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(54) Method for the treatment of articles.

(57) There is disclosed a method for the treatment of articles (9) including the following steps:

- the generation of a laser beam (2),
- the combination of the laser beam (2) with a first gas jet (3) including helium and xenon gases thus obtaining a first accelerated plasma beam,
- the following combination of the first plasma beam with a second gas jet (4) including the deuterium and tritium

gases thus obtaining a second accelerated plasma beam (5),

- the collimation (6) of the second plasma beam,
- the application of a magnetic field (7) to the second plasma beam to deflect the electrons of the plasma beam on a plate (8) where said articles are arranged,

the application of the plasma beam deflected by the magnetic field on the articles arranged on the plate (8) for a given period of time.

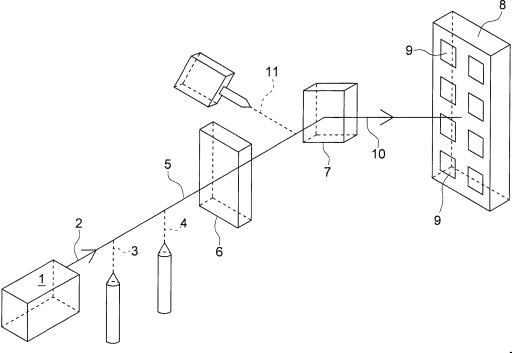


Fig.1

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[0001] The present invention relates to a method for the treatment of articles.

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[0002] Methods for treating various kinds of articles are known in the state of the art. Particle accelerators allowing to strike different kinds of articles with particles are also known.

[0003] It is the object of the present invention to provide a method for the treatment of articles which is different from the known methods.

[0004] According to the present invention, said object is achieved by a method for the treatment of articles including the following steps:

- the generation of a laser beam,
- the combination of the laser beam with a first gas jet including the helium and xenon gases thus obtaining a first accelerated plasma beam,
- the following combination of the first plasma beam with a second gas jet including the deuterium and tritium gases thus obtaining a second beam of accelerated plasma,
- the collimation of the second plasma beam,
- the application of a magnetic field to the second plasma beam to deflect the electrons of the plasma beam on a plate where said articles are arranged,

the application of the plasma beam deflected by the magnetic field on the articles arranged on the plate for a given period of time.

[0005] The features of the present invention will become more apparent from the following description of an embodiment thereof, shown by way of non-limitative example in the accompanying figure 1, which shows a plasma accelerator used for the method according to the invention.

[0006] Figure 1 depicts a specific particle accelerator, i.e. a plasma accelerator used for different purposes; said accelerator is the Joshi model from the University of California produced by Chandrashekhar Joshi and is disclosed in the May 2006 issue of Scientific American. Said accelerator is smaller in size than the known particle accelerators. The accelerator includes a device 1 adapted to emit a laser beam 2. A gas jet 3 strikes the laser beam 2 according to a preferably rectilinear trajectory; the gas jet 3 is formed by a concentration of 30 to 70% helium gas and a corresponding 70 to 30% concentration of xenon gas. The gas jet 3 is directed towards the laser beam 2 by means of an appropriate pressure-type device. The combination of the laser beam 2 with the jet of noble gases (helium and xenon) produces a first accelerated plasma beam which becomes even more intense when it is combined with another jet 4 of hydrogen isotropic gases; the jet of gas 4 is formed by a concentration of 30 to 70% deuterium gas and a corresponding 70 to 30% concentration of tritium gas. The gas jet 4 is directed towards the first plasma beam with a preferably rectilinear

trajectory by means of an appropriate pressure-type device; the devices adapted to emit the gas jets 3 and 4 are arranged near the beam trajectory. The electrons of the second plasma beam 5, which is obtained by the combination of the laser beam with the gas jets 3 and 4, are thereby further accelerated.

[0007] The beam 5 is induced to pass through a plate 6 adapted to collimate the beam itself.

[0008] The collimated beam 5 is induced to pass through a magnetic field 7 having an intensity higher than 10000 Gauss, which is produced by appropriate magnetic means. The latter allows to deflect the electrons on the basis of their energy on a plate 8 which is electron sensitive and on which the articles 9 to be treated are placed. The plate 8 is formed by a superconductor, specifically copper or silver or by the combination of both.

[0009] The beam 10 thus obtained, which hits the plate 8, allows the inversion of the electric field at the level of the electron orbit of the articles 9 arranged on the plate 8, i.e. it allows the inversion of the orbital spin of the electrons in the articles 9. Normally, the articles 9 are treated with the plasma beam for a time interval in the range between 20 and 30 seconds.

