

(51) International Patent Classification:
C07K 1/04 (2006.01)

(21) International Application Number:

PCT/US2014/017970

(22) International Filing Date:

24 February 2014 (24.02.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13/833,745 15 March 2013 (15.03.2013) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US 13/833,745 (CON)
Filed on 15 March 2013 (15.03.2013)

(71) Applicant: MASSACHUSETTS INSTITUTE OF TECHNOLOGY [US/US]; 77 Massachusetts Avenue, Cambridge, MA 02139 (US).

(72) Inventors: SIMON, Mark, David; 10218 SW 13th Pl., Gainesville, FL 32607 (US). PENTELUTE, Bradley, L.; 108 Armory Street, Unit 1, Cambridge, MA 02139 (US). ADAMO, Andrea; 4 Gordon Place, Cambridge, MA

02139 (US). HEIDER, Patrick, Louis; 1819 Eastlawn Drive, Apt. J12, Midland, MI 48642 (US). JENSEN, Klavs, F.; 103 Outlook Drive, Lexington, MA 02421 (US).

(74) Agent: BLACKWELL, Brandon, S.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210-2206 (US).

(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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, 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,

[Continued on next page]

(54) Title: SOLID PHASE PEPTIDE SYNTHESIS PROCESSES AND ASSOCIATED SYSTEMS

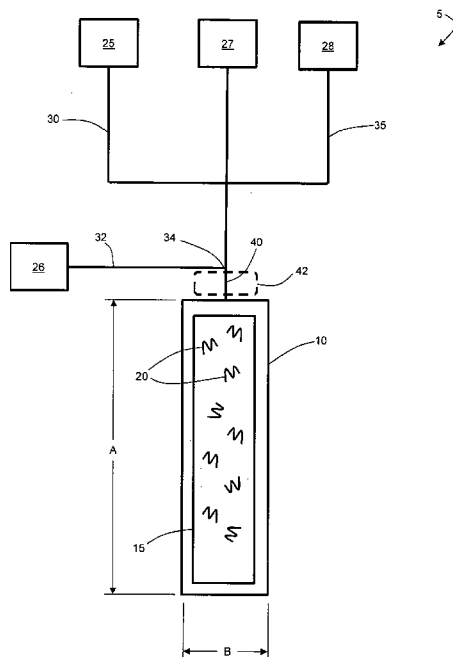


FIG. 1

(57) Abstract: Systems and processes for performing solid phase peptide synthesis are generally described. Solid phase peptide synthesis is a known process in which amino acid residues are added to peptides that have been immobilized on a solid support. In certain embodiments, the inventive systems and methods can be used to perform solid phase peptide synthesis quickly while maintaining high yields. Certain embodiments relate to processes and systems that may be used to heat, transport, and/or mix reagents in ways that reduce the amount of time required to perform solid phase peptide synthesis.



MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, **Published:**

SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,

GW, KM, ML, MR, NE, SN, TD, TG).

— *without international search report and to be republished
upon receipt of that report (Rule 48.2(g))*