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[Continued on next page]

(54) Title: MOBILE WIRELESS DISPLAY PROVIDING SPEECH TO SPEECH TRANSLATION AND AVATAR SIMULATING HUMAN ATTRIBUTES

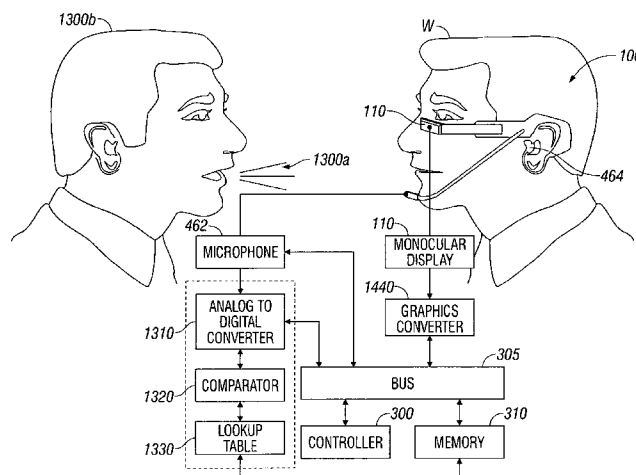


FIG. 14

(57) Abstract: An apparatus includes a monocular display with a wireless communications interface, user input device, transmitter, and controller, and may provide a video link to and control and management of a host device and other devices, such as a cell phone, computer, laptop, or media player. The apparatus may receive speech and digitize it. The apparatus may compare the digitized speech in a first language to a table of digitized speech in a second language to provide translation or, alternatively, may compare the digitized speech to a table of control commands. The control commands allow user interaction with the apparatus or other remote devices in a visual and audio manner. The control signals control a "recognized persona" or avatar stored in a memory to provide simulated human attributes to the apparatus, network or third party communication device. The avatar may be changed or upgraded according to user choice.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/009267

A. CLASSIFICATION OF SUBJECT MATTER
INV. G10L15/18 G10L15/26

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)
G10L

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, INSPEC, COMPENDEX, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 2006/293874 A1 (ZHANG ZHENGYOU [US] ET AL) 28 December 2006 (2006-12-28)</p> <p>abstract page 1, paragraphs [0001],[0006] page 3, paragraphs [0044] page 4, paragraphs [0050],[0056] page 5, paragraph [0060] page 7, paragraph [0087]- page 8, paragraph [0089] figures 4,7,13,16,19</p> <p align="center">----- -/--</p>	<p>1-6, 20-25, 39,40</p>

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.
- *&* document member of the same patent family

Date of the actual completion of the international search

6 November 2008

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/009267

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>HUANG X ET AL: "MiPad: a multimodal interaction prototype" 2001 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING. PROCEEDINGS. (ICASSP). SALT LAKE CITY, UT, MAY 7 - 11, 2001; [IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING (ICASSP)], NEW YORK, NY : IEEE, US, vol. 1, 7 May 2001 (2001-05-07), pages 9-12, XP010803073 ISBN: 978-0-7803-7041-8 abstract page 9, right-hand column, paragraph 2 - page 10, left-hand column, paragraph 1 page 10, left-hand column, last paragraph - right-hand column, paragraph 2 figures 2,3</p>	1,20,39, 40
A	<p>----- BOWEN ZHOU ET AL: "A hand-held speech-to-speech translation system" AUTOMATIC SPEECH RECOGNITION AND UNDERSTANDING, 2003. ASRU '03. 2003 IEEE WORKSHOP ON ST. THOMAS, VI, USA NOV. 30-DEC. 3, 2003, PISCATAWAY, NJ, USA, IEEE, 30 November 2003 (2003-11-30), pages 664-669, XP010713352 ISBN: 978-0-7803-7980-0 abstract page 664, right-hand column, last paragraph - page 665, left-hand column, paragraph 1 page 665, right-hand column, last paragraph - page 666, left-hand column, paragraph 1 page 668, right-hand column, paragraph 1 figures 1,2</p>	1,3,4, 20,22, 23,39,40
A	<p>----- ALEX WAIBEL ET AL: "Speechalator: two-way speech-to-speech translation on a consumer PDA" 20030901, 1 September 2003 (2003-09-01), page 369, XP007007279 abstract page 370, par. [3. Recognition] - page 371, par. [5. Synthesis]</p>	1,20,39, 40

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/009267

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see extra sheet

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6,20-25,39-40

Mobile communication device comprises a speech-to-speech system

2. claims: 7-19,26-38

Mobile communication system employs an avatar for interacting in a visual and audio manner

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/009267

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006293874	A1	NONE	