AIR FILTERING MESH SCREEN FOR COMBUSTION APPARATUS AND COMBUSTION APPARATUS INCORPORATING THE SAME

TECHNICAL FIELD

The present utility model relates to an air filtering mesh screen and, in particular, to an air filtering mesh screen for use in a combustion apparatus such as an internal combustion engine. The present utility model also relates to a combustion apparatus incorporating the air filtering mesh screen.

BACKGROUND

Most combustion apparatuses continuously provide combustion energy by mixing air with fuel and then igniting the mixture. A typical combustion apparatus, such as an internal combustion engine, is a heat engine for combusting fuel and converting the released heat energy into power. Globally, various automobiles, tractors, agricultural machines, engineering machines, small mobile power stations, maritime merchant ships, inland vessels, and regular naval vessels, and some types of small aircraft are all propelled by internal combustion engines.

The combustion efficiency of an internal combustion engine is highly dependent on the content of combustible components in the air that is introduced into a combustion chamber. As is known, the content of oxygen in the air is only 20%, while that of the incombustible nitrogen is up to 79.7%. Researches have shown that, according to the following formula of the Rutherford theory, nitrogen that has the highest content in the air can be artificially converted into oxygen and hydrogen which can be utilized for combustion, upon nitrogen nuclei being irradiated by alpha rays (also called alpha particle beams, i.e., helium atomic nuclei moving at a high speed).

$$^{14}_{7}N + ^{4}_{2}He \rightarrow ^{17}_{8}O + ^{1}_{1}H$$

Based on this theory, there has been proposed a device for improving the combustion efficiency of an automobile engine. The device includes a filter screen disposed in the engine and bearing an alpha ray radiating material. Outside air that has passed through an air filter in the engine is further guided through the filter screen before it enters a combustion chamber of the engine. A part of the filter screen is schematically shown in FIG. 1. As illustrated, the filter screen includes a screen body 10 and a plurality of small-sized balls 11 evenly placed on the screen body. Each ball 11 is coated with an alpha ray radiating material, such as thorium oxide. The screen body 10 is formed of iron wires so interwoven that adjacent iron wires form square openings sized of about 2 mm. The surface of the iron wires is not subject to any special treatment, nor coated with any radioactive material. The plurality of balls 11 are fixedly attached on the screen body 10 at an equal interval of about half inch.

Upon outside air having been filtered by the air filter passing through the aforesaid filter screen, alpha particles generated from the radioactive material coated over the balls 11 artificially convert the nitrogen contained in the air into oxygen and hydrogen. The alpha particles further activate and ionize the oxygen contained in the air into oxygen ions. After the artificially converted and ionized air enters the combustion chamber, it can result in more complete combustion of the fuel therein.

However, in practical use, the above-described filter screen still suffers from the deficiencies as follows: firstly, in the whole area of the filter screen, only the surface of the balls 11 is provided with the radioactive material, which results in the generation of limited alpha ray energy that is only about 2 MeV and thus a limited efficiency of the conversion and ionization of the air; secondly, the approximately 2 mm wide openings of the filter screen are so small that a part of the air is inhibited and restricted, thus deteriorating air circulation efficiency when the device is used in

an air circulation system such as an automobile engine; moreover, in case of clogging of the openings occurring due to dust or other foreign material, the small-sized openings may further reduce the air inflow to the combustion chamber, which, in turn, causes failure of fuel efficiency improvement.

SUMMARY OF THE INVENTION

It is therefore an objective of the present utility model to provide an improved air filtering mesh screen for a combustion apparatus, which can effectively improve the combustion efficiency of the combustion apparatus.

In accordance with the above objective of the utility model, there is provided an air filtering mesh screen for a combustion apparatus. The air filtering mesh screen includes a screen body with uniformly spaced aperture openings and a coating over the screen body. The coating includes thorium oxide (ideally, thorium-232). A ratio of an intact thickness of the screen body to a thickness of the screen body bearing the coating is from 3: 4 to 3: 7.

Optionally, each of the aperture openings may assume a diamond shape.

Optionally, the coating may further include an adhesive for binding the thorium oxide (ideally, thorium-232) to the screen body.

Optionally, the adhesive may be an epoxide resin.

