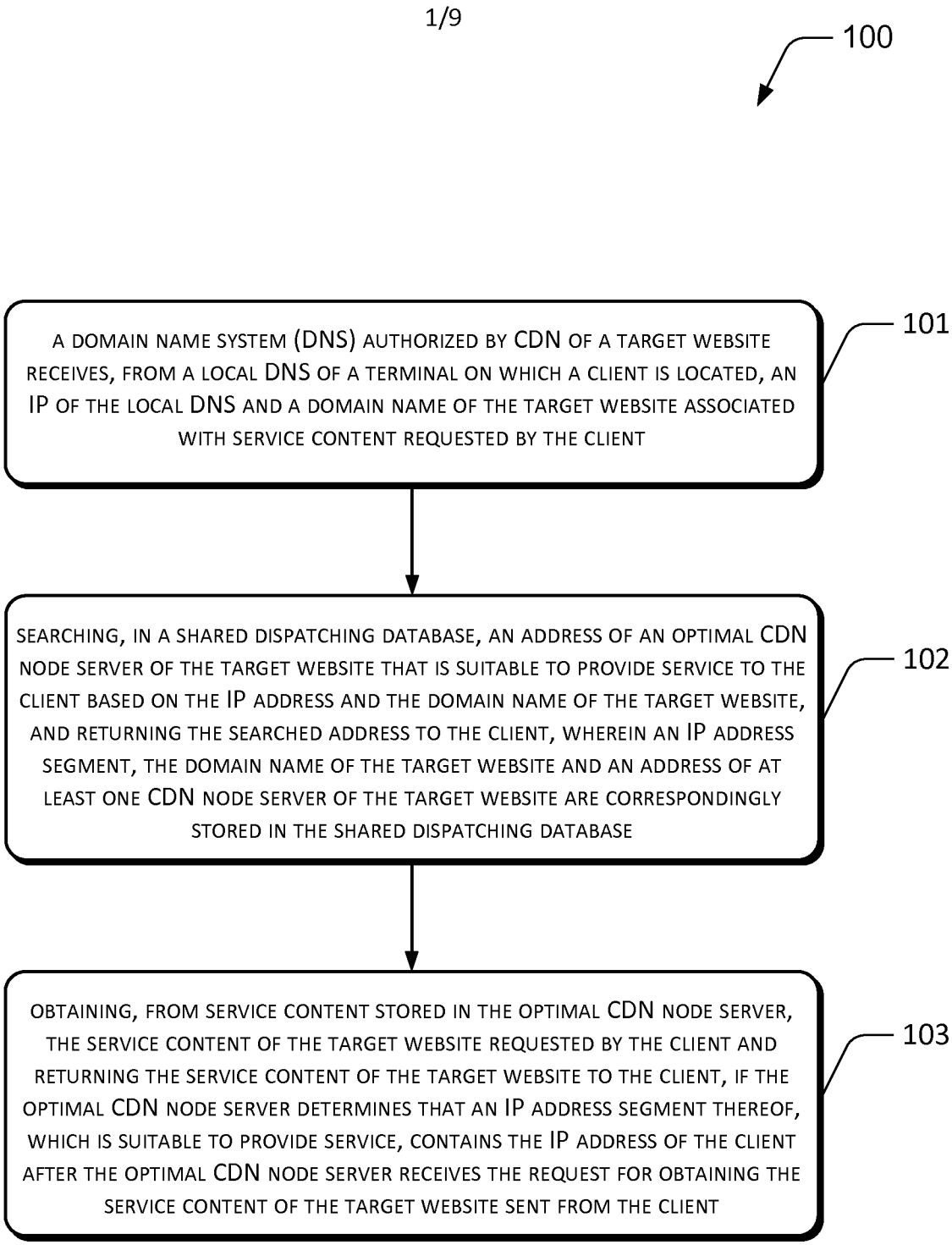
100
A DOMAIN NAME SYSTEM (DNS) AUTHORIZED BY CDN OF A TARGET WEBSITE RECEIVES, FROM A LOCAL DNS OF A TERMINAL ON WHICH A CLIENT IS LOCATED, AN IP OF THE LOCAL DNS AND A DOMAIN NAME OF THE TARGET WEBSITE ASSOCIATED WITH SERVICE CONTENT REQUESTED BY THE CLIENT
101
SEARCHING, IN A SHARED DISPATCHING DATABASE, AN ADDRESS OF AN OPTIMAL CDN NODE SERVER OF THE TARGET WEBSITE THAT IS SUITABLE TO PROVIDE SERVICE TO THE CLIENT BASED ON THE IP ADDRESS AND THE DOMAIN NAME OF THE TARGET WEBSITE, AND RETURNING THE SEARCHED ADDRESS TO THE CLIENT, WHEREIN AN IP ADDRESS SEGMENT, THE DOMAIN NAME OF THE TARGET WEBSITE AND AN ADDRESS OF AT LEAST ONE CDN NODE SERVER OF THE TARGET WEBSITE ARE CORRESPONDINGLY STORED IN THE SHARED DISPATCHING DATABASE
102
OBTAINING, FROM SERVICE CONTENT STORED IN THE OPTIMAL CDN NODE SERVER, THE SERVICE CONTENT OF THE TARGET WEBSITE REQUESTED BY THE CLIENT AND RETURNING THE SERVICE CONTENT OF THE TARGET WEBSITE TO THE CLIENT, IF THE OPTIMAL CDN NODE SERVER DETERMINES THAT AN IP ADDRESS SEGMENT THEREOF, WHICH IS SUITABLE TO PROVIDE SERVICE, CONTAINS THE IP ADDRESS OF THE CLIENT AFTER THE OPTIMAL CDN NODE SERVER RECEIVES THE REQUEST FOR OBTAINING THE SERVICE CONTENT OF THE TARGET WEBSITE SENT FROM THE CLIENT
103

