



- (51) **International Patent Classification:**
G16B 15/30 (2019.01) *G16B 15/20* (2019.01)
- (21) **International Application Number:**
PCT/EP2024/081668
- (22) **International Filing Date:**
08 November 2024 (08.11.2024)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
102023000023748 10 November 2023 (10.11.2023) IT
- (71) **Applicant:** **SIBYLLA BIOTECH S.P.A.** [IT/IT]; Via Lillo del Duca, 10, 20091 BRESSO MI (IT).
- (72) **Inventors:** **BOLDRINI, Alberto**; c/o SIBYLLA BIOTECH S.P.A., Via Lillo del Duca, 10, 20091 BRESSO MI (IT). **COLASURDO, Enrica**; c/o SIBYLLA BIOTECH S.P.A., Via Lillo del Duca, 10, 20091 BRESSO MI (IT). **TERRUZZI, Luca**; c/o SIBYLLA BIOTECH S.p.A., Via Lillo del Duca, 10, 20091 BRESSO MI (IT). **SPAGNOLLI, Giovanni**; c/o SIBYLLA BIOTECH S.P.A., Via Lillo del Duca, 10, 20091 BRESSO MI (IT).

- (74) **Agent:** **TIROTTA, Ilaria** et al.; Via Vittor Pisani, 13, 20124 MILANO (IT).

- (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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, 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).

- (54) **Title:** CO-TRANSLATIONAL PROTEIN FOLDING SIMULATIONS

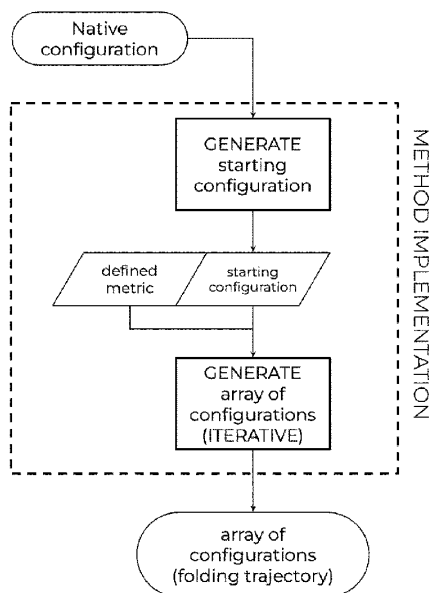


Fig. 5

- (57) **Abstract:** It forms an object of the present invention a method for determining the folding trajectory of a given protein comprising:
- generating a starting configuration;
- defining a metric to evaluate the distance between configurations;
- generating an array of protein configurations constituting the trajectory. It forms a further object a method for identifying a target configuration suitable for being tested as target for drug discovery procedures.

Published:

- *with international search report (Art. 21(3))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*