(51) International Patent Classification:
    G01N 23/225 (2006.0 1)    G01N 23/203 (2006.0 1)

(21) International Application Number:
    PCT/IB/2013/061349

(22) International Filing Date:

(25) Filing Language:
    English

(26) Publication Language:
    English

(30) Priority Data:

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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, NL, 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,
    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).

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

(48) Date of publication of this corrected version:
    13 August 2015

(54) Title: PROCESS FOR PERFORMING AUTOMATED MINERALOGY

(57) Abstract: A method and system for determining the mineral content of a sample using an electron microscope. The method includes directing an electron beam toward an area of interest of a sample, the area of interest comprising an unknown composition of minerals. The working distance between the backscattered electron detector of the microscope and the area of interest of the sample is determined. Compensation is made for the difference between the working distance and a predetermined working distance in which the predetermined working distance being the working distance that provides desired grayscale values for detected backscattered electrons. One way of compensating for working distance variation is to use an autofocus feature of the microscope to adjust the working distance. Backscattered electrons from the area of interest of the sample are then detected.
Information about Correction:
see Notice of 13 August 2015