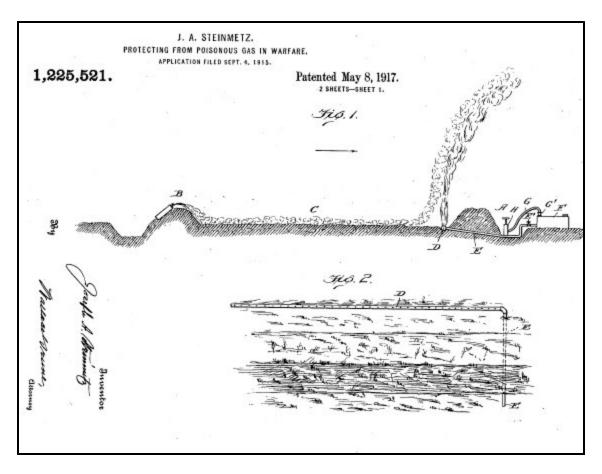
## **Patently Obvious**

## A Partial History of Aerosol and Weather Related Technologies

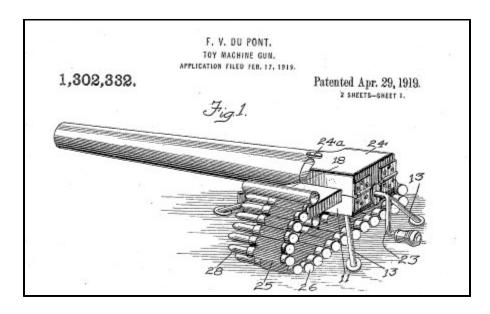
July 30, 2003
Lorie Kramer seektress@ev1.net



1225521 - May 8, 1917 - Protection From Poisonous Gas in Warfare

Referenced in 4704942 - Charged aerosol
"A method of defending against a warfare cloud of toxic aerosol utilizes
a charged defensive aerosol which is sprayed into the cloud.
The defensive aerosol is made of a defensive agent

## which may be chemically or biologically active."



1302332 - April 29, 1919 - Toy Machine Gun - F.V. Du Pont

Referenced in - 4141274 which is for a smoke generator, which evolved into the particle and aerosol devices in use today.

The history of interest in aerosol and weather related technologies and devices is evident when a list of related patents is compiled and examined, even a partial list.

The following patents are all verifiable, along with additional information that can be found by reading the referrenced patents included in the documentation. Patent information can be found by visiting the

**United States Patent and Trademark Office** 

1338343 - April 27, 1920 - Process And Apparatus For The Production of Intense Artificial Clouds, Fogs, or Mists

1619183 - March 1, 1927 - Process of Producing Smoke Clouds From Moving Aircraft

1631753 - June 7, 1927 - Electric Heater - Referenced in 3990987

1665267 - April 10, 1928 - Process of Producing Artificial Fogs

1892132 - December 27, 1932 - Atomizing Attachment For Airplane Engine Exhausts

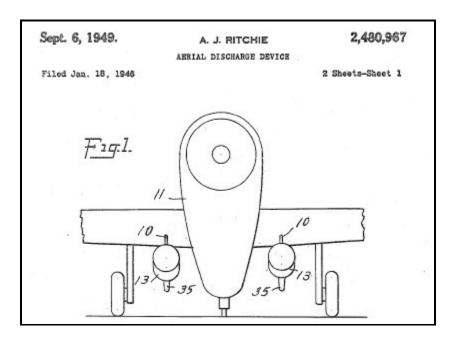
1928963 - October 3, 1933 - Electrical System And Method