Optionally, the screen body may be made of metal wires equidistantly arranged in a first direction and metal wires equidistantly arranged in a second direction, which are interwoven together, with each of the aperture openings delimited by corresponding ones of the metal wires.

Optionally, the first and second directions may form an acute angle of from 51° to 62°.

Optionally, each two adjacent parallel ones of the metal wires may be spaced

by an interval that is greater than three times a diameter of the metal wires.

Optionally, the interval between each two adjacent parallel ones of the metal wires may be from 3.5 times to 4.5 times the diameter of the metal wires.

Optionally, the screen body may be formed in one-piece.

The present utility model also provides a combustion apparatus including an air filter and the air filtering mesh screen as defined above mounted on the air filter.

By coating the whole surface area of the screen body with the alpha ray radiating material thorium oxide (ideally, thorium-232), during the passage of air through the air filtering mesh screen, nitrogen and oxygen contained in the air can be sufficiently bombarded by alpha ray particles, thereby generating a large amount of hydrogen and oxygen. When the so artificially converted and ionized air enters a combustion chamber, it will effectuate more thorough combustion of the fuel in the combustion chamber, and the fuel can thereby be utilized more efficiently and generate more energy. Therefore, the use of the air filtering mesh screen can result in a reduction in both fuel consumption and carbon deposit and thus an environmentally friendly effect.

BRIEF DESCRIPTION OF THE DRAWINGS

The present utility model will be better understood upon reading the following description by reference to the accompanying drawings, in which:

FIG. 1 is a schematic illustration of part of a conventional air filter screen for use in a combustion apparatus;

FIG. 2 is a diagram illustrating part of an air filtering mesh screen for use in a combustion apparatus in accordance with an embodiment of the present utility model;

FIG. 3 is a top view of Fig. 2; and

FIG. 4 is a partial cross-sectional view taken along the line A-A in FIG. 2.

DETAILED DESCRIPTION

Features and advantages of the present utility model will be more apparent from the following detailed description, and from the appended claims. Note that the accompanying drawings are provided in a very simplified form not necessarily presented to scale, with the only intention of facilitating convenience and clarity in explaining a few exemplary embodiments of the present utility model.

FIG. 2 schematically shows part of an air filtering mesh screen for use in a combustion apparatus in accordance with the present utility model. As shown, the air filtering mesh screen includes a screen body 20 with uniformly spaced aperture openings and a coating 21 over the whole screen body. The coating 21 mainly includes an alpha ray radiating material for generating alpha particles. In this embodiment, the alpha ray radiating material is implemented as thorium oxide ThO_2 (ideally, thorium-232).

Still referring to FIG. 2, and additionally to FIG. 3, the aperture openings 22 are distributed uniformly in the screen body 20. Preferably, each of the aperture openings 22 assumes a diamond shape which allows the passage of a greater amount of the air. In this embodiment, the screen body 20 is formed of first metal wires 23 equidistantly arranged in a first direction and second metal wires 24 equidistantly arranged in a second direction, which are interwoven into the screen body 20. As such, the shape and size of each of the aperture openings are determined by an angle between the first and second metal wires 23 and 24, as well as by intervals between the metal wires. In this embodiment, the first and second metal wires 23 and 24 are fabricated from the same material into the same diameter. In addition, intervals of the equidistantly arranged first and second metal wires are also the same. The metal wires may be iron wires, aluminum wires, alloy wires, etc. and their diameter may be

suitably selected according to practical needs, for example, but not limited to, 1-2 mm. Preferably, the screen body 20 is formed in one-piece.

Still referring to FIG. 2, and further to FIG. 4, the coating 21 covers the entire surface of the screen body 20, including the front surface, back surface and inner sidewalls of the aperture openings. In other words, the circumference of each of the metal wires is covered by the coating 21. This maximizes the amount of the alpha ray radiating material that the mesh screen bears and thus enables a significant increase in the generated alpha ray energy. Preferably, the coating 21 includes thorium oxide (ideally, thorium-232) powders and an adhesive for securely binding the powders to the surface of the filter screen 20. In this embodiment, the adhesive is implemented as an epoxide resin, in order to obtain a desirable bonding effect. Following the bonding and binding of the thorium oxide (ideally, thorium-232) powder to the screen body with the epoxide resin, the coated screen body is sintered and cured under controlled temperature, preferably about 400 degrees Celsius, over a period of time, preferably about 2 hours for optimum results.