FIG. 1

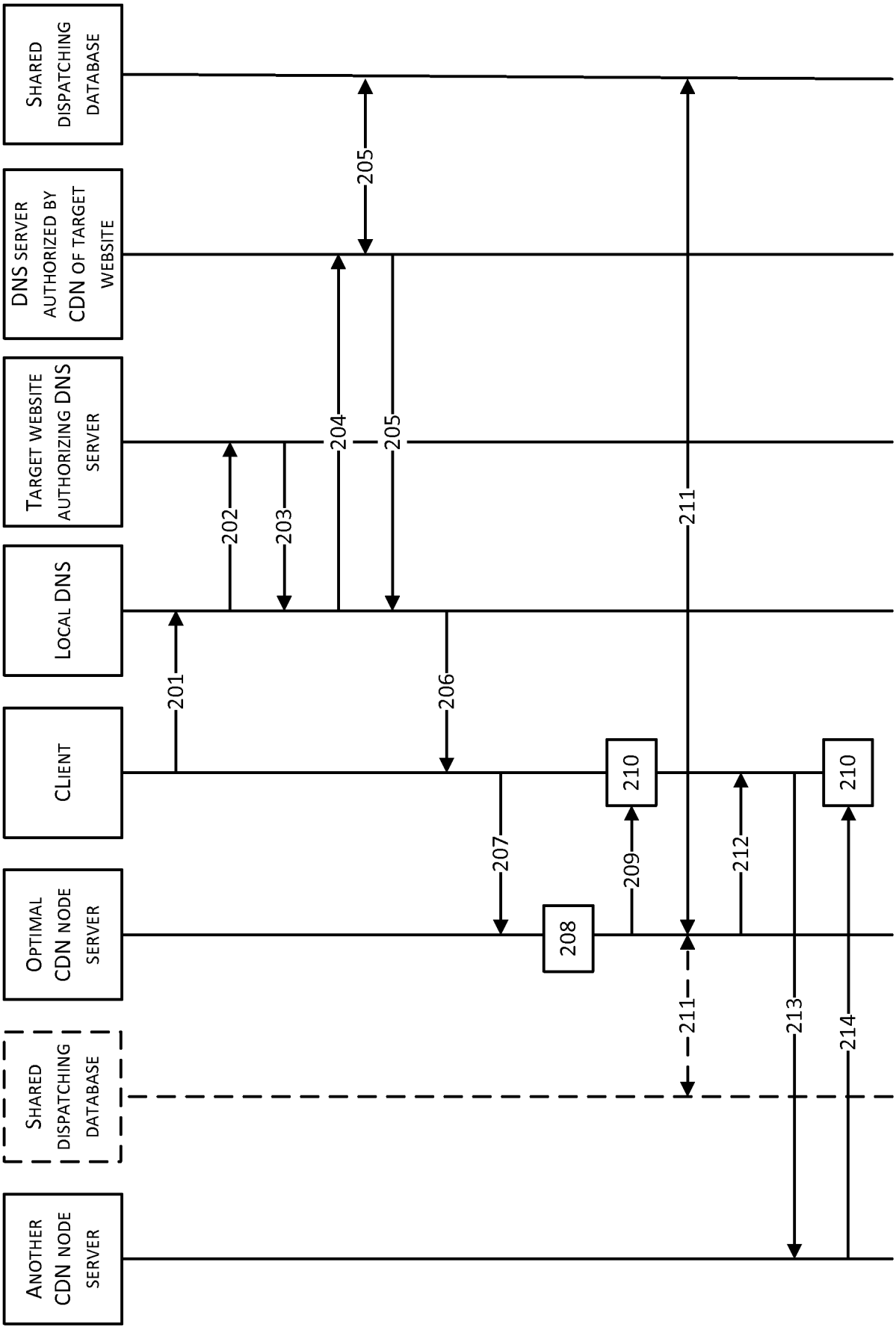
SHARED DISPATCHING DATABASE
DNS SERVER AUTHORIZED BY CDN OF TARGET WEBSITE
TARGET WEBSITE AUTHORIZING DNS SERVER
LOCAL DNS
CLIENT
OPTIMAL CDN NODE SERVER
SHARED DISPATCHING DATABASE
ANOTHER CDN NODE SERVER
201
202
203
204
205
205
206
207
208
209
210
210
211
211
212
213
214