1957075 - May 1, 1934 - Airplane Spray Equipment

2097581 - November 2, 1937 - Electric Stream Generator - Referenced in 3990987

2409201 - October 15, 1946 - Smoke Producing Mixture

2476171 - July 18, 1945 - Smoke Screen Generator



2480967 - September 6, 1949 - Aerial Discharge Device

2550324 - April 24, 1951 - Process For Controlling Weather

2510867 - October 9, 1951 - Method of Crystal Formation and Precipitation

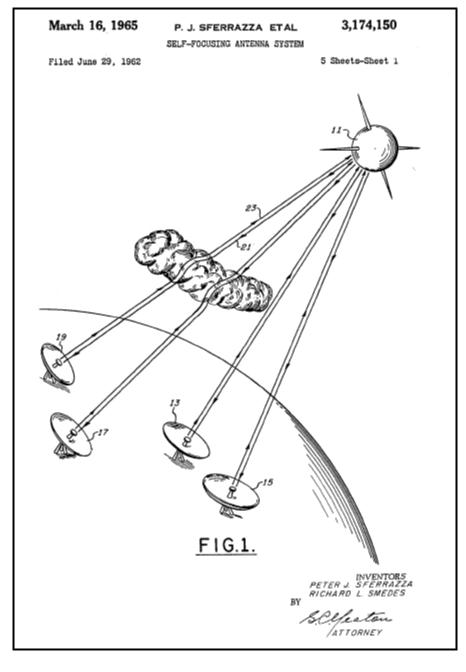
2582678 - June 15, 1952 - Material Disseminating Apparatus For Airplanes

2591988 - April 8, 1952 - Production of TiO2 Pigments - Referenced in 3899144

2614083 - October 14, 1952 - Metal Chloride Screening Smoke Mixture

**2633455 - March 31, 1953 - Smoke Generator** 

- **2688069 August 31, 1954 Steam Generator Referenced in 3990987**
- 2721495 October 25, 1955 Method And Apparatus For Detecting Minute Crystal Forming Particles Suspended in a Gaseous Atmosphere
- 2730402 January 10, 1956 Controllable Dispersal Device
- 2801322 July 30, 1957 Decomposition Chamber for Monopropellant Fuel Referenced in 3990987
- 2881335 April 7, 1959 Generation of Electrical Fields
- 2908442 October 13, 1959 Method For Dispersing Natural Atmospheric Fogs And Clouds
- 2986360 May 30, 1962 Aerial Insecticide Dusting Device
- 2963975 December 13, 1960 Cloud Seeding Carbon Dioxide Bullet
- 3126155 March 24, 1964 Silver Iodide Cloud Seeding Generator Referenced in 3990987
- 3127107 March 31, 1964 Generation of Ice-Nucleating Crystals
- 3131131 April 28, 1964 Electrostatic Mixing in Microbial Conversions



3174150 - March 16, 1965 - Self-Focusing Antenna System

3234357 - February 8, 1966 - Electrically Heated Smoke Producing Device

- 3274035 September 20, 1966 Metallic Composition For Production of Hydroscopic Smoke
- 3300721 January 24, 1967 Means For Communication Through a Layer of Ionized Gases
- 3313487 April 11, 1967 Cloud Seeding Apparatus
- 3338476 August 29, 1967 Heating Device For Use With Aerosol Containers Referenced in 3990987
- 3410489 November 12, 1968 Automatically Adjustable Airfoil Spray System With Pump
- 3429507 February 25, 1969 Rainmaker
- 3432208 November 7, 1967 Fluidized Particle Dispenser
- 3441214 April 29, 1969 Method And Apparatus For Seeding Clouds
- 3445844 May 20, 1969 Trapped Electromagnetic Radiation Communications System
- 3456880 July 22, 1969 Method Of Producing Precipitation From The Atmosphere
- 3518670 June 30, 1970 Artificial Ion Cloud
- 3534906 October 20, 1970 Control of Atmospheric Particles
- 3545677 December 8, 1970 Method of Cloud Seeding
- 3564253 February 16, 1971 System And Method For Irradiation Of Planet Surface Areas
- 3587966 June 28, 1971 Freezing Nucleation
- 3601312 August 24, 1971 Methods of Increasing The Likelihood oF Precipatation By The Artificial Introduction Of Sea Water Vapor Into The Atmosphere Winward Of An Air Lift Region
- 3608810 September 28, 1971 Methods of Treating Atmospheric Conditions
- 3608820 September 20, 1971 Treatment of Atmospheric Conditions by Intermittent Dispensing of Materials Therein
- 3613992 October 19, 1971 Weather Modification Method
- 3630950 December 28, 1971 Combustible Compositions For Generating Aerosols,
- Particularly Suitable For Cloud Modification And Weather Control And Aerosolization Process
- USRE29142 This patent is a reissue of patent US3630950 Combustible compositions for generating aerosols, particularly suitable for cloud modification and weather control and aerosolization process
- 3659785 December 8, 1971 Weather Modification Utilizing Microencapsulated Material
- 3666176 March 3, 1972 Solar Temperature Inversion Device
- 3677840 July 18, 1972 Pyrotechnics Comprising Oxide of Silver For Weather Modification Use
- 3722183 March 27, 1973 Device For Clearing Impurities From The Atmosphere
- 3769107 October 30, 1973 Pyrotechnic Composition For Generating Lead Based Smoke
- 3784099 January 8, 1974 Air Pollution Control Method

