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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 August 2004 (26.08.2004)

PCT

(10) International Publication Number
WO 2004/071487 A2

(51) International Patent Classification[7]: A61K 9/00

(21) International Application Number:
PCT/US2003/025774

(22) International Filing Date: 15 August 2003 (15.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/404,196 16 August 2002 (16.08.2002) US
60/463,865 18 April 2003 (18.04.2003) US

(71) Applicant: **MICROCHIPS, INC.** [US/US]; 6-B Preston Court, Bedford, MA 01730 (US).

(72) Inventors: **UHLAND, Scott, A.**; 982 South Street, Roslindale, MA 02131 (US). **POLITO, Benjamin, F.**; 69 Chestnut Street, Cambridge, MA 02139 (US). **MALONEY, John, M.**; 169 Msgr. O'Brien Hwy., #213, Cambridge, MA 02141 (US). **SHEPPARD, Norman, F., Jr.**; 6 Battle Flagg Road, Bedford, MA 01730 (US). **HERMAN, Stephen, J.**; 50 Sunset Rock Road, Andover, MA 01810 (US). **YOMTOV, Barry, M.**; 36 Gerald Road, Marblehead, MA 01945-2044 (US).

(74) Agents: **KING, Kevin, W.** et al.; Sutherland Asbill & Brennan LLP, 999 Peachtree Street, N.E., Atlanta, GA 30309-3996 (US).

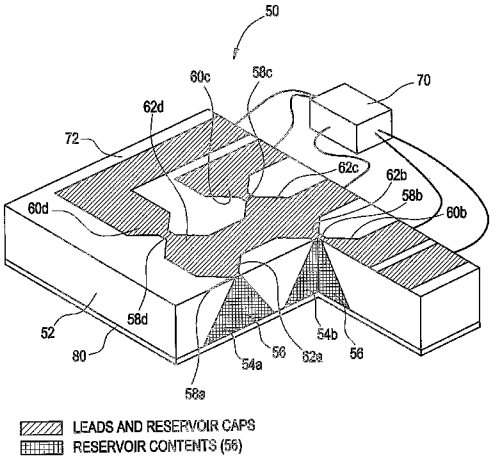
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**
— *without international search report and to be republished upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: CONTROLLED RELEASE DEVICE AND METHOD USING ELECTROTHERMAL ABLATION




(57) Abstract: Devices and methods are provided for the controlled release or exposure of reservoir contents. The device includes a reservoir cap formed of an electrically conductive material, which prevents the reservoir contents from passing out from the device and prevents exposure of the reservoir contents to molecules outside of the device; an electrical input lead connected to said reservoir cap; and an electrical output lead connected to said reservoir cap, such that upon application of an electrical current through the reservoir cap, via the input lead and output lead, the reservoir cap ruptures to release or expose the reservoir contents. The reservoir contents can comprise a release system containing drug molecules for release or can comprise a secondary device, such as a sensor. In one embodiment, the controlled release system is incorporated into an implantable drug delivery device.

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