A thickness of the coating 21 may be determined according to the thickness of the screen body 20 as well as practical needs. The thickness of the coating 21 may be, but not limited to, for example, 0.5-1 mm. As can be understood, the greater the thickness of the coating 21, the higher the generated alpha ray energy and thus the higher the air conversion and activation efficiency. However, an excessively large thickness of the coating 21 will, on the one hand, lead to an increase in the manufacturing cost of the mesh screen and, on the other hand, narrow the aperture openings and reduce the air inflow. Moreover, an excessively thick coating is more likely to peel off from the screen body, which will influence the use of the mesh screen.

As shown in Fig. 4, if an intact thickness of the screen body (i.e., its thickness

when it is not coated with the coating 21, which approximates the diameter of the metal wires) is denoted by T1 and its thickness when it bears the coating 21 (i.e., T1 plus twice the thickness of the coating 21) is denoted by T2, then a ratio of T1/T2 is preferably in a range of 3: 4 to 3: 7. For example, when the intact thickness T1 of the screen body is 1.5 mm, the thickness T2 of the screen body with the coating thereon is preferably 2-3.5 mm, with 2-2.5mm more preferred.

With continuing reference to FIG. 3, as indicated above, the shape and size of each aperture opening 22 of the screen body 20 may be determined based on an angle between the first and second metal wires 23 and 24 as well as an interval thereof. In order to increase the air flux to obtain a better air circulation effect, it is desirable for the aperture openings 22 to be as large as possible. However, larger openings 22 will leads to a decreased total mass of the metal wires used in the mesh screen and thus a reduced strength of the screen, and also a less total area of the coating 21 and thus a reduced energy of generated alpha rays. Preferably, the angle between the first and second metal wires 23 and 24 is an acute angle of 51°-62°. That is, the delimited diamond aperture openings have a vertex angle of 51°-62°. In addition, a distance D between each two adjacent parallel metal wires is over 3 times, preferably 3.5-4.5 times, the diameter of the metal wires, so that the longer diagonal of each diamond aperture opening is up to 5-7 mm.

The above described design with the screen body completely covered by the thorium oxide (ideally, thorium-232) coating allows the air filtering mesh screen to generate alpha rays with energy of up to 8-10 MeV, higher than 3 times that of the conventional filter screen of FIG. 1. Such high energy can make nitrogen and oxygen in the air sufficiently bombarded by alpha ray particles, thereby generating a great amount of hydrogen and oxygen. Additionally, compared to the 2 mm square openings shown in FIG. 1, the larger diamond aperture openings can result in an

increased air flux and will not impede the circulation of the air.

The air filtering mesh screen in accordance with the present utility model is particularly suitable for use in combustion apparatuses such as automobile engines. For example, the air filtering mesh screen may be mounted on a built-in air filter of a car engine (either on an air inlet side or on an air outlet side, or both) and can be tailored to any shape and size compatible with the air filter as needed. In addition, the shape and size of aperture openings of the mesh screen may be adjusted according to a capacity and flux of the air filter. Upon outside air passing through the air filter equipped with the aforesaid air filtering mesh screen, under the effect of alpha rays, nitrogen contained therein will be artificially converted to oxygen and hydrogen and oxygen contained therein will be activated and ionized. When the so artificially converted and ionized air enters a combustion chamber, it will effectuate more thorough combustion of the fuel in the combustion chamber, and the fuel can thereby be utilized more efficiently and generate more energy. Therefore, the use of the air filtering mesh can result in a reduction in both fuel consumption and carbon deposit and thus an environmentally friendly effect.

Although the utility model has been presented hereinabove with reference to some specific embodiments, it is apparent that those skilled in the art may make various alterations and modifications thereto without departing from the spirit and scope of the present utility model. Therefore, it is intended that the utility model include all such alterations and modifications that fall within the scope of the appended claims or equivalents thereof.

