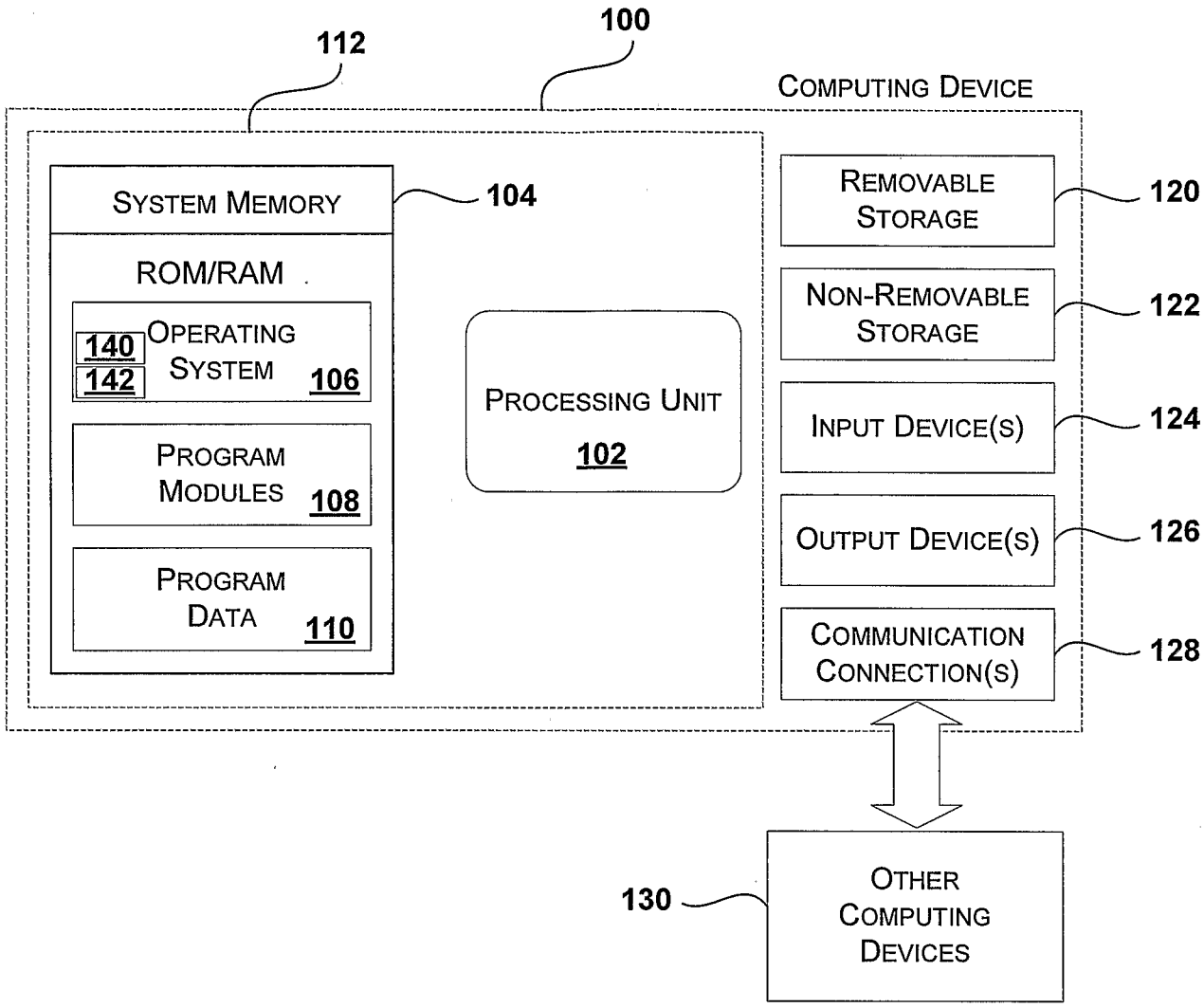

112
100
COMPUTING DEVICE
SYSTEM MEMORY
104
ROM/RAM
140
142
OPERATING SYSTEM
106
PROGRAM MODULES
108
PROGRAM DATA
110
PROCESSING UNIT
102
REMOVABLE STORAGE
120
NON-REMOVABLE STORAGE
122
INPUT DEVICE(S)
124
OUTPUT DEVICE(S)
126
COMMUNICATION CONNECTION(S)
128
130
OTHER COMPUTING DEVICES

