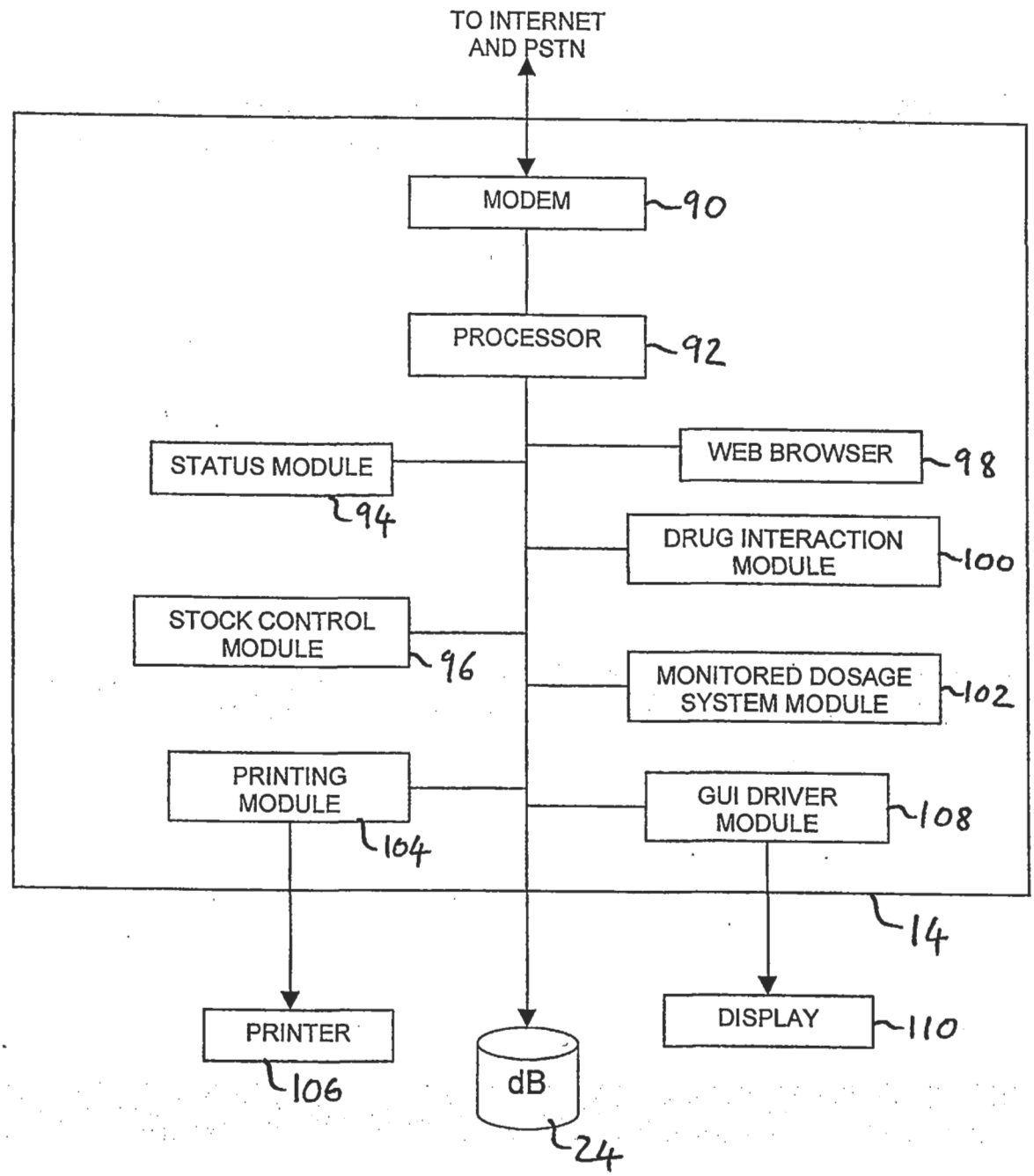

TO INTERNET AND PSTN
MODEM
90
PROCESSOR
92
STATUS MODULE
94
WEB BROWSER
98
DRUG INTERACTION MODULE
100
STOCK CONTROL MODULE
96
MONITORED DOSAGE SYSTEM MODULE
102
PRINTING MODULE
104
GUI DRIVER MODULE
108
14
PRINTER
106
dB
24
DISPLAY
110

