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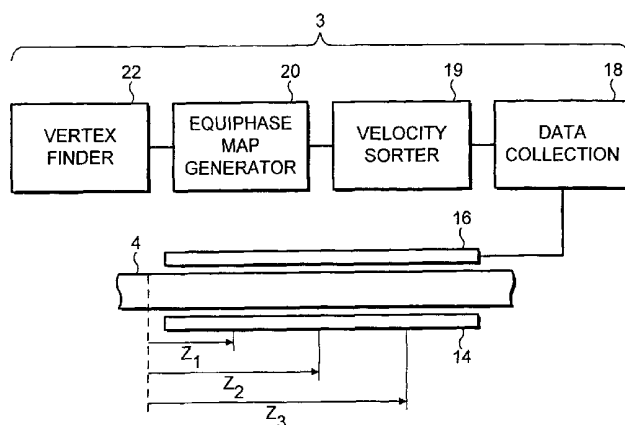
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(54) Title: SYSTEM AND METHOD FOR DETERMINING THE VELOCITY OF MIGRATING OBJECTS



(57) **Abstract:** An analysis system for and method of enabling determination of the velocities of migrating objects and also classifying migrating objects into groups having a common constraint. In one aspect the present invention provides an analysis system for and method of enabling determination of the velocities of migrating objects, the system comprising: a space-time map generator for generating a space-time map of points representative of the signal peaks of signals detected at a plurality of spaced positions; and a vertex finder for identifying at least one vertex from the space-time map, with a single vertex being identified for each group of objects having a common constraint and the velocities of the objects being determinable from the sets of points in the space-time map corresponding to the respective objects as fitted to the respective vertex. In another aspect the present invention provides an analysis system for classifying migrating objects into groups each having a common constraint, the system comprising: a space-time map generator for generating a space-time map of points representative of the signal peaks of signals detected at a plurality of spaced positions; and a vertex finder for identifying at least one vertex from the space-time map, with a single vertex being identified for each group of objects having a common constraint.



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## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G01N27/447

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)  
IPC 7 G01N

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 practical, search terms used)

EPO-Internal, WPI Data, INSPEC, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 6 017 435 A (HASSARD STUART ET AL) 25 January 2000 (2000-01-25)</p> <p>column 3, line 40 - line 57 column 4, line 58 - line 64 column 5, line 34 - line 67 column 11, line 46 - column 13, line 33 --- -/--</p>	<p>1,2, 5-17, 20-33, 36-47, 50-64</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## ° Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*Z\* document member of the same patent family

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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>LU S X ET AL: "Side-entry excitation and detection of square capillary array electrophoresis for DNA sequencing" JOURNAL OF CHROMATOGRAPHY A, ELSEVIER SCIENCE, NL, vol. 853, no. 1-2, 20 August 1999 (1999-08-20), pages 359-369, XP004178255 ISSN: 0021-9673 paragraph '02.3!; figures ---</p>	<p>1,2, 5-17, 20-33, 36-47, 50-64</p>
X	<p>NEUMANN M ET AL: "Capillary array scanner for time-resolved detection and identification of fluorescently labelled DNA fragments" JOURNAL OF CHROMATOGRAPHY A, ELSEVIER SCIENCE, NL, vol. 871, no. 1-2, 25 February 2000 (2000-02-25), pages 299-310, XP004322111 ISSN: 0021-9673 paragraphs '0002!,'0004!; figures 1,4 ---</p>	<p>1,2,5,6, 8-17,20, 21, 23-33, 36,37, 39-47, 50,51, 53-64</p>
X	<p>US 5 627 643 A (WAHLUND KARL-GUSTAV ET AL) 6 May 1997 (1997-05-06)  column 2, line 23 - line 40; figures column 4, line 62 -column 5, line 6 ---</p>	<p>1,2,5,6, 8-17,20, 21, 23-33, 36,37, 39-47, 50,51, 53-64</p>
A	<p>US 5 141 609 A (SWEEDLER JONATHAN V ET AL) 25 August 1992 (1992-08-25) the whole document ---</p>	<p>1-64</p>
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Information on patent family members

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