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

(19) World Intellectual Property Organization
International Bureau

G00002

(43) International Publication Date
23 May 2002 (23.05.2002)

PCT

(10) International Publication Number
WO 02/40095 A1

(51) International Patent Classification[7]: A61N 1/36, 1/05

(21) International Application Number: PCT/CA00/01374

(22) International Filing Date:
16 November 2000 (16 11.2000)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant *(for all designated States except US)*: **POLY-VALOR S.E.C.** [CA/CA]; 3744, rue Jean-Brillant, Bureau 6332, Montréal, Québec H3T 1P1 (CA)

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **SAWAN, Mohamad** [CA/CA], 597 Bord-de-l'Eau, Laval, Québec H7X 1T9 (CA) **HARVEY, Jean-François** [CA/CA], 19 de Vaudreuil, Blainville, Québec J7C 4A8 (CA). **ROY, Martin** [CA/CA]; 4378 Parthenais, Montréal, Québec H2H 2G5 (CA). **COULOMBE, Jonathan** [CA/CA], 7808 Henri-Julien, Montréal, Québec H2R 2B7 (CA). **SAVARIA, Yvon** [CA/CA], 2705 Charny, Montréal, Québec H3M 1J6 (CA) **DONFACK, Colince** [CA/CA]; 90 Woodridge Crescent, Apt 218, Nepean, Ontario K2B 7T1 (CA).

(74) Agent: **ROBIC**; 55 St-Jacques, Montréal, Québec H2Y 3X2 (CA)

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

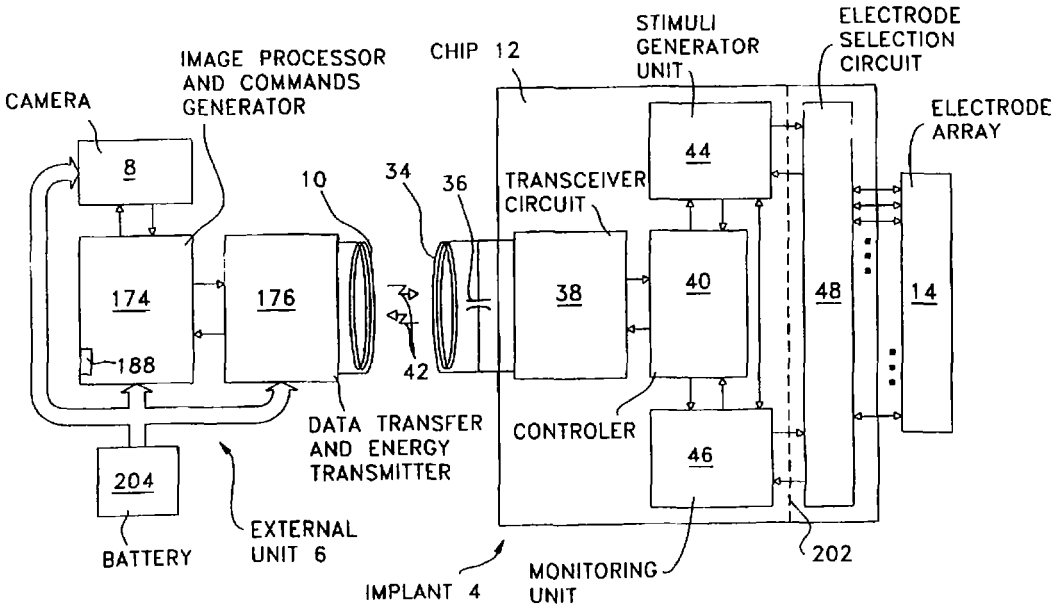
(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML,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

Published:
— *with international search 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

162162

(54) Title: BODY ELECTRONIC IMPLANT AND ARTIFICIAL VISION SYSTEM THEREOF



(57) Abstract: A miniaturized body electronic implant for providing artificial vision to a blind person or for other uses as neuromuscular sensors and microstimulators The implant has a high resolution electrode array connected to a chip integrating implant stimulation and monitoring circuits, mounted on the back of the electrode array The implant is powered by and communicates with an external unit through an inductive bi-directional link.

WO 02/40095 A1