## 發明名稱

#### (以下內容一頁為限,不可揭露關鍵技術內容;填表完成後請刪除此行)

發明人: 呂宗昕 教授

單 位: 國立臺灣大學 化工學系/研究所

簡 歷: (可列出相關連結,例如系所、研究室網頁)

本實驗室研究領域乃在於奈米技術、光電材料、電子陶瓷、CIGS太陽能電池、螢光粉。目前研究題目

包括:

奈米電子及光電材料之製備及改質

電子及光電元件薄膜製程

電子及光電材料分析及元件設計

http://homepage.ntu.edu.tw/~d01524001/index.html

市場及需求:

化學機械研磨(Chemical-Mechanical Polishing, CMP)

技術摘要(含成果):

本技術可於低溫下,利用水熱法合成奈米級小粒徑的圓球狀氧化鈰粉體,並且具有粒徑分佈均勻以及分散性良好等優點。相較於市面上非球狀且粒徑較大之氧化鈰粉體,透過本技術合成之氧化鈰粉體,可避免研磨對象表面的損傷,有效進行研磨。

優勢:

透過此技術,能將合成氧化鈰粉體之所需溫度太幅降低、合成粒徑分佈均勻、分散性良好的小粒徑圓球狀氧化鈰粉體,有利於降低製造成本,以及避免研磨時造成研磨物體表面受損。

## 競爭產品:

## 專利現況:

- (1)本技術已有相關專利(中華民國專利申請號:XXXX;美國專利證號:XXX)。
- (2)本研究團隊具有數十年研究經驗…
- (3)其他…

本資料僅供國立臺灣大學專利/技術申請使用,嚴禁使用全部或部分內容於其他用途。若有疑問請與我們聯繫, 我們將盡力協助您。

請放任一代表照片 (不可揭露技術內容)

# 聯絡方式(請不用填):

臺大產學合作總中心

Tel: 02-3366-9945, E-mail: ntuciac@ntu.edu.tw



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## Title of Invention

(Below is limited to 1-page only; be careful not to disclose vital technology content. Please delete these words when the document is finished)

PI: Prof. Chung-Hsin Lu Department of Chemical Engineering, National Taiwan U. An interesting **photo** related to your technology (be careful not to disclose key technology)

#### **Experience:**

The research fields in our laboratory are nano technology, photoelectric materials, electronic ceramics, CIGS solar cell, and phosphor. The current topics include:

Synthesis and Modification of Nano Electronic and Photoelectric Materials Process of Films of Electronic and Photoelectric Device Analysis and Designation of Electronic and Photoelectric Device

#### **Market Needs:**

Chemical-Mechanical Polishing, CMP

#### **Our Technology:**

By this technology, we can synthesize nano scale spherical CeO2 with small size, uniform distribution and good disperion. Compare to the larger and non-spherical CeO2 on the market, CeO2 synthesized by this technology can avoid the surface damage of the object and polish the object effectively.

#### Strength:

By this technology, we can significantly decrease the temperature of CeO2 synthesis and synthesize CeO2 with uniform size distribution, good dispersion, small size, and spherical shaped. These characteristics are beneficial to reduce the cost and avoid the surface damage of the object while polishing.

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COIIII	Jeung	riou	ucts.

**Intellectual Properties:** 

## Contact (do not need to fill out):

Center for Industry-Academia Cooperation, NTU Tel: 02-3366-9945, E-mail: ntuciac@ntu.edu.tw

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