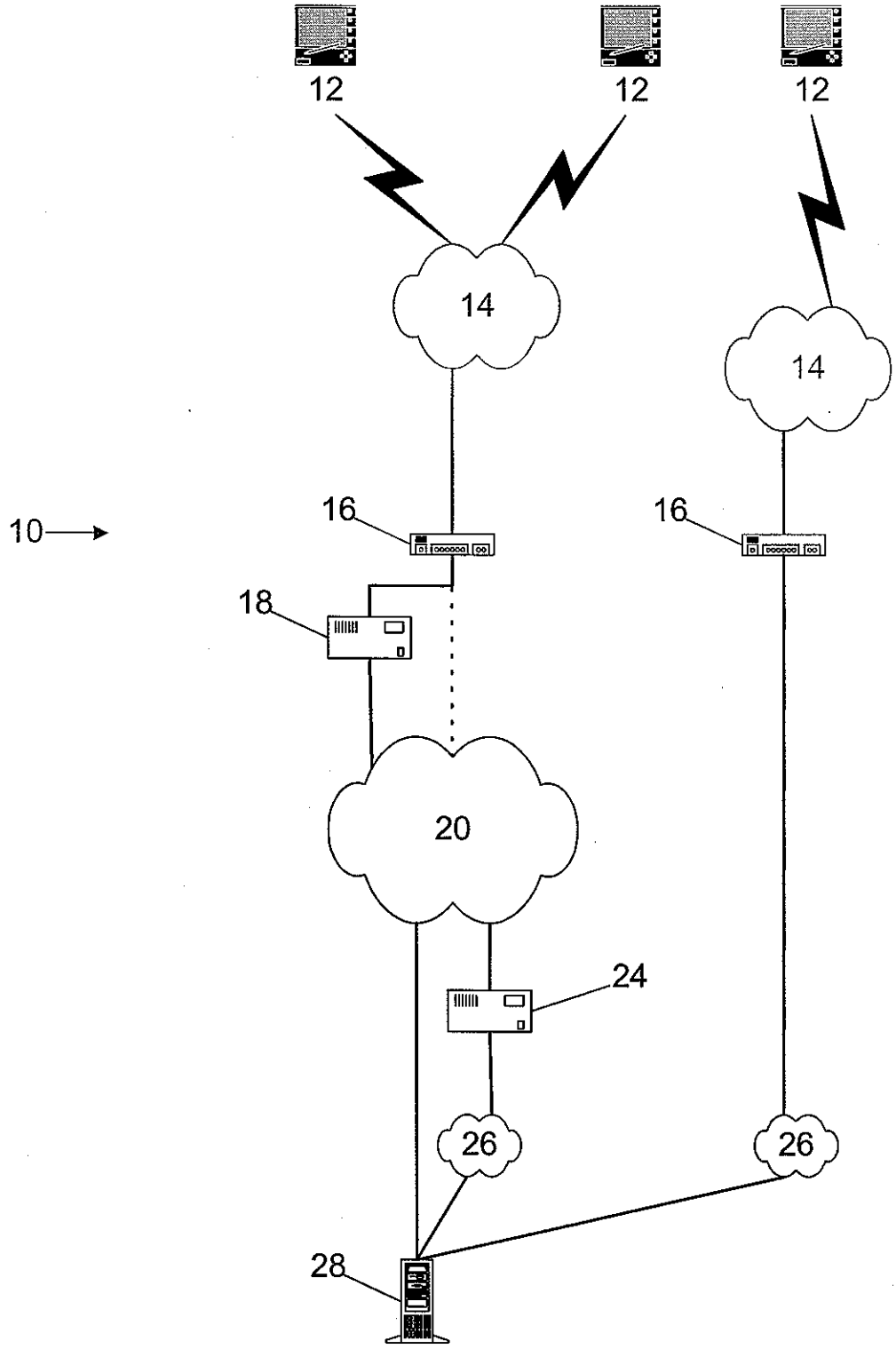


Fig. 1

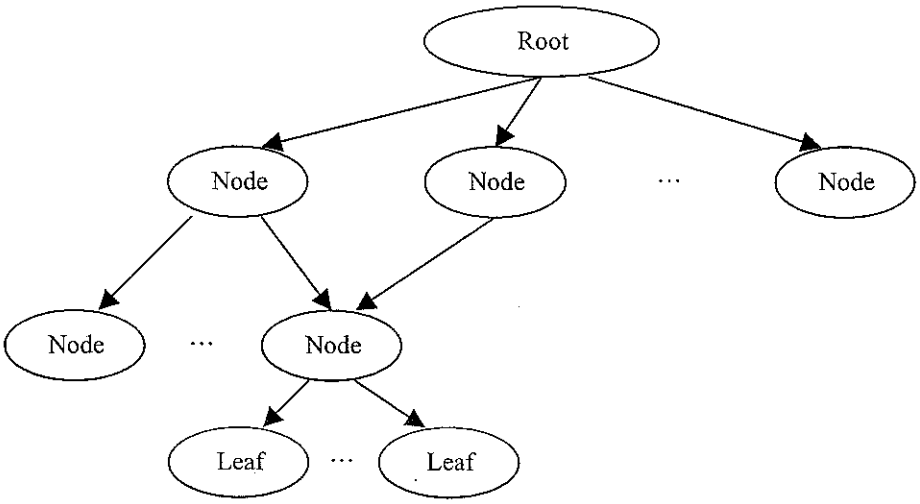


Figure 2

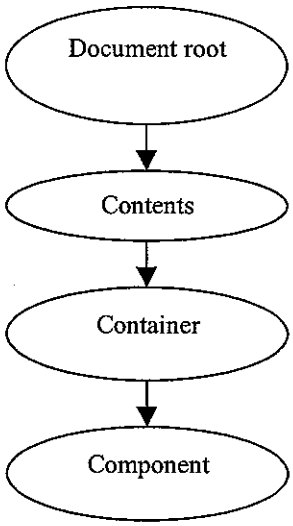


Figure 3

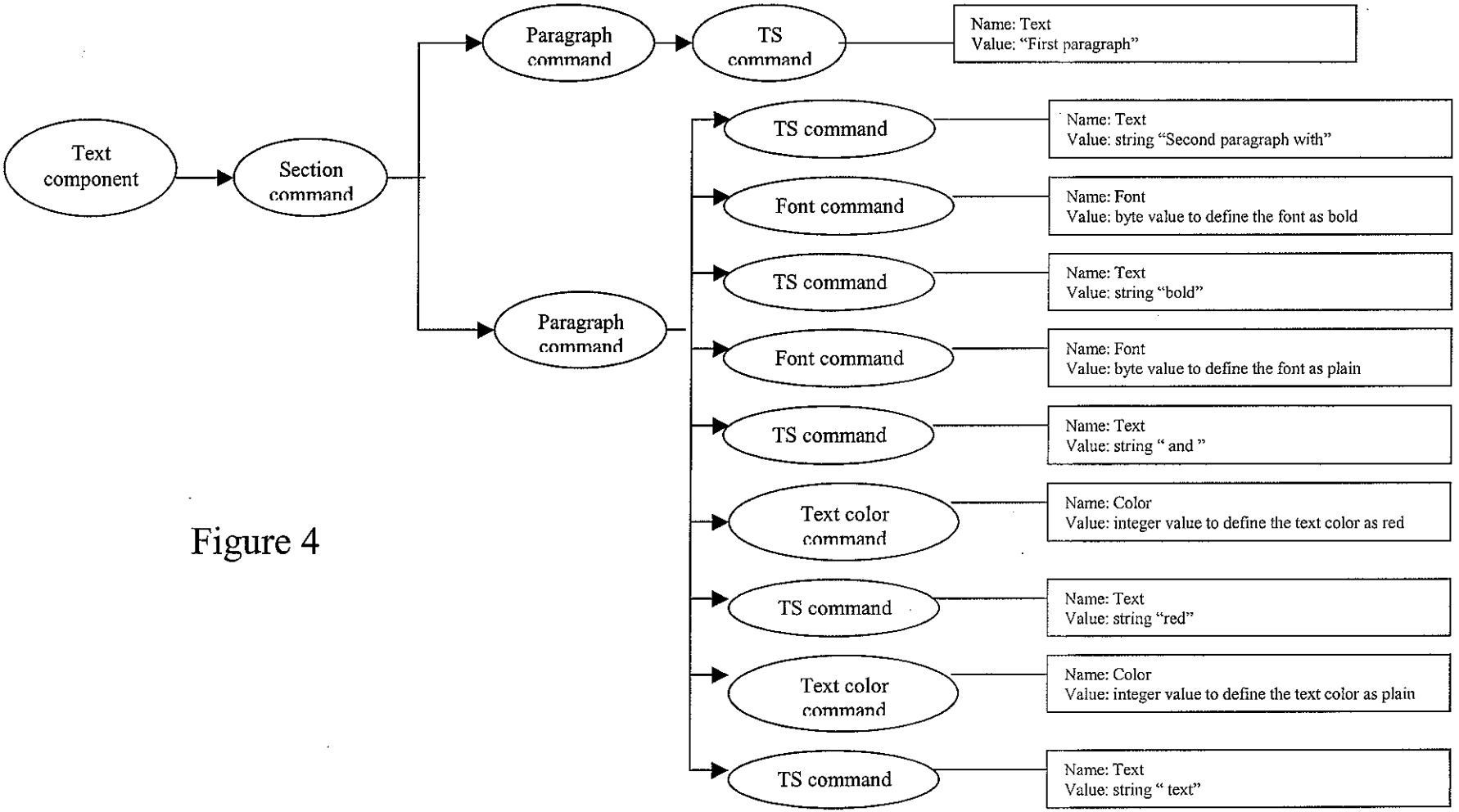

Text component
Section command
Paragraph command
TS command
Name: Text
Value: "First paragraph"
Paragraph command
TS command
Name: Text
Value: string "Second paragraph with"
Font command
Name: Font
Value: byte value to define the font as bold
TS command
Name: Text
Value: string "bold"
Font command
Name: Font
Value: byte value to define the font as plain
TS command
Name: Text
Value: string " and "
Text color command
Name: Color
Value: integer value to define the text color as red
TS command
Name: Text
Value: string "red"
Text color command
Name: Color
Value: integer value to define the text color as plain
TS command
Name: Text
Value: string " text"

