



- (51) International Patent Classification:  
*A61K 31/4015* (2006.01) *A61K 31/4415* (2006.01)
- (21) International Application Number:  
PCT/IB2014/002398
- (22) International Filing Date:  
9 September 2014 (09.09.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
61/875,384 9 September 2013 (09.09.2013) US  
14/038,258 26 September 2013 (26.09.2013) US  
61/991,351 9 May 2014 (09.05.2014) US
- (71) Applicant: **ALCOBRA LTD.** [IL/IL]; 65 Rothschild Avenue, 65785 Tel Aviv (IL).
- (72) Inventors: **DANIELY, Yaron**; 65 Rothschild Avenue, 65785 Tel Aviv (IL). **MEGIDDO, Dalia**; M.P. Judean Hills, 90804 Nataf (IL).
- (74) Agent: **LUZZATTO & LUZZATTO**; P.O. Box 5352, 84152 Beer Sheva (IL).
- (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, 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, 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,

[Continued on next page]

(54) Title: METHODS OF TREATING FRAGILE X SYNDROME AND RELATED DISORDERS

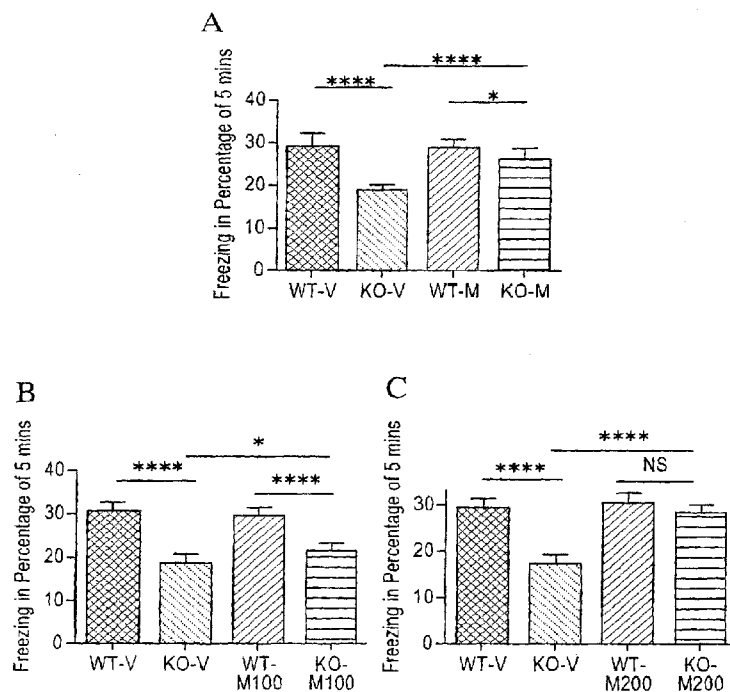


Fig.1

(57) Abstract: The present invention provides methods of alleviating a sign or a symptom of Fragile X Syndrome and relates disorders such as autism spectrum disorders.



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))*

**Declarations under Rule 4.17:**

— *of inventorship (Rule 4.17(iv))*

**(88) Date of publication of the international search report:**

2 July 2015