projects, the Corporation believes this is the best way to facilitate the prompt processing of these requests. The commentors agreed that if this is the fastest and most accurate way to obtain verification, it should be used. The Corporation will continue its practice of processing all forms, regardless if they came to the Trust through the projects or directly from members.

Both commentors suggested moving the item which asks for service dates from the section to be completed by the member to the section to be completed by the Corporation. The concern was that an AmeriCorps member may use incorrect dates. However, if a member enters an incorrect date, the Corporation can correct it. When the Corporation signs the form it is verifying that the dates are correct, regardless of who enters them. The commentors agreed to this

Dated: January 27, 1999.

#### Thomas L. Bryant,

Acting General Counsel.

[FR Doc. 99-2384 Filed 2-1-99; 8:45 am]

BILLING CODE 6050-28-P

## **DEPARTMENT OF DEFENSE**

# Department of the Army, Corps of Engineers

# Grant of Exclusive, or Partially Exclusive Licenses

AGENCY: Army Corps of Engineers, DoD.

ACTION: Notice.

**SUMMARY:** The Department of the Army, U.S. Army Corps of Engineers, announces the general availability of exclusive, or partially exclusive licenses under the following patents. Any license granted shall comply with 35 U.S.C. 209 and 37 CFR part 404.

Patent No: 5,657,601

Title: Method and Apparatus for Micro Modeling the Sediment Transport

Characteristics of a River Issue Date: 08/15/97 Patent No: 5,657,601

Title: Multiple Sensor Fish Surrogate for Acoustic and Hydraulic Data

Collection

Issue Date: 10/07/97 Patent No: 5,683,344

Title: Method for Solidification and Stabilization of Soils Contaminated with Heavy Metals and Organic Compounds Including Explosive Compounds

Issue Date: 11/04/97 Patent No: 5,702,203

Title: Floating "V" Shaped Breakwater

Issue Date: 12/30/97

Patent No: 5,702,651

Title: Use of Oriented Tabular Aggregate in Manufacture of High-Flexural-Strength Concrete

Issue Date: 12/30/97 Patent No: 5,706,018

Title: Multi-Band Variable, High-

Frequency Antenna *Issue Date:* 01/06/98

Patent No: 5,796,679

Title: Doppler Velocimeter for Monitoring Groundwater Flow

Issue Date: 08/18/98 Patent No: 5,804,721

Title: Capacitor for Water Leak
Detection in Roofing Structures

Issue Date: 09/08/98 Patent No: 5,815,064

Title: Snow Temperature and Depth

Probe

Issue Date: 09/29/98 Patent No: 5,813,340

Title: Roof Moisture Sensing System and Method for Determining Presence of Moisture in a Roof Structure

Issue Date: 10/06/98 Patent No: 5,828,220

Title: Method and System Utilizing Radio Frequency for Testing The Electromagnetic Shielding Effectiveness of an

Electromagnetically Shielded

Enclosure

Issue Date: 10/27/98 Patent No: 5,835,025

Title: Portable Battery Operated Power Managed Event Recorder and

Interrogator System Issue Date: 11/10/98 Patent No: 5,841,289

Title: System and Method for Detecting Accretion of Frazil Ice on the

Underwater Grating Issue Date: 11/24/98

ADDRESSES: Humphreys Engineer Center Support Activity, Office of Counsel, 7701 Telegraph Road, Alexandria, Virginia 22315–3860.

**DATES:** Applications for an exclusive or partially exclusive license may be submitted at any time from the date of this notice. However, no exclusive or partially exclusive license shall be granted until 90 days from the date of this notice.

FOR FURTHER INFORMATION CONTACT: Patricia L. Howland (703) 428–6672 or Alease J. Berry, (703) 428–8160.

**SUPPLEMENTARY INFORMATION:** USP 5,653,592 Apparatus for modeling the sediment transport characteristics of a selected section of a river or the like includes an elevated inclined platform adapted to receive and insert representing a scaled model of the section of river to be studied and a

water source for delivering water containing a simulated sediment to the model. As the water flows over the model, the sediment is transported so as to simulate the sedimentary characteristics of the modeled portion of the river. The apparatus is provided with a function generator which allows the water to be delivered to the model in accordance with a specified hydrograph and is also provided with a sliding digital micrometer survey system which allow accurate survey to be taken at selected increments along the model. Method for modeling the sediment transport characteristics of a river is also described.