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The combustion efficiency of an internal combustion engine is highly dependent on the content of combustible components in the air that is introduced into a combustion chamber. As is known, the content of oxygen in the air is only 20%, while that of the incombustible nitrogen is up to 79.7%. Researches have shown that, according to the following formula of the Rutherford theory, nitrogen that has the highest content in the air can be artificially converted into oxygen and hydrogen which can be utilized for combustion, upon nitrogen nuclei being irradiated by alpha rays (also called alpha particle beams, i.e., helium atomic nuclei moving at a high speed).

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Based on this theory, there has been proposed a device for improving the combustion efficiency of an automobile engine. The device includes a filter screen disposed in the engine and bearing an alpha ray radiating material. Outside air that has passed through an air filter in the engine is further guided through the filter screen before it enters a combustion chamber of the engine. A part of the filter screen is schematically shown in FIG. 1. As illustrated, the filter screen includes a screen body 10 and a plurality of small-sized balls 11 evenly placed on the screen body. Each ball 11 is coated with an alpha ray radiating material, such as thorium oxide. The screen body 10 is formed of iron wires so interwoven that adjacent iron wires form square openings sized of about 2 mm. The surface of the iron wires is not subject to any special treatment, nor coated with any radioactive material. The plurality of balls 11 are fixedly attached on the screen body 10 at an equal interval of about half inch.

Upon outside air having been filtered by the air filter passing through the aforesaid filter screen, alpha particles generated from the radioactive material coated over the balls 11 artificially convert the nitrogen contained in the air into oxygen and hydrogen. The alpha particles further activate and ionize the oxygen contained in the air into oxygen ions. After the artificially converted and ionized air enters the combustion chamber, it can result in more complete combustion of the fuel therein.

However, in practical use, the above-described filter screen still suffers from the deficiencies as follows: firstly, in the whole area of the filter screen, only the surface of the balls 11 is provided with the radioactive material, which results in the generation of limited alpha ray energy that is only about 2 MeV and thus a limited efficiency of the conversion and ionization of the air; secondly, the approximately 2 mm wide openings of the filter screen are so small that a part of the air is inhibited and restricted, thus deteriorating air circulation efficiency when the device is used in

an air circulation system such as an automobile engine; moreover, in case of clogging of the openings occurring due to dust or other foreign material, the small-sized openings may further reduce the air inflow to the combustion chamber, which, in turn, causes failure of fuel efficiency improvement.

SUMMARY OF THE INVENTION

It is therefore an objective of the present utility model to provide an improved air filtering mesh screen for a combustion apparatus, which can effectively improve the combustion efficiency of the combustion apparatus.

In accordance with the above objective of the utility model, there is provided an air filtering mesh screen for a combustion apparatus. The air filtering mesh screen includes a screen body with uniformly spaced aperture openings and a coating over the screen body. The coating includes thorium oxide (ideally, thorium-232). A ratio of an intact thickness of the screen body to a thickness of the screen body bearing the coating is from 3: 4 to 3: 7.

Optionally, each of the aperture openings may assume a diamond shape.

Optionally, the coating may further include an adhesive for binding the thorium oxide (ideally, thorium-232) to the screen body.

Optionally, the adhesive may be an epoxide resin.

Optionally, the screen body may be made of metal wires equidistantly arranged in a first direction and metal wires equidistantly arranged in a second direction, which are interwoven together, with each of the aperture openings delimited by corresponding ones of the metal wires.

Optionally, the first and second directions may form an acute angle of from 51° to 62°.

Optionally, each two adjacent parallel ones of the metal wires may be spaced

by an interval that is greater than three times a diameter of the metal wires.

Optionally, the interval between each two adjacent parallel ones of the metal wires may be from 3.5 times to 4.5 times the diameter of the metal wires.

Optionally, the screen body may be formed in one-piece.

The present utility model also provides a combustion apparatus including an air filter and the air filtering mesh screen as defined above mounted on the air filter.

By coating the whole surface area of the screen body with the alpha ray radiating material thorium oxide (ideally, thorium-232), during the passage of air through the air filtering mesh screen, nitrogen and oxygen contained in the air can be sufficiently bombarded by alpha ray particles, thereby generating a large amount of hydrogen and oxygen. When the so artificially converted and ionized air enters a combustion chamber, it will effectuate more thorough combustion of the fuel in the combustion chamber, and the fuel can thereby be utilized more efficiently and generate more energy. Therefore, the use of the air filtering mesh screen can result in a reduction in both fuel consumption and carbon deposit and thus an environmentally friendly effect.