FIG. 2

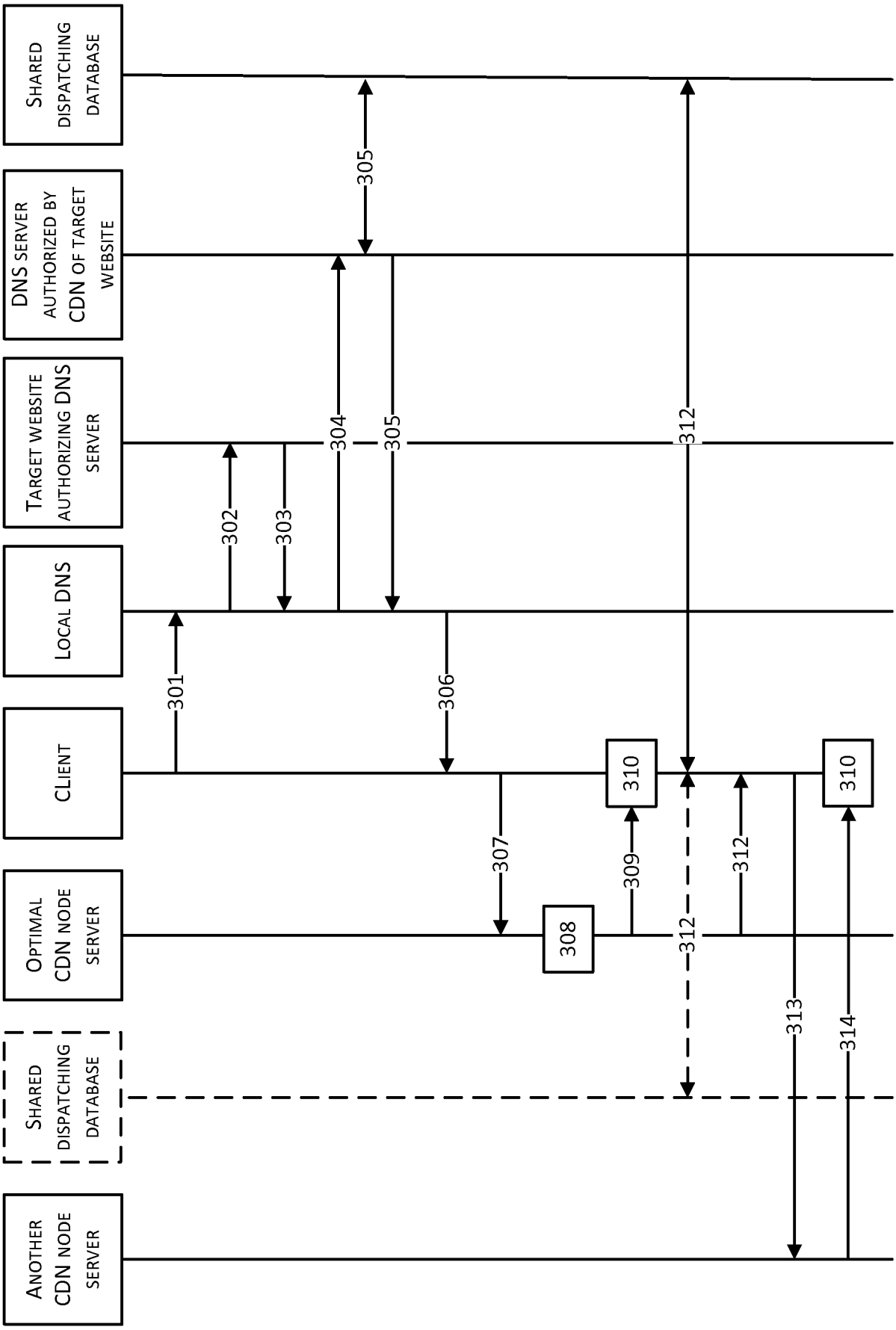
SHARED DISPATCHING DATABASE
DNS SERVER AUTHORIZED BY CDN OF TARGET WEBSITE
TARGET WEBSITE AUTHORIZING DNS SERVER
LOCAL DNS
CLIENT
OPTIMAL CDN NODE SERVER
SHARED DISPATCHING DATABASE
ANOTHER CDN NODE SERVER
301
302
303
304
305
306
307
308
309
310
312
313
314