USP 5,657,601 An apparatus for assembling two cement board stay-inplace form panels for making concretefilled walls that is cost-effective and forms a uniform precise composite wall construction. The assembly includes a coextensive corrugated spacer panels are secured in place with a notched tie rod that penetrates the spacer and both wall panels, this assembly allows for rapid form installation. The spacer panel has two embodiments, viz. (i) a preformed rigid corrugated panel and (ii) a flattened unassembled panel with precut fold lines that are folded at the building site and then secured with a dowel-rod bracing component. The apparatus preferably uses fiber-glassreinforced cement board for the say-in place forms. The final composite wall construction typically is made up of 4 feet wide by 8 feet high by 6.5-inch thick composite wall sections. The form walls use standard 4 feet by 8 feet by half-inch thick concrete or cement bard. Assembly of composite wall form requires erecting the corrugated spacer panel first and then attaching two form panels to the spacer panel's corrugations thereby forming a series of vertical compartments that are then filled with concrete of foam concrete with proper reinforcement.

USP 5,575,555 The apparatus of the invention are multiple fish surrogates that each have a plurality of piezoelectric and triaxial accelerometer sensors for emulating sensory organs of a particular fish. The multiple fish surrogates are immersed in flowing water intakes of a hydraulic structure such as: Intakes, intake bypasses, and diversion structures: Or also natural geological formation such as riffles, shoal areas, and pools. The invention is used for acquisition of acoustic and fluid dynamic data in or near these hydraulic structures and natural formations. To accomplish this, multiple sensors in multiple fish-shaped physical enclosures are deployed at same time to describe a fish's aquatic

environment at locations such as in proximity to a dam's intake. Since such an intake exhibits turbulent and high energy flow fields that cannot be characterized by a single sensor, many sensor bodies are required for a complete characterization of the environment. Similar deployment of the multiple sensor fish bodies can be made in complex natural channels to describe their acoustic fields and hydrodynamic fields. Such data are correlated with fish behavior for the purpose of developing methods of diverting fish from such areas of danger of a water intake or to attract them to a water bypass entrance system.

USP 5,683,344 A method for solidification and stabilization of soils contaminated with heavy metals and organic compounds removable by activated carbon includes the steps of placing a selected weight of the contaminated soil in a vessel, adding water to the contaminated soil in the vessel, mixing the soil, water and carbon in the vessel, adding cement and fly ash to the soil, water, carbon, cement and fly ash into a mold and curing the mixture of soil, water carbon, the carbon in the vessel and pouring the mixture of soil, water carbon, the carbon in the vessel and pouring the mixture therein.

USP 5,702,203 The present invention pertains to a floating breakwater structure in the shape "V". This breakwater design allows for a wide range of wave periods, unlike previous floating breakwater. The construction of the instant invention is that of a suspended curtain which deflects and redirects the waves that are incident thereto rather than absorb or reflect incoming wave energy. This design results in a substantially smaller structure with reduced mooring loads. Moreover, the floating breakwater of the instant invention allows for fast deployment that can be either shipped in sections and assembled on site or assembled in sheltered waters and towed to a site for deployment. The breakwater of the instant invention is intended for temporary coastal operations such as military force projection and sustainment, dredging, coastal civil construction and repair, oil spill recovery, and search/rescue relief

USP 5,702,651 High-flexural-strength concrete is produced by mixing wet hydraulic cement-sand mixture with coarse, flat, tabular aggregate, pouring the resulting mixture into a form in a shallow layer, vibrating the form containing the mixture, thereby orienting the coarse aggregate particles, pouring another shallow layer of the mixture into the form, again vibrating the form, and repeating these processes

until the form has been filled to the desired level. The mixture then is allowed to cure. Cast-in-place items are prepared by placing thin layers or lifts of oriented, tabular-aggregate concrete into conventional forms and vibrating each lift using flat-plate vibrators.

USP 5,706,018 A multi-band, variable, high-frequency antenna comprises a pair of transmission lines for conveyance of signal from and to a transceiver, and a pair of braided copper conductor and elements, each in electrical communication at a proximal end thereof with one of the transmission lines. Each of the braided copper conductor elements is mounted on a nonconductive support cord, the braided copper conductor elements being expandable and retractable along the support cords on which the conductor elements are mounted. A cord lock is proximate a distal end of each of the conductor elements for releasable locking the distal end of the conductor element at a selected position on the support cord on which the conductor elements, and locking the cord locks is operative to lock the conductor elements in place on the support cords selectively fix a length of each of the conductor elements.