BRIEF DESCRIPTION OF THE DRAWINGS

The present utility model will be better understood upon reading the following description by reference to the accompanying drawings, in which:

FIG. 1 is a schematic illustration of part of a conventional air filter screen for use in a combustion apparatus;

FIG. 2 is a diagram illustrating part of an air filtering mesh screen for use in a combustion apparatus in accordance with an embodiment of the present utility model;

FIG. 3 is a top view of Fig. 2; and

FIG. 4 is a partial cross-sectional view taken along the line A-A in FIG. 2.

DETAILED DESCRIPTION

Features and advantages of the present utility model will be more apparent from the following detailed description, and from the appended claims. Note that the accompanying drawings are provided in a very simplified form not necessarily presented to scale, with the only intention of facilitating convenience and clarity in explaining a few exemplary embodiments of the present utility model.

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Still referring to FIG. 2, and additionally to FIG. 3, the aperture openings 22 are distributed uniformly in the screen body 20. Preferably, each of the aperture openings 22 assumes a diamond shape which allows the passage of a greater amount of the air. In this embodiment, the screen body 20 is formed of first metal wires 23 equidistantly arranged in a first direction and second metal wires 24 equidistantly arranged in a second direction, which are interwoven into the screen body 20. As such, the shape and size of each of the aperture openings are determined by an angle between the first and second metal wires 23 and 24, as well as by intervals between the metal wires. In this embodiment, the first and second metal wires 23 and 24 are fabricated from the same material into the same diameter. In addition, intervals of the equidistantly arranged first and second metal wires are also the same. The metal wires may be iron wires, aluminum wires, alloy wires, etc. and their diameter may be

suitably selected according to practical needs, for example, but not limited to, 1-2 mm. Preferably, the screen body 20 is formed in one-piece.

Still referring to FIG. 2, and further to FIG. 4, the coating 21 covers the entire surface of the screen body 20, including the front surface, back surface and inner sidewalls of the aperture openings. In other words, the circumference of each of the metal wires is covered by the coating 21. This maximizes the amount of the alpha ray radiating material that the mesh screen bears and thus enables a significant increase in the generated alpha ray energy. Preferably, the coating 21 includes thorium oxide (ideally, thorium-232) powders and an adhesive for securely binding the powders to the surface of the filter screen 20. In this embodiment, the adhesive is implemented as an epoxide resin, in order to obtain a desirable bonding effect. Following the bonding and binding of the thorium oxide (ideally, thorium-232) powder to the screen body with the epoxide resin, the coated screen body is sintered and cured under controlled temperature, preferably about 400 degrees Celsius, over a period of time, preferably about 2 hours for optimum results.

A thickness of the coating 21 may be determined according to the thickness of the screen body 20 as well as practical needs. The thickness of the coating 21 may be, but not limited to, for example, 0.5-1 mm. As can be understood, the greater the thickness of the coating 21, the higher the generated alpha ray energy and thus the higher the air conversion and activation efficiency. However, an excessively large thickness of the coating 21 will, on the one hand, lead to an increase in the manufacturing cost of the mesh screen and, on the other hand, narrow the aperture openings and reduce the air inflow. Moreover, an excessively thick coating is more likely to peel off from the screen body, which will influence the use of the mesh screen.

As shown in Fig. 4, if an intact thickness of the screen body (i.e., its thickness

when it is not coated with the coating 21, which approximates the diameter of the metal wires) is denoted by T1 and its thickness when it bears the coating 21 (i.e., T1 plus twice the thickness of the coating 21) is denoted by T2, then a ratio of T1/T2 is preferably in a range of 3: 4 to 3: 7. For example, when the intact thickness T1 of the screen body is 1.5 mm, the thickness T2 of the screen body with the coating thereon is preferably 2-3.5 mm, with 2-2.5mm more preferred.