FIG. 3

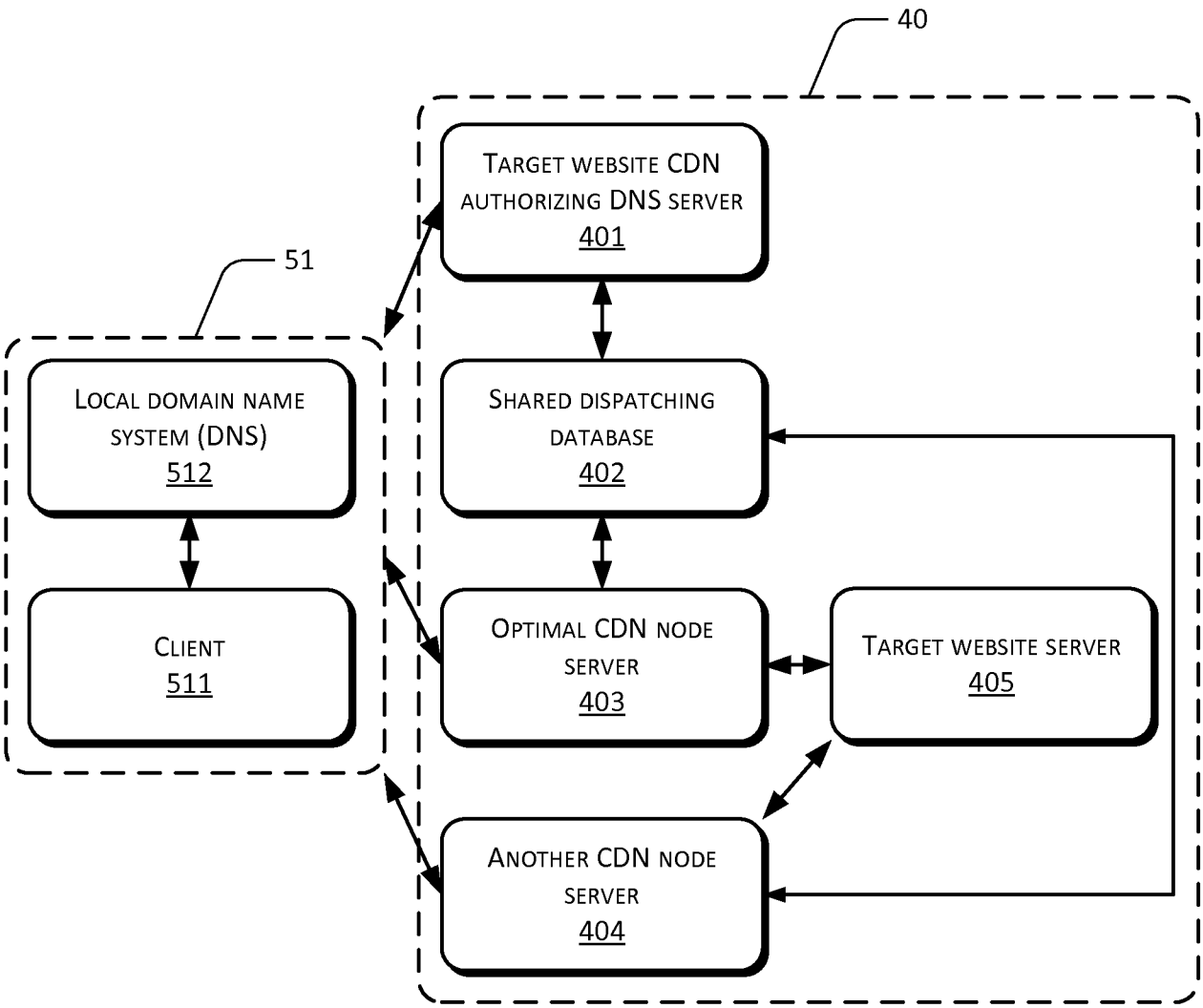
40
TARGET WEBSITE CDN AUTHORIZING DNS SERVER
401
51
LOCAL DOMAIN NAME SYSTEM (DNS)
512
SHARED DISPATCHING DATABASE
402
CLIENT
511
OPTIMAL CDN NODE SERVER
403
TARGET WEBSITE SERVER
405
ANOTHER CDN NODE SERVER
404

