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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 September 2007 (13.09.2007)

PCT

(10) International Publication Number
WO 2007/102146 A3

(51) International Patent Classification:
G01N 1/30 (2006.01) *G01N 33/50* (2006.01)

(21) International Application Number:
PCT/IL2007/000281

(22) International Filing Date: 6 March 2007 (06.03.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/778,839	6 March 2006 (06.03.2006)	US
60/778,944	6 March 2006 (06.03.2006)	US
60/778,900	6 March 2006 (06.03.2006)	US
60/778,902	6 March 2006 (06.03.2006)	US

(71) Applicant *(for all designated States except US)*: **ZETIQ TECHNOLOGIES LTD.** [IL/IL]; Paz Tower 1, 9th Floor, 5-7 Shoham Street, 52521 Ramat-gan (IL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GELVAN, Dan, Jacob** [IL/IL]; 21 Hashoftim Street, 47210 Ramat-hasharon (IL). **GOLTSMAN, Lev** [IL/IL]; 2/6 Ahad Haam Street, 76261 Rechovot (IL). **CHAUSOVSKY, Alexander** [IL/IL]; 25/6 Sayeret Yerushalmit Street, Pisgat Zeev, 97543 Jerusalem (IL).

(74) Agents: **G.E. EHRLICH (1995) LTD.** et al.; 11 Menachem Begin Street, 52521 Ramat Gan (IL).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, 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, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
29 November 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS FOR IDENTIFYING A CELL PHENOTYPE

(57) Abstract: A method of staining or pre-staining at least one cell is provided. The method comprising contacting the at least one cell with a staining agent selected from the group consisting of an extract of a Ficus elastica plant, a C23H44O4 and a proanthocyanidin, thereby staining or pre-staining the at least one cell. Also provided are methods of detecting cells of different differentiation stages and methods of diagnosing cancer and metabolic diseases.

WO 2007/102146 A3