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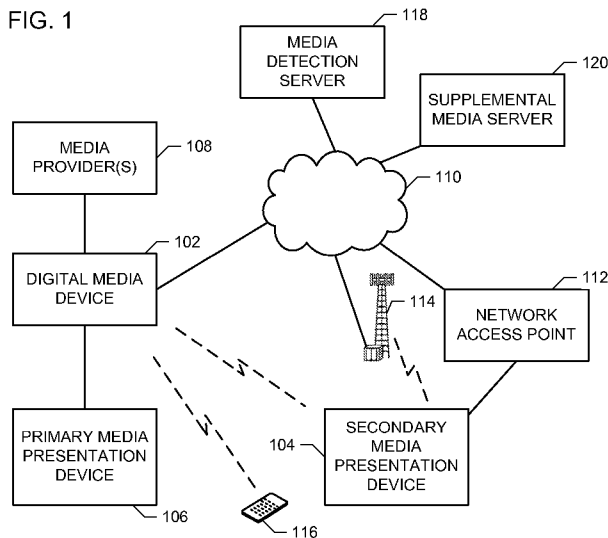
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(54) Title: METHODS AND APPARATUS TO PRESENT SUPPLEMENTAL MEDIA ON A SECOND SCREEN



(57) Abstract: Methods and apparatus to present supplemental media on a second screen are disclosed. An example method includes obtaining, at a digital media device, media identifying data from audio data of a portion of first media being presented via the digital media device; determining that the portion of the first media is an advertisement based on the media identifying data; detecting, at the digital media device, a command to cause the digital media device to skip the portion of the first media; and providing an indication to a second device in response to detecting the command, the indication to cause the second device to present second media.

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| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br><b>H04N 21/4402(2011.01)i, H04N 21/45(2011.01)i, H04N 21/4147(2011.01)i</b>  |  |   |
|--|--|---|
| According to International Patent Classification (IPC) or to both national classification and IPC  |  |   |
| <b>B. FIELDS SEARCHED</b>  |  |   |
| Minimum documentation searched (classification system followed by classification symbols)<br>H04N 21/4402; H04N 5/91; G06F 17/00; G06T ; G06F 17/60; H04N 7/025; H04N 21/45; H04N 21/4147  |  |   |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched<br>Korean utility models and applications for utility models<br>Japanese utility models and applications for utility models  |  |   |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)<br>eKOMPASS(KIPO internal) & Keywords: digital media device, media identifying data, audio data, first media, advertisement, command, skip, second device, second media, location, identification, indication, decoding, signature  |  |   |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>  |  |   |
| Category*  | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.   |
| X  | US 2003-0149621 A1 (YEVGENIY EUGENE SHTEYN) 7 August 2003<br>See paragraphs 11-32; claims 1, 7; and figures 1, 2.                  | 1, 2, 5-9, 12, 19, 20<br>, 23-27  |
| Y  |  | 3, 4, 13-16, 21, 22, 30   |
| A  |  | 10, 11, 17, 18, 28, 29  |
| Y  | US 2007-0294292 A1 (AAMER HYDRIE et al.) 20 December 2007<br>See paragraphs 17-26, 39-44; and figures 1, 5.                        | 3, 4, 13-16, 21, 22, 30   |
| A  | US 2008-0152300 A1 (ROBERT A. KNEE et al.) 26 June 2008<br>See paragraphs 23-48; claims 1, 14; and figure 1.                       | 1-30  |
| A  | WO 02-082374 A2 (EXPANSE NETWORKS, INC.) 17 October 2002<br>See page 5, line 21 - page 9, line 24; claims 1, 54; and figures 1, 2. | 1-30  |
| A  | US 2009-0265734 A1 (DOMINIQUE DION et al.) 22 October 2009<br>See paragraphs 32-36; and figures 1, 2.                              | 1-30  |
| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.   |  |   |
| * Special categories of cited documents:<br>"A" document defining the general state of the art which is not considered to be of particular relevance<br>"E" earlier application or patent but published on or after the international filing date<br>"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)<br>"O" document referring to an oral disclosure, use, exhibition or other means<br>"P" document published prior to the international filing date but later than the priority date claimed<br>"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<br>"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<br>"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<br>"&" document member of the same patent family |  |   |
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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| Patent document cited in search report | Publication date | Patent family member(s)  | Publication date   |
|--|------------------|--|--|
| US 2003-0149621 A1                     | 07/08/2003       | AU 2003-205950 A1<br>CN 1628314 A<br>EP 1479019 A2<br>JP 2005-517361 A<br>KR 10-2004-0079437 A<br>TW 1270297 B<br>WO 03-067880 A2<br>WO 03-067880 A3   | 02/09/2003<br>15/06/2005<br>24/11/2004<br>09/06/2005<br>14/09/2004<br>01/01/2007<br>14/08/2003<br>18/12/2003   |
| US 2007-0294292 A1                     | 20/12/2007       | CN 101467141 A<br>CN 101467141 B<br>EP 2027541 A1<br>EP 2027541 A4<br>JP 2009-540746 A<br>KR 10-2009-0018634 A<br>TW 200822743 A<br>WO 2007-145854 A1  | 24/06/2009<br>16/11/2011<br>25/02/2009<br>29/12/2010<br>19/11/2009<br>20/02/2009<br>16/05/2008<br>21/12/2007   |
| US 2008-0152300 A1                     | 26/06/2008       | US 2010-0166389 A1<br>WO 2008-088510 A1  | 01/07/2010<br>24/07/2008   |
| WO 02-082374 A2                        | 17/10/2002       | AU 2002-307128 A1<br>CA 2442842 A1<br>CA 2442842 C<br>US 2002-0144262 A1<br>US 2005-0097599 A1<br>US 2008-0040740 A1<br>US 2008-0059997 A1<br>US 2013-0101272 A1<br>US 7440674 B2<br>US 8116616 B2<br>US 8290351 B2<br>WO 02-082374 A3 | 21/10/2002<br>17/10/2002<br>07/12/2010<br>03/10/2002<br>05/05/2005<br>14/02/2008<br>06/03/2008<br>25/04/2013<br>21/10/2008<br>14/02/2012<br>16/10/2012<br>08/05/2003 |
| US 2009-0265734 A1                     | 22/10/2009       | US 2013-067512 A1<br>US 8332887 B2<br>US 8739206 B2  | 14/03/2013<br>11/12/2012<br>27/05/2014   |