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[Continued on next page]

- (54) **Title:** METHOD CIRCUIT AND SYSTEM FOR HUMAN TO MACHINE INTERFACING BY HAND GESTURES

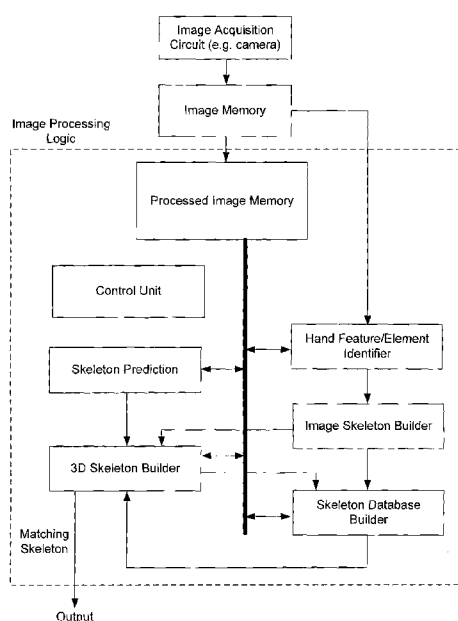


Fig. 10

(57) **Abstract:** Disclosed is a system method and circuit for human to machine interfacing using one or more 3D hand skeleton models, comprising an image acquisition circuit to acquire a 2D image of a hand, a hand feature identifier module to identify hand features in an acquired image and an image skeleton builder module to generate a 2D skeleton dataset of the hand using identified features. A 3D skeleton builder module is adapted to generate a 3D hand skeleton dataset by determining a configuration of some or all of the one or more 3D hand skeleton models whose 2D projection substantially corresponds to the generated 2D skeleton dataset.



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A. CLASSIFICATION OF SUBJECT MATTER

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

B. FIELDS SEARCHED

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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)

MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); DialogPRO; IEEE; Google/Google Scholar; human*, machine*, interface*, 3D, hand*, skeleton*, image*, acquisition*, circuit*, 2D, feature*, identifier*, builder*, dataset, generating*, anatomic*, relationship*, predict*, motion*, physics*, rule*, identifying*

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 2008/0037829 A1 (GIVON, D) February 14, 2008, Figures 3-10, Abstract, Paragraphs [0007], [0035], [0046], [0065], [0066], [0070], [0074], [0075], [0077], [0121], [0166], [0180], [0182], [0185]-[0187], [0226], [0227], [0253], [0351], [0352], Claims 38, 41	1-4, 6-9, 11-14 ----- 5, 10, 15
Y	WO 2008/126069 A2 (GIVON, D) October 23, 2008, paragraphs [0035], [0037], [0041], [0063], [0071], [0081], [0111]).	5, 10, 15
A	US 2010/0208038 A1 (KUTLIROFF, G et al.) August 19, 2010, entire document	1-15
A	US 2004/0155962 A1 (MARKS, RL) August 12 2004, entire document	1-15
A	US 6,833,843 B2 (MOJAVER, M et al) December 21, 2004, entire document	1-15

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