Figure 4

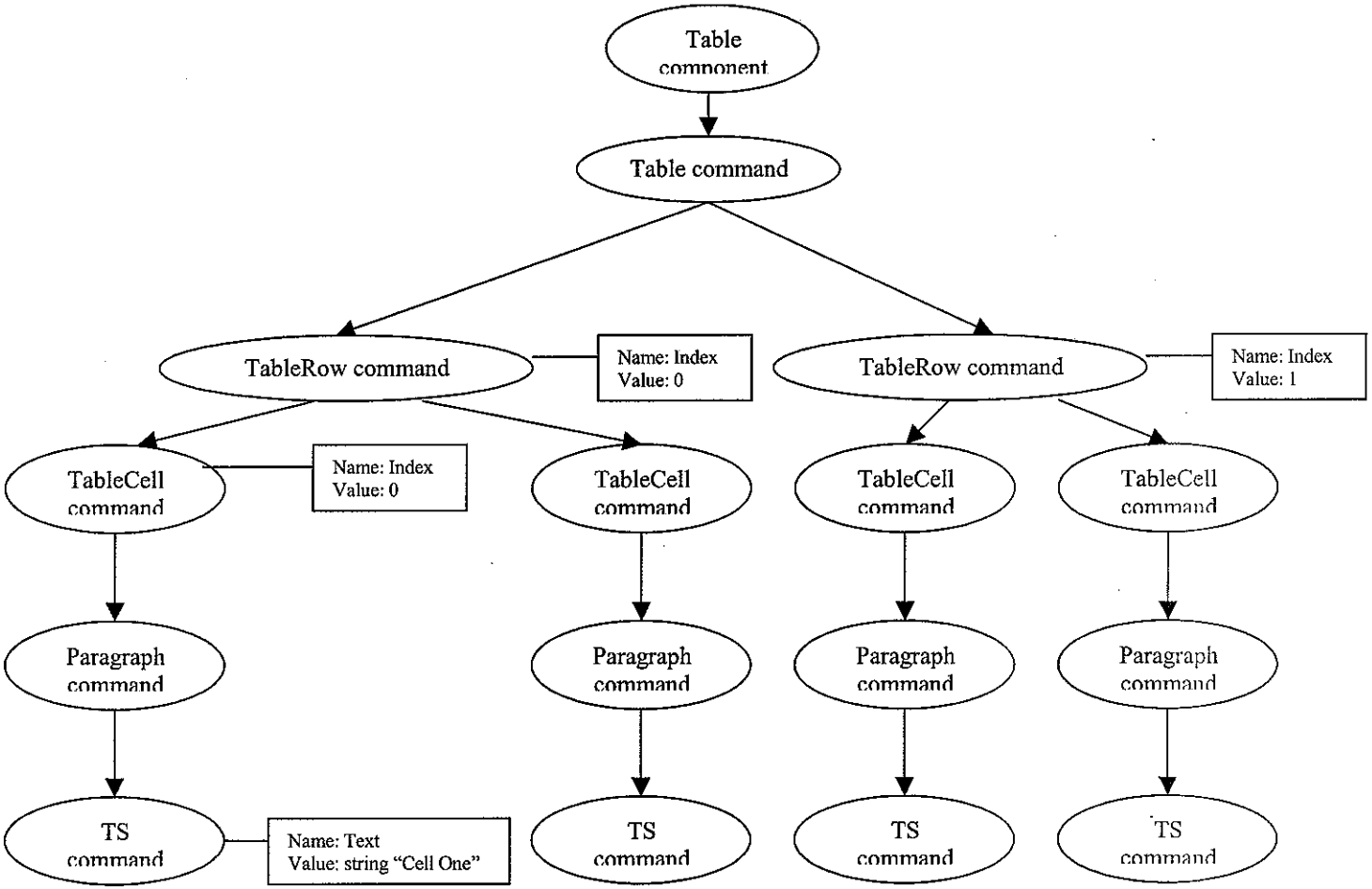

Table component
Table command
TableRow command
Name: Index
Value: 0
TableRow command
Name: Index
Value: 1
TableCell command
Name: Index
Value: 0
TableCell command
TableCell command
TableCell command
Paragraph command
Paragraph command
Paragraph command
Paragraph command
TS command
Name: Text
Value: string "Cell One"
TS command
TS command
TS command