FIG. 4

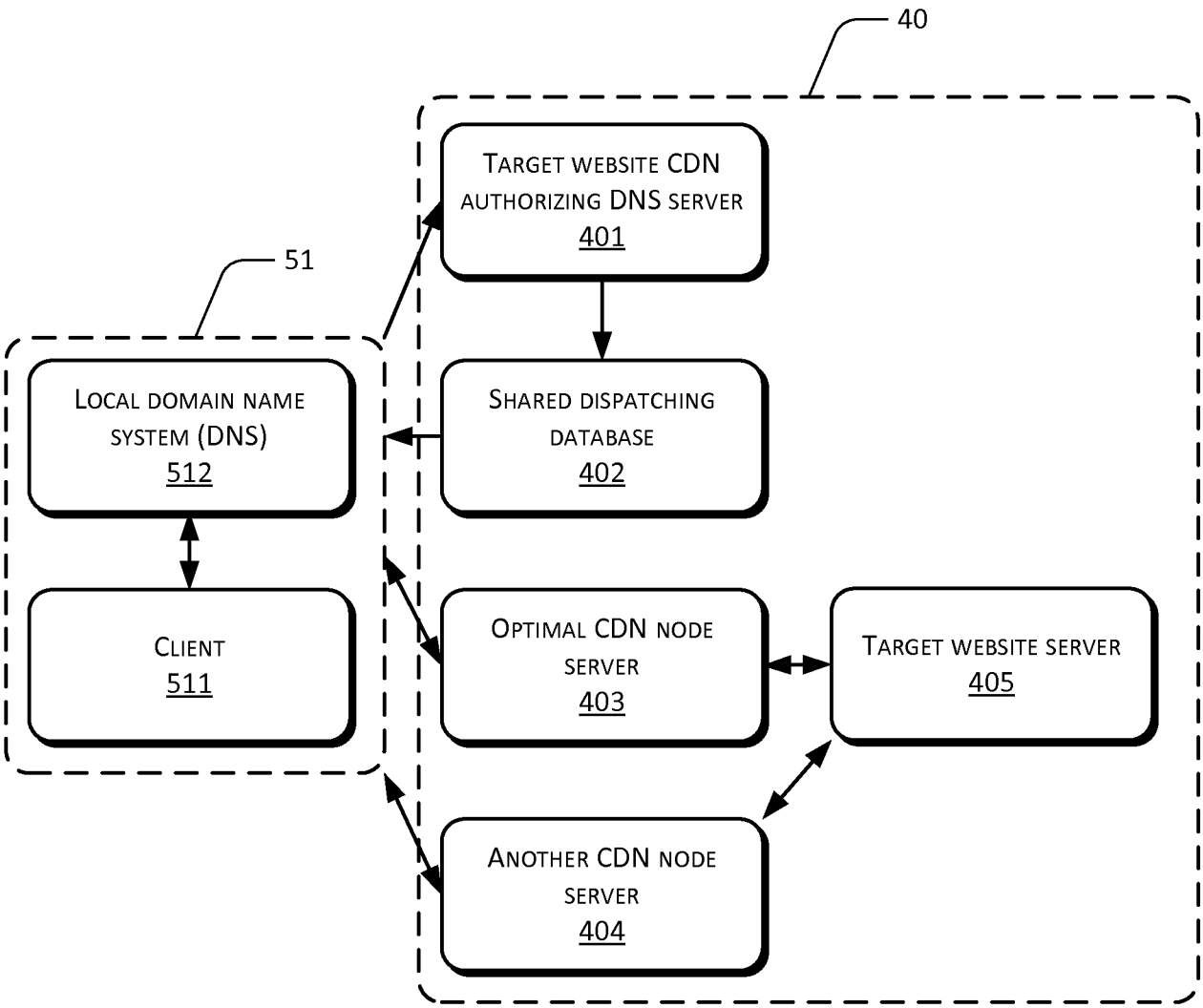
40
TARGET WEBSITE CDN AUTHORIZING DNS SERVER
401
51
LOCAL DOMAIN NAME SYSTEM (DNS)
512
SHARED DISPATCHING DATABASE
402
CLIENT
511
OPTIMAL CDN NODE SERVER
403
TARGET WEBSITE SERVER
405
ANOTHER CDN NODE SERVER
404

