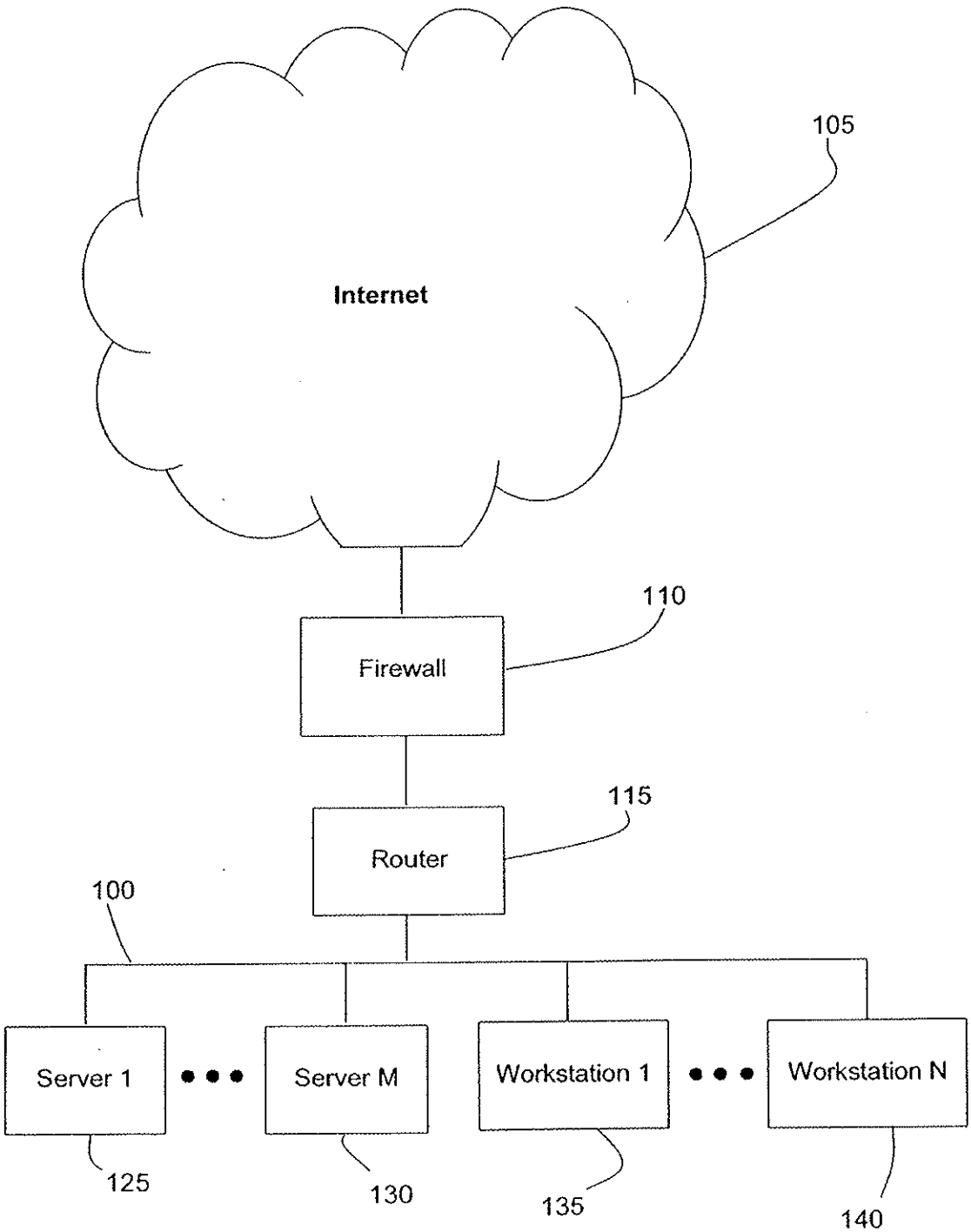

105
Internet
110
Firewall
115
Router
100
Server 1
Server M
Workstation 1
Workstation N
125
130
135
140

Figure 1

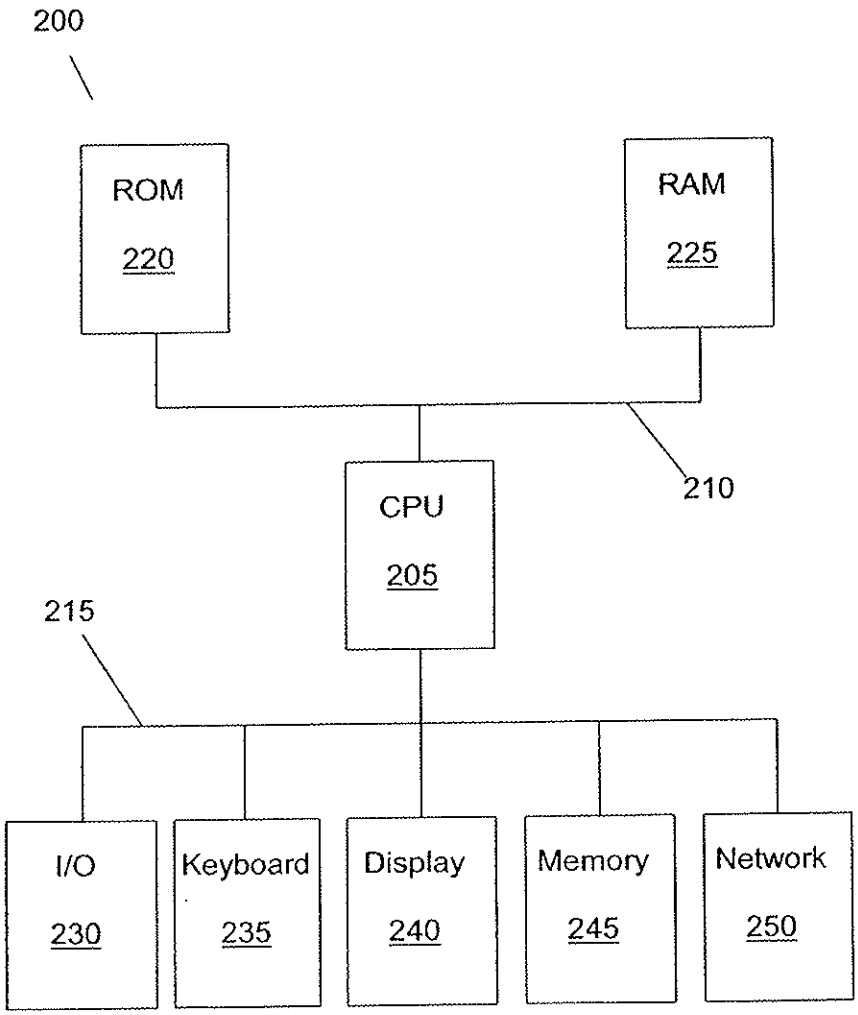

200
ROM
220
RAM
