

INVENTION

Current U.S. Patents

A giant disposal destroys classified information once it has served its purpose, preventing documents from falling into the wrong hands—By William McCann

► A GIANT DISPOSAL that literally eats up thousands of pounds of top secret information every week was awarded a patent from the U.S. Patent Office in Washington, D.C.

The system was invented by James E. O'Connor, president of Document Disintegration, Inc., Los Angeles.

Some 300,000 pounds of the material are chewed up each week, Mr. O'Connor reported.

Waste containers for the classified documents are kept in locked bins located at the offices of a number of top Government contractors, banks and insurance companies. The disposal, carried around on a van, makes weekly trips to the bins where the classified "garbage" is dumped into the disposal under security guard and made confetti-sized by a hammer-milling process. This process is similar to a garbage disposal without water.

AEC Patents

Three U.S. Atomic Energy Commission inventions, held in secrecy for a total of 54 years, have finally been awarded patents.

The oldest is an arming device for aerial bombs, which earned patent 3,192,858 for Carl B. Crumb Jr., Cincinnati, Ohio. The patent was applied for in March 1945.

A uranium gallium alloy and method of preparation was held under wraps for 19 years. It earned patent 3,193,380 for Walter D. Wilkinson, Maywood, Ill., and Le Roy R. Kelman, Chicago.

The third AEC patent is a reactor control for neutronic reactors, which earned patent 3,193,467 for Liley A. Evans, Schenectady, N.Y. It had been kept secret for 15 years.

Portable Still

A portable still that uses the sun's energy to make salty water fresh has been devised for remote areas where fresh water is scarce. The still can be assembled in isolated areas where power is either expensive or not available, inventor Kim D. Beard of Los Angeles, Calif., reported.

The solar still, which its inventor claims can be quickly and easily put together without tools, received patent 3,193,473.

Other Interesting Patents

The Monsanto Company, St. Louis, Mo., received 10 patents for a method used for the production of adiponitrile from acrylonitrile, an intermediate step in the manufacture of nylon. Inventor Dr. Manuel M. Baizer and co-workers at Monsanto's central research department were awarded patents

3,193,475 through 3,193,483 and 3,193,510. The process, which represents several hundred thousand dollars of research, is said to be the first large-scale application of electro-chemistry in the field of organic chemicals.

A method has been found to protect fruit trees from borers by painting the trees with asphalt composition. Inventor Hans W. Sachs, Binghamton, N.Y., reported in patent 3,192,666 that the product is extremely effective against the peach tree borer, one of the most destructive fruit tree pests.

A guided missile navigation system, earned patent 3,193,822 for Carl A. Meneley and Richard E. Langworth, Cuyahoga Falls, Ohio, after 17 years of waiting. Patent rights were assigned to Goodyear Aerospace Corporation, Akron, Ohio.

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TECHNOLOGY

Supersonic Sled Built For Antimissile Tests

► A SUPERSONIC SLED will rocket a mock missile nose cone into a high energy blast in forthcoming tests to measure the force of antimissile shock waves.

The 4,500-pound sled, being built for the Air Force Missile Development Center at Holloman Air Force Base, New Mexico, is the heaviest of its kind to be tested on the desert track.

Propelled by rockets, the sled will reach almost 2,300 miles per hour on the 35,000-foot rail course. After it has traveled about 13,000 feet, it will be intercepted by the blast. Instruments on the nose cone will measure the shock waves. A balloon parachute deceleration device will be used to slow down the sled.

The vehicle and the balloon parachute are being built for the Air Force by the Goodyear Aerospace Corporation in Akron, Ohio.

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PUBLIC SAFETY

Fire Fighters Pack Fire-Finding Pistols

► FIREMEN may soon be packing pistols to help them discover hidden fires.

The pistols are new heat-seeking devices known as infrared detectors that sound a signal in the presence of a flame, ember or other abnormal heat source. A pistol can be holster-mounted on a fireman's hip for a quick draw during an emergency or in mop-up operations to make sure a fire is completely out.

In actual tests, a fireman used one such device to find smoldering rags behind a

huge metal wall cabinet. Another fireman found that an automobile fire was not entirely extinguished when he used the detector to scan under the dashboard after the fire was doused.

Firemen who tested the device for Civil Defense authorities were reported to be enthusiastic about the device. They found that it can indicate the presence of live embers in a smoke-filled building. It can also pick out the most dangerous hot spots during a fire.

Developed by HRB-Singer, Inc., State College, Pa., the detector is powered by ordinary flashlight batteries.

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TECHNOLOGY

Artificial Truck Tests Strength of Materials

► AN ARTIFICIAL "truck" is pounding pavements to find out how certain materials hold up under highway traffic.

The truck is actually a hydraulic testing machine capable of dropping up to 14,000-pound loads repeatedly on specimens of roadbases and subbases.

The equipment is being used in pavement design studies of the Texas Transportation Institute in the cooperative research program with the Texas Highway Department and the Department of Commerce, Bureau of Public Roads.

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