- 3785557 January 15, 1974 Cloud Seeding System
- 3795626 March 5, 1974 Weather Modification Process
- **3808595 April 30, 1974 Chaff Dispensing System**
- 3813875 June 4, 1974 Rocket Having Barium Release System to Create Ion Clouds In The Upper Atmopsphere
- 3835059 September 10, 1974 Methods of Generating Ice Nuclei Smoke Particles For
- Weather Modification And Apparatus Therefore
- 3835293 September 10, 1974 Electrical Heating Aparatus For Generating Super Heated Vapors Referenced in 3990987
- 3877642 April 15, 1975 Freezing Nucleant
- 3882393 May 6, 1975 Communications System Utilizing Modulation of The Characteristic Polarization of The Ionosphere
- 3896993 July 29, 1975 Process For Local Modification of Fog And Clouds For Triggering
- Their Precipitation And For Hindering The Development of Hail Producing Clouds
- 3899129 August 12, 1975 Apparatus for generating ice nuclei smoke particles for weather modification
- 3899144 August 12, 1975 Powder contrail generation
- 3940059 February 24, 1976 Method For Fog Dispersion
- 3940060 February 24, 1976 Vortex Ring Generator
- **3990987 November 9, 1976 Smoke generator**
- 3992628 November 16, 1976 Countermeasure system for laser radiation
- 3994437 November 30, 1976 Broadcast dissemination of trace quantities of biologically active chemicals
- 4042196 August 16, 1977 Method and apparatus for triggering a substantial change in earth characteristics and measuring earth changes
- RE29,142 February 22, 1977 Reissue of: 03630950 Combustible compositions for generating aerosols, particularly suitable for cloud modification and weather control and aerosolization process
- 4035726 July 12, 1977 Method of controlling and/or improving high-latitude and other communications or radio wave surveillance systems by partial control of radio wave et al 4096005 June 20, 1978 Pyrotechnic Cloud Seeding Composition
- 4129252 December 12, 1978 Method and apparatus for production of seeding materials
- 4141274 February 27, 1979 Weather modification automatic cartridge dispenser
- 4167008 September 4, 1979 Fluid bed chaff dispenser
- 4347284 August 31, 1982 White cover sheet material capable of reflecting ultraviolet rays
- 4362271 December 7, 1982 Procedure for the artificial modification of atmospheric

precipitation as well as compounds with a dimethyl sulfoxide base for use in carrying out said procedure

4402480 - September 6, 1983 - Atmosphere modification satellite

4412654 - November 1, 1983 - Laminar microjet atomizer and method of aerial spraying of liquids

4415265 - November 15, 1983 - Method and apparatus for aerosol particle absorption spectroscopy

4470544 - September 11, 1984 - Method of and Means for weather modification

4475927 - October 9, 1984 - Bipolar Fog Abatement System

4600147 - July 15, 1986 - Liquid propane generator for cloud seeding apparatus

4633714 - January 6, 1987 - Aerosol particle charge and size analyzer

4643355 - February 17, 1987 - Method and apparatus for modification of climatic conditions

4653690 - March 31, 1987 - Method of producing cumulus clouds

4684063 - August 4, 1987 - Particulates generation and removal

4686605 - August 11, 1987 - Method and apparatus for altering a region in the earth's atmosphere, ionosphere, and/or magnetosphere

4704942 - November 10, 1987 - Charged Aerosol

4712155 - December 8, 1987 - Method and apparatus for creating an artificial electron cyclotron heating region of plasma

4744919 - May 17, 1988 - Method of dispersing particulate aerosol tracer

4766725 - August 30, 1988 - Method of suppressing formation of contrails and solution therefor

4829838 - May 16, 1989 - Method and apparatus for the measurement of the size of particles entrained in a gas

4836086 - June 6, 1989 - Apparatus and method for the mixing and diffusion of warm and cold air for dissolving fog

4873928 - October 17, 1989 - Nuclear-sized explosions without radiation

4948257 - August 14, 1990 - Laser optical measuring device and method for stabilizing fringe pattern spacing

4948050 - August 14, 1990 - Liquid atomizing apparatus for aerial spraying

4999637 - March 12, 1991 - Creation of artificial ionization clouds above the earth