[0010] Preferably, a positron guide beam 11 of the gases xenon, deuterium, tritium and helium is used before the magnetic field 7, between the collimator 6 and the magnetic field 7; the positive charge of this positron beam 11 allows to attract the plasma electrons within the beam 5 thus forming a blister. The concentration of each gas is about 25% and the trajectory of the positron guide beam is preferably angled by 45 degrees with respect to the trajectory of the plasma beam 5.

[0011] The spin of the electrons in the beam 5 changes from laevorotatory to dextrorotatory; this modification is maintained in the articles 9 struck by the beam outgoing from the magnetic field 7. The benefit of the dextrorotatory spin with respect to the laevorotatory spin is perceivable by means of medical and mechanical instruments (dark-field microscopy, load cells, electromyography, etc.)

[0012] The disclosed operation also serves to generate the active ability to impregnate the article 9 with a component that is stored by the article itself and is adapted, in the case in which the article itself is connected to an electromagnetic apparatus, to transform the electromagnetic spin of the apparatus from laevorotatory to dextrorotatory, in the case in which the same apparatus has an electric emission lower than 60 V/m; thereby an electromagnetic emission results less harmful for the user.

[0013] The impregnated article may transfer most part of the electrostatic magnetism from the electromagnetic frequency to the infrared frequency, with a range varying on average between 2,5 nanometres and 25 nanometres; in this range there is a bionic kind of energy which is useful for the human body.

[0014] A practical application of the impregnated article may be to attach it to a mobile telephone as, by doing so, it not only protects the user from electrostatic mag-

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netism caused by the battery even when the telephone is on stand-by, but it also allows to convert the electromagnetic spin from laevorotatory to dextrorotatory when a telephone call is received or made with the obvious benefits for the user.

[0015] It is crucial for the correct operation of the object that it is attached to the electromagnetic emission source by means of an adhesive that has been subjected to the same treatment as the article 9. Therefore, in the case of the mobile telephone, the impregnated article 9 is small in size, it is preferably made of resin and includes an adhesive portion for the attachment to the telephone itself.

[0016] The article may be applied to any portion of the mobile telephone for its operation.

Claims

- **1.** A method for the treatment of articles (9) including the following steps:
 - the generation of a laser beam (2),
 - the combination of the laser beam (2) with a first gas jet (3) including helium and xenon gases thus obtaining a first accelerated plasma beam,
 - the following combination of the first plasma beam with a second gas jet (4) including the deuterium and tritium gases thus obtaining a second accelerated plasma beam (5),
 - the collimation (6) of the second plasma beam,
 - the application of a magnetic field (7) to the second plasma beam in order to deflect the electrons of the plasma beam on a plate (8) where said articles are arranged,
 - the application of the plasma beam deflected by the magnetic field on the articles arranged on the plate (8) for a given period of time.
- A method according to claim 1, characterised in that it includes the combination of a gas positron guide beam (11) with the second collimated plasma beam (5) before the application of the magnetic field.
- 3. A method according to claim 2, characterised in that said gas positron beam includes positrons of the helium, xenon, deuterium and tritium gases.
- **4.** A method according to claim 1, **characterised in that** said first gas jet (3) has a concentration of 30 to 70% helium gas and a corresponding 70 to 30% concentration of xenon gas.
- **5.** A method according to claim 1, **characterised in that** said second gas jet (4) has a concentration of 30 to 70% deuterium gas and a corresponding 70 to 30% concentration of tritium gas.

- 6. A method according to claim 1, characterised in that said given period of time for the application of the plasma beam deflected by the magnetic field on the articles arranged on the plate is in the range between 20 and 30 seconds.
- 7. A method according to claim 1, characterised in that said treated object (9) includes an adhesive adapted to attach the article to electrical or electromagnetic devices in order to change the electromagnetic spin of said electrical or electromagnetic devices from laevorotatory to dextrorotatory.
- 8. A method according to any one of the preceding claims, characterised in that said method is carried out by means of a plasma particle accelerator including means for carrying out the different steps.
- **9.** The use of a plasma particle accelerator for carrying out the method for the treatment of articles according to any one of the claims from 1 to 8.
- 10. An object (9) treated by means of a plasma beam including a laser beam combined with helium, xenon, deuterium and tritium gases, said plasma beam being subjected to the action of a magnetic field and to means adapted to accelerate said plasma beam on the article (9) to be treated.
- 30 11. An article according to claim 10, characterised in that it includes an adhesive adapted to attach the article to electrical or electromagnetic devices in order to change the electromagnetic spin of said electrical or electromagnetic devices from laevorotatory to dextrorotatory.

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