Figure 3

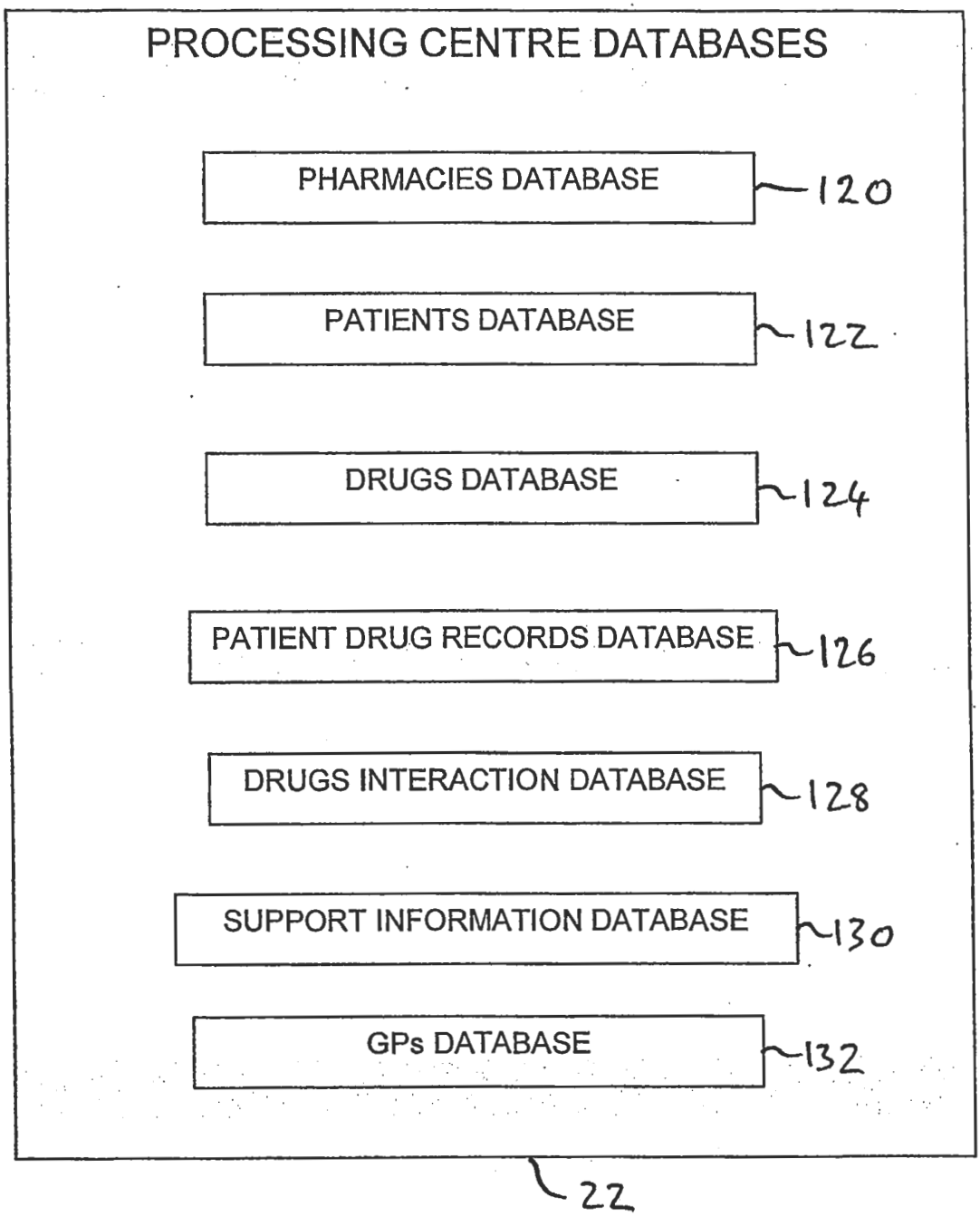

PROCESSING CENTRE DATABASES
PHARMACIES DATABASE
120
PATIENTS DATABASE
122
DRUGS DATABASE
124
PATIENT DRUG RECORDS DATABASE
126
DRUGS INTERACTION DATABASE
128
SUPPORT INFORMATION DATABASE
130
GPs DATABASE
132
22