225
210
CPU
205
215
I/O
230
Keyboard
235
Display
240
Memory
245
Network
250

Figure 2

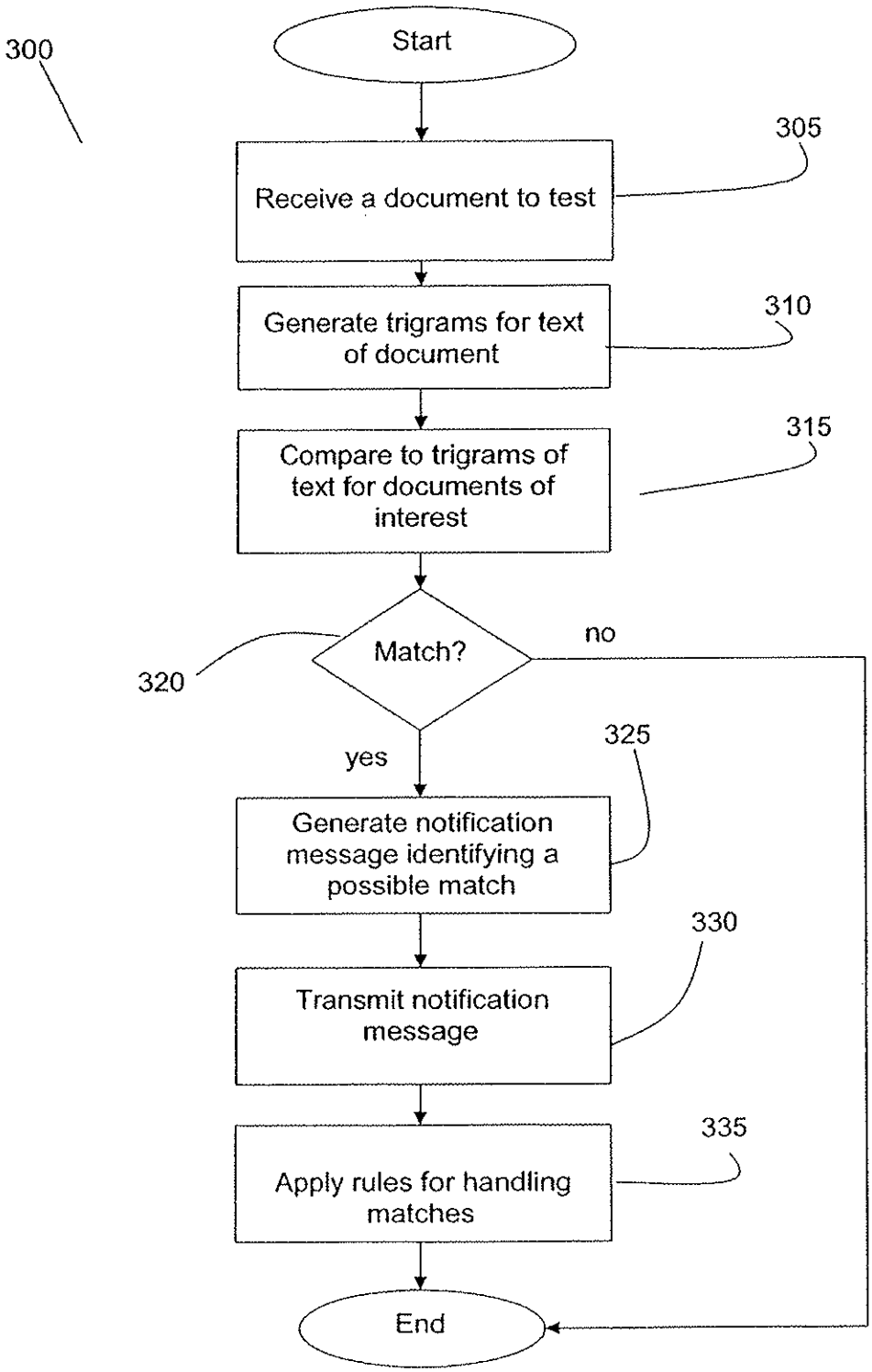

300
Start
305
Receive a document to test
310
Generate trigrams for text of document
315
Compare to trigrams of text for documents of interest
320
Match?
no
yes
325
Generate notification message identifying a possible match
330
Transmit notification message
335
Apply rules for handling matches
End