FIG. 5

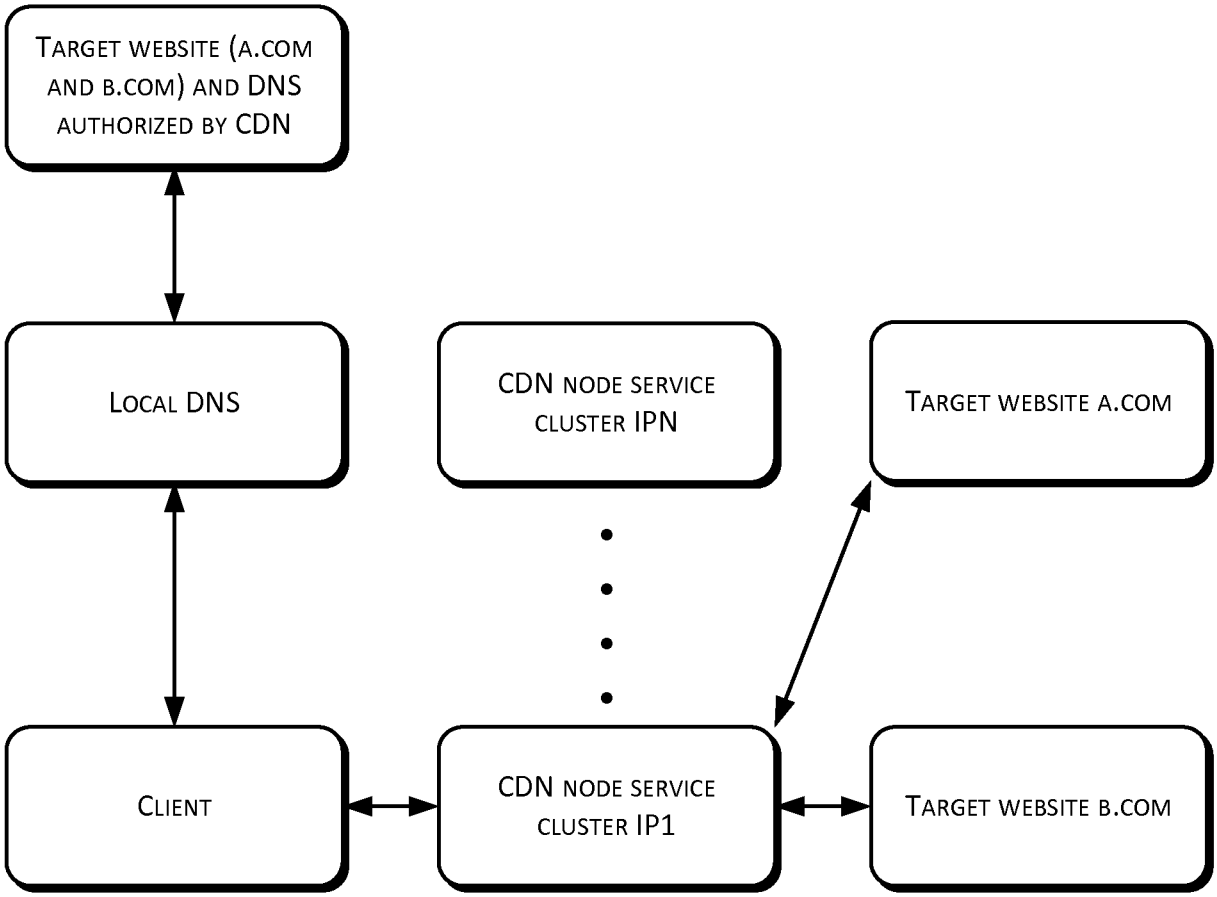
TARGET WEBSITE (A.COM AND B.COM) AND DNS AUTHORIZED BY CDN
LOCAL DNS
CDN NODE SERVICE CLUSTER IPN
TARGET WEBSITE A.COM
CLIENT
CDN NODE SERVICE CLUSTER IP1
TARGET WEBSITE B.COM

