



(51) International Patent Classification:

C07C 217/18 (2006.01) *A61P 3/06* (2006.01)
A61K 31/138 (2006.01)

(21) International Application Number:

PCT/US2012/049451

(22) International Filing Date:

3 August 2012 (03.08.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/515,278 4 August 2011 (04.08.2011) US

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(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, 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).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

— of inventorship (Rule 4.17(iv))

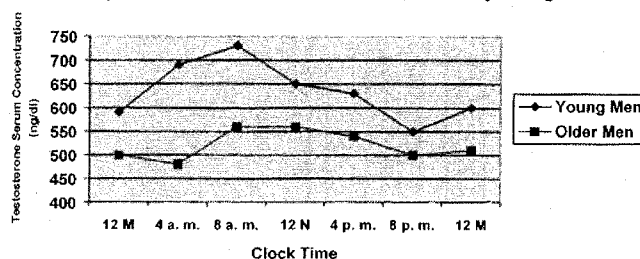
Published:

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

(54) Title: TRANS-CLOMIPHENE METABOLITES AND USES THEREOF

FIG. 1

Normal Secretory Total Serum Testosterone Profiles in Healthy Young and Older Men



(57) **Abstract:** The present invention relates to substantially pure metabolites of irara-clomiphene. The invention is also directed to pharmaceutical compositions comprising these metabolites and their use in treating disorders including secondary hypogonadism, type 2 diabetes, elevated cholesterol, elevated triglycerides, wasting, lipodystrophy, female and male infertility, benign prostate hypertrophy, prostate cancer, breast cancer, ovarian cancer and endometrial cancer.