Figure 3

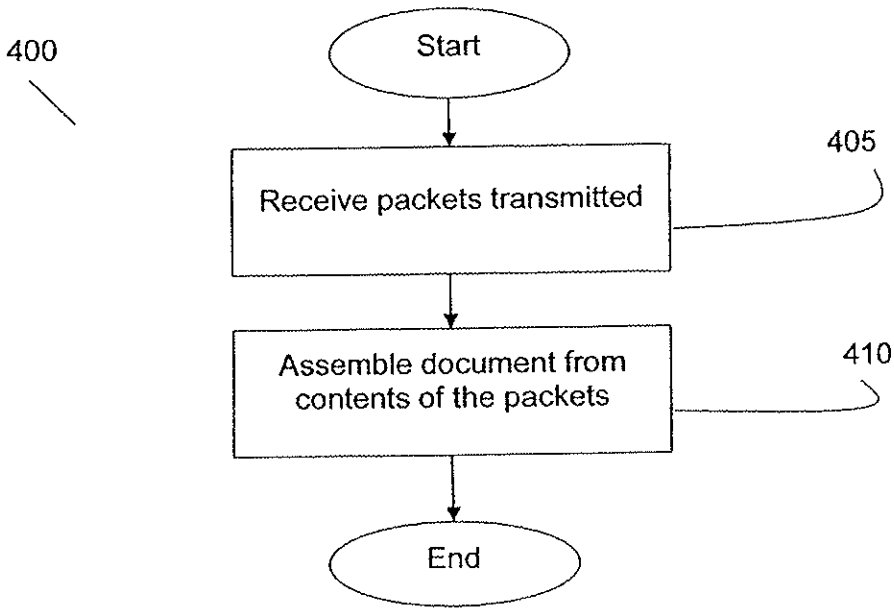

400
Start
Receive packets transmitted
405
Assemble document from contents of the packets
410
End

Figure 4

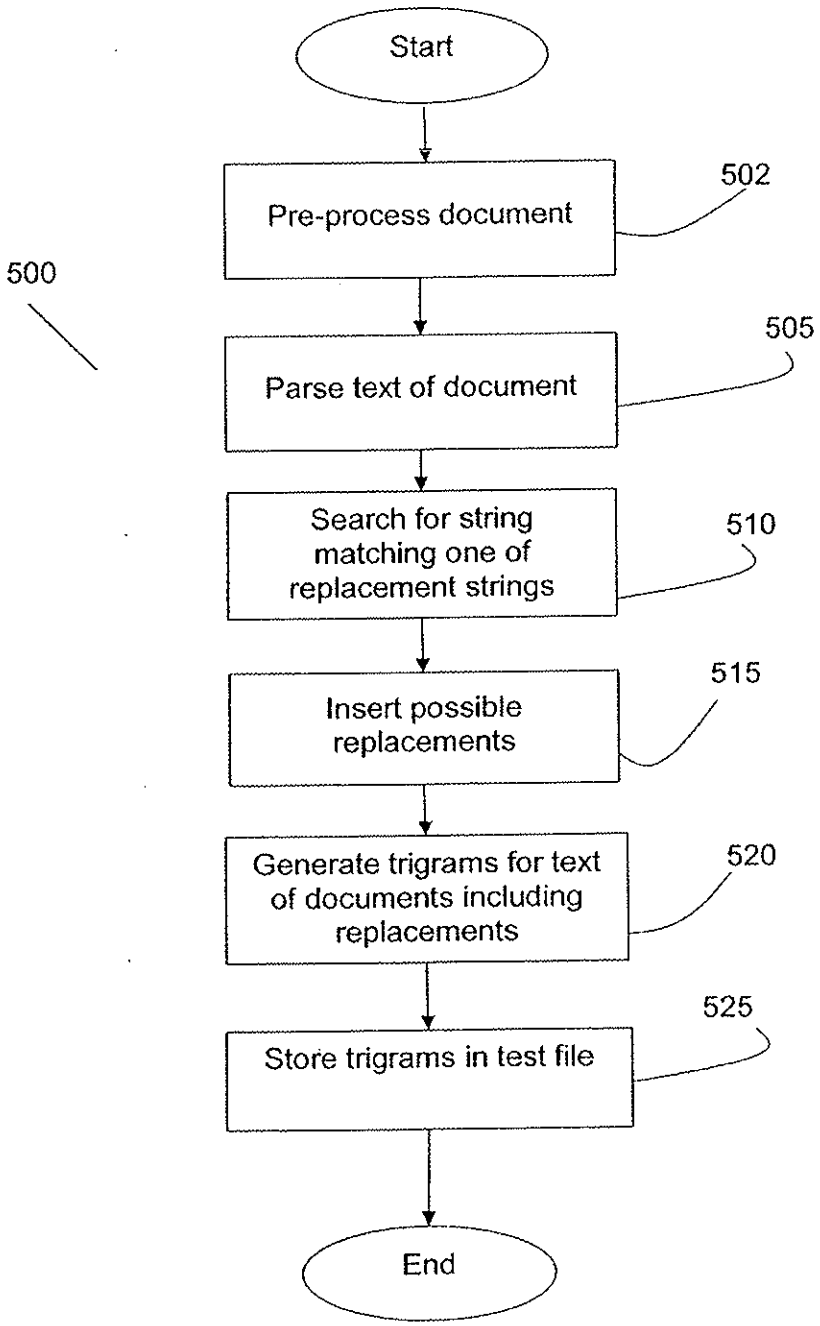

Start
Pre-process document
502
500
Parse text of document
505
Search for string matching one of replacement strings
510
Insert possible replacements
515
Generate trigrams for text of documents including replacements
520
Store trigrams in test file
525
End

