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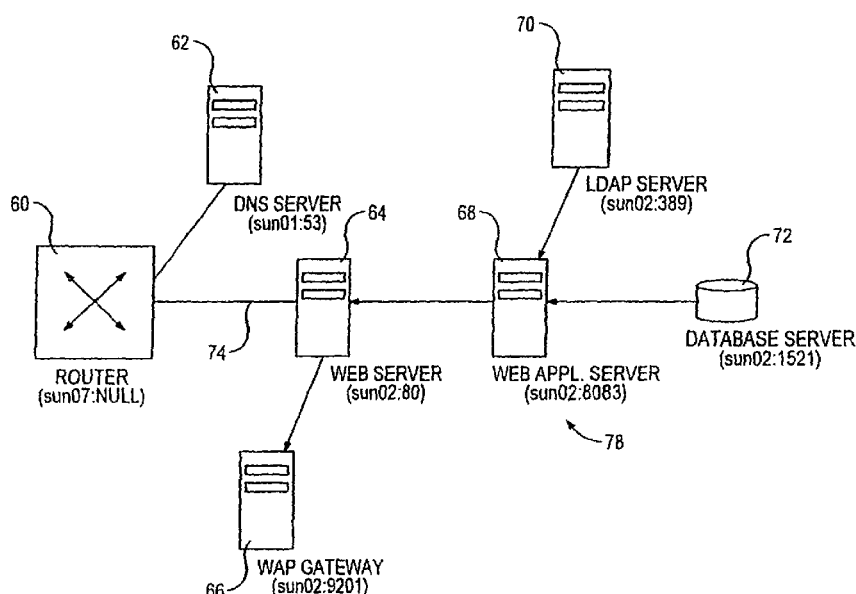
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(54) Title: ROOT-CAUSE APPROACH TO PROBLEM DIAGNOSIS IN DATA NETWORKS



(57) Abstract: A method of monitoring a data network includes storing topology information that identifies interconnections and interdependencies among network components, as well as links between websites and the components. Each component is also mapped to relevant protocol layers of a hierarchy of protocol layers that are ranked according to dependencies among the protocol layers in implementing functions. Network test measurements are also mapped to the appropriate protocol layers. Based upon the topology information and the various forms of mapping information, a user is able to navigate through a web-based user interface to determine root causes of network problems. Alternatively, an automated correlation process may be used to prioritize alerts of network problems, so that the root cause can be easily ascertained.

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY,

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