Fig. 1

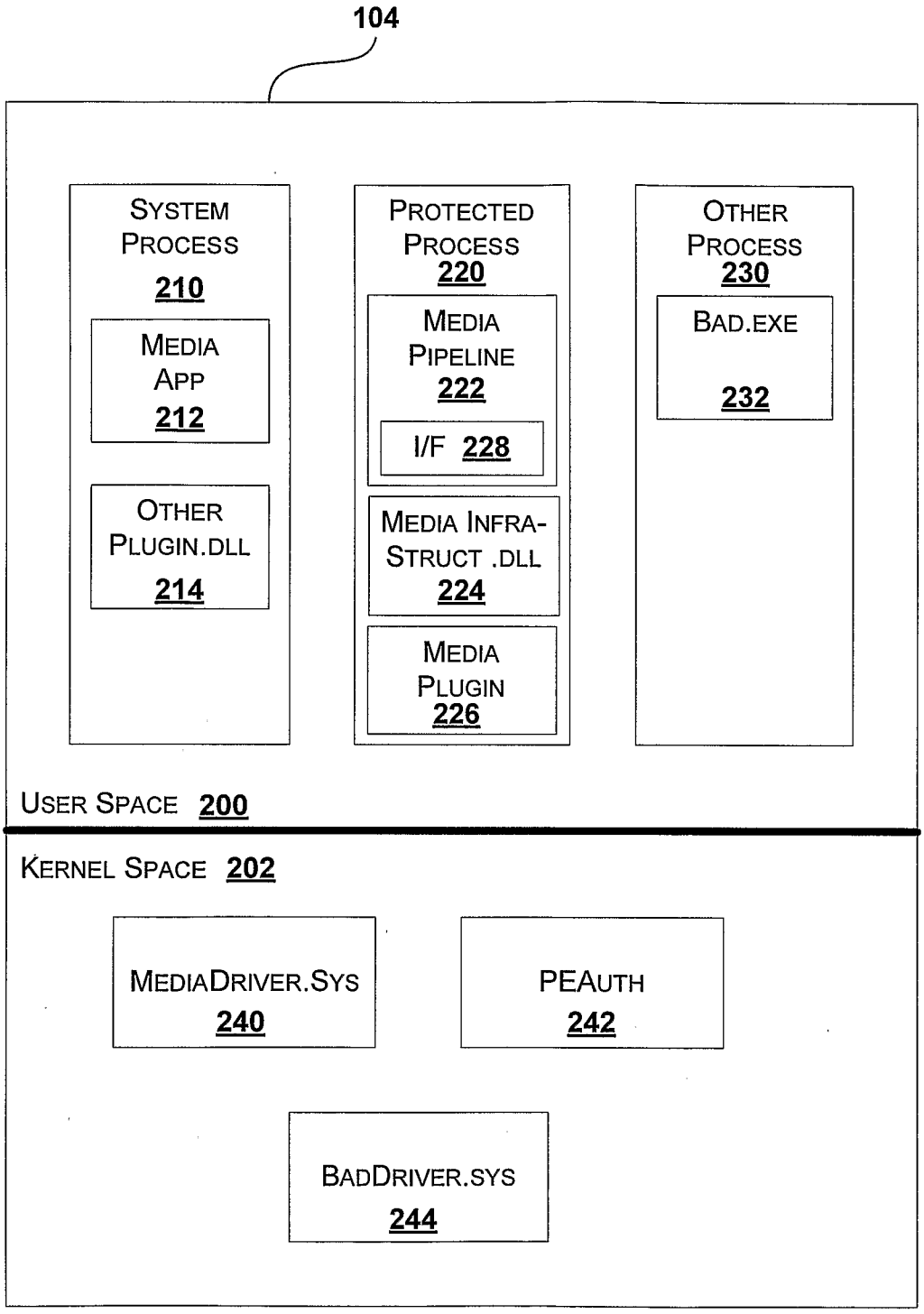

104
SYSTEM PROCESS
210
MEDIA APP
212
OTHER PLUGIN.DLL
214
PROTECTED PROCESS
220
MEDIA PIPELINE
222
I/F 228
MEDIA INFRA-STRUCT .DLL
224
MEDIA PLUGIN
226
OTHER PROCESS
230
BAD.EXE
232
USER SPACE 200
KERNEL SPACE 202
MEDIADRIVER.SYS
240
PEAUTH
242
BADDRIVER.SYS
244

