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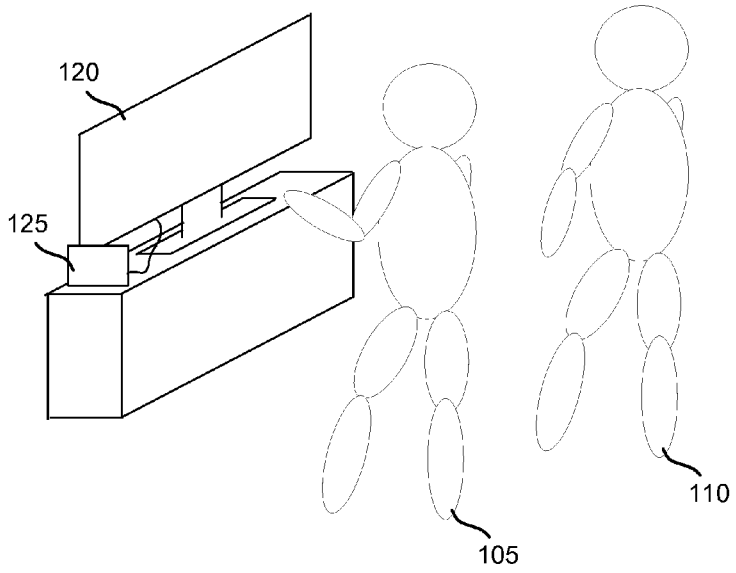
[Continued on next page]

(54) Title: USER INPUT PROCESSING WITH EYE TRACKING



(57) Abstract: A system determines which user of multiple users provided input through a single input device. A mechanism captures images of the one or more users. When input is detected, the images may be processed to determine which user provided an input using the input device. The images may be processed to identify each users head and eyes, and determine the focus point for each user's eyes. The user which has eyes focused at the input location is identified as providing the input. When the input mechanism is a touch screen, the user having eyes focused on the touch screen portion which was touched is identified as the source of the input.

FIGURE 1

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A. CLASSIFICATION OF SUBJECT MATTER
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USPC: 345/158
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. : 345/158

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

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2010/0130280 A1 (AREZINA et al.) 27 May 2010 (27.05.2010), see entire documetns.	1, 2, 9-11 and 18 ---------- 3-8 and 12-17
Y	US 2010/0066667 A1 (MACDOUGALL et al.) 18 March 2010 (18.03.2010), see entire documents.	3-8, and 12-17
Y	US 2013/0057573 A1 (CHAKRAVARTHULA et al.) 07 March 2013 (07.03.2013), see entire documents.	8 ans 17
Y	US 6,637,883 B1 (TENGSHE et al.) 28 October 2003 (28.10.2003), see entire documents.	19 and 20

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

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Date of the actual completion of the international search	Date of mailing of the international search report
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Continuation of B. FIELDS SEARCHED Item 3:
US-PGPUB, USPAT, USOCR, EPRS, EPO, JPO, DERWENT, IBM_TDB: eye, colour, camera, gazel, color, tracking, player, screen, canel, touch, people, multiple, gesture, interact, linear, touchscreen, focus, image.