Figure 5

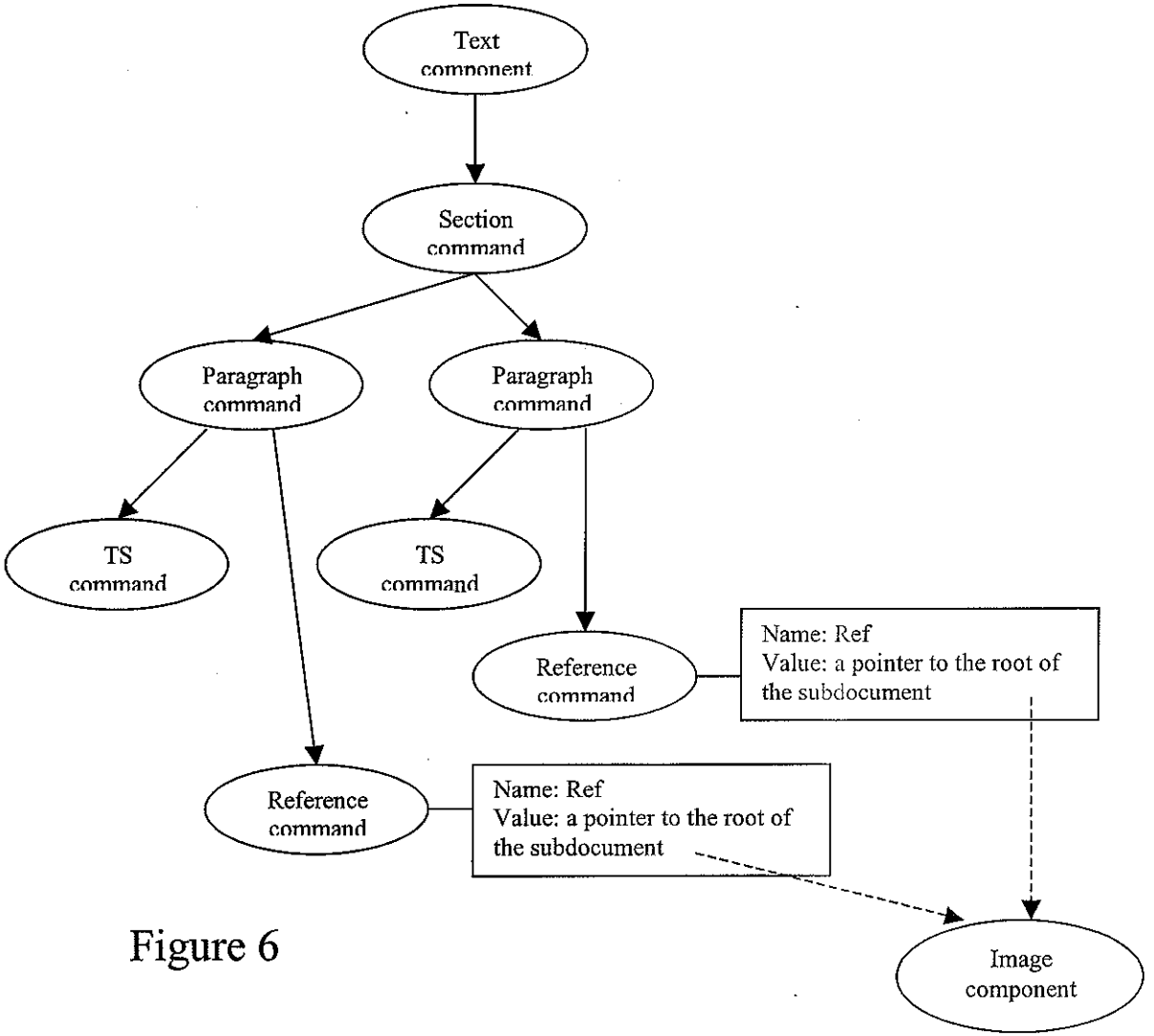

Text component
Section command
Paragraph command
Paragraph command
TS command
TS command
Reference command
Name: Ref
Value: a pointer to the root of the subdocument
Reference command
Name: Ref
Value: a pointer to the root of the subdocument
Image component

