



(51) International Patent Classification:
G06F 11/36 (2006.01)

(21) International Application Number:
PCT/IB2021/051033

(22) International Filing Date:
09 February 2021 (09.02.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
16/804,164 28 February 2020 (28.02.2020) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,

(54) Title: EXECUTING TESTS IN DETERMINISTIC ORDER

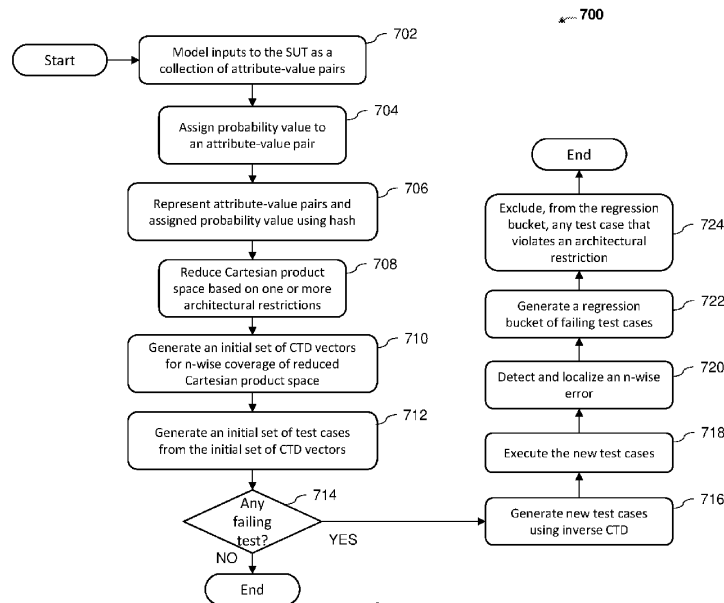


FIG. 7

(57) Abstract: A method for detecting and localizing a fault in a system under test (SUT) includes generating an initial set of test vectors that provides complete n-wise coverage of the reduced test space. The method further includes generating and executing an initial set of test cases to obtain a first set of execution results. The method further includes determining, based at least in part on the first set of execution results, that one or more test cases failed execution. The method further includes generating a set of new test cases from a selected failing test case. The method further includes executing the set of new test cases to obtain a second set of execution results. The method further includes detecting and localizing the fault based at least in part on the second set of execution results.

[Continued on next page]

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, 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, 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))