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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 September 2011 (22.09.2011)

PCT

(10) International Publication Number
WO 2011/113953 A1

(51) International Patent Classification:
G01N 33/50 (2006.01) *G01N 33/569* (2006.01)

(21) International Application Number:
PCT/EP2011/054207

(22) International Filing Date:
21 March 2011 (21.03.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/282,701 19 March 2010 (19.03.2010) US
10157086.9 19 March 2010 (19.03.2010) EP

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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, 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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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).

Published:

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

(54) **Title**: IN VITRO PROCESS FOR THE QUICK DETERMINATION OF A PATIENT'S STATUS RELATING TO INFECTION WITH MYCOBACTERIUM TUBERCULOSIS

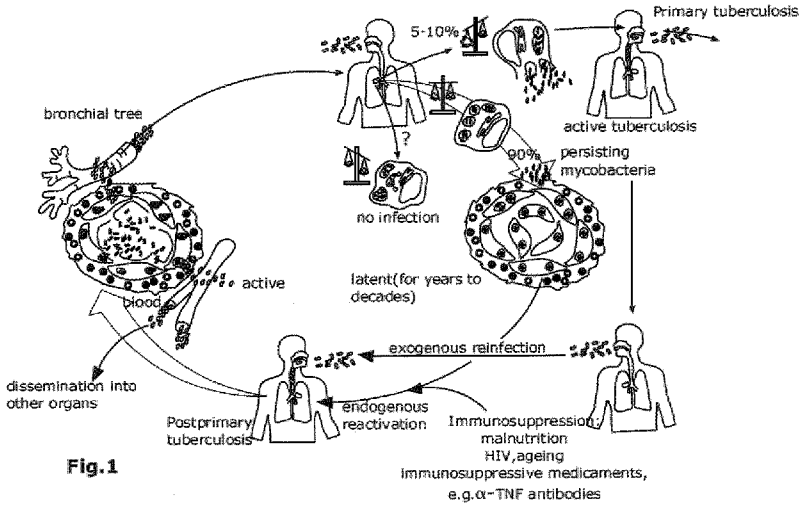


Fig.1

(57) **Abstract**: An in-vitro process for the quick determination of the infection status of a Mycobacterium tuberculosis infection from whole blood in terms of active or latent tuberculosis, comprising the steps of: • stimulating an antigen-specific T cell that is present in a first sam¬ ple of whole blood with purified protein derivative (PPD) in the presence of antibodies against CD28, or CD28 and CD49d; • processing of PPD by antigen-presenting cells (APC) by incubating for 1.5 h to 2.5 h, especially for 2 h, at 35 °C to 39 °C, especially at 37 °C, optionally with adding $C0_2$; • then adding a secretion inhibitor; • effecting an intensive mixing; and • another incubation for a period of at least 2.5 h at a temperature of from 35 °C to 39 °C, and • determining a cytokine profile from both the intracellular INF-γ production and the intracellular IL-2 production of the antigen-specific T cell; wherein • the presence of an active tuberculosis is indicated by a shift of the cytokine profile towards IFN-γ single positive cells accompanied by a decrease of IFN-γ/IL-2 double positive T cells.

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