

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
19 June 2025 (19.06.2025)



(10) International Publication Number
WO 2025/128860 A1

(51) International Patent Classification:

H01Q 1/27 (2006.01) *G06F* 3/01 (2006.01)
G01S 13/87 (2006.01) *H04B* 1/38 (2015.01)
G06F 1/16 (2006.01)

(21) International Application Number:

PCT/US2024/059833

(22) International Filing Date:

12 December 2024 (12.12.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/609,769 13 December 2023 (13.12.2023) US
18/977,818 11 December 2024 (11.12.2024) US

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(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA,

(54) Title: SYSTEM AND METHOD FOR PERFORMING MOTION CAPTURE USING CHANNEL STATE INFORMATION

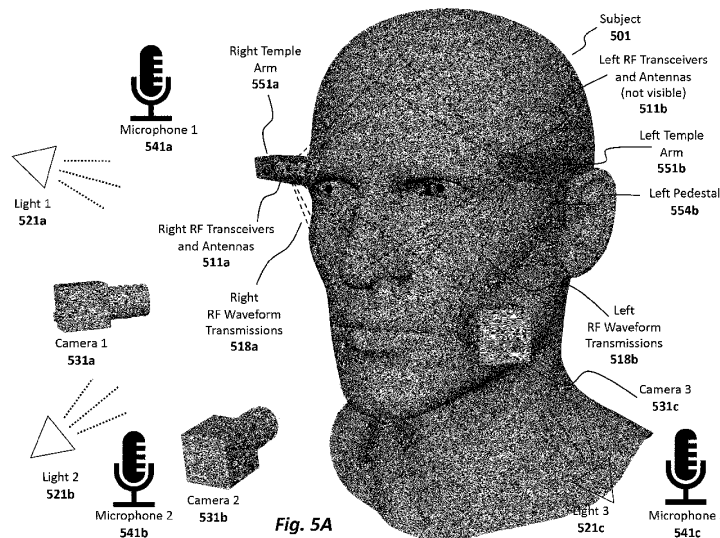


Fig. 5A

(57) Abstract: A wearable device including at least one radio frequency (RF) transmitter comprising an antenna integrated into at least one component of the wearable device, the at least one RF transmitter configured to periodically transmit at least one RF waveform, and at least one RF receiver comprising an antenna integrated into the at least one component of the wearable device, the at least one RF receiver configured to receive the at least RF waveform subsequent to the at least one RF waveform contacting an anatomy of a wearer of the wearable device. A channel state information (CSI) is estimated from the received RF waveform, the estimated CSI is compared with CSI entries in a database to determine a closest matching CSI, and a texture map of the wearer's anatomy is selected by associating with the CSI in the database.

[Continued on next page]

NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,
RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, 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, ME, 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).

Published:

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