國立臺灣大學技術行銷表

台大案號:_____(由產學合作中心填寫)

產學合作中心聯絡人：　　電話：　　e-mail：

產品/技術名稱	熱寫磁讀記錄媒體及其製作方法
發明人/單位	郭博成、方彥翔、孫安正、楊道軒、周群淵、張慶瑞/台灣大學
產品/技術說明	本發明提供一種熱寫磁讀之記錄媒體及其製作方法，其係引入一 FePt 磁性層，利用 FePt/CoTb 雙層膜結構之間的交換耦合（exchange coupling）現象，而於室溫下產生足夠之磁通量以供訊號讀取。本發明之記錄媒體於室溫下即具有高飽和磁化量與高頑磁力，因而深具超高記錄熱寫磁讀之應用潛力。
應用範圍	熱寫磁讀之記錄媒體
產品/技術優勢	本發明之一第一構想在於提供一種具有高飽和磁化量與高頑磁力之熱寫磁讀記錄媒體，其於室溫下即可產生足夠之磁通量以供訊號讀取。
市場潛力	由於本發明所提供之熱寫磁讀記錄媒體於室溫下即具有高飽和磁化量與高頑磁力，因而深具超高記錄熱寫磁讀之應用潛力
產品/技術 智財權保護方式	（由產學合作中心填寫）

Marketing Abstract of NTU's Invention Disclosure

NTU's docket no:_____(由產學合作中心填寫)

CIAC contact： Tel： e-mail：

Title	Heat Assisted Recording Medium and Method for Fabricating The Same
Inventor (s)	Po-Cheng Kuo、Yen-Hsiang Fang、An-Cheng Sun、Tao-Hsuan Yang、Chun-Yuan Chou、Ching-Ray Chang
Brief Description	A novel heat assisted magnetic recording (HAMR) medium and the fabrication method therefore are provided, where a magnetic FePt layer is introduced. The exchange coupling effect occurring at the interface of FePt/CoTb double layers is adopted, and thus the resulting magnetic flux would be sufficient enough to be detected and readout under the room temperature. The provided HAMR medium exhibits a relatively high saturation magnetization and perpendicular coercivity, and thus possesses a great potential for the ultra-high density recording application.
Fields of Application	heat assisted magnetic recording (HAMR) medium
Advantages	The heat assisted magnetic recording (HAMR) method with perpendicular writing and magnetic flux reading is well proposed for increasing the recording density of the magnetic disk, where the amorphous rare earth-transition metal (RE-TM) thin films are usually applied as the recording medium therefor. .
Market Potential	The provided HAMR medium exhibits a relatively high saturation magnetization and perpendicular coercivity, and thus possesses a great potential for the ultra-high density recording application.