太陽能追日式自然光照明系統

公司名稱	(中) 國立臺北科技大學 (英) National Taipei University of Technology	專館代表號/攤位號碼：
公司地址	(中) 10608 台北市忠孝東路三段一號 (英) 1, Sec. 3, Chung-hsiao E. Rd., Taipei,10608,Taiwan, R.O.C.	
產品名	(中) 太陽能追日式自然光照明系統 (英) SOLAR TRACKING SKYLIGHT SYSTEM FOR LLUMINATION	

產品簡介：

隨著人們對永續發展的綠建築理念的瞭解與接受，越來越多的人開始關心居家和工作場所裡的能源使用效率。一種名為太陽能自然光追蹤照明系統，可藉由持久性增強室內照明強度與光線品質方式，達成可觀的降低使用照明電力，可滿足上述節能減碳的需求。

本發明主要包括光導引器、追日控制器、雙軸追蹤機構、轉能與儲能系統、天候保護罩等機構組成，利用追日控制器感測光源方向，發出電訊使雙軸追蹤機構朝光源處動作以利設於雙軸追蹤機構之上的光導引器順利採光擴散進入屋內使用，並由保護罩防護雨水，整個系統利用轉能與儲能系統之太陽能板發電儲存至電池輸出供系統應用，因此屋內採光及系統都無需外部電力，達成節能、省碳、環保之綠能科技產品特色。

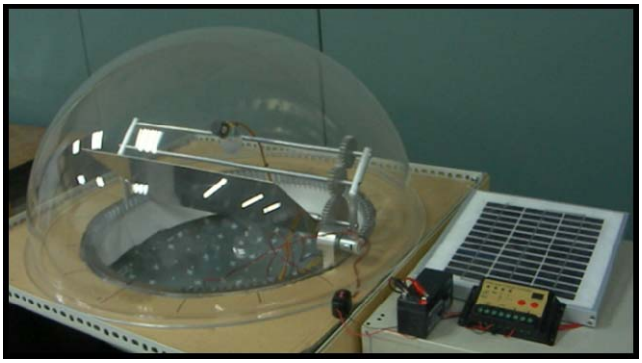
本發明能讓採光不佳的室內在白天也可以採集到自然光，減少室內開燈機率，而且室內有陽光普照之效果，且組成機構元件、簡單且輕巧、容易操作、容易組裝與設置、又防雨水侯變、消耗的電池電力也少、使用壽命長，不需大電力便能運作，供消費大眾大量運用後達到降低排碳目的。

With the increasing awareness of sustainable and green building, more and more people are concerned with the efficiency of energy use at home and at work. A solar tracking skylight illumination system, which enables us to conserve energy by producing increased interior light levels for a longer duration than normally possible, can fit to the above need.

A solar tracking skylight system for illumination of the present invention is assembled to comprise a light guide, a solar tracking controller, a two-axis tracking mechanism, an energy converter and energy storage system, and a weather protective cover. Operation involves sensing a light source, after which the system rotates toward the light source and collects light and guides it indoors for use thereof. The protective covering provides waterproofing, and the energy converter and energy storage system is used to generate electricity for use by the system. The present

invention is an energy saving product that does not need external electrical power.

The present invention collects natural light for use thereof, thereby reducing the need to turn on electric lights. In addition, the present invention filters ultraviolet rays, and change in time does not affect maintaining indoor lighting, while equally maintaining the same uniform brightness, thereby providing the effectiveness of indoor sunlight illumination.



聯絡方式：

- 台灣技術交易整合服務中心（TWTM）
- 台北市信義路三段 41-2 號 3 樓之一
- 聯絡人：黃小姐, 02-23250399,MaggieHuang@itri.org.tw
- 聯絡人：廖小姐,03-5917711,fion@itri.org.tw