Figure 4

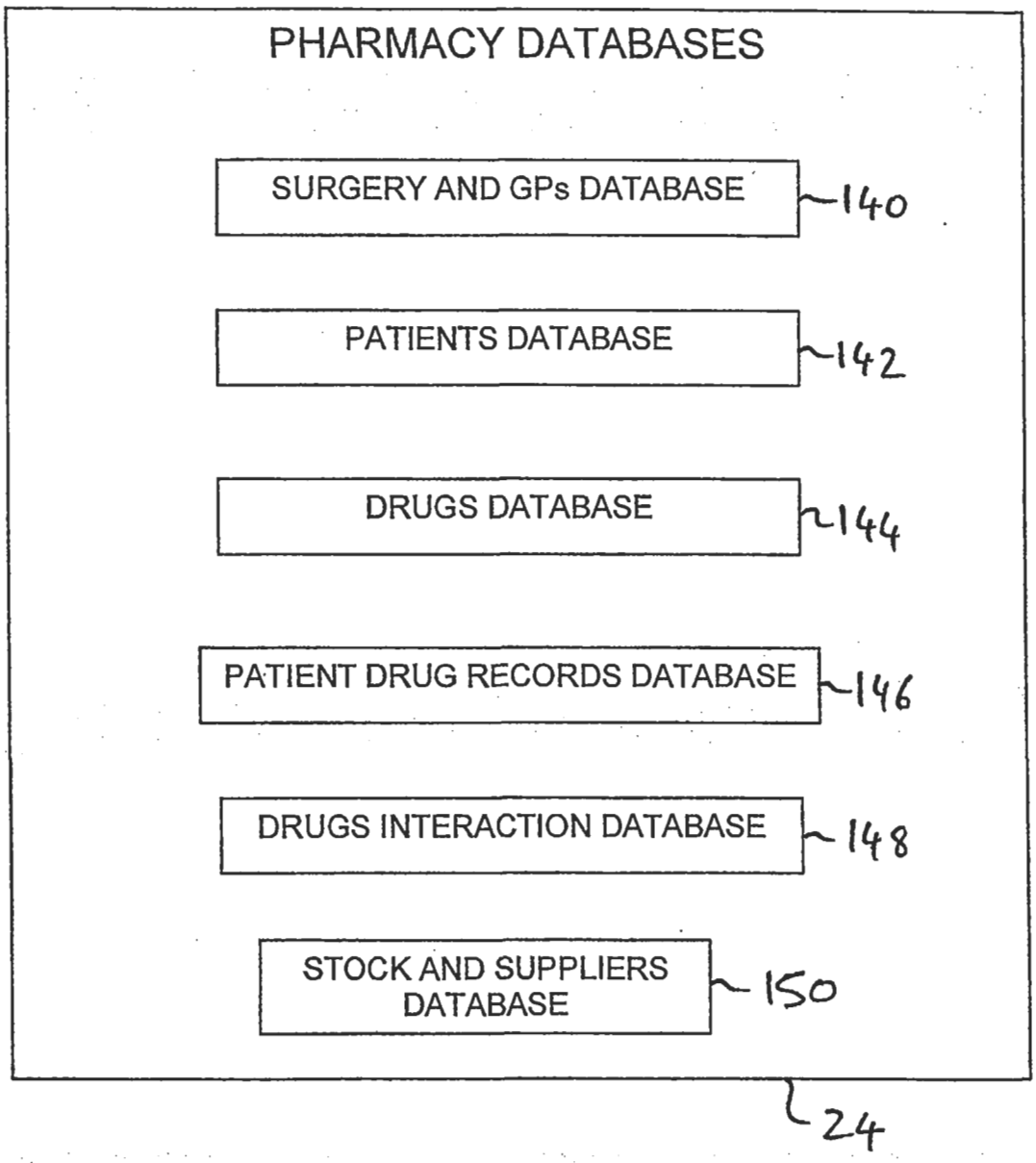

PHARMACY DATABASES
SURGERY AND GPs DATABASE
140
PATIENTS DATABASE
142
DRUGS DATABASE
144
PATIENT DRUG RECORDS DATABASE
146
DRUGS INTERACTION DATABASE
148
STOCK AND SUPPLIERS DATABASE
150
24

Figure 5

Basic Data Structure of Patient Record at Pharmacy:

Patient number		164
Enigma Card Number		162
Pharmacy code		166
Forename	(Required Field)	
Surname	(Required Field)	
Initial		
Title		
Sex		
Password		
DOB	(Required Field)	
DOD		
Permanent Address first line and Post code	(Required Field)	
Permanent Telephone 1		
Permanent Telephone 2		
Fax		
Mobile		
Email		
Temp. Address		
Temp. Telephone		
Emergency Telephone		
Emergency Contact		
Emergency Relationship		
CHI No		
NHS No		
NI No		
NI Regd. Date		
Exempt Category - 1 to M		168
Service Type Required		
Delivery Instructions		
CRC Flag	(Default value 'Y')	170
Regular GP Code		
Comments		
Nursing Home Number		
Nursing Home Room No		
Nursing Home Active		
Oxygen		172

160

Figure 6

Data Structure of PDR:

