

研發成果資訊

專利/技術名稱：Ecological board and it application (美國發明專利 US8579552 B2)

發明/研發人員：俞克儉

專利期間：2013 年 11 月 12 日~

成果類別：民生紡織 民生化學 民生醫材 民生食品 金屬機電
金屬材料 電子資訊 技術服務 產品設計

研發成果說明：

本創作係有關於一種生態堤防之改良構造，特別是指一種施工簡易、便於修復，同時又能降低對自然景觀影響之生態堤防之改良構造。

- 1、每一塊生態堤防四面都設有榫頭，所以生態堤防可以互相榫接。
- 2、生態堤防有廢輪胎鑲嵌於水泥板之外側以作為故定於樁柱之用
- 3、樁柱長 5 公尺，將樁打入地下 3 公尺，如此樁柱將會非常勞固，然後在生胎堤防後方填入土石以便植栽，能降低對自然景觀的影響及兼顧生態環境保護之功效。

本創作之生態堤防可以模組化大量預製，而能達到施工簡易、便於修復，同時又能降低對自然景觀的影響，而具有節省成本及兼顧生態環境保護之功效。

本生態堤防可用於海岸、河岸、山坡、土石流防治、公路邊坡、河流水庫及保護橋墩。

照片及圖示：



※未來是否申請專利？是 否

若將申請專利，本項成果暫時不會公開於網頁上；若不申請專利，本項成果將公告於本校技轉中心網頁及經濟部 CITD 平台，以利推廣及促進技術移轉。



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(12) **United States Patent**
Yu

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(54) **ECOLOGICAL BOARD AND ITS APPLICATIONS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 58 days.

(21) Appl. No.: **13/241,213**

(22) Filed: **Sep. 23, 2011**

(65) **Prior Publication Data**

US 2012/0014747 A1 Jan. 19, 2012

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/202,441, filed on Sep. 2, 2008, now abandoned.

(51) **Int. Cl.**
E02D 29/02 (2006.01)

(52) **U.S. Cl.**
USPC **405/302.4; 405/15; 405/284**

(58) **Field of Classification Search**
USPC **405/15, 80, 107, 116, 284, 285, 302.4, 405/302.5, 302.6; 256/12.5, 13**
See application file for complete search history.

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(57) **ABSTRACT**

An ecological board includes a quadrilateral board body, on the side edges thereof is disposed at least one reglet or at least one insertion groove to be engaged with a corresponding insertion groove or a reglet of another identical board body. Further, a plurality of separated strong and pliable pad bodies are embedded in at least a first side surface of the board body and protrude outwards therefrom. The ecological board according to the present invention is durable, stable, easy to construct, maintain, and repair, and environmentally friendly to the natural landscape. Most importantly, it can be applied to various environments, such as coastlines, artificial reefs, and slopes of reservoirs, rivers, or mountains.

7 Claims, 6 Drawing Sheets

