



(51) International Patent Classification:  
*H04L 61/4511* (2022.01) *H04L 9/40* (2022.01)  
(21) International Application Number:  
PCT/US2024/013771  
(22) International Filing Date:  
31 January 2024 (31.01.2024)  
(25) Filing Language: English  
(26) Publication Language: English  
(30) Priority Data:  
63/483,628 07 February 2023 (07.02.2023) US  
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(54) Title: DOMAIN NAME SYSTEM (DNS) SECURITY

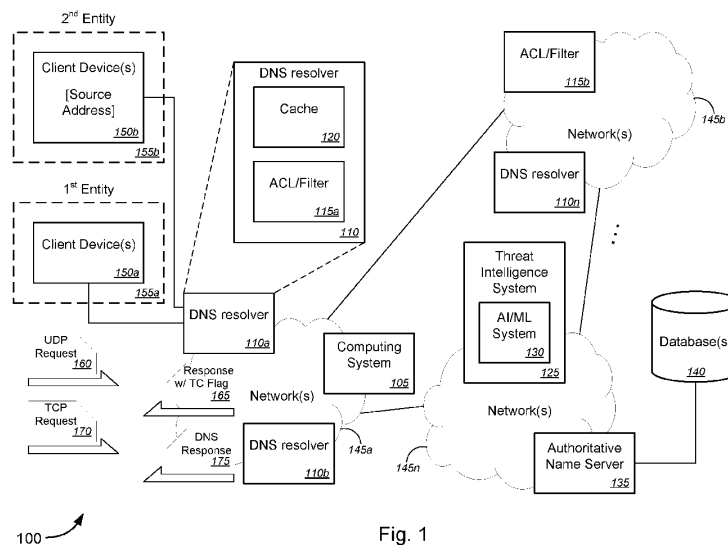


Fig. 1

(57) Abstract: Novel tools and techniques are provided for implementing improvement to domain name system ("DNS") security. In various embodiments, a computing system may receive a user datagram protocol ("UDP") -based DNS request, and may send a UDP-based response message, which may include an empty payload portion and a header portion containing a truncate flag that is set, which indicates to resend the request as a transmission control protocol ("TCP") -based DNS request. When the TCP-based DNS request is received within a first period, the computing system may send, to the source address, a TCP-based response message comprising an answer to a query (in the TCP-based DNS request) for a destination DNS record associated with a destination device. If no TCP-based DNS request is received from the source address within the first period, the computing system may block all UDP-based DNS requests from the source address for at least a second period.

[Continued on next page]

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**(84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report (Art. 21(3))