

INVENTION

Patents of the Week

A method for eliminating the spin of satellites by using the earth's magnetic field to counteract the spinning motion was awarded a patent—By Ann Ewing

► A METHOD for stopping the spin of satellites, in use on more than a dozen satellites now in orbit—some of them secret—earned patent 3,114,518 from the U.S. Patent Office.

The method uses the earth's magnetic field to eliminate the spinning motion of a satellite. It works either alone or in combination with mechanical means of reducing the spin.

Robert E. Fischell of Johns Hopkins' Applied Physics Laboratory, Silver Spring, Md., assigned patent rights to the Government through the Secretary of the Navy.

The reason for wanting a satellite without spin is to achieve stability of radio transmissions, since a spinning object changes the radio frequency. Mr. Fischell's method is to put into the satellite a lattice of metal rods made from a magnetic material.

The magnetic field of the rods, acting against the earth's magnetic field, can reduce the satellite's spin to zero.

Multicolored X-Rays

X-rays would be in color instead of black and white if the system devised by Bernard M. Fine of Lynn, Mass., is adopted.

One case in which colored X-rays would have great advantage over black and white would be in spotting embedded glass fragments. The colored X-rays do not necessarily have to reproduce the exact color of the body part being examined. Rather the color is only for the purpose of distinguishing different features, Mr. Fine notes in patent 3,114,833.

Amusement Rides

Two popular rides in Disneyland, Orange County, Calif.—a submarine and a bobsled—earned patents this week. Rights to both were assigned to Walt Disney Productions.

The simulated submarine journey, awarded patent 3,114,333, was designed by Joseph W. Fowler of Corona del Mar, Calif., and Jacob S. Hamel of Glendale, Calif. Passengers not only have an underwater view of their surroundings, but the illusion of diving or ascending.

The bobsled amusement ride, granted patent 3,114,332, was devised by Karl W. Bacon, Mountain View, Calif., and Edgar O. Morgan, Palo Alto, Calif. In it, individual cars carrying passengers in tandem coast down a snake-like track at high speed. The wheels simulate the sound of a bobsled sliding on ice or snow.

Other Significant Patents

Other patents included:

A way of skywriting by several planes

flying in formation, release of the smoke being governed by a tape that starts upon receiving a radio signal. Patent 3,114,214 to Sele Sidney Pike of Howard Beach, N. Y., and Rolf K. Hansen of Wayne, N. J.; assigned to Skywriting Corporation of America, New York.

An educational device for teaching both a mental concept, such as the meaning of a keypunch code, and a psycho-motor skill, such as punching this kind of keyboard. Patent 3,114,210 to William R. Uttal of Yorktown Heights, N. Y.; assigned to International Business Machines Corporation, New York.

An electrical device consisting of a pair of electrodes and a thin film of barium titanate coated on the surface that serves as one of the electrodes. Patent 3,114,868 to Charles Feldman of Alexandria, Va.; assigned to the Government through the Secretary of the Navy.

A typewriter ribbon that has one inked strip and another strip covered with an opaque substance for obliterating the typed character when a mistake is made. Patent 3,114,447 to William H. Wolowitz of Washington, D. C.

A space vehicle that is powered for maneuvering in orbit by microwaves beamed from the ground. Patent 3,114,517 to William C. Brown of Weston, Mass.; assigned to Raytheon Company, Lexington, Mass.

A fluid device for computers, requiring only two cells per stage for shifting information. Patent 3,114,390 to Hans H. Glatli, Kusnacht, Zurich, Switzerland; assigned to International Business Machines Corporation.

• Science News Letter, 85:13 Jan. 4, 1964

CONSERVATION

DDT Not Dangerous to Raising Cutthroat Trout

► CONCENTRATION of DDT in brook water does not kill the cutthroat trout, *Salmo clarki lewisi*, and is unlikely to interfere with a fishery, a team of Government scientists reported in Science, 142:958, 1963.

Reassuring experiments were made at the National Fish Hatchery in Jackson, Wyo., with conclusions that damaging concentrations of DDT will not occur as a result of normal insecticide use of DDT.

The team that did the experiment consisted of Oliver B. Cope and Charles C. Van Valin of the Fish-Pesticide Research Laboratory, U.S. Bureau of Sport Fisheries and Wildlife, Denver, Colo.; Don Allison of the Fish-Pesticide Research Laboratory, Jackson, Wyo., and Burton J. Kallman, Veterans Administration Center, Los Angeles.

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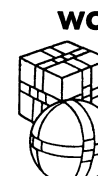
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