USP 5,796,679 Groundwater velocity and direction of flow are determined by insertion in a borehole below the water table of a sound source and plurality of sound sensors. A periodic sound signal is emitted by the sound source. Which is submerged in groundwater at the bottom of the borehole. The sound signals are sensed by the sound sensors, which are also submerged in the water in the vicinity of the sound source. Owing to the Doppler effect there is a shift in the frequency of the sound signal observed by the different sound sensors. The differences in frequency are determined by pulse counters and used to compute the components of groundwater velocity along north-south and east-west axes. The velocity of groundwater flow and its direction are determined by vector addition of the groundwater velocity components. These computational processes are carried out by an appropriately programmed microprocessor.

USP 5,804,721 A pair of mental plates having a space therebetween are surrounded by a flexible enclosure which is waterproof and which is filled with a dry gas. A pair of electrical conductors connected to the plates extend through and are water-tight sealed to the enclosure. A water-deformable element which expands in the presence of moisture is disposed around the enclosure, and a rigid housing having holes therethrough is

disposed around the water-deformable element so that moisture passing through the holes into the water-deformable element causes it to expand to move the enclosure and at least one plate so as to reduce the space between the plates to change the capacitance of the capacitor.

USP 5,804,721 A pair of metal plates having a space therebetween are surrounded by a flexible enclosure which is waterproof and which is filled with a dry gas. A pair of electrical conductors connected to the plates extended through and are water-tight sealed to the enclosure. A waterdeformable element which expands in the presence of moisture is disposed around the enclosure, and a rigid housing having holes therethrough is disposed around the water-deformable element so that moisture passing through the holes into the waterdeformable element causes it to expand to move the enclosure and at least one plate so as to reduce the space between the plates to change the capacitance of the capacitor.

USP 5,815,064 A temperature and depth probe for accurate temperature measurements in snow contains a temperature sensing element such as a thermistor placed in a protective cap affixed to the end of a hollow carbon fiber tube. Wires connected to the output terminals of the temperature sensing element pass through the hollow tube to the input terminal of a temperature indicating instrument. The depth of insertion of the probe into the snow is read from depth markings on the side of the hollow tube.

USP 5,818,340 A roof moisture sensing system includes (1) a radio frequency pulse transmitter, (2) a moisture sensor disposed on a roof, and (3) a radio receiver adapted to monitor resonance of the moisture sensor activated by a pulse transmitted by the pulse transmitter. The receiver is adapted to analyze the resonance of the sensor to determine the presence of moisture in the sensor. The transmitter and the receiver can be remote from the sensor and the roof.

USP 5,828,220 A system and method for continuously monitoring the shielding effectiveness of an electromagnetically shielded enclosure is disclosed including an RF transmitter positioned remote from the shielded enclosure. RF signals received by both an enclosure receiver positioned inside of the enclosure and simultaneously by a reference receiver having its antenna positioned outside of the shielded enclosure. These two received signals are mixed so as to produce IF signals which are subsequently forwarded to a

synchronous detector which determines the ratio of the two signal levels by comparing their strengths. This ratio is indicative of the enclosure's electromagnetic shielding effectiveness. If the effectiveness drops below a predetermined or threshold limit, such is determined by a comparator position within the enclosure and an alarm may be sounded so as to indicate that the shield is failing. Accordingly, the effectiveness of the electromagnetic shield may be monitored twenty-four hours a day. It is also noted that the remotely positioned transmitter may be that of an existing radio station according to certain embodiments of this invention.

USP 5,835,025 A data acquisition apparatus that includes a recorder device of an event's time and date signified by the opening of an external trigger switching circuit in combination with a complimentary interrogator device for collecting data from the recorder device. The recorder device's components comprise a battery powered source with a power regulator, a processor, a dip-switch identifier, a programmable read only memory, a timing/control subcircuit interface that connects to the external trigger switching circuit. The interrogator device is portable and has multiple functional capabilities. This interrogator comprise a regulated battery power source, a processor, a programmable ROM, an event storage RAM, a clock/ calender subcircuit, an optional liquid crystal display and an input/output interface port to communicate with the recorder device.

USP 5,841,289 A system for detecting accretion of frazil ice on underwater grating comprises a pair of parallel electrically conductive bars mounted side-by-side, for disposition beneath a water surface and spaced from but proximate an underwater intake grating. The system further includes a coaxial transmission line connected at a first end to the pair of bars for extension from the bars upwardly above the water surface, and a time domain reflectometer disposed above the water surface for generating electromagnetic pulses and having a second end of the transmission line fixed thereto. The transmission line facilitates propagation of the pulses to the bars for further travel time in the bars and to compute changes in the round trip travel time, from which can be determined absence, presence, and build-up of frazil ice on the bars providing an indication of same on the grating. The invention further contemplates a method for detecting accretion of frazil ice on underwater

gratings, utilizing the above-described system.