Figure 6

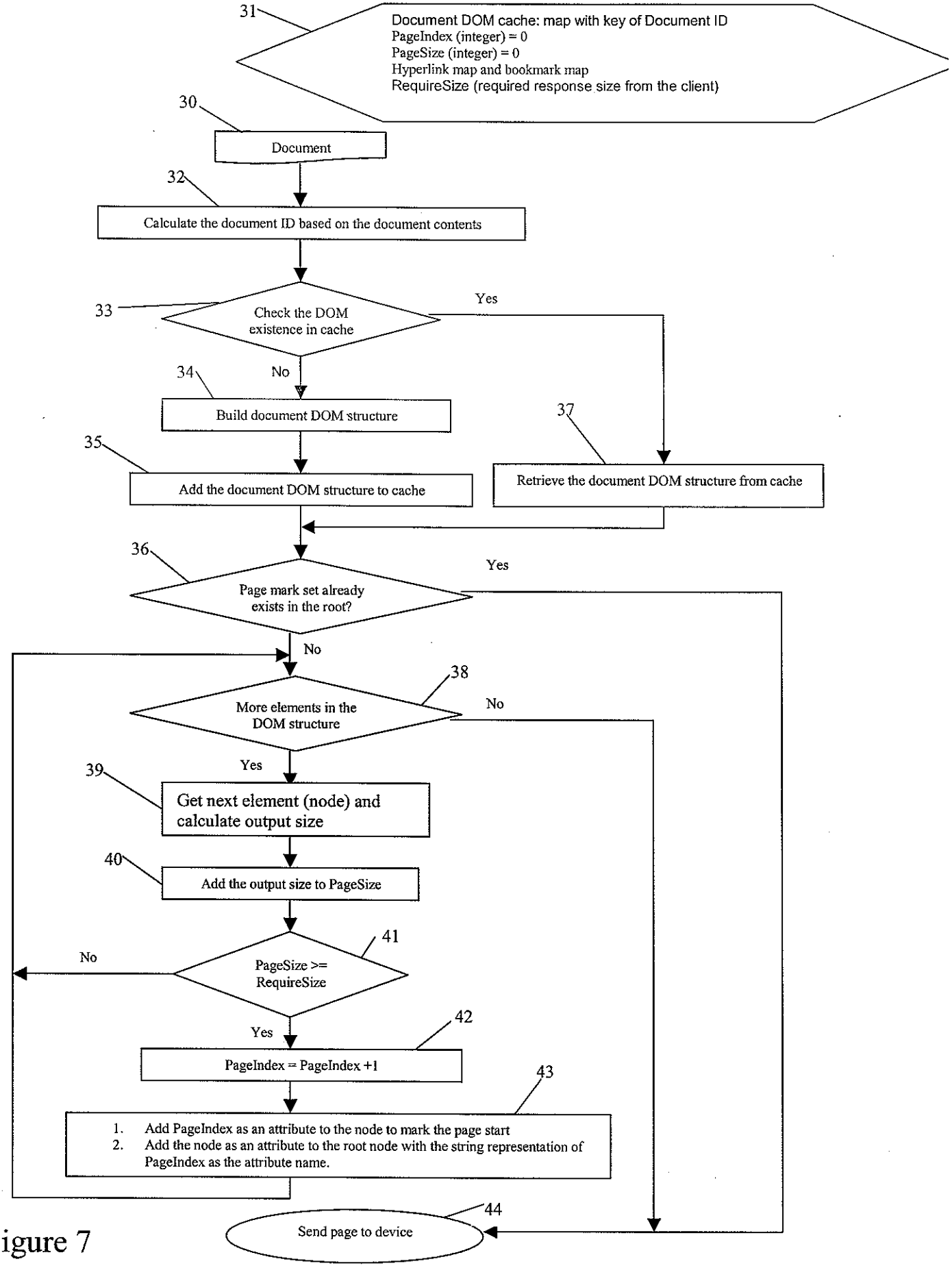

31
Document DOM cache: map with key of Document ID
PageIndex (integer) = 0
PageSize (integer) = 0
Hyperlink map and bookmark map
RequireSize (required response size from the client)
30
Document
32
Calculate the document ID based on the document contents
33
Check the DOM existence in cache
Yes
No
34
Build document DOM structure
37
Retrieve the document DOM structure from cache
35
Add the document DOM structure to cache
36
Page mark set already exists in the root?
Yes
No
38
More elements in the DOM structure
No
Yes
39
Get next element (node) and calculate output size
40
Add the output size to PageSize
41