Figure 5

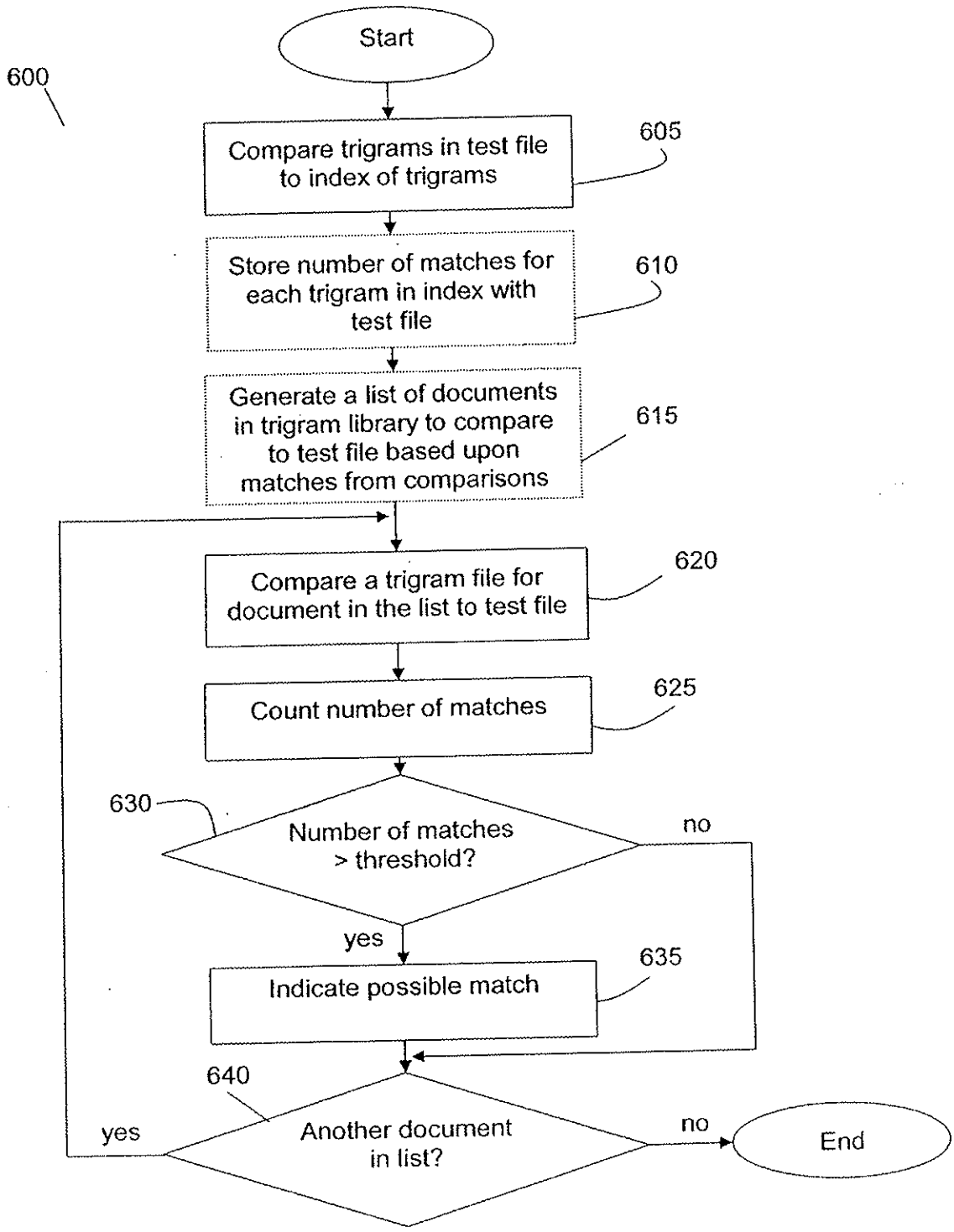

600
Start
Compare trigrams in test file to index of trigrams
605
Store number of matches for each trigram in index with test file
610
Generate a list of documents in trigram library to compare to test file based upon matches from comparisons
615
Compare a trigram file for document in the list to test file
620
Count number of matches
625
630
Number of matches > threshold?
no
yes
Indicate possible match
635
640
Another document in list?
yes
no
End

