Claims

1. An active field polarized media air cleaner, said active field polarized media air cleaner comprising:

a first pad of dielectric filter material;

a second pad of dielectric filter material;

a center screen disposed between said first and second pads of dielectric material;

a first conductive outer screen of sufficiently rigid material so as to lie substantially flat when placed against said first pad of dielectric filter material;

a first conductive holding frame for holding said first conductive outer screen;

a second conductive outer screen of sufficiently rigid material so as to lie substantially flat when placed against said second pad of dielectric filter material;

a second conductive holding frame for holding said second conductive outer screen;

said first and second conductive holding frames being disposed substantially parallel to each other on either side of said first and second pads of dielectric filter material, whereby said first and second conductive outer screens are substantially flat and substantially parallel to each other.

2. An active field polarized media air cleaner in accordance with claim 1 wherein said first and second conductive outer screens each comprise a perforated sheet of solid material.

3. In an active field polarized media air cleaner, said active field polarized media air cleaner comprising in combination a first conductive outer screen, a first pad of dielectric filter material, a center screen, a second pad of dielectric filter material, and a second conductive outer screen, an improvement comprising:

a high-voltage probe passing through said conductive outer screen; and

an insulating shield attached to said first conductive outer screen, said insulating shield surrounding said high-voltage probe.

4. A combination in accordance with claim 2, wherein said high-voltage probe comprises a spring contact.

5. A combination in accordance with claim 3, further comprising a contact attached to said center screen, said contact positioned so as to contact said high-voltage probe.

6. A combination in accordance with claim 5, wherein said contact comprises:

a fastener having a head and a shank, said shank passing through said center screen, said head of said fastener being in contact with said high-voltage probe.

7. A combination in accordance with claim 6, further comprising a metallic disk disposed on the shank of said fastener, said metallic disk being in contact with said center screen.

8. A combination in accordance with claim 3, further comprising a second insulating shield attached to said second conductive outer screen, said second insulating shield disposed opposite said first insulating shield.

CLAIMS

1. In an active field polarized media air cleaner, said active field polarized media air cleaner comprising a first conductive outer screen, a first pad of dielectric filter material, a center screen, a second pad of dielectric filter material, and a second conductive outer screen comprising:

a high-voltage probe passing through said conductive outer screen: and

an insulating shield attached to said first conductive outer screen, said insulating shield surrounding said high-voltage probe;

a contact attached to said center screen, said contact positioned so as to contact said high-voltage probe, wherein said contact comprises a fastener having a head and a shank, said shank passing through said center screen, said head of said fastener being in contact with said high-voltage probe.

2. The active field polarized media air cleaner of claim 1, further comprising a conductive disk disposed on the shank of said fastener, said conductive being in contact with said center screen.

3. A combination in accordance with claim 1, further comprising a second insulating shield attached to said second conductive outer screen, said second insulating shield disposed opposite said first insulating shield.