

Title (en)

MULTI-FUNCTION FIELD-DEPLOYABLE RESOURCE HARNESSING APPARATUS AND METHOD OF MANUFACTURES

Title (de)

MULTIFUNKTIONALE, AM EINSATZORT VERWENDBARE RESSOURCENAUSNUTZUNGSVORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

APPAREIL DE CAPTATION DE RESSOURCES MULTIFONCTIONS UTILISABLE SUR LE TERRAIN ET PROCEDES DE FABRICATION ASSOCIES

Publication

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Application

EP 05805073 A 20051020

Priority

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Abstract (en)

[origin: MX2008004809A] A multi-function, field-deployable resource harnessing apparatus (600) having, in its embodiments, an inflatable reflector apparatus (610) comprising a least one manufactured parabolic mirror made from a pressure-deformable reflective covering of an inflatable ring for focusing electromagnetic energy from radio frequency radiation (RF) through the ultraviolet (UV) radiation including solar energy for 1) heating and cooking, 2) electrical power generation, 3) enhancing the transmission and reception of radio signals, 4) enhancing vision in low-light environments, and/or 5) projection of optical signals or images. The device also has non-electromagnetic uses, such as the collection and storage of water, harnessing of energy from a fluid stream, and/or harnessing wave energy. A first main embodiment of the inflatable reflector apparatus (610) generally utilizes two pressure-deformable membranes, at least one of which is deflective. A second main embodiment utilizes a reflective membrane and a transparent membrane. In addition to the reflector apparatus (610), the modular apparatus (600) typically further includes modular assemblies to increase versatility, facilitate use, and/or enhance safety such as, for example, a modular support and orienting assembly (612), a separate support ring (614), a safety shield or cage (616), a focal point support assembly (618), a safety cover (620), a safety net or mesh (622), and a stabilizing assembly (624). Portability is enhanced by complete collapsing of the inflatable device.

IPC 8 full level

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