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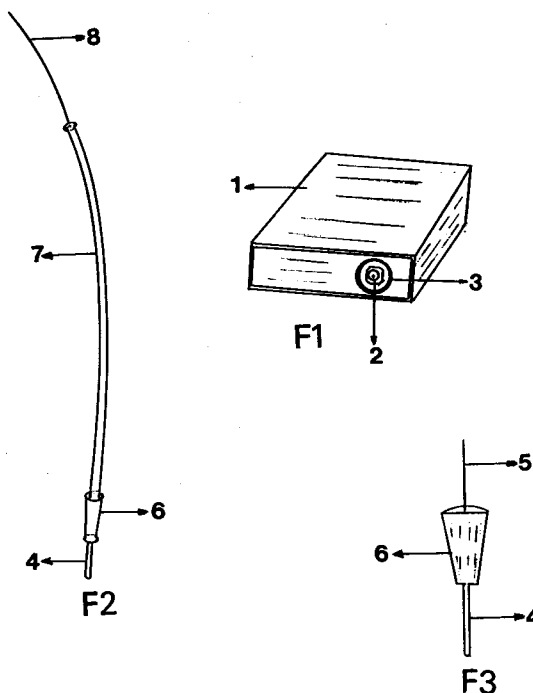
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(54) **Generator-projector of negative ions in liquid or gaseous fluids.**

(57) Generator-projector of negative ions in liquid or gaseous fluids, designed to produce negative ions and to project them, mixing them with fluids mainly in a liquid or gaseous state, in order to maintain the balance of positive and negative ions in both the atmosphere and the individual.

The generator has two projectors, one to project the ions into the atmosphere and the other to project them into the liquid contained in a recipient.

The projector consists of a pin with a changeable needle of varying length depending on whether the negative ions are to be projected into the atmosphere or into a liquid container.

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This invention refers to a "Generator-projector of negative ions in liquid or gaseous fluids" designed to produce negative ions, with projectors, mixing them with fluids, mainly in the liquid or gaseous state.

It is known that the atmosphere contains a balance of positive and negative ions but that, at the present time, pollution, plastics, computers and a variety of substances and utensils of normal use increase the presence of positive ions, creating an imbalance.

In humans, positive ions are produced internally which have to be balanced with the external negative ions so that, if positive ions rise in humans, the negative ions in the atmosphere must be increased.

This is usually done with small, high-tension ion generators, which emit negative ions.

The aim of the present model is to improve existing generators, giving them a projector nozzle with which two projectors are possible, one used to project the ions into the atmosphere and the other which can project them into a fluid contained in a recipient.

Therefore, in this model, the element acting as an ions projector is interchangeable.

People subjected for example to static charges from computers are balanced by the ingestion of any fluid - water or the like - previously treated with the necessary negative ion discharges.

Until now, tension generators have been known which are located in easily transported parallelepiped cases connected to the mains and which produce negative ions.

With the present model, on one side of the case there is an opening, preferably cylindrical, hollow inside, at the bottom of which is the connection port.

This generator is fitted with a projection element consisting of a connection lug to which a needle is attached; if it is short, the negative ions are projected directly into the atmosphere, but a longer needle can be fitted with an extension cable, so as to connect the negative ion discharge to a vessel containing fluid.

The essential benefits of this model are, by way of illustration and without limitation, as follows:

- the use with a variety of projectors
- possible discharge of negative ions into liquid containers
- ease of interchange of the ion discharge projection elements

The attached sheet of drawings includes a diagram of the invention for a better understanding thereof, given as one design, without limitation, of this invention.

Fig. 1. is a perspective view of the ion generator.

Fig. 2. is a face view of the projector for adaptation to the fluid containers.

Fig. 3 is a projector aimed into the atmosphere.

In accordance with these designs, the ion generator consists of a flat parallelepiped case (ref. 1) containing a tension generator which can be connected to the electrical mains.

On one side there is an opening (2), preferably circular, with a convex peripheral beading in the form of a gorge.