5003186 - March 26, 1991 - Stratospheric Welsbach seeding for reduction of global warming

5005355 - April 9, 1991 - Method of suppressing formation of contrails and solution therefor

5038664 - August 13, 1991 - Method for producing a shell of relativistic particles at an altitude above the earths surface

5041760 - August 20, 1991 - Method and apparatus for generating and utilizing a compound

plasma configuration

5041834 - August 20, 1991 - Artificial ionospheric mirror composed of a plasma layer which can be tilted

5056357 - October 15, 1991- Acoustic method for measuring properties of a mobile medium

5059909 - October 22, 1991 - Determination of particle size and electrical charge

5104069 - April 14, 1992 - Apparatus and method for ejecting matter from an aircraft

5110502 - May 5, 1992 - Method of suppressing formation of contrails and solution therefor

5156802 - October 20, 1992 - Inspection of fuel particles with acoustics

5174498 - December 29, 1992 - Cloud Seeding

5148173 - September 15, 1992 - Millimeter wave screening cloud and method

5245290 - September 14, 1993 - Device for determining the size and charge of colloidal particles by measuring electroacoustic effect

5286979 - February 15, 1994 - Process for absorbing ultraviolet radiation using dispersed melanin

5296910 - March 22, 1994 - Method and apparatus for particle analysis

5327222 - July 5, 1994 - Displacement information detecting apparatus

5357865 - October 25, 1994 - Method of cloud seeding

5360162 - November 1, 1994 - Method and composition for precipitation of atmospheric water

5383024 - January 17, 1995 - Optical wet steam monitor

5425413 - June 20, 1995 - Method to hinder the formation and to break-up overhead atmospheric inversions, enhance ground level air circulation and improve urban air quality

5434667 - July 18, 1995 - Characterization of particles by modulated dynamic light scattering

5441200 - August 15, 1995 - Tropical cyclone disruption

5486900 - January 23, 1996 - Measuring device for amount of charge of toner and image forming apparatus having the measuring device

5556029 - September 17, 1996 - Method of hydrometeor dissipation (clouds)

5628455 - May 13, 1997 - Method and apparatus for modification of supercooled fog

5631414 - May 20, 1997 - Method and device for remote diagnostics of ocean-atmosphere system state

5639441 - June 17, 1997 - Methods for fine particle formation

5762298 - June 9, 1998 - Use of artificial satellites in earth orbits adaptively to modify the effect that solar radiation would otherwise have on earth's weather

5912396 - June 15, 1999 - System and method for remediation of selected atmospheric conditions

5922976 - July 13, 1999 - Method of measuring aerosol particles using automated mobility-

classified aerosol detector

5949001 - September 7, 1999 - Method for aerodynamic particle size analysis

5984239 - November 16, 1999 - Weather modification by artificial satellite

6025402 - February 15, 2000 - Chemical composition for effectuating a reduction of visibility

obscuration, and a detoxifixation of fumes and chemical fogs in spaces of fire origin

6030506 - February 29, 2000 - Preparation of independently generated highly reactive chemical species

6034073 - March 7, 2000 - Solvent detergent emulsions having antiviral activity

6045089 - April 4, 2000 - Solar-powered airplane

6056203 - May 2, 2000 - Method and apparatus for modifying supercooled clouds

6110590 - August 29, 2000 - Synthetically spun silk nanofibers and a process for making the same

6263744 - July 24, 2001 - Automated mobility-classified-aerosol detector

6281972 - August 28, 2001 - Method and apparatus for measuring particle-size distribution

6315213 - November 13, 2001 - Method of modifying weather

6382526 - May 7, 2002 - Process and apparatus for the production of nanofibers

6408704 - June 25, 2002 - Aerodynamic particle size analysis method and apparatus

6412416 - July 2, 2002 - Propellant-based aerosol generation devices and method

6520425 - February 18, 2003 - Process and apparatus for the production of nanofibers

6539812 - April 1, 2003 - System for measuring the flow-rate of a gas by means of ultrasound

6553849 - April 29, 2003 - Electrodynamic particle size analyzer

6569393 - May 27, 2003 - Method and device for cleaning the atmosphere

**Chem Trail Tracking USA** 

Cliford Carnicom - Aerosol Crimes & Cover-up Documented

**Rense.com Chemtrail Datapage** 