With continuing reference to FIG. 3, as indicated above, the shape and size of each aperture opening 22 of the screen body 20 may be determined based on an angle between the first and second metal wires 23 and 24 as well as an interval thereof. In order to increase the air flux to obtain a better air circulation effect, it is desirable for the aperture openings 22 to be as large as possible. However, larger openings 22 will leads to a decreased total mass of the metal wires used in the mesh screen and thus a reduced strength of the screen, and also a less total area of the coating 21 and thus a reduced energy of generated alpha rays. Preferably, the angle between the first and second metal wires 23 and 24 is an acute angle of 51°-62°. That is, the delimited diamond aperture openings have a vertex angle of 51°-62°. In addition, a distance D between each two adjacent parallel metal wires is over 3 times, preferably 3.5-4.5 times, the diameter of the metal wires, so that the longer diagonal of each diamond aperture opening is up to 5-7 mm.

The above described design with the screen body completely covered by the thorium oxide (ideally, thorium-232) coating allows the air filtering mesh screen to generate alpha rays with energy of up to 8-10 MeV, higher than 3 times that of the conventional filter screen of FIG. 1. Such high energy can make nitrogen and oxygen in the air sufficiently bombarded by alpha ray particles, thereby generating a great amount of hydrogen and oxygen. Additionally, compared to the 2 mm square openings shown in FIG. 1, the larger diamond aperture openings can result in an

increased air flux and will not impede the circulation of the air.

The air filtering mesh screen in accordance with the present utility model is particularly suitable for use in combustion apparatuses such as automobile engines. For example, the air filtering mesh screen may be mounted on a built-in air filter of a car engine (either on an air inlet side or on an air outlet side, or both) and can be tailored to any shape and size compatible with the air filter as needed. In addition, the shape and size of aperture openings of the mesh screen may be adjusted according to a capacity and flux of the air filter. Upon outside air passing through the air filter equipped with the aforesaid air filtering mesh screen, under the effect of alpha rays, nitrogen contained therein will be artificially converted to oxygen and hydrogen and oxygen contained therein will be activated and ionized. When the so artificially converted and ionized air enters a combustion chamber, it will effectuate more thorough combustion of the fuel in the combustion chamber, and the fuel can thereby be utilized more efficiently and generate more energy. Therefore, the use of the air filtering mesh can result in a reduction in both fuel consumption and carbon deposit and thus an environmentally friendly effect.

Although the utility model has been presented hereinabove with reference to some specific embodiments, it is apparent that those skilled in the art may make various alterations and modifications thereto without departing from the spirit and scope of the present utility model. Therefore, it is intended that the utility model include all such alterations and modifications that fall within the scope of the appended claims or equivalents thereof.

TITLE : SYSTEM, METHOD AND DEVICE OF IONTECHNO

DESCRIPTION

Motto : Towards better Fuel Saving, cleaner and healthier environment.

Objective:

1. To improve fuel efficiency by introducing activated, ionised oxygen into the combustion chamber of the engine, resulting in more complete combustion which in turn provides more power and less carbon deposits.
2. To reduce the amount of HC, CO, CO2 and NO in exhaust emission of internal combustion engine by ensuring continuous complete combustion.