PageSize >= RequireSize
No
Yes
42
PageIndex = PageIndex +1
43
1. Add PageIndex as an attribute to the node to mark the page start
2. Add the node as an attribute to the root node with the string representation of PageIndex as the attribute name.
44
Send page to device

Figure 7

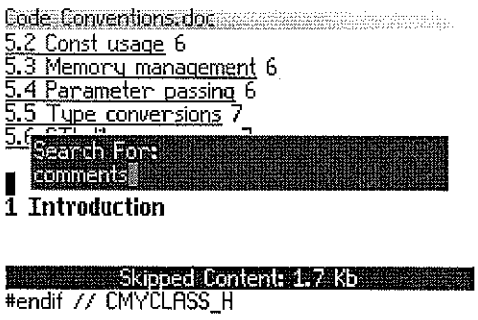


Figure 8A

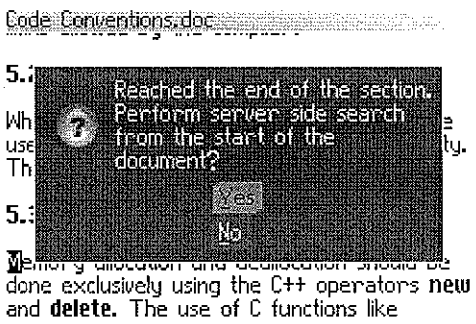


Figure 8B

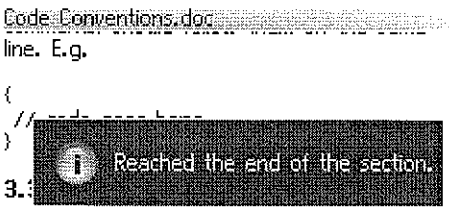

Code Conventions.doc
line. E.g.
{
}
Reached the end of the section.
3.
The default comment style use in the code should be the new C++ style based of two consecutive forward slashes (//). The use of the C style comments (/**/) is not