Fig. 2

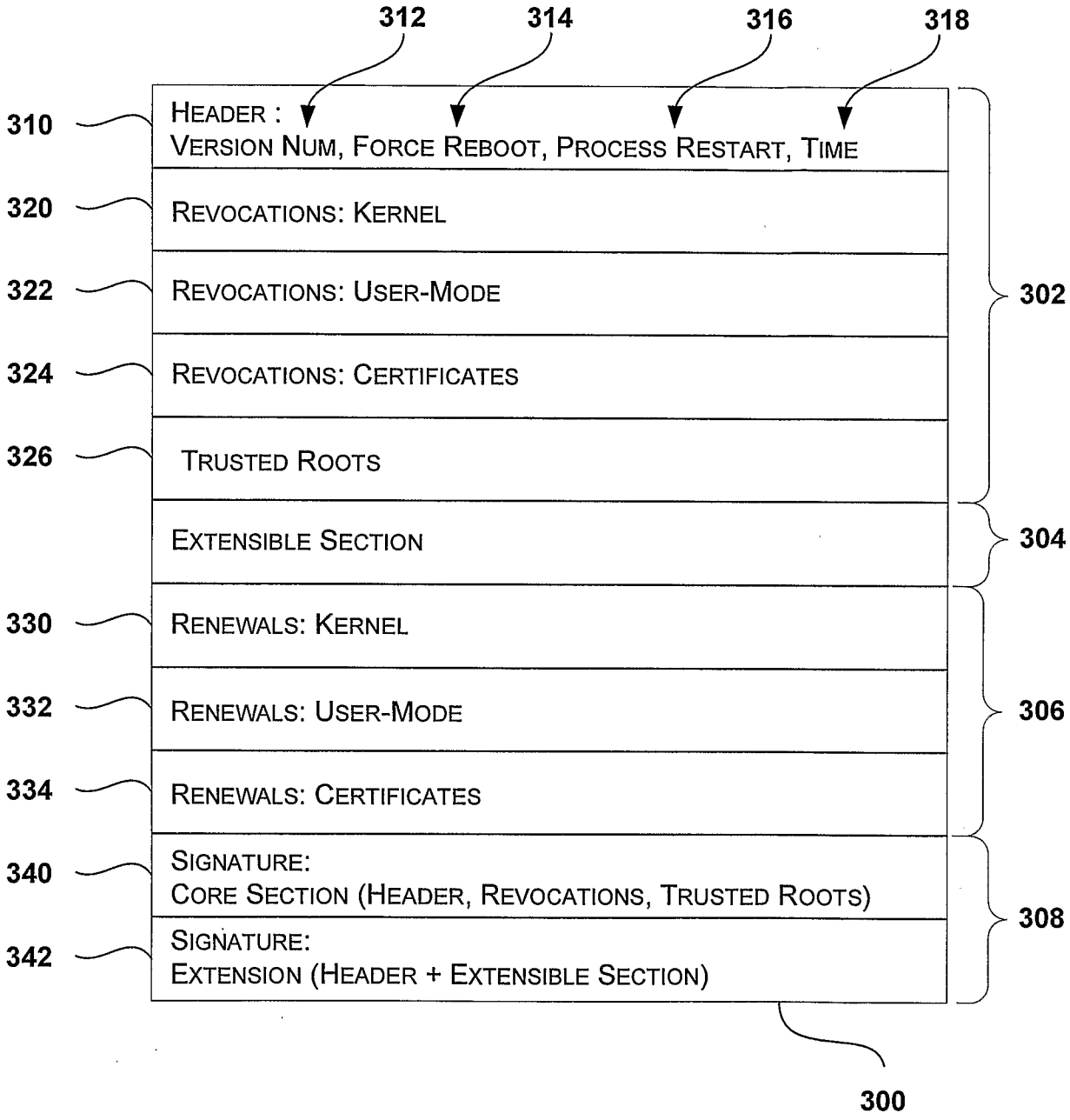

312
314
316
318
310
HEADER :
VERSION NUM, FORCE REBOOT, PROCESS RESTART, TIME
320
REVOCATIONS: KERNEL
322
REVOCATIONS: USER-MODE
324
REVOCATIONS: CERTIFICATES
326
TRUSTED ROOTS
302
EXTENSIBLE SECTION
304
330
RENEWALS: KERNEL
332
RENEWALS: USER-MODE
334
RENEWALS: CERTIFICATES
306
340
SIGNATURE:
CORE SECTION (HEADER, REVOCATIONS, TRUSTED ROOTS)
342
SIGNATURE:
EXTENSION (HEADER + EXTENSIBLE SECTION)
308
300

