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**(71) Applicant(s):**

UNIQUE BIOTECHNOLOGY CO., LTD. [CN/CN]; 26f.-9, No.3, Ziqiang 3rd Rd., Lingya Dist., Kaohsiung City, Taiwan (CN)  
(for all designated states)

**(72) Inventor(s):**

LIN, Cheng-ho; 26f.-9, No.3, Ziqiang 3rd Rd., Lingya Dist. Kaohsiung City, Taiwan (CN)  
YIN, Hao-chang; 26f.-9 No.3, Ziqiang 3rd Rd., Lingya Dist., Kaohsiung City, Taiwan (CN)  
WANG, Shan Shue; 26f.-9 No.3, Ziqiang 3rd Rd., Lingya Dist., Kaohsiung City, Taiwan (CN)  
HUANG, Pin-hsuan; 26f.-9 No.3, Ziqiang 3rd Rd., Lingya Dist., Kaohsiung City, Taiwan (CN)  
HSU, Chu-wei; 26f.-9 No.3, Ziqiang 3rd Rd., Lingya Dist., Kaohsiung City, Taiwan (CN)

**(74) Agent(s):**

WUXI HUICHENGYONGXIN PATENT FIRM( GENERAL PARTNERSHIP); Room 1406 Block C, Rongzhi Mansion, No. 4, Longshan Road wuxi city, Jiangsu 214000 (CN)

**(54) Title (EN):** ELECTROLYSIS SYSTEM AND CATHODE APPARATUS THEREOF

**(54) Title (FR):** SYSTÈME D'ÉLECTROLYSE ET SON APPAREIL DE CATHODE

**(54) Title (ZH):** 电解系统及其阴极装置

**(57) Abstract:**

**(EN):** An electrolysis system and cathode apparatus thereof. The electrolysis system comprises two cathode apparatus and one anode apparatus. The cathode apparatus are separated by a gap and respectively comprise one base wall and one outer wall separated by a gap from each other, several pipe elements respectively connected to the outer wall and allowing inflow and outflow of a fluid, and several supporting elements respectively connected to the base wall and the outer wall. Each base wall and the corresponding outer wall jointly define one cooling space. The anode apparatus is arranged between the cathode apparatus. The supporting elements reinforce the strength of the outer walls and allow the outer walls to withstand increased water pressure, thus allowing accelerated flow of cooling water and increasing cooling efficiency.

**(FR):** L'invention concerne un système d'électrolyse et son appareil de cathode. Le système d'électrolyse comprend deux appareils de cathode et un appareil d'anode. Les appareils de cathode sont séparés par un espace et comprennent chacun une paroi de base et une paroi externe séparées l'une de l'autre par un espace, plusieurs éléments de tuyau reliés chacun à la paroi externe et permettant l'entrée et la sortie d'un fluide, et plusieurs éléments de support reliés chacun à la paroi de base et à la paroi externe. Chaque paroi de base et la paroi externe correspondante définissent conjointement un espace de refroidissement. L'appareil d'anode est agencé entre les appareils de cathode. Les éléments de support renforcent la résistance des parois externes et permettent aux parois externes de résister à une pression d'eau accrue, ce qui permet d'accélérer l'écoulement de l'eau de refroidissement et d'augmenter l'efficacité du refroidissement.

**(ZH):** 一种电解系统及其阴极装置。该电解系统包含两个阴极装置,以及一个阳极装置。所述阴极装置彼此间隔设置,且分别包括彼此间隔的一个基壁与一个外壁、数个分别连接该外壁且能供液体进出的管件,以及数个分别连接该基壁与该外壁

的支撑件。每一基壁与对应的外壁相配合界定出一个冷却空间。该阳极装置设置于所述阴极装置间。所述支撑件加强了所述外壁强度,使所述外壁能承受较强的水压,故能加快冷却水的流动,并提高冷却效率。

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