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| <p>(15) <b>International Patent Classification:</b><br/><i>A61K 51/04</i> (2006.01) <i>C07D 241/02</i> (2006.01)<br/><i>A61K 51/02</i> (2006.01)</p>                                                                                                                                                                                                                                                                                                                                                                                       | <p><b>Craig A.</b>; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US). <b>TONG, Ling</b>; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <p>(71) <b>Applicant: MERCK SHARP &amp; DOHME LLC</b> [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US).</p>                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p>(72) <b>Inventors: BENNACEF, Idriiss</b>; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US). <b>FAWAZ, Maria V.</b>; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US). <b>HOSTETLER, Eric D.</b>; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US). <b>MITCHELL, Helen</b>; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US). <b>ROECKER, Anthony J.</b>; 8932 Hightail Drive, Santee, California 92071 (US). <b>SHAW, Anthony W.</b>; 126 East Lincoln Avenue, Rahway, New Jersey 07065 (US). <b>STUMP,</b></p> | <p>(84) <b>Designated States</b> (<i>unless otherwise indicated, for every kind of regional protection available</i>): 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,</p>                                                                                                                                                                                                                                |

(54) **Title:** ALPHA-SYNUCLEIN BINDERS AND METHODS OF USE

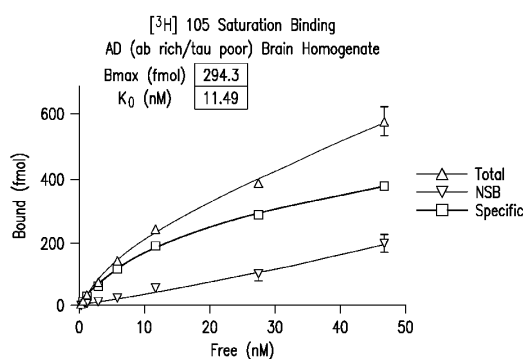
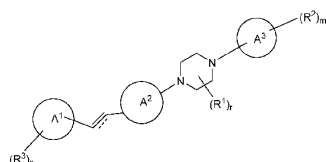


FIG. 1

**(57) Abstract:** The invention is directed to compounds of Formula I (I) or their pharmaceutically acceptable salts, which may be suitable for imaging alpha-synuclein pathology and hence are useful in binding and imaging alpha-synuclein aggregates in patients with Parkinson's Disease. More specifically, this invention relates to a method of using the compounds of this invention as tracers in positron emission tomography (PET) imaging to study alpha-synuclein in brain *in vivo* to allow diagnosis of Parkinson's Disease and other neurodegenerative diseases characterized by alpha-synuclein pathology. The invention further relates to a method of measuring clinical efficacy of therapeutic agents for Parkinson's Disease and other neurodegenerative diseases characterized by alpha-synuclein pathology.



SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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- *as to the identity of the inventor (Rule 4.17(i))*
- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
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