

Title (en)  
METHOD AND APPARATUS FOR TRANSPARENTLY PROCESSING DNS TRAFFIC

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR TRANSPARANTEN VERARBEITUNG VON DNS VERKEHR

Title (fr)  
PROCEDE ET DISPOSITIF DE TRAITEMENT EN TRANSPARENCE DU TRAFIC DNS

Publication  
**EP 1110361 A2 20010627 (EN)**

Application  
**EP 99945436 A 19990901**

Priority  
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Abstract (en)  
[origin: WO0014938A2] A method and apparatus for transparently processing DNS traffic. To access information on the internet using a domain name, the internet protocol (IP) address that maps to the host name must be determined. The host name system (DNS) is utilized to transmit and process the address and domain name information. DNS traffic comprises approximately 10 % of the internet network traffic. When a client requests a name server to translate a domain name into an IP address, the requests are forwarded from one network router to another network router until a name server that maintains the desired information is reached. The network routers do not examine the information, but merely forward the information along the pathway to the destination name server. One or more embodiments of the invention provide for updated routers that recognize when the information consists of DNS traffic, parses the information, caches the address information (if any), and then continues to forward the desired information back to the client of the name service. Consequently, when another request for similar address information is forwarded to a router, the router can provide the response to the requestor instead of forwarding the request to a distant name server. In this manner, routers intercept DNS traffic and cache DNS information, allowing clients that utilize different name servers to benefit from the cached information. Such updated routers reduce the latency in DNS responses and reduce network traffic.

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**H04L 29/00**

IPC 8 full level  
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