

HAARP PATENTS (Assigned to APTI, Inc.)

(List of patents - you can lookup at [link to www.freepatentsonline.com])

U.S. Patent 4686605:
Method And Apparatus For Altering A
Region In The Earth's Atmosphere,
Ionosphere, And/Or Magnetosphere
Inventors: Eastlund; Bernard J., Spring, TX

Assignees: APTI, Inc., Los Angeles, CA
Issued: Aug. 11, 1987
Filed: Jan. 10, 1985

U.S. Patent 5038664:
Method For Producing A Shell Of
Relativistic Particles At An Altitude
Above The Earth's Surface
Inventors: Eastlund; Bernard J., Spring, TX

Assignees: APTI, Inc., Washington, DC
Issued: Aug. 13, 1991
Filed: Jan. 10, 1985

U.S. Patent 4712155:
Method And Apparatus For Creating An
Artificial Electron Cyclotron
Heating Region Of Plasma
Inventors: Eastlund; Bernard J., Spring, TX

Ramo; Simon, Beverly Hills, CA
Assignees: APTI, Inc., Los Angeles, CA
Issued: Dec. 8, 1987
Filed: Jan. 28, 1985

U.S. Patent 5068669:
Power Beaming System
Inventors: Koert; Peter, Washington, DC

Cha; James T., Fairfax, VA
Assignees: APTI, Inc., Washington, DC
Issued: Nov. 26, 1991
Filed: Sep. 1, 1988

U.S. Patent 5218374:
Power Beaming System With Printer Circuit
Radiating Elements
Having Resonating Cavities
Inventors: Koert; Peter, Washington, DC

Cha; James T., Fairfax, VA
Assignees: APTI, Inc., Washington, DC
Issued: June 8, 1993
Filed: Oct. 10, 1989

U.S. Patent 5293176:
Folded Cross Grid Dipole Antenna Element
Inventors: Elliot; Paul G., Vienna, VA

Assignees: APTI, Inc., Washington, DC
Issued: Mar. 8, 1994
Filed: Nov. 18, 1991

U.S. Patent 5202689:
Lightweight Focusing Reflector For Space

Inventors:

Bussard; Robert W., Manassas, VA
Wallace; Thomas H., Gainesville, FL

Assignees: APTI, Inc., Washington, DC

Issued: Apr. 13, 1993

Filed: Aug. 23, 1991

U.S. Patent 5041834:
Artificial Ionospheric Mirror Composed Of A
Plasma Layer
Which Can Be Tilted

Inventors: Koert; Peter, Washington, DC

Assignees: APTI, Inc., Washington, DC

Issued: Aug. 20, 1991

Filed: May. 17, 1990

U.S. Patent 4999637:
Creation Of Artificial Ionization Clouds
Above The Earth

Inventors: Bass; Ronald M., Houston, TX

Assignees: APTI, Inc., Washington, DC

Issued: Mar. 12, 1991

Filed: May. 14, 1987

U.S. Patent 4954709:
High Resolution Directional Gamma Ray
Detector

Inventors: Zigler; Arie, Rishon Le Zion,
Israel

Eisen; Yosset, Rishon Le Zion, Israel

Assignees: APTI, Inc., Washington, DC

Issued: Sep. 4, 1990

Filed: Aug. 16, 1989

U.S. Patent 4817495:
Defense System For Discriminating
Between Objects In Space

Inventors: Drobot; Adam T., Annandale,
VA

Assignees: APTI, Inc., Los Angeles, CA

Issued: Apr. 4, 1989

Filed: Jul. 7, 1986

U.S. Patent 4873928:
Nuclear-Sized Explosions Without Radiation

Inventors: Lowther; Frank E., Plano, TX

Assignees: APTI, Inc., Los Angeles, CA

Issued: Oct. 17, 1989

Filed: June 15, 1987