

# Current U.S. Patents

Electronically controlled equipment that tests the performance of automobiles indicates which parts may need attention before expensive repairs are necessary.

➤ A "DIAGNOSTIC CENTER" that uses electronically controlled equipment to determine a car's condition and the parts that need repair through some 80 separate tests was granted a patent by the U.S. Patent Office.

Sending automobiles down an assembly line of machines to check on their operation is a new, rapidly growing procedure.

The parts checked include the engine, with its electrical and fuel systems; the suspension, including tire alignment, wheel arms and wheel bearings; the brake drums and cylinders, and the automatic transmission. Operation under simulated road conditions at speeds up to 60 miles per hour is also tested.

The person whose car is being evaluated can follow the process by walking down the 70-foot production line.

Patents numbered from 3,238,769 through 3,238,772 were assigned variously to Charles R. Small of Woodbury Heights, N.J., Charles H. Pancoast of Pitman, N.J., Fernando A. Pellicci-

otti of Inglewood, Calif., and George B. Myrtetus of Collingswood, N.J. All rights were assigned to Socony Mobil Oil Company.

## Promising Harmless Hormones

A new class of chemicals that has already proved successful in promoting a 12% increase in animal growth and also holds hope of controlling fertility in humans earned 17 patents, numbered from 3,239,341 through 3,239,357.

Announcement of the discovery of these estrogenic compounds, called RAL's, which have very low incidence of side effects in animals, caused a jump in price on the New York Stock Exchange for shares of Commercial Solvents Corporation, the commercial producer of the resorcylic acid lactones. The basic patent was assigned to Purdue University's Research Foundation.

Commercial Solvents, which was assigned rights to the 17 patents, has exclusive license for producing the RAL compounds that act like steroid hormones, but apparently do not cause side effects.

Drs. Edward R. Hodge, Phil H. Hidy, and Herbert L. Wehrmeister of Terre Haute, Ind., were awarded the 17 patents.

## Solar Sails for Spacecraft

A device that uses the energy from the light thrown spaceward by the sun to stabilize a satellite in orbit earned patent 3,239,165 for Robert L. Sohn, who assigned rights to TRW Systems, Redondo Beach, Calif.

As conceived by Mr. Sohn, the solar sail has no moving parts. A temperature-sensitive device is used to monitor the spacecraft orientation relative to the direction of the solar radiation, then to adjust the angle of the solar sails to control pitch and yaw.

## Other Interesting Patents

A process for producing aldehydes and alcohols by the hydroformylation of olefins earned patents 3,239,566 and 3,239,569 through 3,239,571 for Lynn H. Slaugh of Pleasant Hill, Calif., and Richard D. Mullineaux of Oakland Calif., who assigned rights to Shell Oil Company, New York.

A method of using an electroluminescent material for making photographic copies was awarded patent 3,238,859. Dr. John W. Mauchly of Ambler, Pa., assigned rights to Mauchly Associates, Inc., Fort Washington, Pa.

• Science News, 89:206 March 26, 1966

## TECHNOLOGY

# Man Sees with Nine Eyes Through Computer

➤ A MAN considers himself lucky to have two good eyes. But for some purposes two simply are not enough.

Measuring the size and shape of objects from aerial photographs, for instance, would be much more accurate if a man could see many pictures at once. He now can do so through a special technique developed by a team from the Cornell University College of Engineering.

Prof. Arthur J. McNair and James M. Anderson reported that they have found a way to reconstruct the light rays of nine photographs so that a man can see as if he had nine eyes.

Depth perception, size of the area being viewed and accuracy are thus multiplied.

A large capacity electronic computer is used to modify the rays from the photographs and bring them within range of two eyes. Then, by magnifying the objects under consideration, it is possible to measure sizes and plot distances accurately. This is especially important in cases where obtaining ground measurements is difficult such as in military reconnaissance.

Prof. McNair told a joint meeting of the American Congress on Surveying and Mapping and the American Society of Photogrammetry in Washington, D.C., that the technique may be applied not only to aerial photographs of earth but also to pictures of the moon and planets.

• Science News, 89:206 March 26, 1966

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