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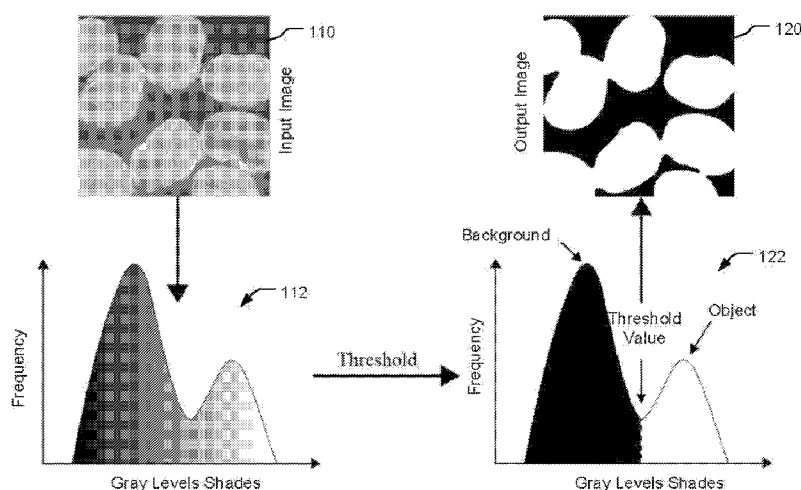
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(54) Title: PETROGRAPHIC IMAGE ANALYSIS FOR DETERMINING CAPILLARY PRESSURE IN POROUS MEDIA

**Fig. 1**

(57) Abstract: This disclosed subject matter is generally related to methods for characterizing two-dimensional (2D) and three-dimensional (3D) samples to determine pore-body and pore-throat size distributions and capillary pressure curves in porous media using petrographic image analysis. Input includes high-resolution petrographic images and laboratory-derived porosity measurements. Output includes: (1) pore-body and pore-throat size distributions, and (2) simulated capillary pressure curves for both pore bodies and pore throats.



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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).

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INTERNATIONAL SEARCH REPORT

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PCT/US2012/027041**A. CLASSIFICATION OF SUBJECT MATTER****G01V 9/00(2006.01)i, G06F 19/00(2011.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G01V 9/00; G06F 17/50; G06F 15/62; G06T 17/00; H01J 49/44; G01N 33/24; G06K 9/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: pore throat, image, watershed, dimension, confocal microscopy

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011-0004448 A1 (NEIL FRANCIS HURLEY et al.) 06 January 2011 See paragraphs 0004-0020 and figures 3,6.	1-30
Y	US 6985612 B2 (HORST HAHN) 10 January 2006 See column 2 lines 2-15, column 10 line 24-column 12 line 52, claim 1 and figure 1.	1-30
A	US 4783751 A (ROBERT EHRLICH et al.) 08 November 1988 See claim 1 and figure 1.	1-30
A	US 7279679 B2 (WILLIAM M. OLD et al) 09 October 2007 See claim 1 and figure 1.	1-30
A	US 2005-0256643 A1 (GREGORY N. BOITNOTT) 17 November 2005 See paragraphs 25,26, claim 1 and figure 7.	1-30

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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