## Gregory D. Showalter,

Army Federal Register Liaison Officer. [FR Doc. 99–2184 Filed 2–1–99; 8:45 am] BILLING CODE 3710–92–P

#### **DEPARTMENT OF DEFENSE**

## Department of the Navy

Public Hearing for Draft Environmental Impact Statement for the Improved Ordnance Storage for Marine Corps Air Station Yuma, Arizona

**AGENCY:** Department of the Navy, DOD. **ACTION:** Announcement of public hearing.

SUMMARY: The United States Marine Corps has prepared and filed with the U.S. Environmental Protection Agency the Draft Environmental Impact Statement (DEIS) for the Improved Ordnance Storage for Marine Corps Air Station Yuma, Arizona. Two public hearings will be held to inform the public of the DEIS findings and to solicit oral and written comments. Federal, state and local agencies, and interested parties are invited to be present or represented at the hearings. DATES: Hearing dates are as follows: (1) February 17, 1999, 1:00 p.m., Yuma, AZ.

(2) February 23, 1999, 7:00 p.m., Yuma, AZ.

ADDRESSES: Hearing locations are: (1) February 17, 1999, at the Ramada Inn Chilton Conference Center, Maya Room, 300 East 32nd Street, Yuma,

AZ 85364. (2) February 23, 1999, at the Ramada Inn Chilton Conference Center, Maya Room, 300 East 32nd Street, Yuma, AZ 85364.

FOR FURTHER INFORMATION CONTACT: Ms. Deb Theroux, (619) 532–2058.

SUPPLEMENTARY INFORMATION: Pursuant to Council on Environmental Quality regulations (40 CFR Parts 1500–1508) implementing procedural provisions of the National Environmental Policy Act, the United States Marine Corps has prepared and filed with the U.S. Environmental Protection Agency the Draft Environmental Impact Statement (DEIS) for the Improved Ordnance Storage for Marine Corps Air Station Yuma, Arizona.

The proposed action includes constructing a new Combat Aircraft Loading Area (CALA), constructing a new station ordnance area, and acquiring land for the elimination of safety waivers and the relocation of facilities at MCAS Yuma.

The Marine Corps has analyzed the environmental effects of the proposed action. The environmental studies were based on reasonable alternatives for accomplishing the proposed action, taking into account sites identified through the scoping process. Four potential alternatives have been identified: (1) the preferred alternative, acquiring 1,641 acres of nonmilitary land south of MCAS Yuma and constructing new ordnance storage magazines and other military facilities in that area; (2) acquiring 1,069 acres of nonmilitary land south of MCAS Yuma and constructing new ordnance storage magazines and other military facilities in that area; (3) acquiring 482 acres of nonmilitary land south of MCAS Yuma and constructing military facilities in that area, along with constructing ordnance storage magazines on the nearby Barry M. Goldwater U.S. Air Force Range; and (4) taking no action (No Action Alternative).

No decision on the proposed action will be made until the National Environmental Policy Act process has been completed and the Secretary of the Navy, or a designated representative, releases the Record of Decision (ROD).

The DEIS has been distributed to various federal, state, and local agencies, elected officials, and special interest groups. Two copies of the DEIS are available for review at each of the following libraries: Yuma County Library District—Main Library, 350 S. 3rd Avenue, Yuma, AZ 85364; and Foothills Branch Library, 11279 S. Glenwood, Yuma, AZ 85367. A limited number of single copies are available from Mr. Richard Samrah, Planning Supervisor, Building 888, Box 99140, Marine Corps Air Station, Yuma, AZ 85369–9110.

The two public hearings will be conducted by the Marine Corps to receive oral and written comments. Federal, state and local agencies, and interested parties are invited and urged to be present or represented at the hearings. Oral statements will be heard and transcribed by a stenographer; however, to assure accuracy of the record, all statements should be submitted in writing. All statements, both oral and written, will become part of the public record on this study. Equal weight will be given to both oral and written statements. In the interest of available time, speakers will be asked to limit their oral comments to five minutes. If longer statements are to be presented, they should be summarized at the public hearings and submitted in writing either at the hearings or mailed to Mr. Richard Samrah, Planning Supervisor, Building 888, Box 99140,