



- (51) International Patent Classification:
A61B 18/20 (2006.01)
- (21) International Application Number:
PCT/US2018/036516
- (22) International Filing Date:
07 June 2018 (07.06.2018)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
62/516,665 07 June 2017 (07.06.2017) US
- (71) Applicant: CYNOSURE, INC. [US/US]; 5 Carlisle Road,
Westford, Massachusetts 01886 (US).
- (72) Inventors: CHEN, Bo; 242 Mountain View Avenue,
Mountain View, California 94041 (US). SIERRA, Rafael
- Armando; 3010 59th Street S, #115, Gulfport, Florida
33707 (US).
- (74) Agent: FAJKOWSKI, James E. et al.; K&L GATES LLP,
State Street Financial Center, One Lincoln Street, Boston,
Massachusetts 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.

(54) Title: FAT REDUCTION AND IMPROVING SKIN LAXITY

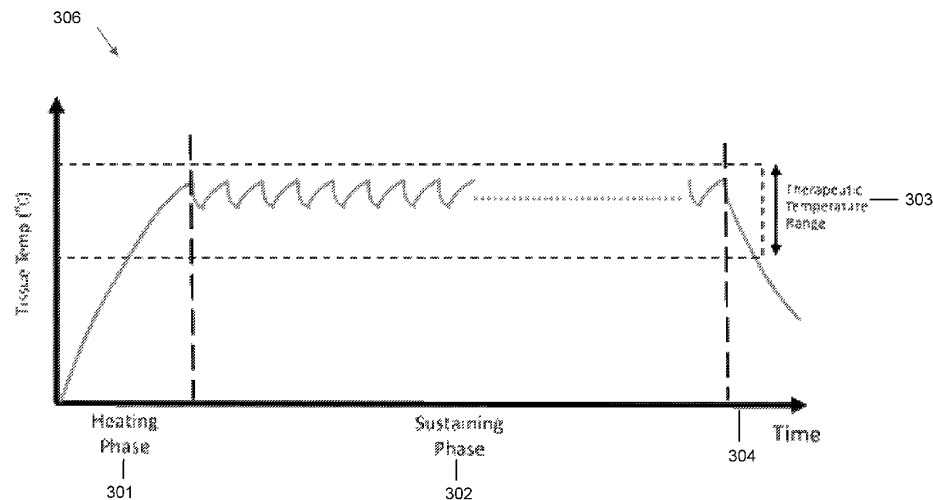


FIG. 3

(57) Abstract: In part, the disclosure relates to systems and methods for applying treatment energy, e.g., electromagnetic radiation such as laser radiation, to body areas having bulges and fat deposits and loose skin. Methods and systems disclosed herein are surprisingly effective in generating a desirable temperature profile in a target region (e.g., moderate hyperthermia in a range of about 42 to about 47 C)). Such systems and methods also provide a dynamic balance of heating (via the application of optical radiation to the skin surface) and cooling, while substantially confining treatment temperatures to the treatment region (e.g., at or below the dermal-hypodermal (D/H) junction). In some aspects, systems and methods are provided that simultaneously reduce fatty deposits (e.g., through lipolysis) and tighten the skin (e.g., through the increased production of collagen) while minimizing patient discomfort and unintended damage, for example, within the epidermis and hypodermis regions adjacent the treatment region.

[Continued on next page]

(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))