Figure 6

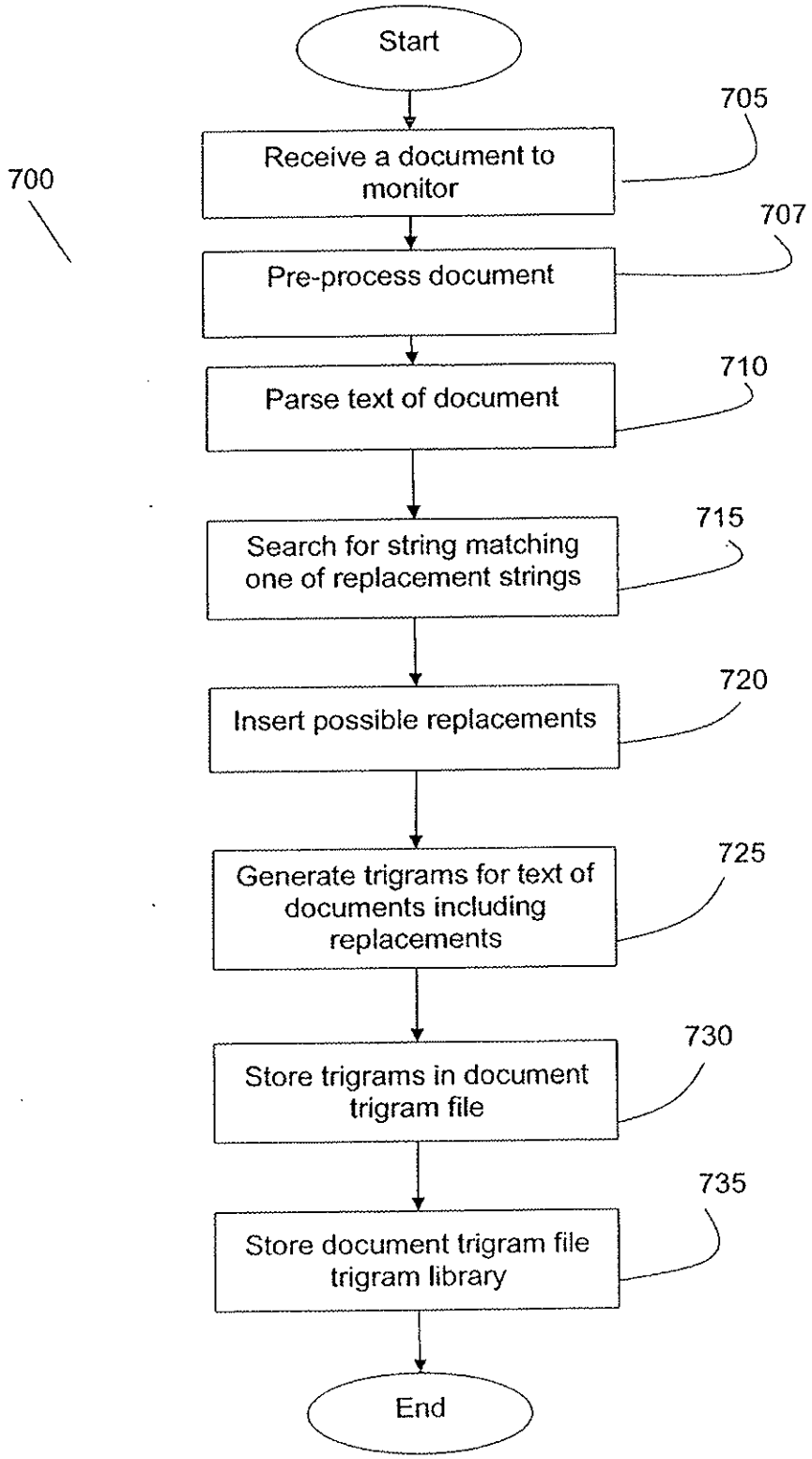

700
Start
Receive a document to monitor
705
Pre-process document
707
Parse text of document
710
Search for string matching one of replacement strings
715
Insert possible replacements
720
Generate trigrams for text of documents including replacements
725
Store trigrams in document trigram file
730
Store document trigram file trigram library
735
End

