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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 April 2014 (10.04.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/053617 A1

(51) International Patent Classification:
G01N 33/50 (2006.01)

(21) International Application Number:
PCT/EP2013/070666

(22) International Filing Date:
4 October 2013 (04.10.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PA 2012 70609 5 October 2012 (05.10.2012) DK

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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, IR, IS, JP, KE, KG, 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, 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, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,

[Continued on next page]

(54) Title: MITOCHONDRIAL TOXICITY TEST

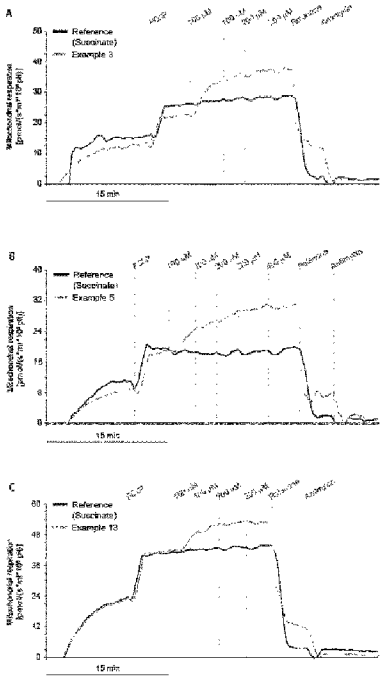


Fig 13. Exemplifying experimental traces for convergent mitochondrial respiration.

(57) Abstract: A novel method useful in drug screening. The method is useful for testing effects of substances on the mitochondria, notably toxic or beneficial effects of drug substances or candidate drug substances. The method is based on measurement in live human mitochondria ex vivo, but in a setting as near the in vivo situation as possible. The method is also useful for testing substances impact on the mitochondrial respiration. The method can be used to i) screening and selection of early or late stage drug candidates in cells derived from blood from healthy individuals or in so-called buffy coat, which is a concentrated solution of platelets and white blood cells, ii) testing a patient's sensitivity to a known mitochondrial toxicant, iii) analysing mitochondrial drug toxicity in clinical trials, and/or iv) analysing beneficial effects of drugs intended to improve mitochondrial function

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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, KM, 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))*