

## ENVIRONMENTALLY FRIENDLY MATERIAL FOR OUTDOOR SEATS AND PRODUCTION PROCESS THEREOF

### ABSTRACT

5        The present invention provides an environmentally friendly material for outdoor seats and a  
production process thereof. The environmentally friendly material includes the following raw  
materials: polylactic acid (PLA), polycarbonate (PC), compatibilizer, lubricant, antioxidant,  
functional fiber filler, and antibacterial and antifungal component. With PLA as a matrix, the  
addition of functional fiber filler may improve the mechanical properties and ultraviolet  
10 resistance of the environmentally friendly material, avoiding aging caused by long-term  
ultraviolet irradiation in outdoor environments, which would affect the performance of the  
environmentally friendly material. The addition of the antibacterial and antifungal component  
enhances the impact toughness and antibacterial and antifungal properties of the environmentally  
friendly material. Outdoor seats prepared from the environmentally friendly material have  
15 excellent mechanical properties, impact toughness, ultraviolet resistance, and antibacterial and  
antifungal properties, may maintain stable performance under long-term outdoor use conditions,  
have a long service life, and have broad application prospects.

Fig. 1