



(51) International Patent Classification:

G06F 3/00 (2006.01) G06F 3/0488 (2013.01)
G06F 3/046 (2006.01) G06T 7/00 (2006.01)

(21) International Application Number:

PCT/IN2014/000006

(22) International Filing Date:

3 January 2014 (03.01.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

5/KOL/2013 3 January 2013 (03.01.2013) IN
5/KOL/2014 1 January 2014 (01.01.2014) IN

(72) Inventors; and

(71) Applicants : SUMAN, Saurav [IN/IN]; c/o A.K. Agrawal, Rani Sati Mandir Lane, Near Tara, Silai Kendra, Ratu Road, Ranchi, Jharkhand 834001 (IN). SHRIVASTAVA, Harshit [IN/IN]; c/o Rajesh Shrivastava, Near Shiv Mandir, Shiv Ward, Station Road, Bina, Distt. Sagar, Madhya Pradesh, PIN 470113 (IN).

(74) Agent: DIPANKAR, Mukharjee; Flat #7, 2nd Floor, 373/2, Nalini Ranjan Avenue, Block G, New Alipore, Kolkata 700053 (IN).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: A METHOD AND SYSTEM ENABLING CONTROL OF DIFFERENT DIGITAL DEVICES USING GESTURE OR MOTION CONTROL

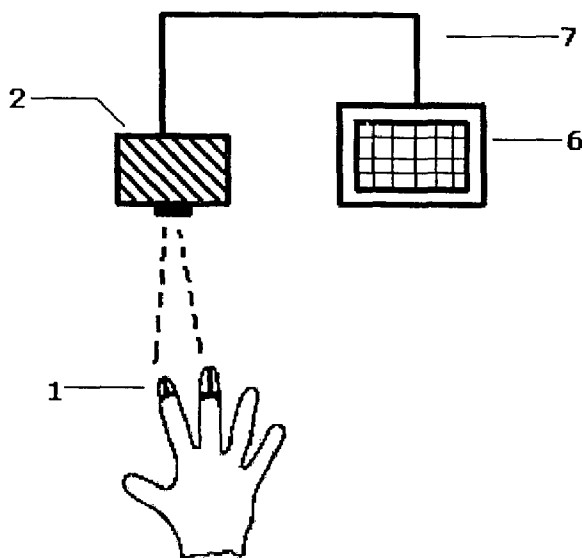


Figure 1(a)

(57) Abstract: A system for controlling operation of digital devices according to gesture of its user comprising: at least one gesture indicating hardware; at least one imaging device for capturing at least one first array of images of the at least one gesture indicating hardware; and a processor for processing the captured stream of images for; identifying at least one second array of images of the at least one gesture indicating hardware from the at least one first array of images captured by the at least one imaging device; determining at least one geometrical characteristic of bodies present in the at least one second array of images and their variation to construct at least one motion path of the at least one gesture indicating hardware; determining at least one key coordinates point representing at least one motion path; and generating at least one operating instruction to control at least one operation of at least one digital device. Noise cancellation while gesture detection is carried out by evaluating errors as a function of relative distances, boundary distances, and characteristics of various bodies identified beyond a threshold image size. Another approach of removing noise in gesture detection is to fix the emitting device in a still environment and identifying still bodies except emitter and thereby removing those still objects while capturing emitting

device in motion.



(88) Date of publication of the international search report:

25 September 2014