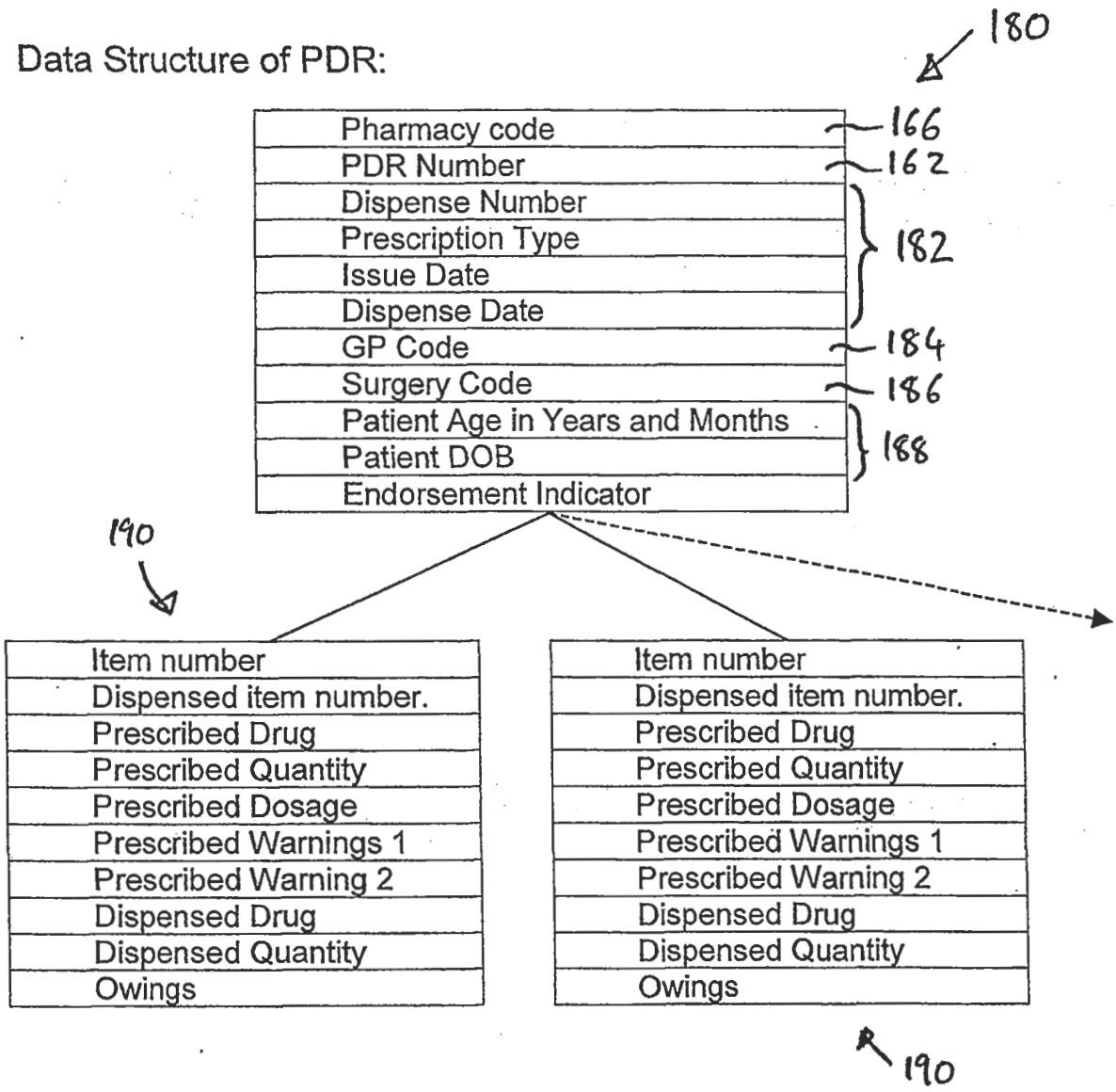


Figure 7

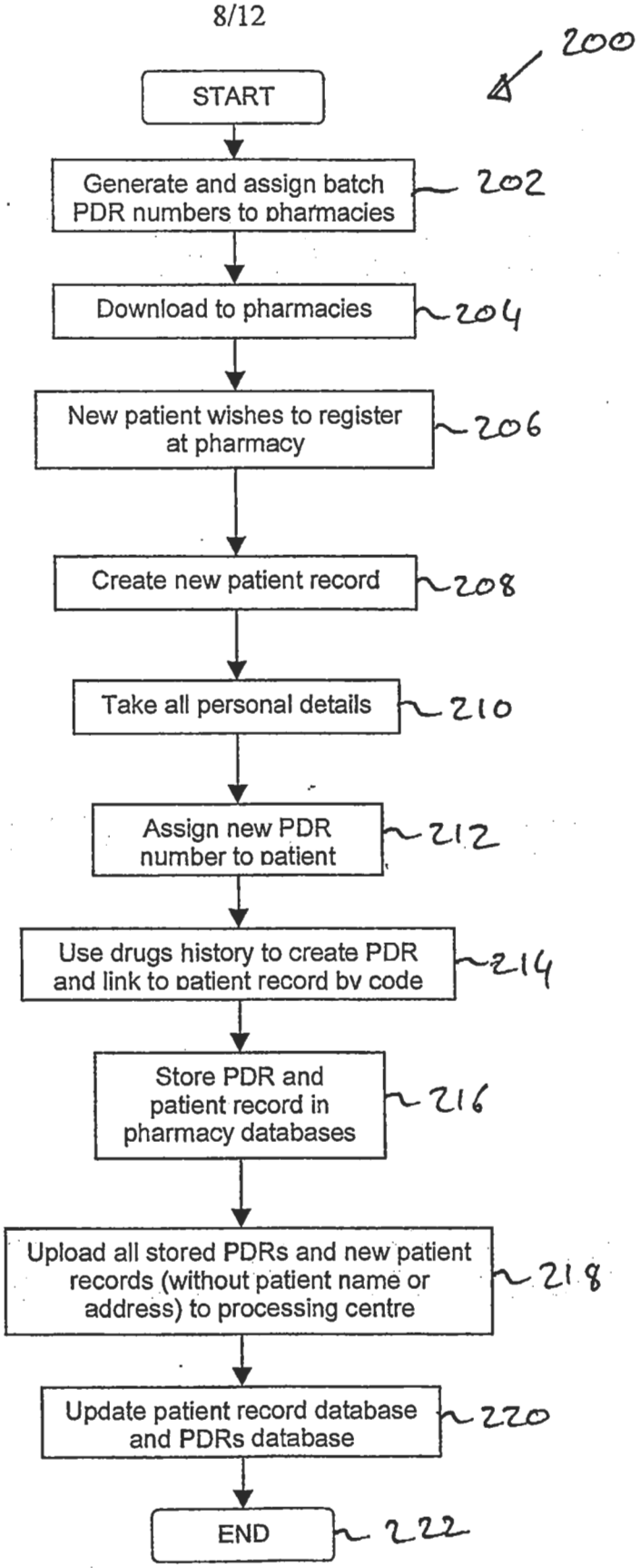

200
START
Generate and assign batch PDR numbers to pharmacies
202
Download to pharmacies
204
New patient wishes to register at pharmacy
206
Create new patient record
208
Take all personal details
210
Assign new PDR number to patient
212
Use drugs history to create PDR and link to patient record by code
214
Store PDR and patient record in pharmacy databases
216
Upload all stored PDRs and new patient records (without patient name or address) to processing centre
218
Update patient record database and PDRs database
220
END
222

