Abstract: Software operable to add spatial frequency to an image is operable to identify a higher resolution, coarse grain material image. The software is typically further operable to generate a sensor image using the material image and to add spatial frequency to the sensor image using a high frequency image to generate a high frequency sensor image.
Published: with international search report

(88) Date of publication of the international search report:
1 March 2007

For two-letter codes and other abbreviations, refer to the “Guidance Notes on Codes and Abbreviations” appearing at the beginning of each regular issue of the PCT Gazette.
A. CLASSIFICATION OF SUBJECT MATTER
INV. G06T 15/20  G06T 50

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)
G06T

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, INSPEC, WPI Data, PAJ

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>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>page 181, left-hand column, line 30 - right-hand column, line 26</td>
<td>3,10,17</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C.

See patent family 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
"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 means
"P" document published prior to the international filing date but later than the priority date claimed

"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
"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
"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.

"A" document member of the same patent family

Date of the actual completion of the international search
26 October 2006

Date of mailing of the international search report
13/11/2006

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl
Fax (+31-70) 340-3016

Authorized officer
Perez Molina, E
<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>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>FR 2 701 779 A1 (AEROSPATIALE [FR]; ERNINES; ARMINES) 26 August 1994 (1994-08-26) claim 1</td>
<td>1,8,15</td>
</tr>
<tr>
<td>A</td>
<td>US 6 735 557 B1 (CASTELLAR JAVIER ET AL) 11 May 2004 (2004-05-11) abstract; figures 3a-4b column 9, line 22 - column 10, line 26</td>
<td>1-21</td>
</tr>
<tr>
<td>Patent document cited in search report</td>
<td>Publication date</td>
<td>Patent family member(s)</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>FR 2701779</td>
<td>A1 26-08-1994</td>
<td>NONE</td>
</tr>
<tr>
<td>US 6735557</td>
<td>B1 11-05-2004</td>
<td>NONE</td>
</tr>
</tbody>
</table>