FIG. 6

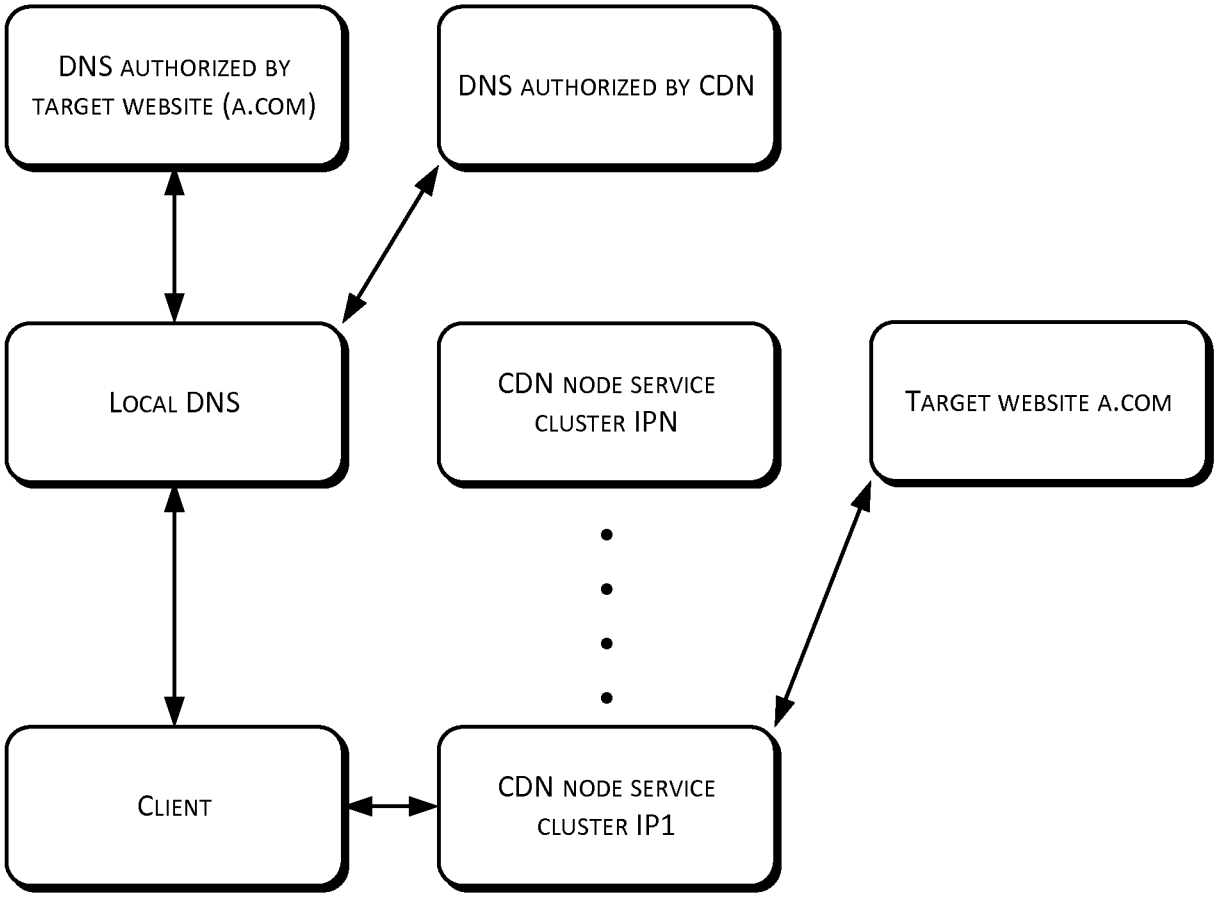
DNS AUTHORIZED BY TARGET WEBSITE (A.COM)
DNS AUTHORIZED BY CDN
LOCAL DNS
CDN NODE SERVICE CLUSTER IPN
TARGET WEBSITE A.COM
CLIENT
CDN NODE SERVICE CLUSTER IP1

FIG. 7

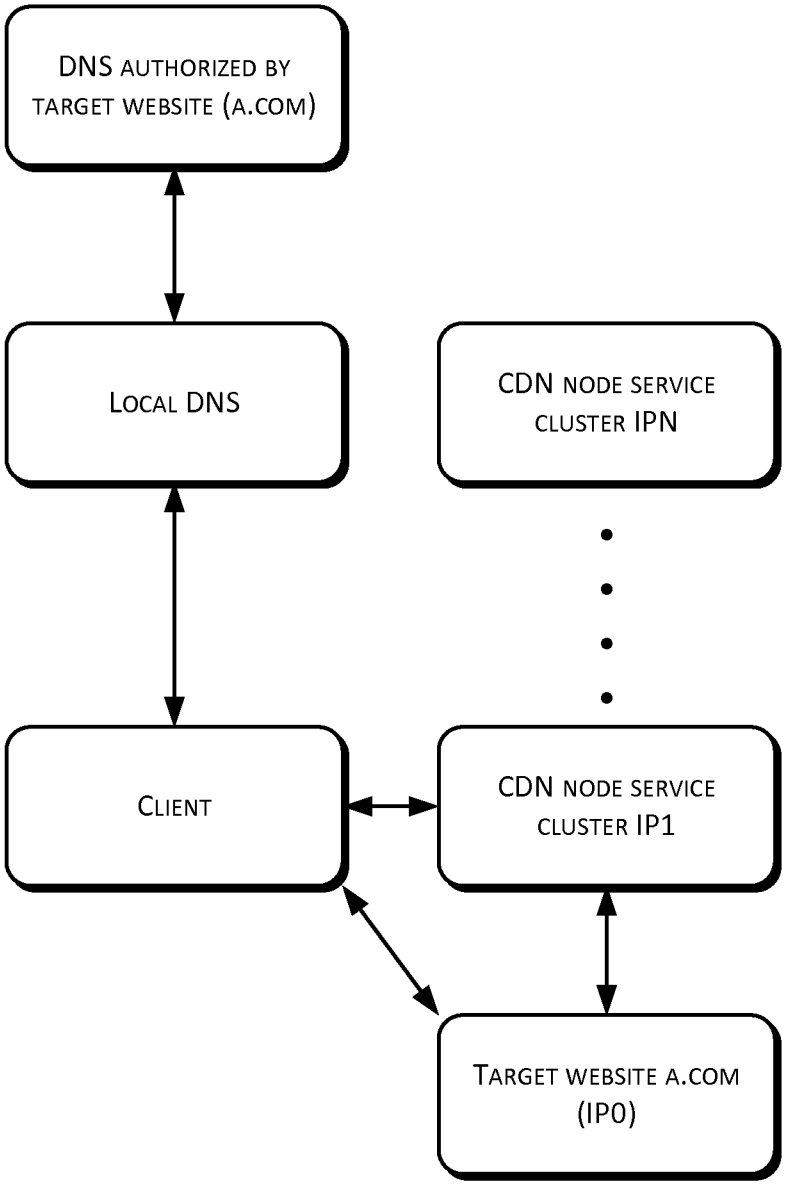
DNS AUTHORIZED BY TARGET WEBSITE (A.COM)
LOCAL DNS
CDN NODE SERVICE CLUSTER IPN
CLIENT
CDN NODE SERVICE CLUSTER IP1
TARGET WEBSITE A.COM (IP0)