IonTechno Technology

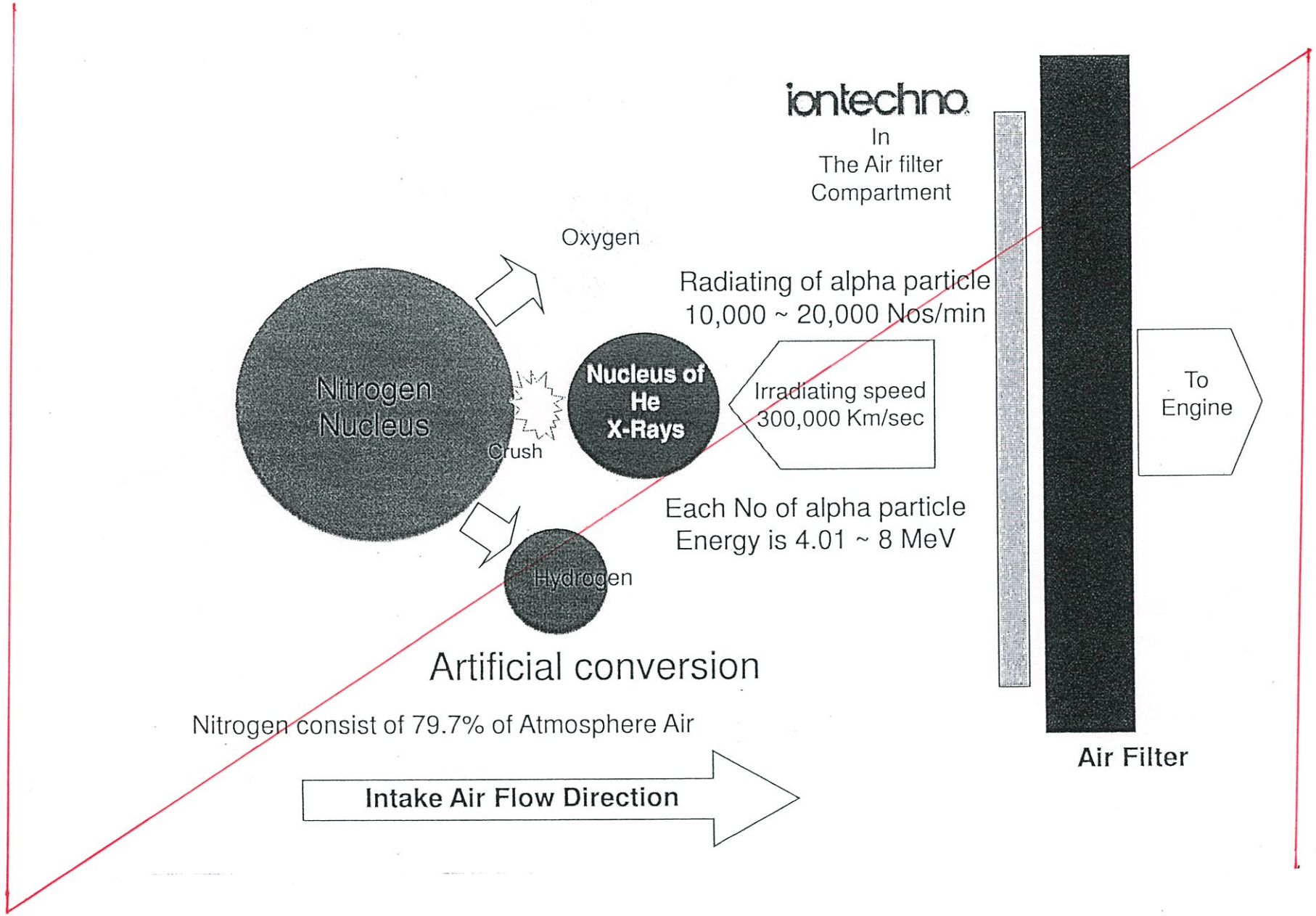
- The IonTechno mesh is an ionization element that utilises radioactive Thorium Oxide.
- The IonTechno consists of a steel wire mesh coated with Thorium Oxide powder that is securely binded in place with specially formulated epoxide resin.
- The binding process is cured and sintered under a controlled temperature and curing time.
- The completed mesh is stable, non-degradable ionizing element with the ability to withstand the temperature of up to 400 degrees Celsius.