Figure 7

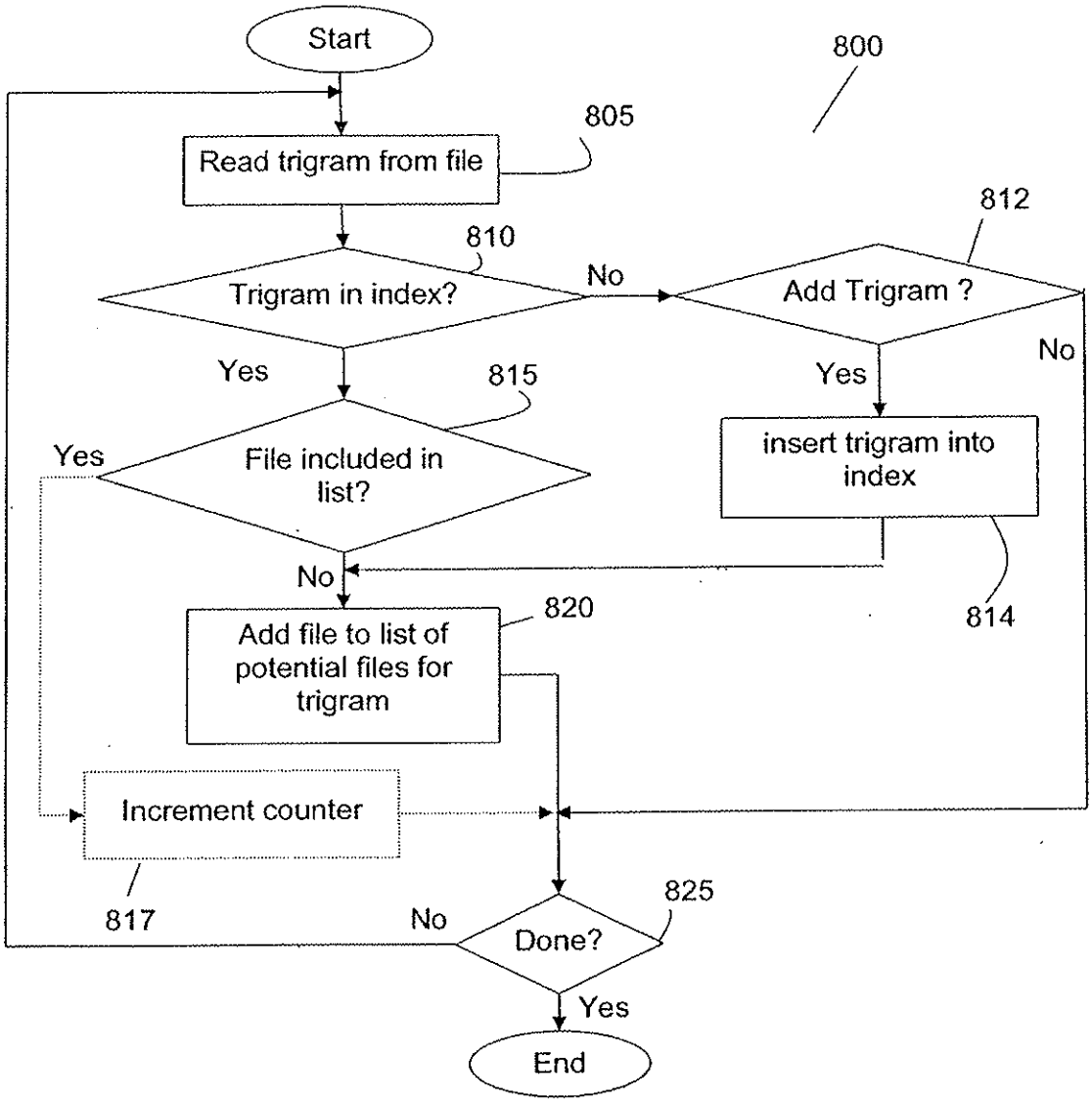

Start
800
805
Read trigram from file
812
810
Trigram in index?
No
Add Trigram ?
No
Yes
Yes
815
Yes
File included in list?
insert trigram into index
No
814