Figure 8

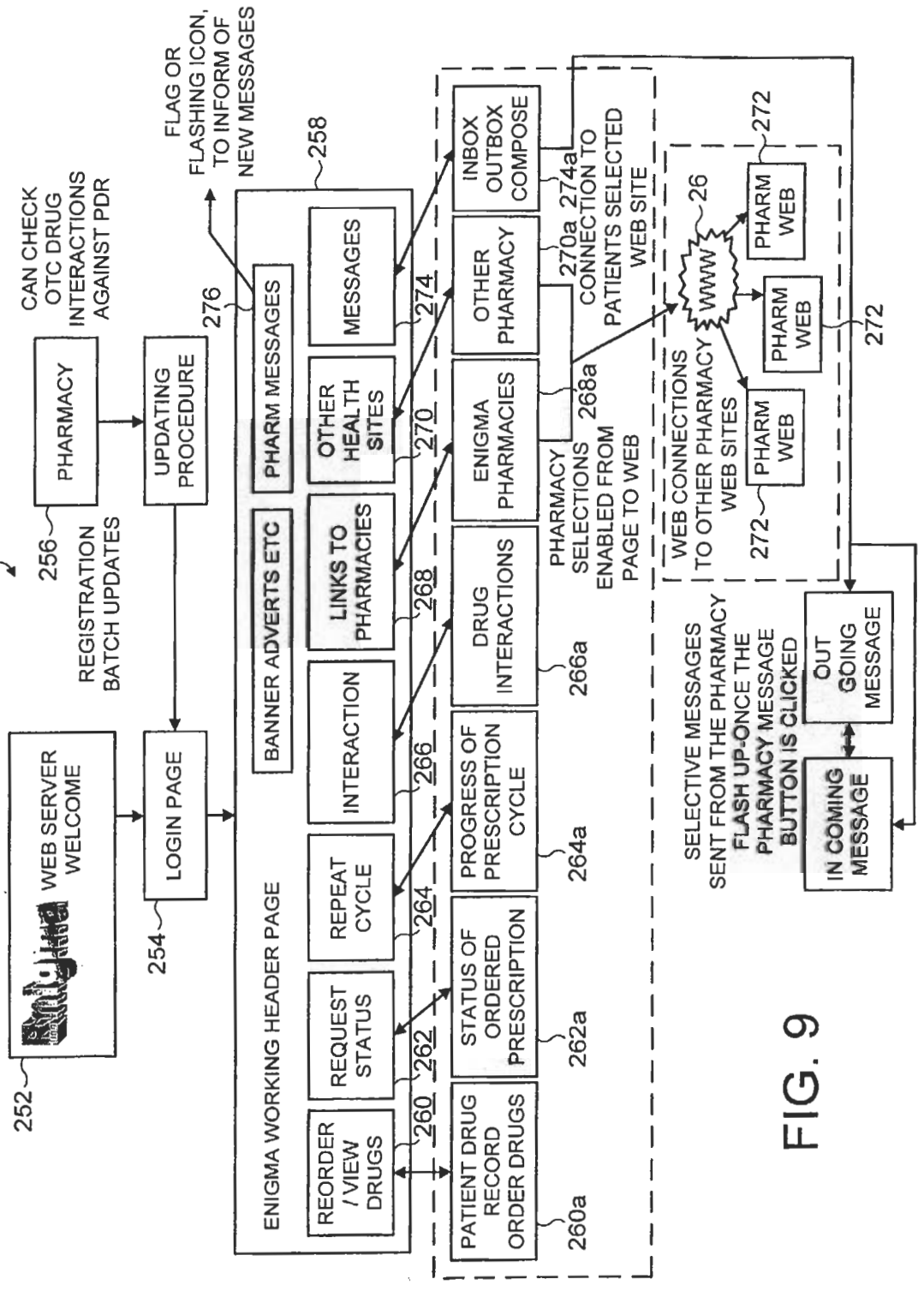

250
252
WEB SERVER WELCOME
254
LOGIN PAGE
256
REGISTRATION BATCH UPDATES
PHARMACY
CAN CHECK OTC DRUG INTERACTIONS AGAINST PDR
UPDATING PROCEDURE
276
FLAG OR FLASHING ICON, TO INFORM OF NEW MESSAGES
258
ENIGMA WORKING HEADER PAGE
BANNER ADVERTS ETC
PHARM MESSAGES
REORDER / VIEW DRUGS
REQUEST STATUS
REPEAT CYCLE
INTERACTION
LINKS TO PHARMACIES
OTHER HEALTH SITES
MESSAGES
260
262
264
266
268
270
274
PATIENT DRUG RECORD ORDER DRUGS
STATUS OF ORDERED PRESCRIPTION
PROGRESS OF PRESCRIPTION CYCLE
DRUG INTERACTIONS
ENIGMA PHARMACIES
OTHER PHARMACY
INBOX OUTBOX COMPOSE
260a
262a
264a
266a
268a
270a
274a
PHARMACY SELECTIONS ENABLED FROM PAGE TO WEB
CONNECTION TO PATIENTS SELECTED WEB SITE
WEB CONNECTIONS TO OTHER PHARMACY WEB SITES
WWW
26
PHARM WEB
272
SELECTIVE MESSAGES SENT FROM THE PHARMACY FLASH UP-ONCE THE PHARMACY MESSAGE BUTTON IS CLICKED
IN COMING MESSAGE
OUT GOING MESSAGE