Fig. 3

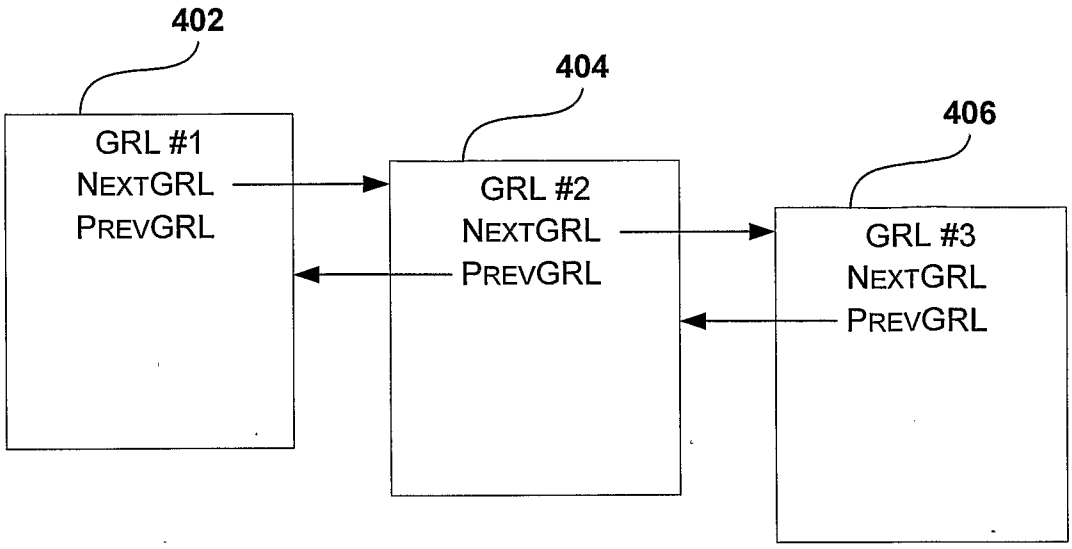

402
404
406
GRL #1
NEXTGRL
PREVGRL
GRL #2
NEXTGRL
PREVGRL
GRL #3
NEXTGRL
PREVGRL

Fig. 4

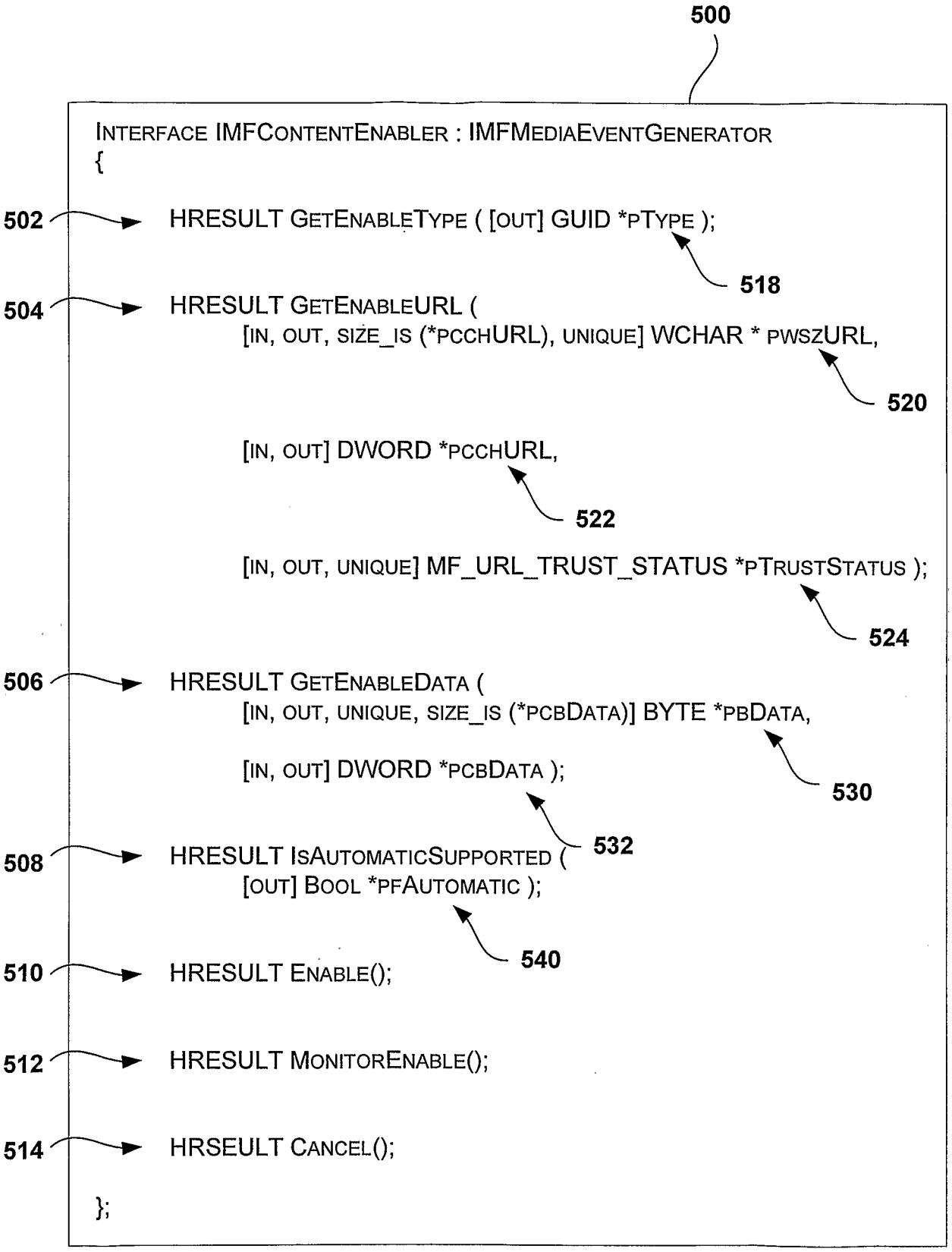

500
INTERFACE IMFCONTENTENABLER : IMFMEDIAEVENTGENERATOR
{
502
HRESULT GETENABLETYPE ([OUT] GUID *PTYPE);
518
504
HRESULT GETENABLEURL (
[IN, OUT, SIZE_IS (*PCCHURL), UNIQUE] WCHAR * PWSZURL,
520
[IN, OUT] DWORD *PCCHURL,
522
[IN, OUT, UNIQUE] MF_URL_TRUST_STATUS *PTRUSTSTATUS);
524
506
HRESULT GETENABLEDATA (
[IN, OUT, UNIQUE, SIZE_IS (*PCBDATA)] BYTE *PBDATA,
530
[IN, OUT] DWORD *PCBDATA);
532
508
HRESULT ISAUTOMATICSUPPORTED (
[OUT] BOOL *PFAUTOMATIC);
540
510
HRESULT ENABLE();
512
HRESULT MONITORENABLE();
514
HRSEULT CANCEL();
};