Figure 9

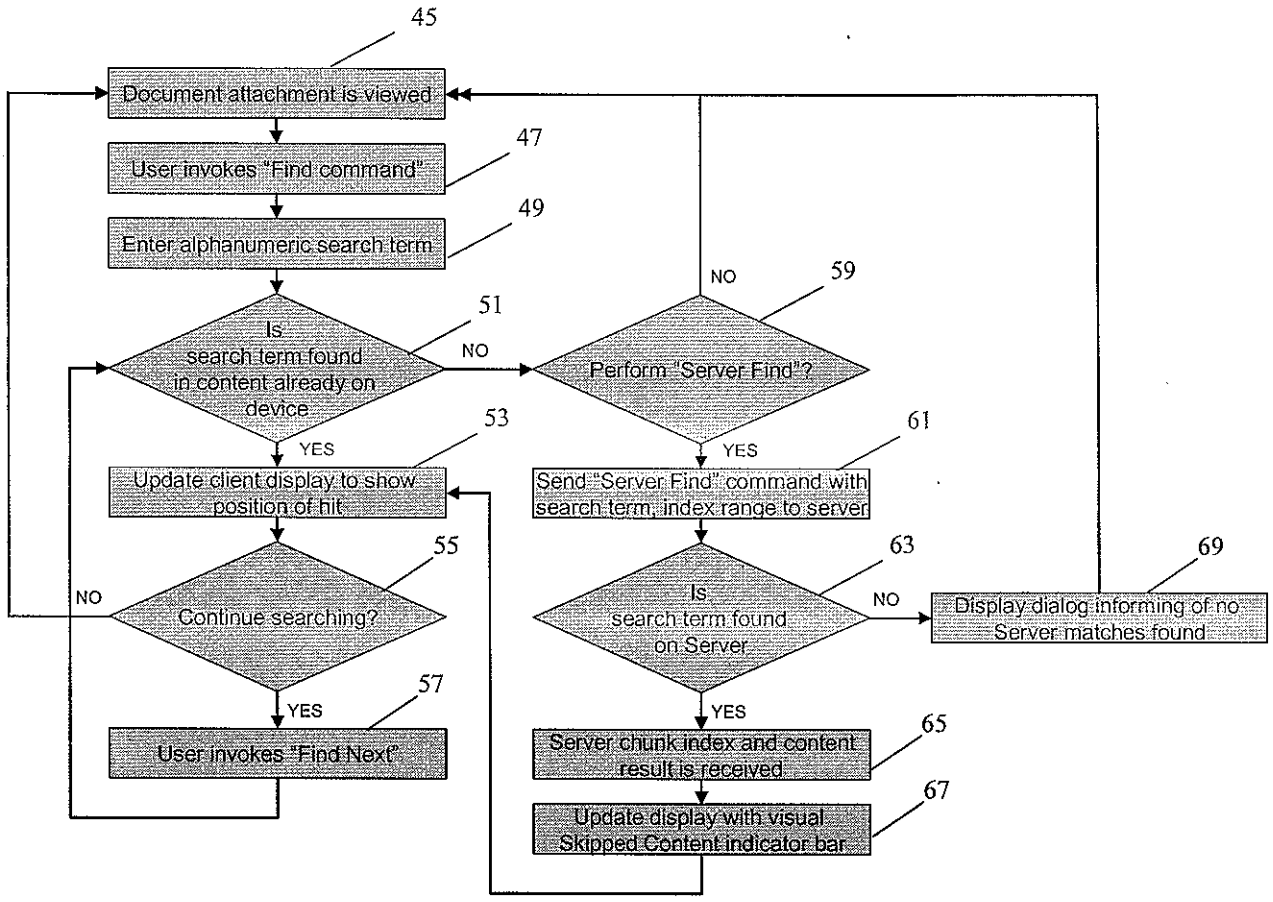

45
Document attachment is viewed
47
User invokes "Find command"
49
Enter alphanumeric search term
51
Is search term found in content already on device
NO
YES
53
Update client display to show position of hit
55
Continue searching?
NO
YES
57
User invokes "Find Next"
59
Perform "Server Find"?
NO
YES
61
Send "Server Find" command with search term, index range to server
63
Is search term found on Server
NO
YES
69
Display dialog informing of no Server matches found
65
Server chunk index and content result is received
67
Update display with visual Skipped Content indicator bar

