

## INVENTION

# Current U.S. Patents

Scrambled picture and sound signals sent over the airways are clarified by individual decoders for TV viewing by the area's pay television subscribers.

► THE PAY television system tested in Hartford, Conn., was granted a patent by the U.S. Patent Office.

In the subscription TV used in Hartford, picture and sound are sent out scrambled. A device called a decoder is attached to home TV sets to clarify the video and audio signals when a proper number is dialed.

Subscribers are billed from a tape that prints a record of every program seen and its price. The tape is taken from the decoder by the subscriber and mailed to the station along with the fee for programs viewed. Most programs are in the \$1.00 to \$1.50 range, with no minimum cost.

The decoder, key to the system, is operated by adjusting a number of dials in somewhat the same way a combination lock is adjusted. Each decoder operates only for the particular subscriber, and a dial setting that will operate one decoder is useless for any other. When set properly, the decoder automatically clears up both the audio and video signals on the so-called Phonevision program.

Myron G. Pawley of Riverside, Calif., and Jacob M. Sacks of Corona, Calif., assigned rights to patent 3,238,297 for a subscription television system to Zenith Radio Corporation, Chicago.

## Direct Recording of Radio Waves

A method of recording directly the information broadcast on radio waves, without the necessity of a receiver, was granted a patent.

Scientists hope that in the future the method can be used to record commercial radio and television signals. The recording is made when high-frequency radio waves directly strike semiconducting materials, thereby raising the energy level of subatomic particles to provide

storage of information being broadcast.

Rights to patent 3,238,511 were assigned to Litton Systems, Inc., College Park, Md., by Harold C. Anderson, who is at a Litton research laboratory in St. Paul, Minn., and Kenneth E. Peltzer who works for the Government.

## Other Interesting Patents

A storage case in which such small animals as guinea pigs, hamsters or rabbits can be kept over weekends and holidays without the need of a special attendant for maintenance earned patent 3,237,599 for Frank R. Torrey of Silver Spring, Md., and Arthur W. Carlson of Muskegon, Mich., who assigned rights to E. H. Sheldon and Company, Muskegon. The animal care case not only provides for the comfort and health of the animals but also takes care of animal and chemical odors.

To make the cavities necessary for efficient fuel burning in large solid-propellant rockets, Homer H. Sellers of Brunswick, Ga., has devised a collapsible mandrel. He assigned rights to patent 3,237,913 to Thiokol Chemical Corporation, Bristol, Pa. The mandrel can be easily removed after the propellant has cured without damage to the cavity it has made in the solid fuel.

A compact, high-temperature furnace capable of heating material to 5,000 degrees F. was awarded patent 3,238,288. Joseph C. McGuire of White Rock, N. Mex., and Donald D. Bowditch of Espanola, N. Mex., assigned rights to the Government through the Atomic Energy Commission.

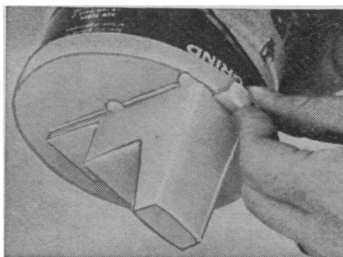
Baby panties that provide a substantially dry surface in contact with the skin, thus decreasing irritation, are the invention of Clarence O. Johnson of Aiken, S.C., who assigned rights to patent 3,237,625 to Riegel Textile Corporation. The panties, claimed to be especially useful when training an infant, are made with one layer of material that is hydrophobic, in order to draw moisture away from the baby's skin. The outer layer is hydrophilic.

A vertical take-off and landing aircraft that can also be made to hover earned patent 3,237,888 for William M. Willis of Northridge, Calif., who assigned rights to Cosmologistics Corp., Northridge.

A cryogenic logic circuit using superconducting material was granted patent 3,238,377. Robert R. Seeber Jr. of Poughkeepsie, N.Y., assigned rights to International Business Machines Corporation, N.Y.

• Science News, 89:189 March 19, 1966

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