



- (51) **International Patent Classification:**
G16H 20/10 (2018.01) *G16H 10/60* (2018.01)
G16H 50/20 (2018.01)
- (21) **International Application Number:**
PCT/US2019/066509
- (22) **International Filing Date:**
16 December 2019 (16.12.2019)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
62/779,705 14 December 2018 (14.12.2018) US
- (71) **Applicant: PEAR THERAPEUTICS, INC.** [US/US]; 200 State Street, 13th Floor, Boston, MA 02109 (US).
- (72) **Inventors: LUDERER, Hilary;** 200 State Street, 13th Floor, Boston, MA 02109 (US). **ENMAN, Nicole;** 200 State Street, 13th Floor, Boston, MA 02109 (US). **KERN, Audrey;** 200 State Street, 13th Floor, Boston, MA 02109 (US). **NICHOLS, Jake;** 200 State Street, 13th Floor, Boston, MA 02109 (US). **MARICICH, Yuri;** 200 State Street, 13th Floor, Boston, MA 02109 (US).
- (74) **Agent: BARNETT, Scott, D.;** Honigman LLP, 650 Trade Centre Way, Suite 200, Kalamazoo, MI 49002-0402 (US).
- (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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,

(54) **Title:** A DIGITAL THERAPEUTIC COMPONENT TO OPTIMIZE INDUCTION OF BUPRENORPHINE-CONTAINING PRODUCTS

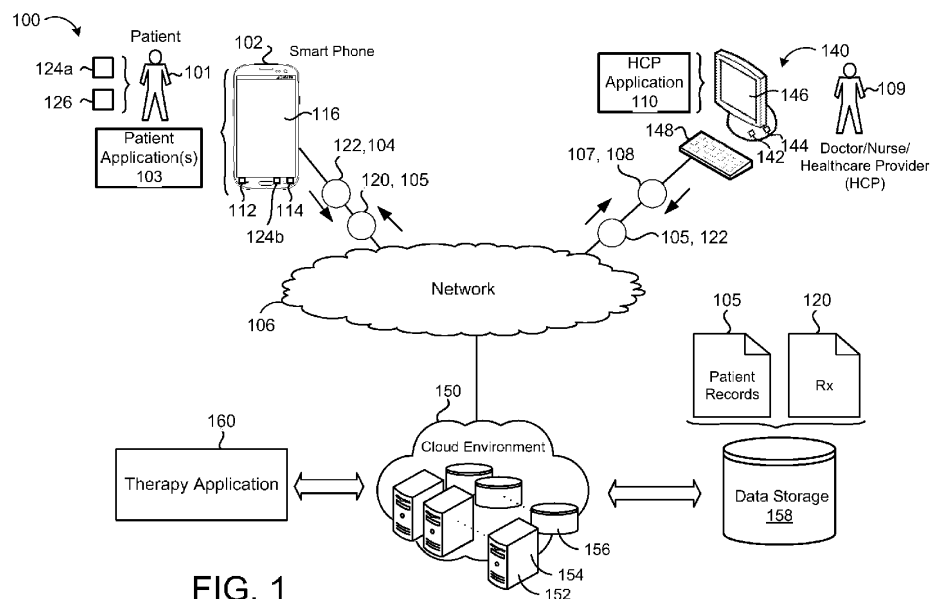


FIG. 1

(57) **Abstract:** A system comprising data processing hardware and memory hardware in communication with the data processing hardware, the memory hardware storing instructions that when executed on the data processing hardware cause the data processing hardware to perform operations comprising executing a prescription digital therapeutic configured to treat symptoms associated with opioid use disorder in a patient, wherein executing the prescription digital therapeutic comprises receiving a plurality of inputs associated with the patient from one or more of (i) first sensors associated directly with the patient and (ii) second sensors associated with a patient electronic device, wherein the plurality of inputs represent a level of opioid withdrawal associated with the patient, weighting the plurality of inputs associated with the patient to provide a plurality of weighted inputs, determining a recommended dosage of a buprenorphine-containing product for the patient based on the plurality of weighted inputs, and instructing an administration unit to

[Continued on next page]

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, 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, 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))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

administer the recommended dosage of the buprenorphine-containing product to the patient.