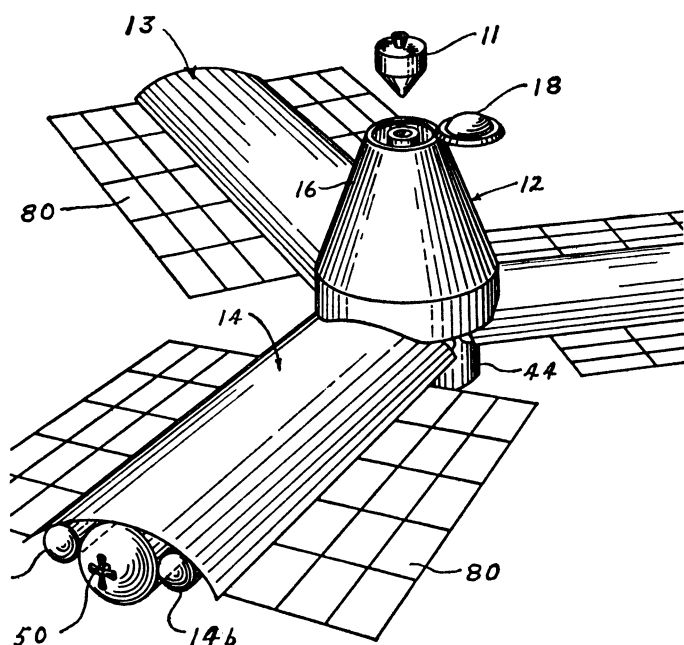


Current Patents



SPACE

Home in the Sky

A three-winged home in space that could house up to 24 astronauts for a year or more in orbit received Patent No. 3,300,162 last week.

Its five inventors claim that the huge station—150

feet across—could easily erect itself in space after an unmanned launch. Its three wings, which would contain living quarters and laboratories, would be folded underneath the central hub for launch. In that position, they would form a single smooth cylinder behind the conical nose cone. Once in space, the wings would fold out to their normal radial position.

Small rockets on the ends of the wings would rotate the station, producing about a fourth of normal gravity at the station's outermost points.

A pressurized hangar for several visiting spacecraft would be provided in the hub. Beneath it would be a laboratory mounted on bearings and counterrotated by an electric motor to provide zero gravity for experiments.

The patent was assigned to the National Aeronautics and Space Administration by the inventors; Owen E. Maynard, Willard M. Taub, David Brown, Edward H. Olling and Robert M. Mason.

GEOLOGY

Chemical Oil Prospecting

A method of determining the proximity of underground oil reservoirs by comparing the fluorescence of earth samples in differing solvents was awarded Patent No. 3,300,641 last week.

The ratio of the fluorescence of a sample in non-polar solvent such as heptane to the same sample in polar solvent such as ethyl alcohol is directly related to the proximity of the oil reservoir, if any, according to the inventor, Bennie Heinze. The patent is assigned to Cities Service Oil Company.

New Ideas and Gadgets

New Ideas and Gadgets is an editorial service to readers; more information on items can be secured from the manufacturers.

Paint and Rust Remover

Steel cutters in the whirling head of the handy tool designed for the home owner removes paint, rust or scale quickly and easily. The unit, which attaches to a 1/4-inch drill motor, is useful for maintaining basement walls and floors, concrete patios, driveways and walks and has many other applications around the home and garden.

Robert C. Collins Co., 746 Northeast 67th St., Miami, Fla. 33138

Filter Monitor

Costly damage and repairs to equipment are avoided by using the filter monitor that checks build-up of foreign matter in filters guarding chemical processing, hydraulic and machine tool fluid systems, power transmission equipment and similar systems. The red-zone on the instrument's gauge indicates the optimum time a filter change should be made.

Orange Research, Inc., 821 Derby-Milford Road, Orange, Conn.

Drum Opener

The top of a 55-gallon steel drum can be removed in two minutes with the power driven opener, which operates on 110- or 220-volt current. The opener leaves

a smooth, clean-cut edge, avoiding the danger of contaminating the contents of the drum with dirt or steel chips. Simple to operate, it propels and guides itself at a controlled rate.

Hydro-Thermal Corp., 1263 N. 70th St., Milwaukee, Wis. 53213

Portable Optical Tachometer

By simply pointing the probe of the hand-held solid-state optical tachometer at the rotating shaft, speeds of loadless motors, engines, power tools and other rotating devices can be read directly. The shaft is marked to provide a fluctuation in reflected light which the probe containing a silicon cell, lamp and optical system picks up.

Power Instruments Inc., 7352 N. Lawndale Ave., Skokie, Ill. 60076

Multi-Mix Homogenizer

Ninety-six thousand cuts per minute can be made in laboratory specimens by the homogenizer that operates at up to 16,000 revolutions per minute. The unit, provided with a built-in solid state speed controller, does not require a separate transformer. Mixing containers from 15 milliliters to two quarts may be used.

Lourdes Instruments Corp., 148 Sweet Hollow Road, Old Bethpage, N.Y. 11804