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(71) Applicant (for all designated States except US): MARINE ENVIRONMENTAL SOLUTIONS, L.L.C. [US/US]; Suite 510, 4041 Powder Mill Road, Calverton, MD 20705 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MCNEIL, Roderick, J. [US/US]; 14460 East Shore Road, Polson, MT 59860 (US).

(74) Agent: THRONSON, Mark, J.; Dickstein, Shapiro, Morin & Oshinsky LLP, 2101 L Street, N.W., Washington, DC 20037-1526 (US).

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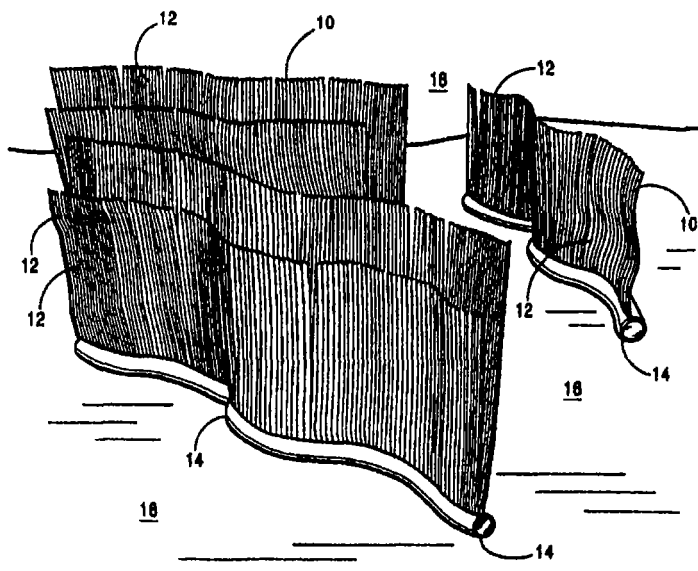


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(54) Title: SYNTHETIC AQUATIC STRUCTURE, METHOD OF CONTROLLING AN AQUATIC ENVIRONMENT, AND AQUARIUM



(57) Abstract

A synthetic structure is used to simultaneously provide food, shelter and reproductive support for many aquatic species. Synthetic seagrass may be produced in the form of flexible mats (10) with a plurality of ribbons (12). The lower ends of the ribbons (12) are anchored to the benthos (16). The other ends of the ribbons (12) are buoyantly supported in the photic zone (18). The ribbons (12) may be economically produced in plural coextensive layers, with one layer providing buoyancy and the other layer being structured to enhance biological growth. The system may be tailored for use in desired applications by selecting the surface area structure, ribbon spacing and density, and other parameters. The invention also relates to artificial plants, including seagrass mats, for aquariums. The artificial plants may be flexible and buoyant.