Fig. 5

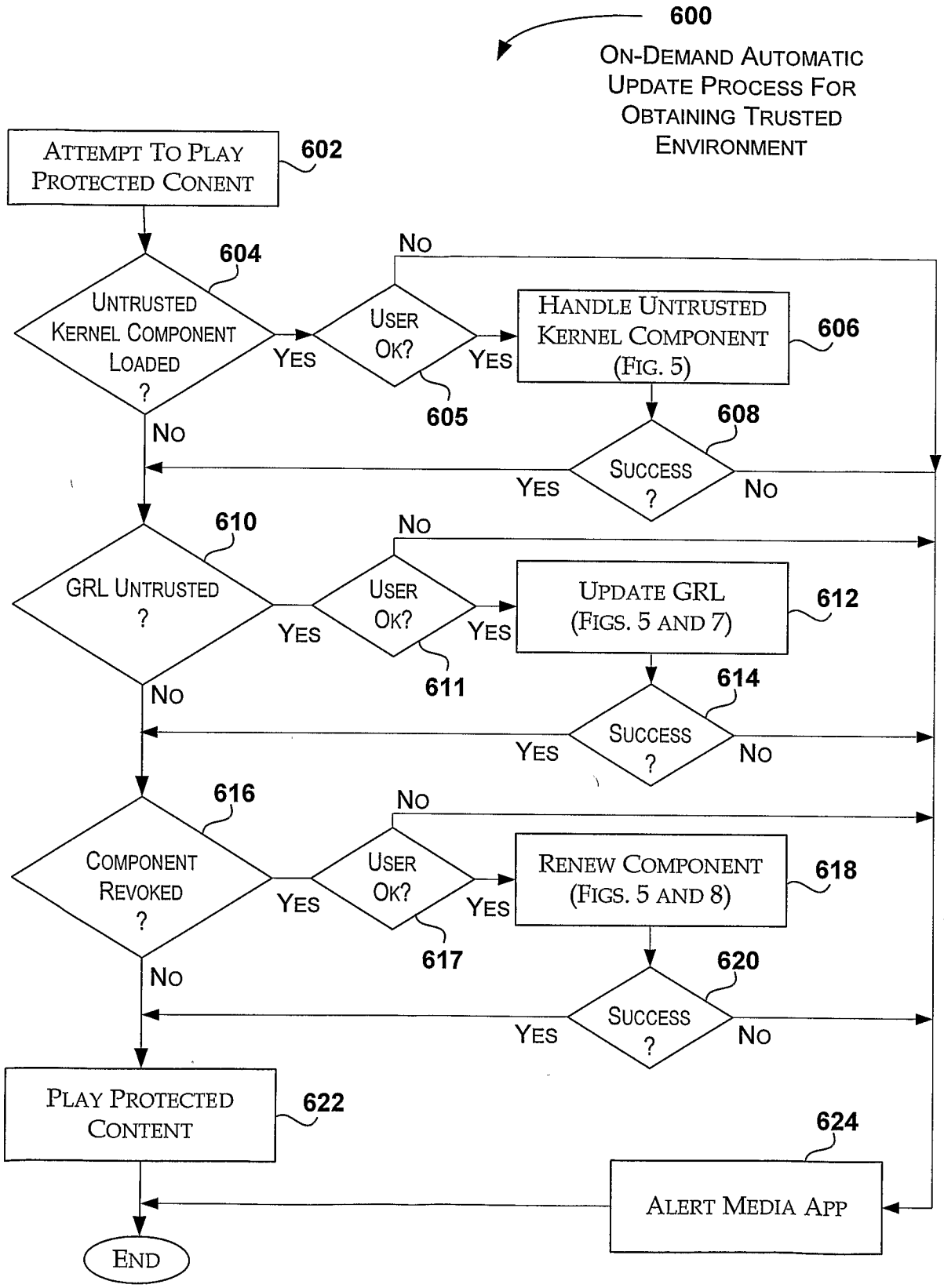

600
ON-DEMAND AUTOMATIC UPDATE PROCESS FOR OBTAINING TRUSTED ENVIRONMENT
ATTEMPT TO PLAY PROTECTED CONENT
602
UNTRUSTED KERNEL COMPONENT LOADED ?
604
YES
NO
USER OK?
605
YES
NO
HANDLE UNTRUSTED KERNEL COMPONENT (FIG. 5)
606
SUCCESS ?
608
YES
NO
GRL UNTRUSTED ?
610
YES
NO
USER OK?
611
YES
NO
UPDATE GRL (FIGS. 5 AND 7)
612
SUCCESS ?
614
YES
NO
COMPONENT REVOKED ?
616
YES
NO
USER OK?
617
YES
NO
RENEW COMPONENT (FIGS. 5 AND 8)
618
SUCCESS ?
620
YES
NO
PLAY PROTECTED CONTENT
622
ALERT MEDIA APP
624
END

