Title: METHOD AND APPARATUS FOR IMPROVED HANDSET MULTI-TASKING, INCLUDING PATTERN RECOGNITION AND AUGMENTATION OF CAMERA IMAGES

Abstract: This invention provides a handset (10) and a method of operating a handset. The handset includes a user interface that contains a data entry device (20) and a visual display device (14), a camera (16) and a controller (12) coupled to the visual display device and to the camera. The controller operates under the control of a stored program (22A) for displaying to a user an image representative of at least a portion of an environment of the user as seen through the camera during a time that the user is interacting with the user interface. The controller may further operate under control of the stored program to process images generated by the camera to detect a potential for a collision with an object that is present in the environment of the user, and to warn the user of the potential for a collision.

Published:

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB04/04282

A. CLASSIFICATION OF SUBJECT MATTER

IPC: H04N 7/14 (2006.01)

USPC: 348/14.02
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)
U.S.: 348/14.02, 14.03, 14.07, 455/556.1, 556.2

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 practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
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<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>US 6,424,369 B1 (ADAI et al.) 23 July 2002, col. 7, lines 40-47; fig. 2.</td>
<td>1, 11, 16, 17, 32, 33</td>
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<tr>
<td>Y</td>
<td>JP 200307913 A (MATSUI) 02 November 2000, see entire document.</td>
<td>2-7, 9, 18-23, 25-34-50</td>
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<td>Y, P</td>
<td>US 6,813,491 B1 (MCKINNEY) 02 November 2004, col. 3, lines 34-42.</td>
<td>8, 24</td>
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<td>Y</td>
<td>US 2003/0210440 A1 (HIROYASU et al.) 13 November 2003, fig. 53, 54.</td>
<td>12, 27</td>
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Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search
13 April 2006 (13.04.2006)

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Form PCT/ISA/210 (second sheet) (April 2005)
Continuation of B. FIELDS SEARCHED Item 3:
USPAT; US-PGPUB; EPO; JPO
collision or crash