



(51) International Patent Classification:
A24F 47/00 (2006.01) *H05B 1/02* (2006.01)

(21) International Application Number:
PCT/US2019/039007

(22) International Filing Date:
25 June 2019 (25.06.2019)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/689,774 25 June 2018 (25.06.2018) US

(71) Applicant: **JUUL LABS, INC.** [US/US]; 560 20th Street Building 104, San Francisco, CA 94107 (US).

(72) Inventors: **FISHER, Joseph, R.**; 560 20th Street Building 104, San Francisco, CA 94107 (US). **HATTON, Nicholas, J.**; 560 20th Street Building 104, San Francisco, CA 94107 (US). **MURPHY, Andrew, L.**; 560 20th Street Building 104, San Francisco, CA 94107 (US). **PHAM, Hugh**; 560 20th Street Building 104, San Francisco, CA 94107 (US).

VALENTINE, Val; 560 20th Street Building 104, San Francisco, CA 94107 (US).

(74) Agent: **AMENDT, Kevin, C.** et al.; Mintz Levin Cohn Ferris Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111 (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, 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,

(54) Title: VAPORIZER DEVICE HEATER CONTROL

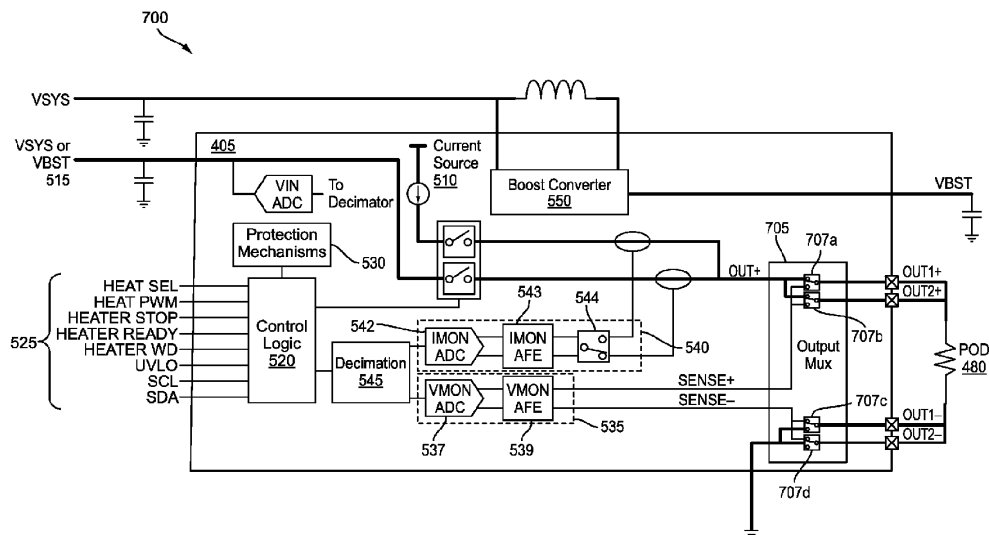


FIG. 7

(57) Abstract: A system includes a current source circuit; a system power input; and load switching circuitry coupling the current source circuit and the system power input to an output configured to couple to a vaporizer heating element. The current source circuit, the system power input, and the load switching circuitry form part of an integrated circuit. Related apparatus, systems, techniques, and articles are also described.

[Continued on next page]

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))