Fig. 6

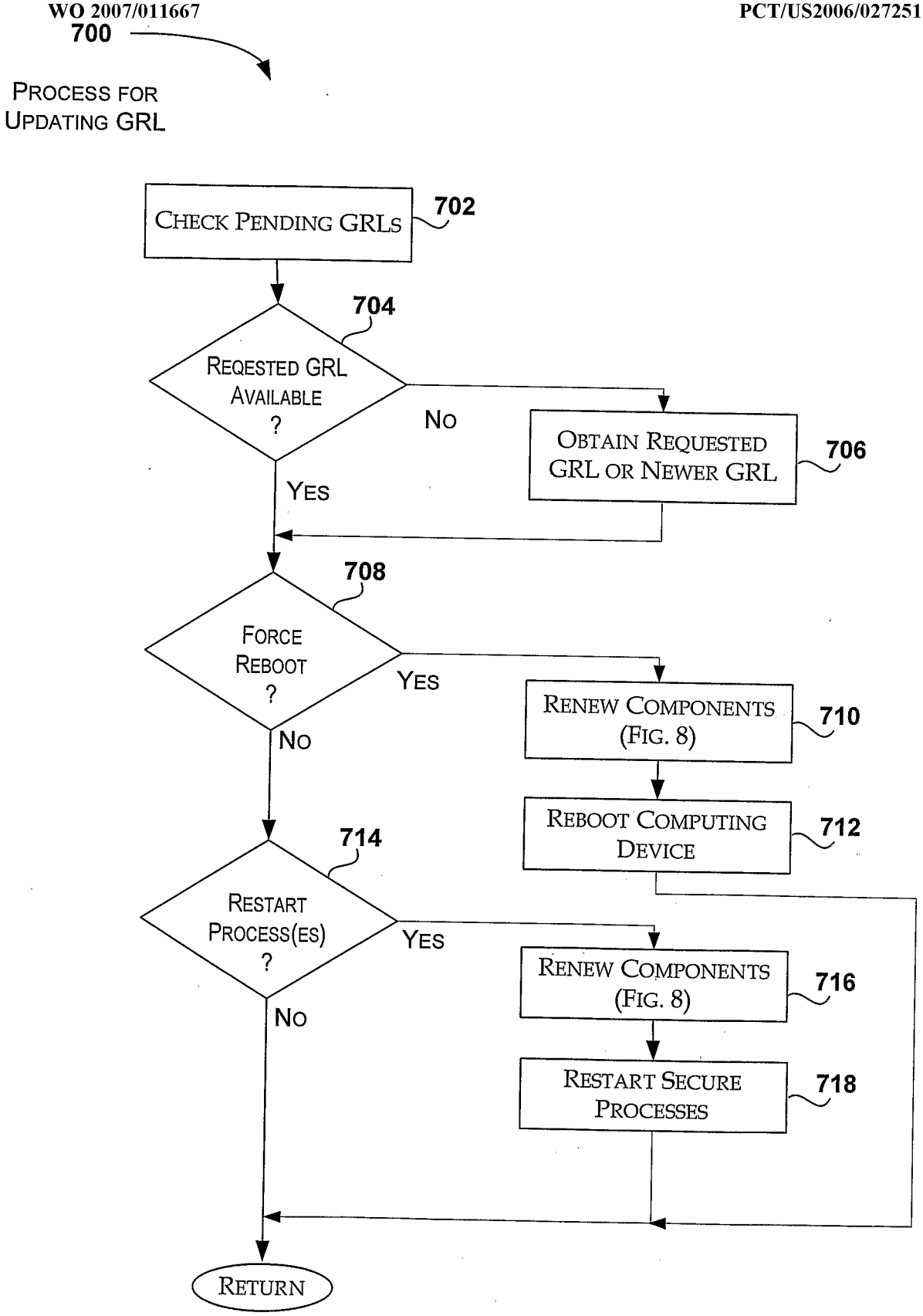

700
PROCESS FOR UPDATING GRL
CHECK PENDING GRLs
702
704
REQESTED GRL AVAILABLE ?
NO
OBTAIN REQUESTED GRL OR NEWER GRL
706
YES
708
FORCE REBOOT ?
YES
RENEW COMPONENTS (FIG. 8)
710
NO
REBOOT COMPUTING DEVICE
712
714
RESTART PROCESS(ES) ?
YES
RENEW COMPONENTS (FIG. 8)
716
NO
RESTART SECURE PROCESSES
718
RETURN

Fig. 7

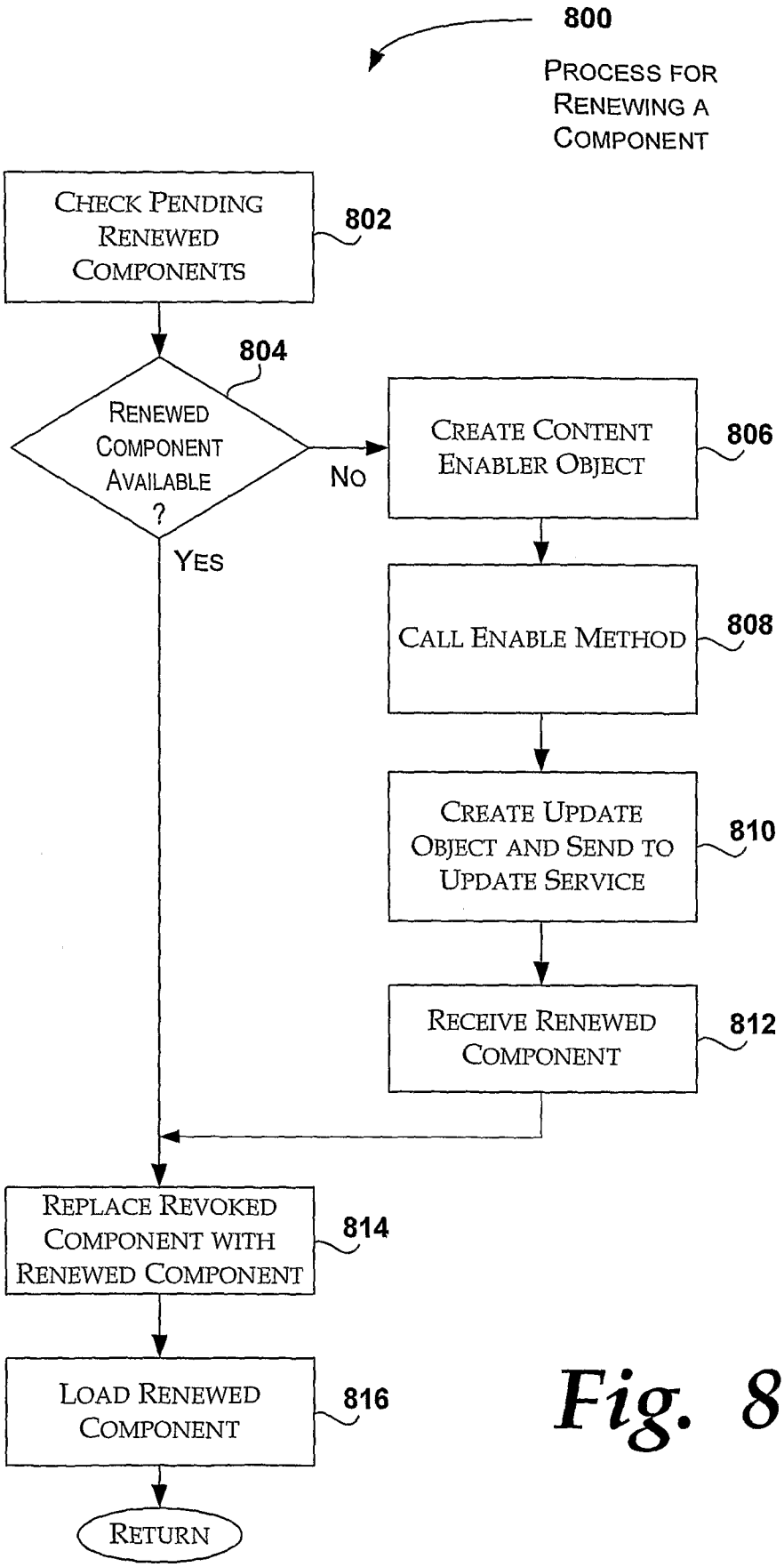

800
PROCESS FOR RENEWING A COMPONENT
CHECK PENDING RENEWED COMPONENTS
802
804
RENEWED COMPONENT AVAILABLE ?
NO
YES
CREATE CONTENT ENABLER OBJECT
806
CALL ENABLE METHOD
808
CREATE UPDATE OBJECT AND SEND TO UPDATE SERVICE
810
RECEIVE RENEWED COMPONENT
812
REPLACE REVOKED COMPONENT WITH RENEWED COMPONENT
814
LOAD RENEWED COMPONENT
816
RETURN