FIG. 9

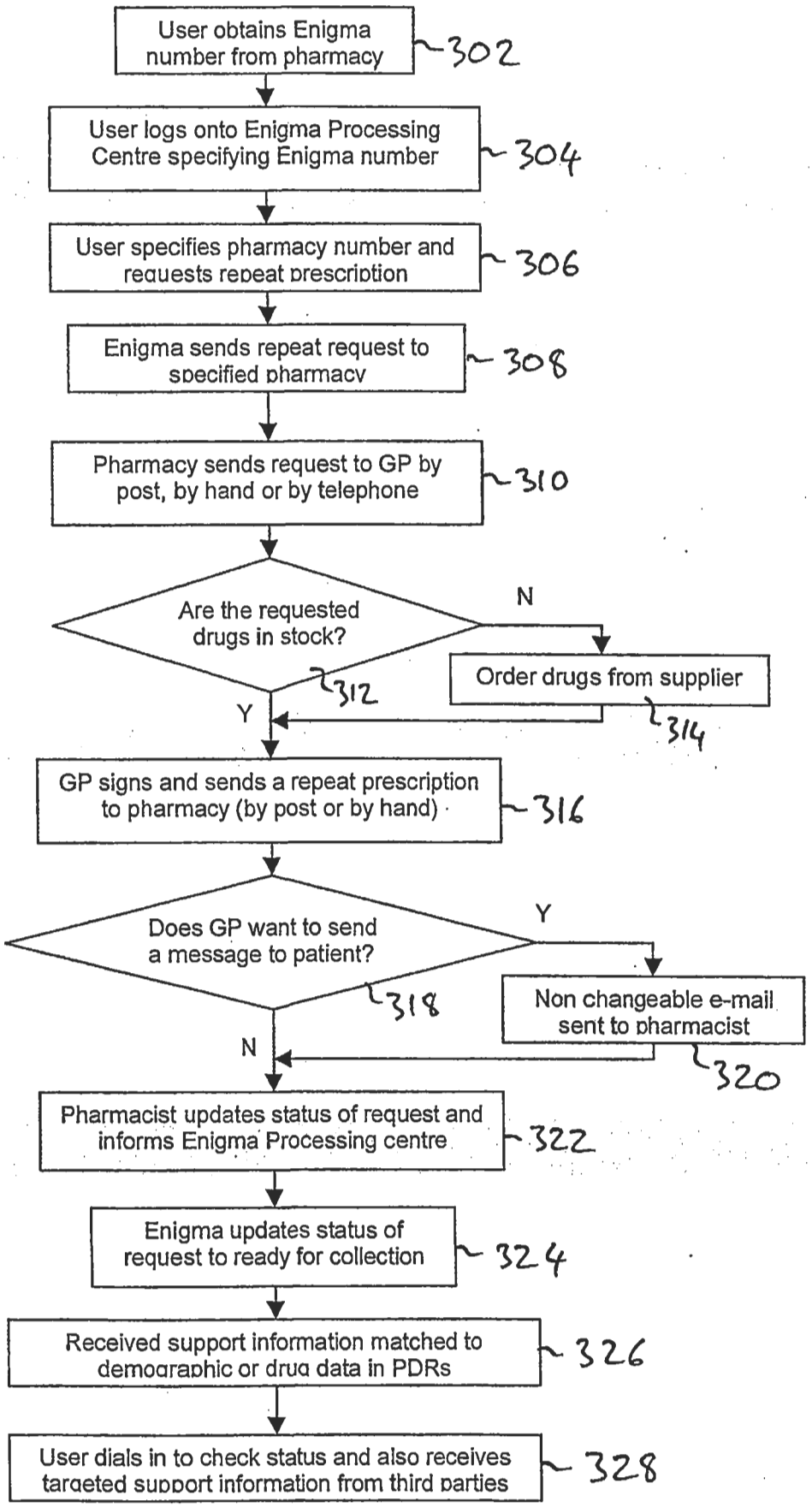

User obtains Enigma number from pharmacy
302
User logs onto Enigma Processing Centre specifying Enigma number
304
User specifies pharmacy number and requests repeat prescription
306
Enigma sends repeat request to specified pharmacy
308
Pharmacy sends request to GP by post, by hand or by telephone
310
Are the requested drugs in stock?
312
N
Order drugs from supplier
314
Y
GP signs and sends a repeat prescription to pharmacy (by post or by hand)
316
Does GP want to send a message to patient?
318
Y
Non changeable e-mail sent to pharmacist
320
N
Pharmacist updates status of request and informs Enigma Processing centre
322
Enigma updates status of request to ready for collection
324
Received support information matched to demographic or drug data in PDRs
326
User dials in to check status and also receives targeted support information from third parties
328