FIG. 8

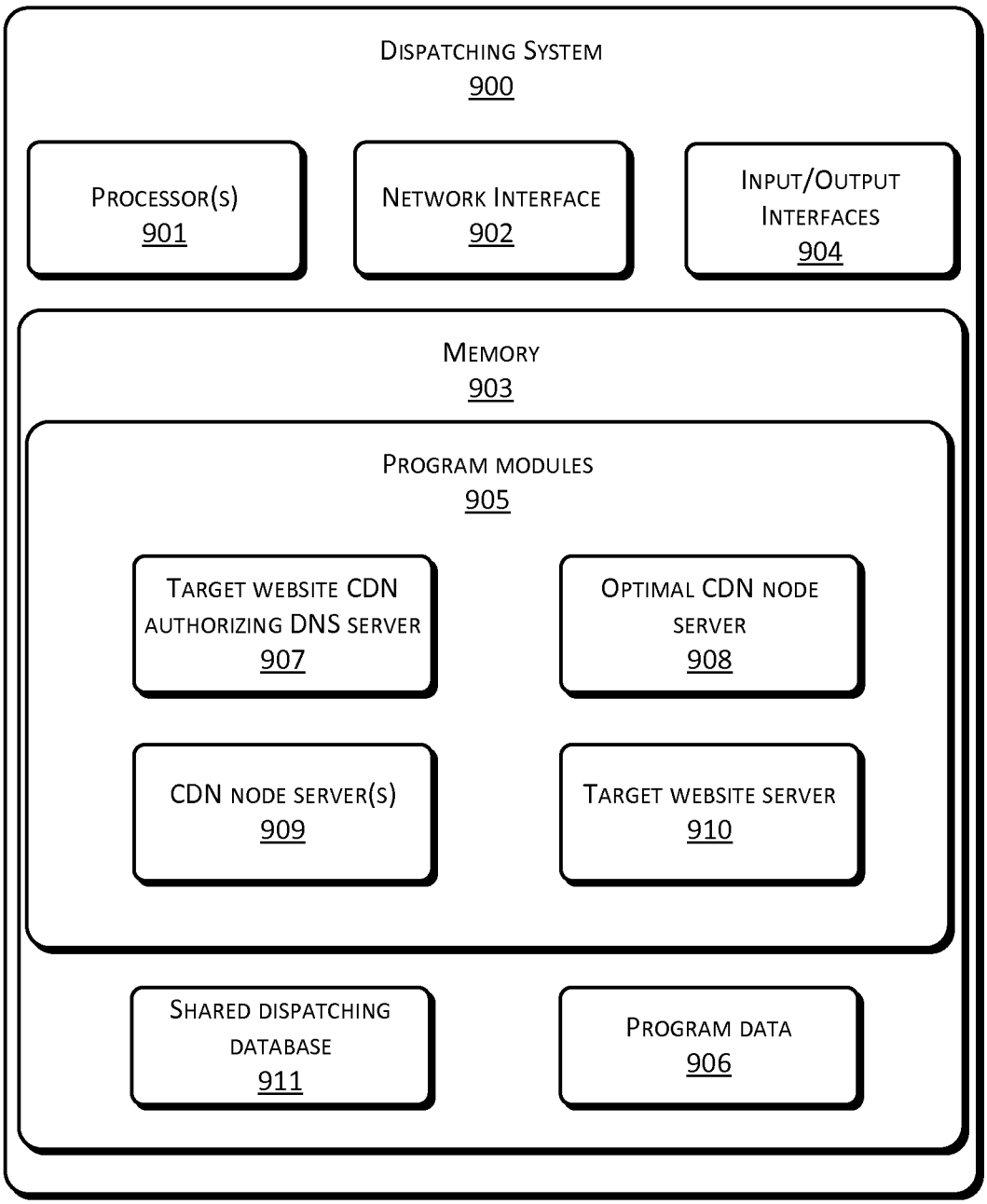
Dispatching System
900
Processor(s)
901
Network Interface
902
Input/Output Interfaces
904
Memory
903
Program modules
905
Target website CDN authorizing DNS server
907
Optimal CDN node server
908
CDN node server(s)
909
Target website server
910
Shared dispatching database
911
Program data
906

FIG. 9