(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 January 2013 (03.01.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/003641 A2

(51) International Patent Classification:

A61K 38/55 (2006.01)	*A61P 1/00* (2006.01)
C07K 19/00 (2006.01)	*A61P 3/10* (2006.01)
A61K 39/395 (2006.01)	*A61P 37/06* (2006.01)
A61P 29/00 (2006.01)	*A61P 21/00* (2006.01)
A61P 9/00 (2006.01)	*A61P 31/04* (2006.01)
A61P 11/00 (2006.01)	*A61P 31/10* (2006.01)
A61P 11/06 (2006.01)	*A61P 31/12* (2006.01)
A61P 35/00 (2006.01)	*A61K 39/40* (2006.01)
A61P 9/10 (2006.01)	*A61K 39/42* (2006.01)
A61P 19/02 (2006.01)	

(21) International Application Number:
PCT/US2012/044730

(22) International Filing Date:
28 June 2012 (28.06.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

61/502,055	28 June 2011 (28.06.2011)	US
61/570,394	14 December 2011 (14.12.2011)	US
61/577,204	19 December 2011 (19.12.2011)	US
61/638,168	25 April 2012 (25.04.2012)	US

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

US	61/502,055 (CIP)
Filed on	28 June 2011 (28.06.2011)
US	61/570,394 (CIP)
Filed on	14 December 2011 (14.12.2011)
US	61/577,204 (CIP)
Filed on	19 December 2011 (19.12.2011)
US	61/638,168 (CIP)
Filed on	25 April 2012 (25.04.2012)

(71) Applicant *(for all designated States except US)*: **INHIBRX LLC** [US/US]; 11099 N. Torrey Pines Road, Suite 130, La Jolla, CA 92037 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **ECKELMAN, Brendan, P.** [US/US]; 11099 N. Torrey Pines Road, Suite 130, La Jolla, CA 92037 (US). **TIMMER, John, C.** [US/US]; 11099 N. Torrey Pines Road, Suite 130, La Jolla, CA 92037 (US). **NGUY, Peter, L.** [US/US]; 11099 N. Torrey Pines Road, Suite 130, La Jolla, CA 92037 (US). **GUENTHER, Grant, B.** [US/US]; 11099 N. Torrey Pines Road, Suite 130, La Jolla, CA 92037 (US). **DEVERAUX, Quinn** [US/US]; 11099 N. Torrey Pines, Suite 130, La Jolla, CA 92037 (US).

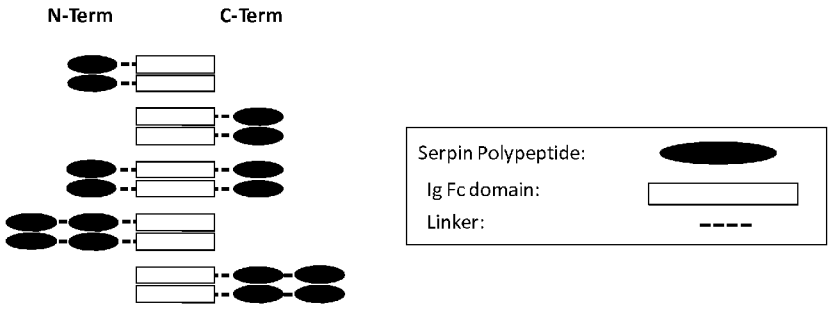
(74) Agents: **ELRIFI, Ivor, R.** et al.; Mintz Levin Cohn Ferris Glovsky And Popeo, P.C., One Financial Center, Boston, MA 02111 (US).

(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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, 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, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SERPIN FUSION POLYPEPTIDES AND METHODS OF USE THEREOF



(57) Abstract: This invention relates to molecules, particularly polypeptides, more particularly fusion proteins that include a serpin polypeptide or an amino acid sequence that is derived from a serpin and second polypeptide comprising of at least one the following: an Fc polypeptide or an amino acid sequence that is derived from an Fc polypeptide; a cytokine targeting polypeptide or a sequence derived from a cytokine targeting polypeptide; a WAP domain containing polypeptide or a sequence derived from a WAP containing polypeptide; and an albumin polypeptide or an amino acid sequence that is derived from a serum albumin polypeptide. This invention also relates to methods of using such molecules in a variety of therapeutic and diagnostic indications, as well as methods of producing such molecules.

WO 2013/003641 A2

Published:

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