Title: PROCESS FOR THE DETECTION OF CHROMOSOMAL ABERRATIONS IN INTERPHASE NUCLEI

Abstract: The present invention relates to a process for the detection of chromosomal aberrations using e.g. a high resolution multicolor-banding (MCB) technology.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 C12Q1/68

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 C12Q

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, PAJ, MEDLINE, BIOSIS, EMBASE, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>X</td>
<td>CLAUSSEN U ET AL.: &quot;The shape and DNA mediated banding pattern of chromosomes in interphase are similar to metaphase chromosomes&quot; AMERICAN JOURNAL OF HUMAN GENETICS, vol. 69, no. 4Sup, October 2001 (2001-10), page 314 XP008021472 abstract</td>
<td>1,3,5,6</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of box C.

Special categories of cited documents:

*A* document defining the general state of the art which is not considered to be of particular relevance

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*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)

*O* document referring to an oral disclosure, use, exhibition or other meaning

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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

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*Same* document member of the same patent family

Date of the actual completion of the international search

4 September 2003

Date of mailing of the international search report

17/09/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5816 Patentlaan 2 NL - 2280 HV Rijswijk

Tel. (+31-70) 340-2040, Tx. 31 051 apo nl, Fac (+31-70) 340-3016

Authorized officer

Knehr, M
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<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
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<tbody>
<tr>
<td>Y</td>
<td>CREMER T ET AL.: &quot;Detection of chromosome aberrations in metaphase and interphase tumor cells by in situ hybridization using chromosome-specific library probes&quot; HUMAN GENETICS, vol. 80, 1988, pages 235-246, XP008021459 cited in the application abstract page 235, column 2, paragraph 2 - page 236, column 2, paragraph 2; figures 2, 5</td>
<td>1-6</td>
</tr>
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<td>A</td>
<td>EILS R ET AL.: &quot;Three-dimensional reconstruction of painted human interphase chromosomes: Active and inactive X chromosome territories have similar volumes but differ in shape and surface structure&quot; THE JOURNAL OF CELL BIOLOGY, vol. 136, no. 6, 1996, pages 1427-1440, XP002253505 cited in the application the whole document</td>
<td>---</td>
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<tr>
<td>A</td>
<td>CARTER N P: &quot;Cytogenetic analysis by chromosome painting&quot; CYTOMETRY, vol. 18, 1994, pages 2-10, XP008021463 the whole document</td>
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<tr>
<td>P,X</td>
<td>LIEHR T ET AL.: &quot;Multicolor chromosome banding (MCB) with YAC/BAC-based probes and region-specific microdissection DNA libraries&quot; CYTGENETIC AND GENOME RESEARCH, vol. 97, 2002, pages 43-50, XP008021453 the whole document</td>
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