(54) Title: SUB PICTURE CONTROL APPARATUS AND METHOD FOR TELEVISION RECEIVER

(57) Abstract: Disclosed is a sub picture control apparatus and method for a TV that can achieve an effective viewing of the sub picture. The apparatus includes a region data extracting section (52) for extracting region data included in a broadcasting signal tuned by a second tuner (43), a second luminance/chrominance (Y/C) separating section (45) for separating a chrominance signal and a luminance signal from the broadcasting signal selected by the second tuner (43), a region extracting section/scaler (46) for extracting a video signal of a region corresponding to a specified region information and performing a picture size adjustment with respect to the extracted video signal, and a control section (53) for controlling a region extracting section/scaler (46) to extract the video signal corresponding to a region information extracted from the region extracting section/scaler (46) and controlling a video processing section (48) to process an output signal of the region extracting section/scaler (46).
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.
## INTERNATIONAL SEARCH REPORT

### CLASSIFICATION OF SUBJECT MATTER

**IPC**: H04N 5/45

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

### MINIMUM DOCUMENTATION SEARCHED

**IPC**: H04N 5/445, 5/45

Minimum documentation searched (classification system followed by classification symbols)

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

### ELECTRONIC DATA BASES

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

### WPI

### 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>A</td>
<td>US 6008860 A (PATTON, S.W. et al.) 28 December 1999 (28.12.99) <strong>fig.2, claims 1-4, 11.</strong></td>
<td>1-5,9-12</td>
</tr>
<tr>
<td>A</td>
<td>EP 0984628 A1 (SONY CORP.) 8 March 2000 (08.03.00) <strong>claims 6-9.</strong></td>
<td>1,4,5,9-12</td>
</tr>
</tbody>
</table>

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

* Special categories of cited documents:
  1. **A** document defining the general state of the art which is not considered to be of particular relevance
  2. **E** earlier application or patent but published on or after the international filing date
  3. **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)
  4. **O** document referring to an oral disclosure, use, exhibition or other means
  5. **P** document published prior to the international filing date but later than the priority date claimed

**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

**Z** document member of the same patent family

---

Date of the actual completion of the international search: 21 January 2002 (21.01.2002)

Date of mailing of the international search report: 28 February 2002 (28.02.2002)

Name and mailing address of the ISA/AT

Austrian Patent Office

Kohlmarkt 8-10; A-1014 Vienna

Facsimile No. 1/53424/535

Authorized officer: FUSSY

Telephone No. 1/53424/328

Form PCT/ISA/210 (second sheet) (July 1998)
<table>
<thead>
<tr>
<th>Patent document cited in search report</th>
<th>Publication date</th>
<th>Patent family member(s)</th>
<th>Publication date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP A 0984628</td>
<td></td>
<td>none</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DE C0 69611733</td>
<td>08-03-2001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DE T2 69611733</td>
<td>23-05-2001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP B1 870401</td>
<td>31-01-2001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP T2 60503181</td>
<td>14-03-2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WO A1 9724869</td>
<td>10-07-1997</td>
</tr>
</tbody>
</table>