Figure 10

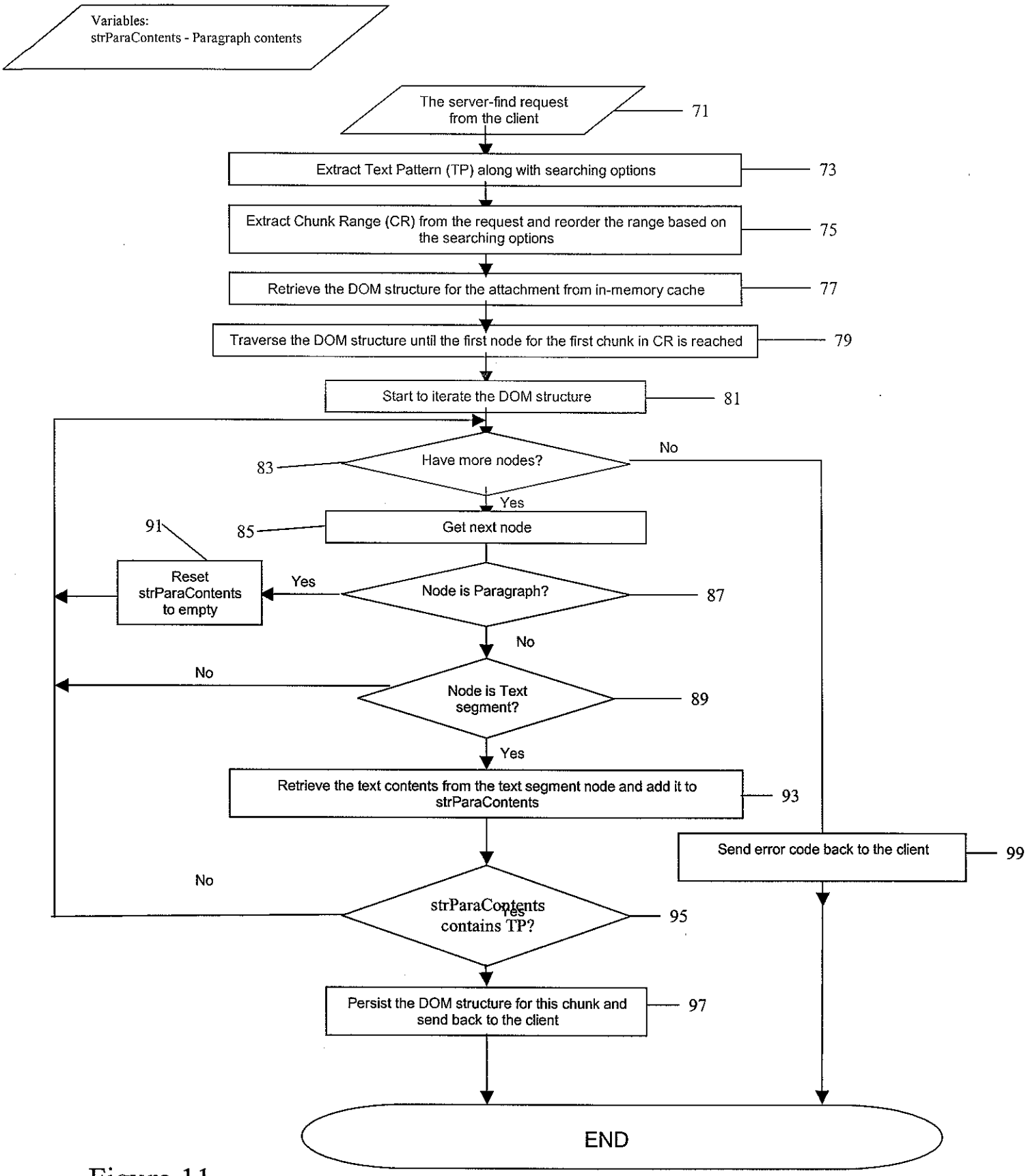

Variables:
strParaContents - Paragraph contents
The server-find request from the client
71
Extract Text Pattern (TP) along with searching options
73
Extract Chunk Range (CR) from the request and reorder the range based on the searching options
75
Retrieve the DOM structure for the attachment from in-memory cache
77
Traverse the DOM structure until the first node for the first chunk in CR is reached
79
Start to iterate the DOM structure
81
83
Have more nodes?
No
Yes
91
85
Get next node
Reset strParaContents to empty
Yes
Node is Paragraph?
87
No
No
Node is Text segment?
89
Yes
Retrieve the text contents from the text segment node and add it to strParaContents
93
Send error code back to the client
99
No
strParaContents contains TP?
Yes
95
Persist the DOM structure for this chunk and send back to the client
97
END

Figure 11