Fig. 8

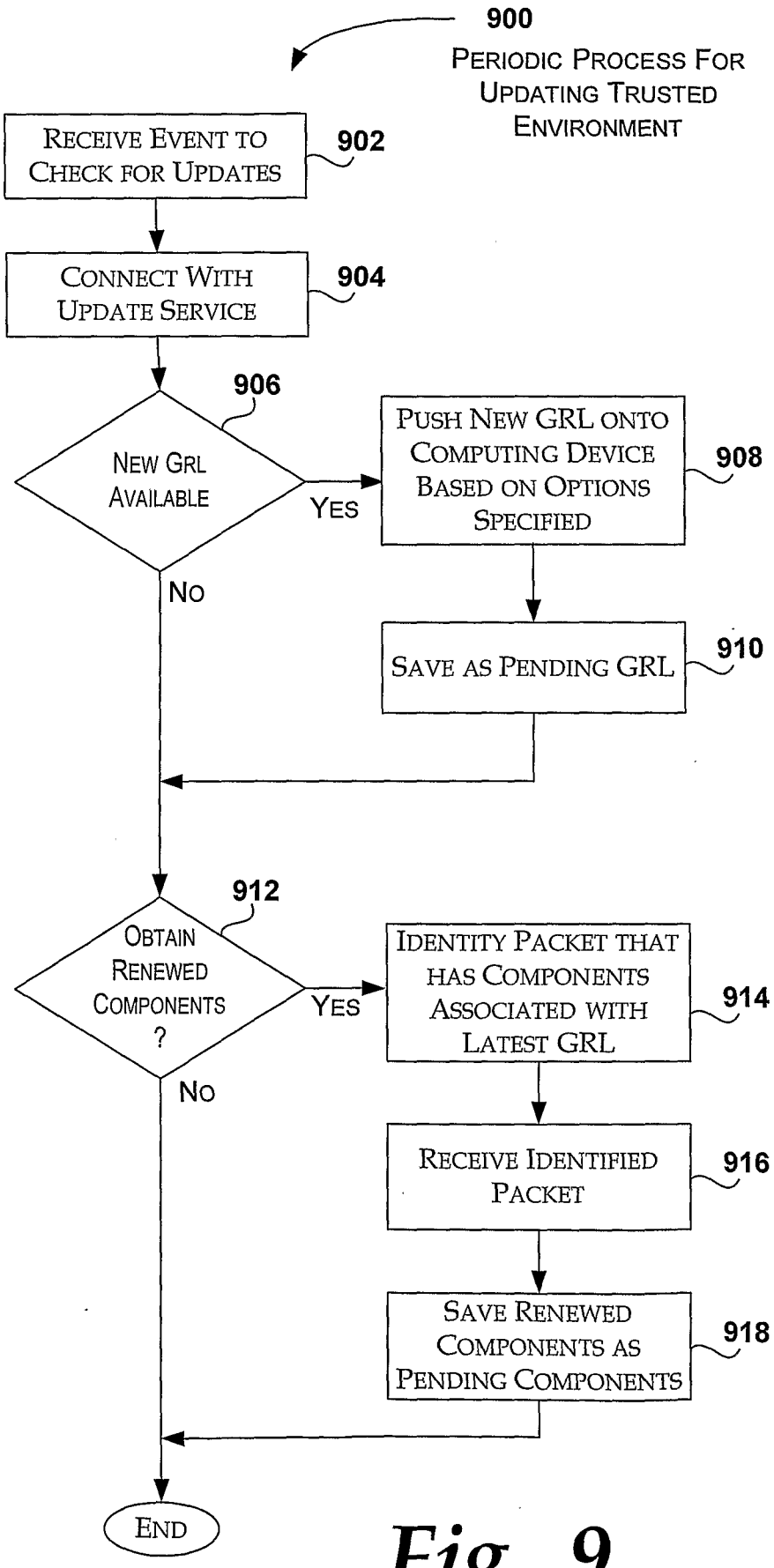

900
PERIODIC PROCESS FOR UPDATING TRUSTED ENVIRONMENT
RECEIVE EVENT TO CHECK FOR UPDATES
902
CONNECT WITH UPDATE SERVICE
904
906
NEW GRL AVAILABLE
YES
NO
PUSH NEW GRL ONTO COMPUTING DEVICE BASED ON OPTIONS SPECIFIED
908
SAVE AS PENDING GRL
910
912
OBTAIN RENEWED COMPONENTS ?
YES
NO
IDENTITY PACKET THAT HAS COMPONENTS ASSOCIATED WITH LATEST GRL
914
RECEIVE IDENTIFIED PACKET
916
SAVE RENEWED COMPONENTS AS PENDING COMPONENTS
918
END