820
Add file to list of potential files for trigram
Increment counter
817
825
No
Done?
Yes
End

Figure 8

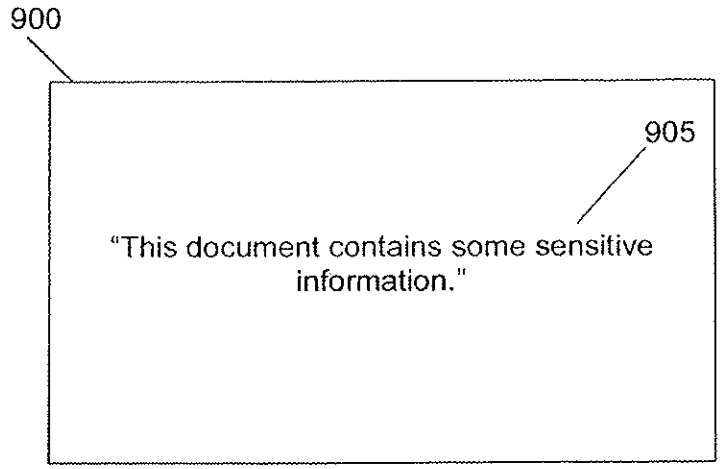


Figure 9

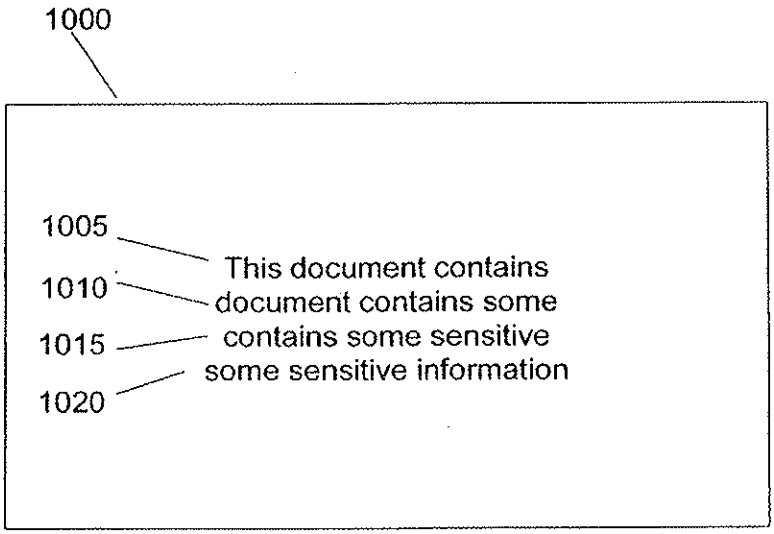


Figure 10