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(21) International Application Number: PCT/US99/10286 (22) International Filing Date: 11 May 1999 (11.05.99) (30) Priority Data: 09/084,112 22 May 1998 (22.05.98) US (71) Applicant: SPECIALIZED HEALTH PRODUCTS, INC. [US/US]; 585 West 500 South, Bountiful, UT 84010 (US). (72) Inventors: THORNE, Gale, H.; 1056 Millcrest Circle, Bountiful, UT 84010 (US). THORNE, David, L.; 1759 South 450 East, Kaysville, UT 84037 (US). THORNE, Michael, L.; 1865 South Bonneview Drive, Bountiful, UT 84010 (US). OWEN, Charles, V.; 10754 North 6000 West, Highland, UT 84003 (US). (74) Agent: EVANS, Paul, S.; 1661 Somerset Court, Farmington, UT 84025 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: LANCET APPARATUS AND METHODS**(57) Abstract**

A one-time-use, self-powered, restricted entry lancet apparatus (10, 210) which provides a smaller incision in a surface or epidermal layers of a lancing site then in subsurface or dermal layers. Two embodiments (10, 210) of the invention are disclosed. Generally, each embodiment comprises a housing (20, 30, 220, 230), a blade component (150, 310), a rotary spring (140, 320) and an actuator (40, 240). The blade (150, 310) generally comprises a proximal portion (156, 330) and a distal section (154, 328). The proximal portion (156, 330) is disposed within the housing (20, 30, 220, 230) and is displaced laterally in a first direction during a lancing procedure. During the lancing procedure, the distal section (154, 328) is extended from the housing (20, 30, 220, 230) through an open exit slot (60, 300) and is rotated about an abutment member (170, 294, 296) of the exit slot (60, 300) to be laterally displaced in a direction opposite the first direction. This rotation about the abutment (170, 294, 296) results in an incision pattern which has a smaller cut in the epidermis than in the dermis. Thus, surface trauma is reduced, while a broad cut is made in capillary rich regions of the dermal layers.