Fig. 9

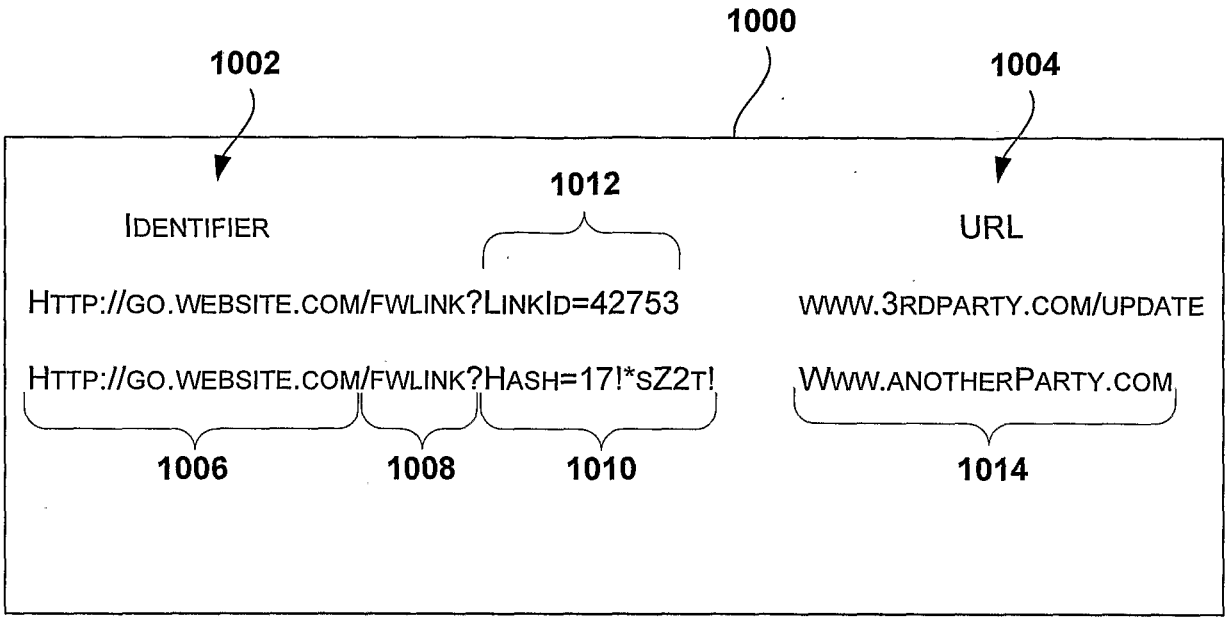

1000
1002
1004
1012
IDENTIFIER
URL
HTTP://GO.WEBSITE.COM/FWLINK?LINKID=42753
WWW.3RDPARTY.COM/UPDATE
HTTP://GO.WEBSITE.COM/FWLINK?HASH=17!*SZ2T!
WWW.ANOTHERPARTY.COM
1006
1008
1010
1014

Fig. 10

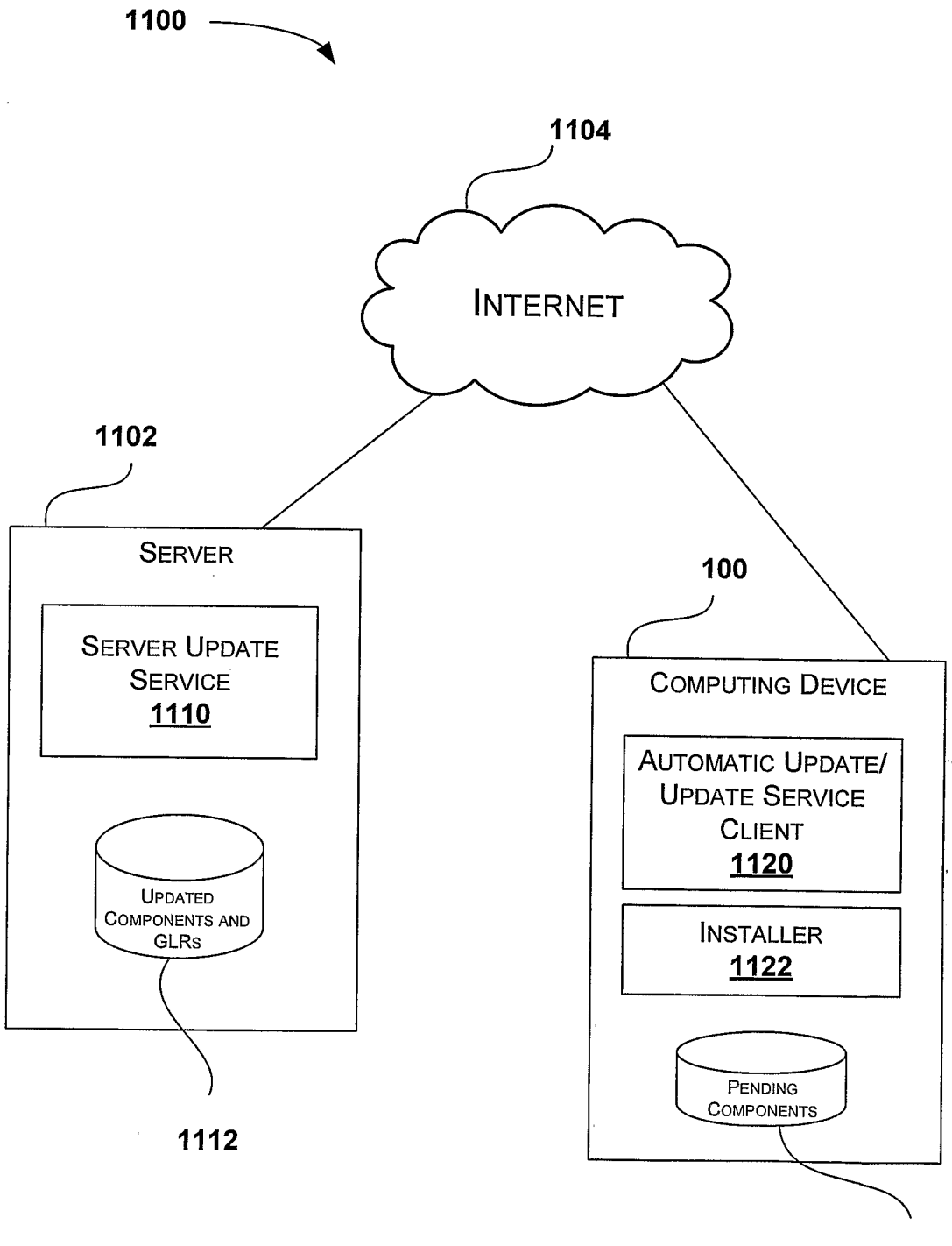

1100
1104
INTERNET
1102
SERVER
SERVER UPDATE SERVICE
1110
UPDATED COMPONENTS AND GLRS
1112
100
COMPUTING DEVICE
AUTOMATIC UPDATE/ UPDATE SERVICE CLIENT
1120
INSTALLER
1122
PENDING COMPONENTS
1124

Fig. 11