



- (51) **International Patent Classification:**
C07D 401/04 (2006.01) **A61P 25/00** (2006.01)
A61K 31/44 (2006.01)
- (21) **International Application Number:**
 PCT/US2012/066778
- (22) **International Filing Date:**
 28 November 2012 (28.11.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
 61/564,537 29 November 2011 (29.11.2011) US
 13/478,361 23 May 2012 (23.05.2012) US
- (71) **Applicant: HELSINN HEALTHCARE SA** [CH/CH];
 Via Pian Scairolo 9, CH-6912 Lugano/Pazzallo (CH).
- (72) **Inventors; and**
- (73) **Applicants :** **FADINI, Luca** [CH/CH]; Via Stefano Francini 7b, CH-6512 Giubiasco (CH). **MANINI, Peter** [CH/CH]; Via Dr. Falleroni 2, CH-6512 Giubiasco (CH). **PIETRA, Claudio** [IT/IT]; Via Scalabrini 56, I-22100 Como (IT). **GIULIANO, Claudio** [IT/IT]; Via Prudenzi-ana 28/A, I-22100 Como (IT). **LOVATI, Emanuela** [IT/IT]; Via Della Selva 18, CH-6850 Mendrisio (CH). **CANNELLA, Roberta** [IT/IT]; Via Al Colle 42, I-21100 Varese (IT). **VENTURINI, Alessio** [IT/IT]; Via Majano 1,

I-21100 Varese (IT). **STELLA, Valentino, J.** [US/US];
 1324 Lawrence Ave., Lawrence, KS 66049 (US).

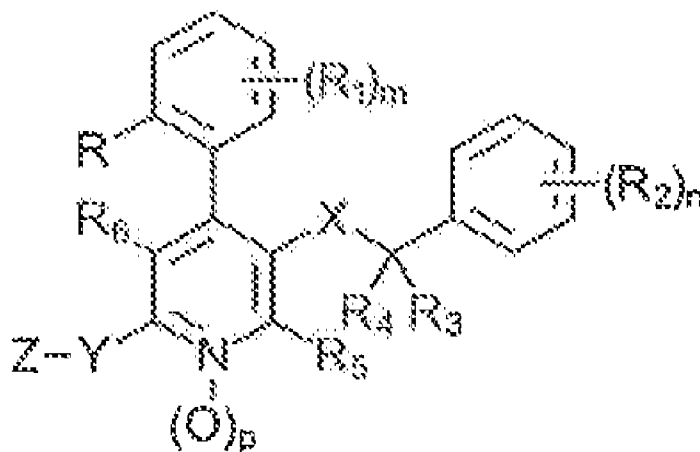
- (74) **Agent: SULLIVAN, Clark, G.;** Arnall Golden Gregory LLP, 171 17th Street NW, Suite 2100, Atlanta, GA 30363 (US).

(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, 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, PA, 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:** SUBSTITUTED 4 - PHENYL - PYRIDINES FOR THE TREATMENT OF NK-1 RECEPTOR RELATED DISEASES



Formula (I).

(57) **Abstract:** Disclosed are compounds, compositions and methods for the prevention and/or treatment of diseases which are patho-physiologically mediated by the neurokinin (NKj) receptor. The compounds have the general formula (I):



Published:

— *with international search report (Art. 21(3))*