Figure 10

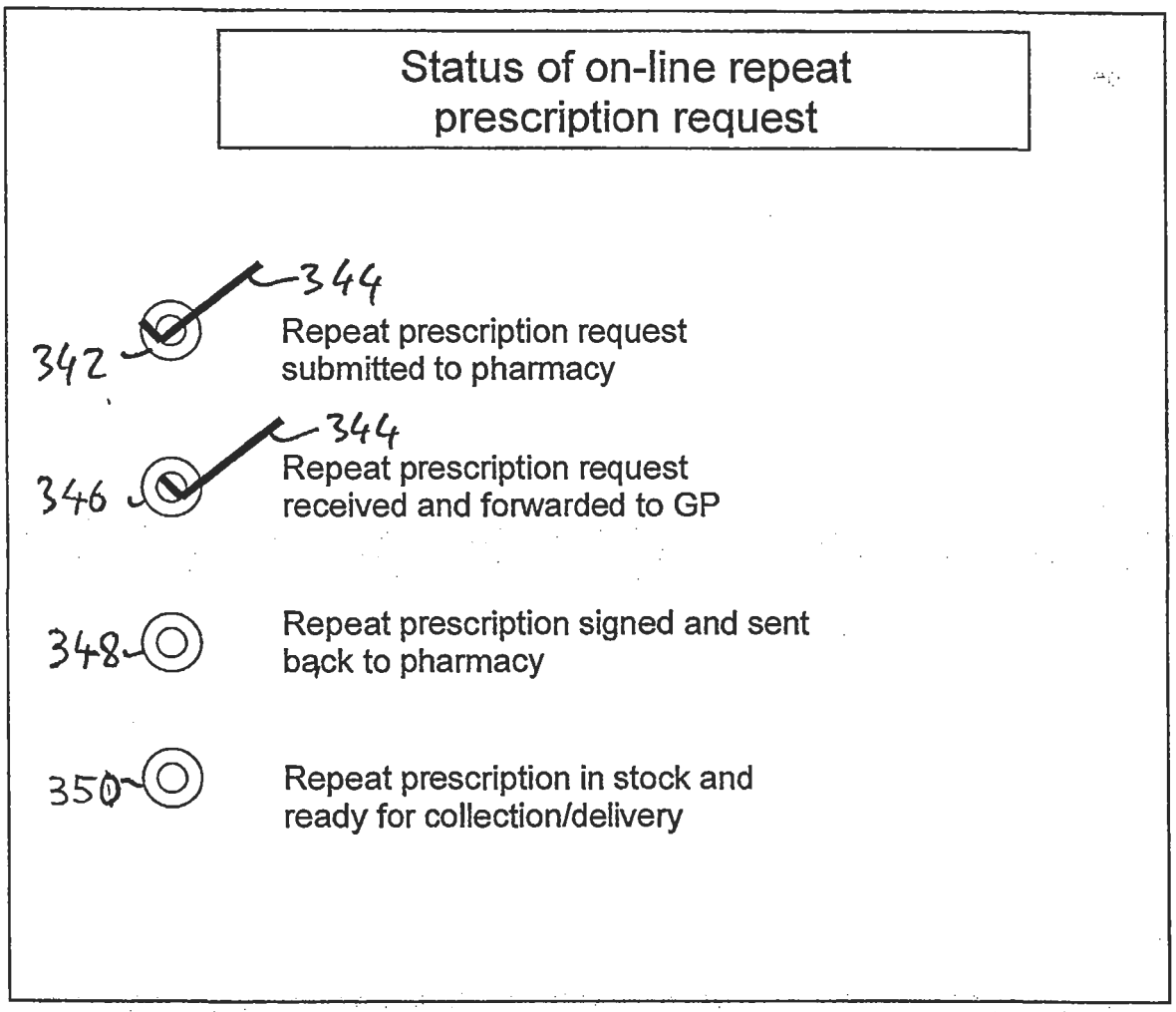

Status of on-line repeat prescription request
342
344
Repeat prescription request submitted to pharmacy
346
344
Repeat prescription request received and forwarded to GP
348
Repeat prescription signed and sent back to pharmacy
350
Repeat prescription in stock and ready for collection/delivery