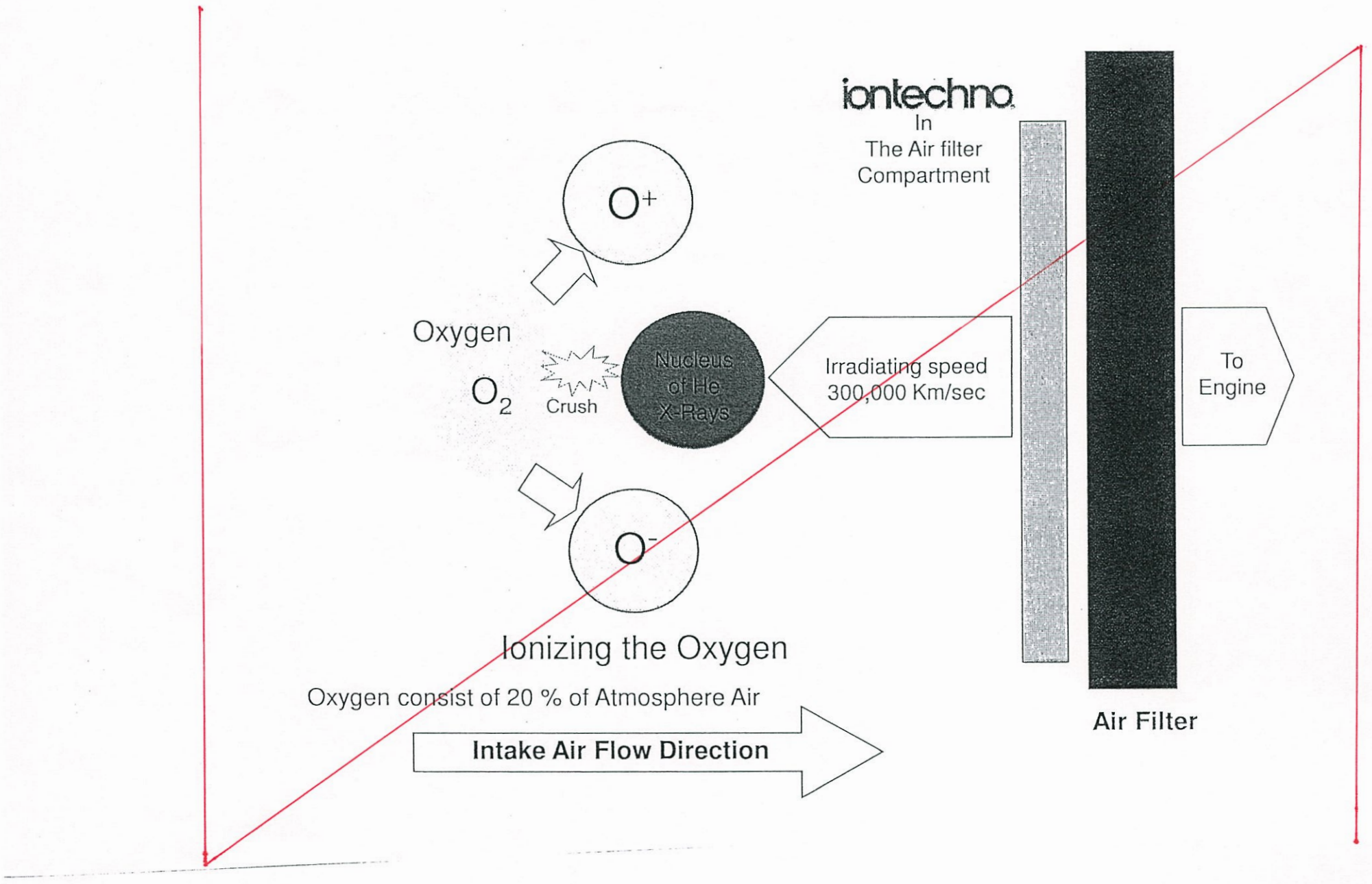
IonTechno

- Thorium Oxide within the IonTechno mesh, retain and magnifies its high Alpha Rays radiation efficiency directly proportional to the surface area of the mesh.
- The Alpha particles are identical to Helium nucleus, both consist of two protons and two neutrons and +2 charge.
- According to Rutherford Theory, the Alpha-Rays (Helium Nuclei) of the IonTechno mesh will convert the Nitrogen (about 80 % of the atmosphere air) into Oxygen and Hydrogen, assisting combustion further

Application

1. Fitted in the way of the inside lower part of the air cleaner of the motor vehicle, the IonTechno mesh onto the internal combustion engine.
2. Air passing through the air cleaner will be exposed to the Alpha-Rays radiated from the IonTechno mesh, resulting in the Oxygen (O2) being ionized and activated, which in turn provides more thorough and complete combustion.


iontechno
In
The Air filter
Compartment
Oxygen
Radiating of alpha particle
10,000 ~ 20,000 Nos/min
Nitrogen
Nucleus
Crush
Nucleus of
He
X-Rays
Irradiating speed
300,000 Km/sec
To
Engine
Each No of alpha particle
Energy is 4.01 ~ 8 MeV
Hydrogen
Artificial conversion
Nitrogen consist of 79.7% of Atmosphere Air
Intake Air Flow Direction
Air Filter


iontechno
In
The Air filter
Compartment
O+
Oxygen
O2
Crush
Nucleus
of He
X-Rays
Irradiating speed
300,000 Km/sec
To
Engine
O-
Ionizing the Oxygen
Oxygen consist of 20 % of Atmosphere Air
Intake Air Flow Direction
Air Filter