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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 October 2006 (26.10.2006)

PCT

(10) International Publication Number
WO 2006/112928 A3

(51) International Patent Classification:
G06F 19/00 (2006.01)

(21) International Application Number:
PCT/US2006/005571

(22) International Filing Date:
17 February 2006 (17.02.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/594,526 15 April 2005 (15.04.2005) US

(71) Applicant *(for all designated States except US)*: **INTELLIGENT VIRUS IMAGING INC.** [US/US]; 26 Pinecrest Plaza, Suite 2, C/o Fasth Law Offices, Southern Pines, North Carolina 28387-4301 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **HOMMAN, Mohammed** [SE/SE]; Alphyddevagen 35, S-131 35 Nacka (SE). **SINTORN, Ida-Maria** [SE/SE]; Kopinge Karragard, S-31291 Laholm (SE).

(74) Agent: **FASTH, Rolf**; FASTH LAW OFFICES, 26 Pinecrest Plaza, Suite 2, Southern Pines, North Carolina 28387-4301 (US).

(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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

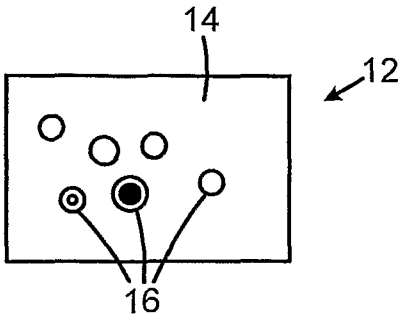
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, 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*

(88) Date of publication of the international search report:
5 April 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: METHOD OF ANALYZING CELL STRUCTURES AND THEIR COMPONENTS



(57) Abstract: A cell (14) is provided that contains a plurality of virus particles (16). A first image (20) of a first virus particle (22) and a second image (32) of a second virus particle (34) are taken by electron microscopy technology. The first virus particle is characterized as being in a first maturity stage and the second virus particle as being in a second maturity stage. The first image (20) and the second image (32) are transformed to first and second gray scale profiles (24, 46), respectively, based on pixel data. The first and second gray scale profiles (24, 36) are then saved as first and second templates, respectively. A third virus particle in a third image is identified. The third image is transformed into a third gray scale profile. The third gray scale is compared to the first and second template to determine a maturity stage of the third virus particle.

WO 2006/112928 A3