The inside of said opening is sunken and hollow and, at the bottom, there is a connection port for the ion projector.

If the ions are to go into the atmosphere, the projector consists of a connection lug (4) linked on to an ion projection needle.

The connection between said projection needle and the lug is a convex link (6).

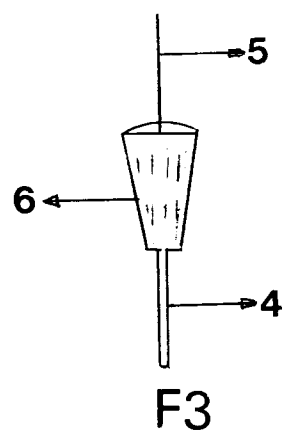
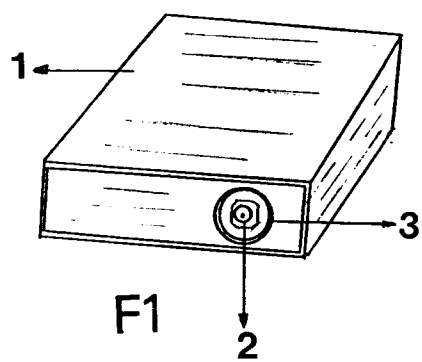
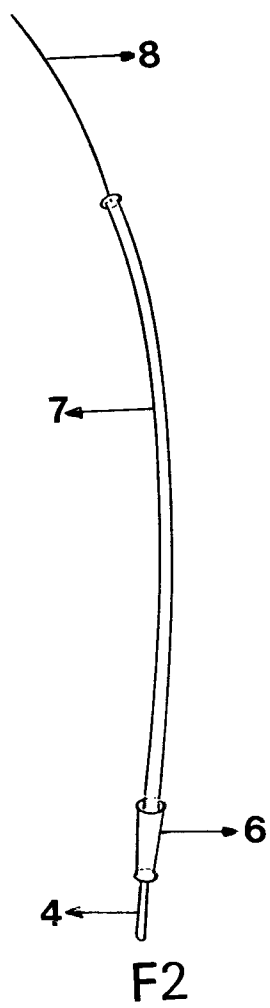
If ions are to be discharged into a fluid, a tubular extension (7) is attached to the connection lug, ending in a longer needle (8).

The ion discharge speed is proportional to the sharpness of the needle.

Finally, following this description, it remains only to indicate that any design variant is possible to this invention provided that it does not alter the essential nature of the invention as described. Said invention may be made in any shape, size and material, without limitation.

Claims

1. A negative ion generator-projector for liquid or gaseous fluids, consisting of a tension generator which can be connected to the electrical mains, inside a flat parallelepiped case wherein, on one side, there is an opening, preferably circular, with the edge beaded by a convex gorge, and a sunken base, at the bottom of which there is a connection port for the projector, which consists of a connection lug attached to a projection needle with a convex connection surface.
2. A negative ion generator-projector for liquid or gaseous fluids as set forth in claim 1, wherein the projector consists of a connection lug attached to a tubular extension ending in a long needle.





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EUROPEAN SEARCH REPORT

Application Number

EP 92 50 0063

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	FR-A-1 319 296 (PHILCO CORPORATION) * page 2, left column, line 37 - line 58; figures 1,4 *	1	H01T23/00
Y	US-A-3 138 740 (RICH) * column 3, line 16 - line 37; figure 2 *	1	
A	DE-A-3 915 907 (YAMAGISHI) * column 4, line 17 - line 48; figure 6 *	1,2	
A	GB-A-2 188 496 (NORTHERN ENGINEERING IND.)		
A	DE-A-3 532 304 (KAHL)		
A	DE-U-8 704 221 (HAUG)		
A	DE-U-8 514 282 (GESELLSCHAFT FÜR IONENTECHNIK)		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H01T A61N H05F H01R
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 AUGUST 1992	Examiner BIJN E.A.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	