Figure 11

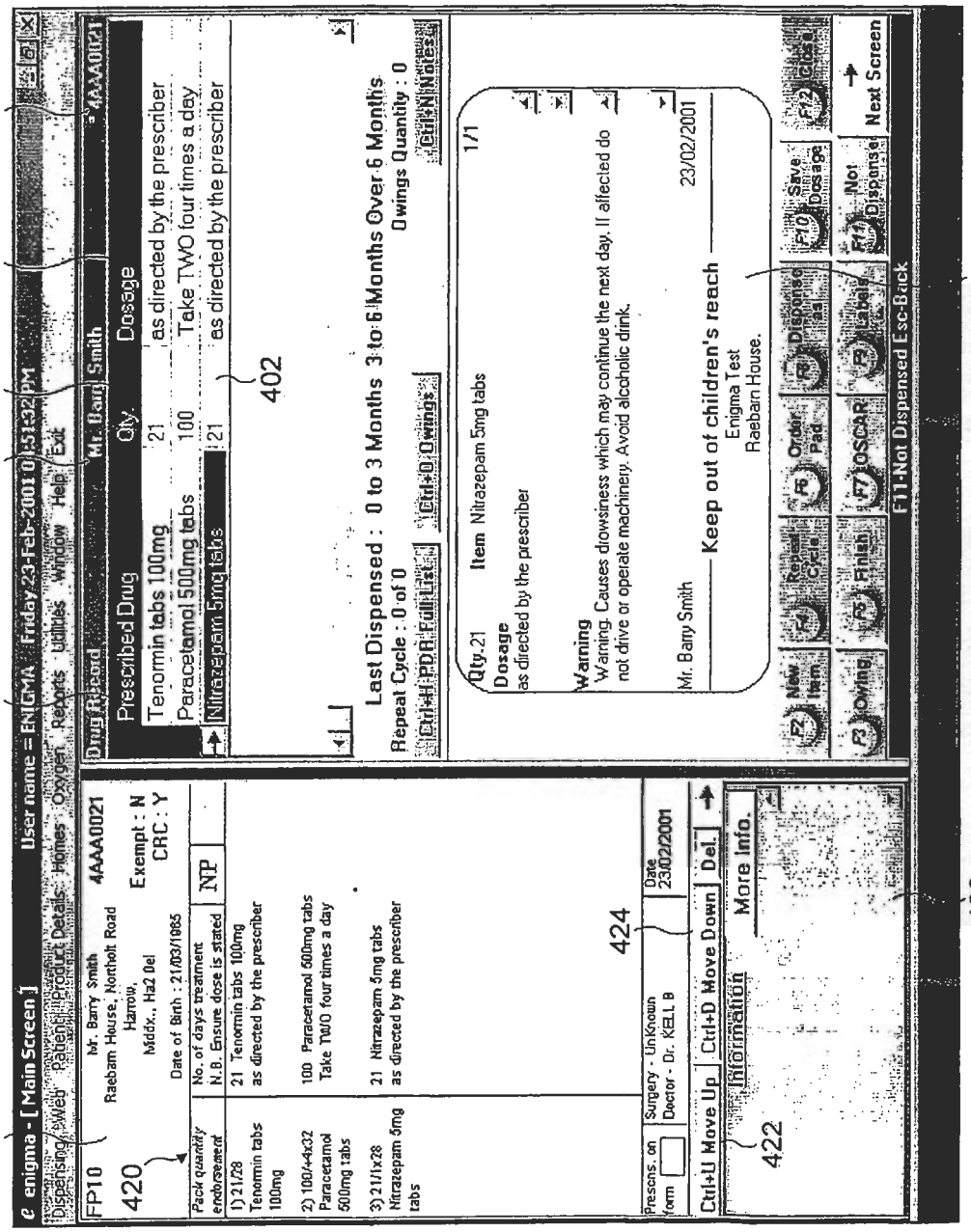

404
410
416
412
414
418
e enigma - [Main Screen]
User name = ENIGMA Friday 23-Feb-2001 0:51:32 PM
Dispensing Web Patient Product Details Homes Oxygen Reports Utilities Window Help Exit
FP10
420
Mr. Barry Smith
Raebarn House, Northolt Road
Harrow,
Middx., Ha2 0el
Date of Birth : 21/03/1965
4AAA0021
Exempt : N
CRC : Y
Pack quantity endorsement
No. of days treatment
N.B. Ensure dose is stated
NP
1) 21/28 Tenormin tabs 100mg
as directed by the prescriber
2) 100/4x32 Paracetamol 500mg tabs
Take TWO four times a day
3) 21/1x28 Nitrazepam 5mg tabs
as directed by the prescriber
424
Prescrs. on form
Surgery - UnKnown
Doctor - Dr. KELL B
Date 23/02/2001
Ctrl+U Move Up
Ctrl+D Move Down
Del.
422
Information
More Info.
Drug Record
Mr. Barry Smith
4AAA0021
Prescribed Drug
Qty.
Dosage
Tenormin tabs 100mg
21
as directed by the prescriber
Paracetamol 500mg tabs
100
Take TWO four times a day
Nitrazepam 5mg tabs
21
as directed by the prescriber
402
Last Dispensed : 0 to 3 Months 3 to 6 Months Over 6 Months
Repeat Cycle : 0 of 0
Owings Quantity : 0
Ctrl+H PPA Full List
Ctrl+O Owings
Ctrl+N Notes
Qty.21 Item Nitrazepam 5mg tabs 1/1
Dosage
as directed by the prescriber
Warning
Warning. Causes drowsiness which may continue the next day. If affected do not drive or operate machinery. Avoid alcoholic drink.
Mr. Barry Smith 23/02/2001
Keep out of children's reach
Enigma Test
Raebarn House.
F2 New Item
F4 Repeat Cycle
F6 Order Pad
F8 Dispensed as
F10 Save Dosage
F12 Close
F3 OWING
F5 Finish
F7 OSCAR
F9 Label
F11 Not Dispense
Next Screen
F11-Not Dispensed Esc-Back
400
408
406

FIG. 12