

A Statutory Invention Publication: Method of Cloud Seeding and Dissipation of Fog at Airports

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The July 24, 1999 edition of *Science News* detailed a cloud-seeding experiment which could enhance rainfall. For years, scientists, including those in the U.S. military, have attempted to cause precipitation by various methods, including, but not limited to, introducing crystals (usually of an iodide) into a cloud formation. Fog dissipation falls into two categories, cold (below 32 degrees) and warm (above 32 degrees). Microphysically unstable water droplets in cold fog can be modified by such methods as aircraft dropping small particles of dry ice into the fog or ground dispensers spraying iodide or venting liquefied propane into the fog. Warm fog is very difficult to modify.

Current trials include attempts to use hygroscopic materials such as salt to absorb moisture and create “seeds” in the cloud. It has been my thought that the pursuit of single compounds severely limits the potential for the hygroscopic model. The following methodology is hereby published and becomes public domain worldwide. I have chosen this journal since I am the publisher and it has worldwide circulation, website publication, as well as being indexed on a number of electronic databases. By this publication individual patent and monopoly of the technology will be prevented. Machinery for dispensing and storage of the material will require some minor development.

Abstract

A method for dispersing a warm or cold fog, or seeding clouds which comprises spraying a composition comprising a mineral(s) and an organic acid(s), causing a demand for water to facilitate an exothermic, effervescent reaction. The resulting particle of seeding nuclei (reacted material) will initiate the coalescing of the moisture present into water droplets which will be large enough to form raindrops, initiating precipitation.

Claims:

1. A method for dispersing a warm fog which comprises introduction into said fog a composition comprising, on a molar or non-molar ratio, a mineral, mineral carbonate, bicarbonate, oxide or hydroxide, combinations thereof and an organic acid or combinations of organic acids, as a powder, (mixed, if necessary, with an anti-caking agent such as Silicon Dioxide) or suspended in solvent, premixed or mixed at the point of dispersion.
2. A method for dispersing a cold fog which comprises introduction into said fog a composition comprising, on a molar or non-molar ratio, a mineral, mineral carbonate, bicarbonate, oxide or hydroxide, combinations thereof and an organic acid or combinations of organic acids, as a powder or suspended in solvent, premixed or mixed at the point of dispersion.