

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/109717 A3**

(51) International Patent Classification:  
**H01J 1/50** (2006.01)

(21) International Application Number:  
PCT/US2004/017081

(22) International Filing Date: 2 June 2004 (02.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/475,027 2 June 2003 (02.06.2003) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, 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, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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

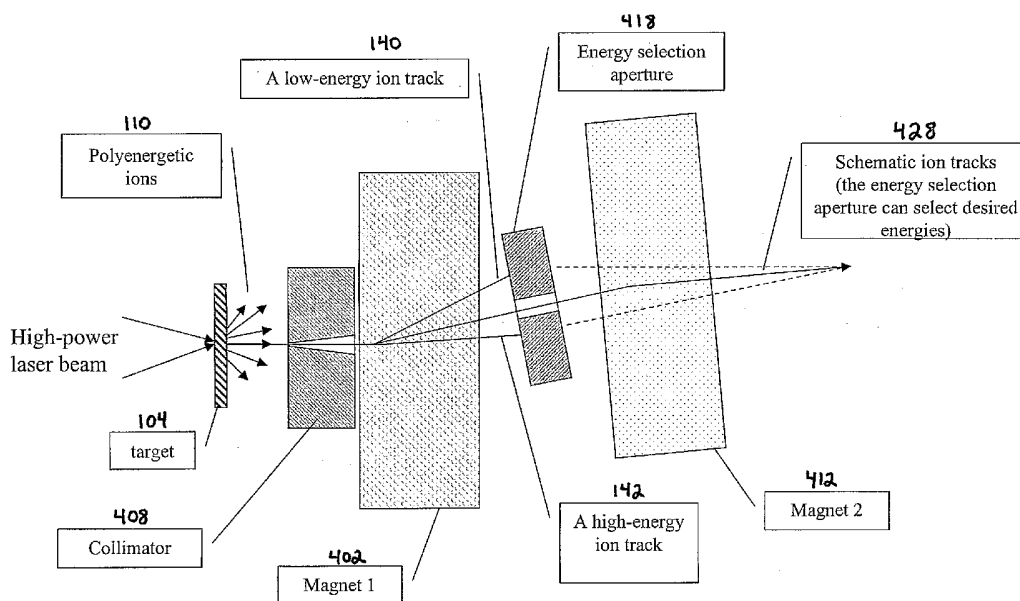
**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
28 December 2006

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: HIGH ENERGY POLYENERGETIC ION BEAM SYSTEMS



(57) Abstract: NEW ABSTRACT Devices (Fig.34) and methods are provided for generating laser-accelerated high energy polyenergetic positive ion beams (110) that are spatially separated and modulated based on energy level. The spatially separated and modulated high energy polyenergetic positive ion beams are used for radiation therapy.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/17081

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H01J 1/50**( 2006.01)

USPC: 250/396ML

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 250/396ML,298,423R,424.425,432R,492.1,492.3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,897,457 B1 (HOLMES et al.) 24 May 2005 (24.05.2005)	1-22
A	US 4,297,191 A (CHEN) 27 October 1981 (27.10.1981)	23-59
A	US 3,786,359 A (KING) 15 January 1974 (15.01.1974)	1-22
A	US 3,555,332 A (SCHRODER et al.) 12 January 1971 (12.01.1971)	1-22
A,T	US 6,906,338 B2 (TAJIMA) 14 January 2005 (14.01.2005)	1-60
A,E	US 6,680,480 B2 (SCHOEN) 20 January 2004 (20.01.2004)	1-60



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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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Date of the actual completion of the international search

22 September 2006 (22.09.2006)

Date of mailing of the international search report

31 OCT 2006

Name and mailing address of the ISA/US

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