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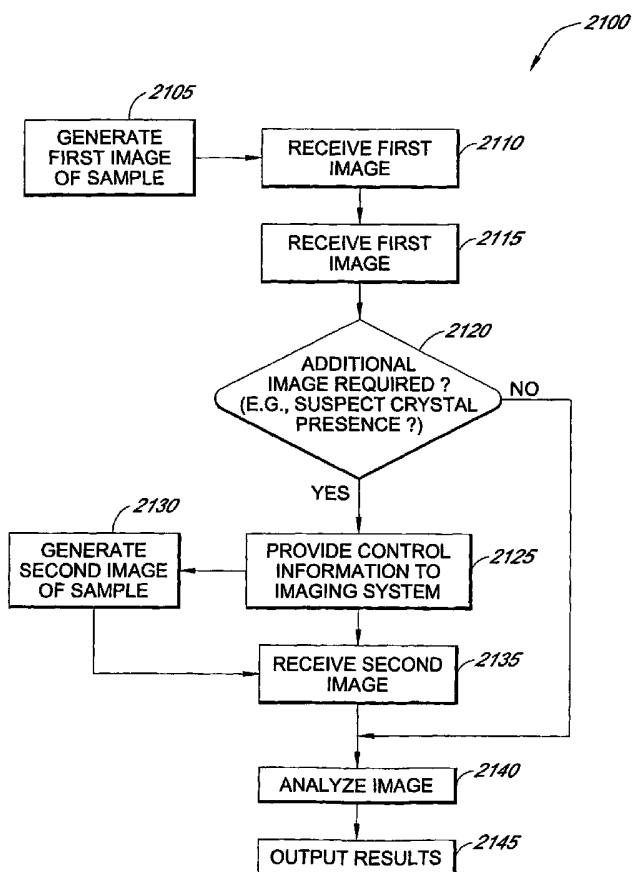
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(54) Title: IMAGE ANALYSIS SYSTEM AND METHOD



(57) Abstract: An image analysis system (200) and related methods for automation of the monitoring of samples to determine crystal growth. Samples are imaged from time to time using a set of imaging parameters. The resulting images are evaluated to determine the contents of the samples. If the evaluation of the image indicates the presence of crystals, the sample may be re-imaged using a different set of imaging parameters, and the resulting image analyzed to determine its contents. The sample may also be evaluated by generating multiple images of a sample using various sets of imaging parameters, identifying pixels that depict regions of interest in a plurality of images, merging the pixels from each region of interest into a composite image and analyzing the composite image. An image of a sample can also be evaluated by classifying the pixels of the image based on the contents of the sample that they depict, color-coding the pixels using the classifications, and displaying the colored image for analysis.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : G06K 9/00; A61B 5/00
 US CL : 382/128, 130-134, 155-159, 165, 170, 284; 600/300
 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)
 U.S. : 382/128, 130-134, 155-159, 165, 170, 284; 600/300

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

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

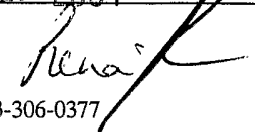
C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,267,722 (ANDERSON et al.) 31 July 2001 (31.07.2001), ENTIRE OF THE PATENT.	1-40

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

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"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</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search	Date of mailing of the international search report
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