

## **DR. SHUNG-WEN KANG' S RESEARCH ON LED WON US PATENT AGAIN!**

Dr. Shung-wen Kang, Dean of Research and Development, who had won US patent in September 2009, had another breakthrough in his research on LED lamp—his “Led Lamp Instantly Dissipating Heat As Effected By Multiple-layer Substrates” got another patent from US. Among the school' s six patents from US, three are from Dr. Kang' s research results. Recently, the school has been applying for Taiwan, Japan, and US patents for dozens of research achievements.

Dr. Kang' s previous patent was “High Power Led Lighting Assembly Incorporated With A Heat Dissipation Module With Heat Pipe.” In this new patented work, he uses Multiple-layer Substrates to increase the heat-dissipation structure and the extent of exposure. He modifies the conventional arrangement of LED on the same substrate, which would concentrate the heat sources and increase difficulty of heat-abstraction. Secondly, the new design create a better usage of space. Thirdly, with this design, there is no need to install fan or heat-releasing module; hence, it decrease the expense of the production. Most importantly, by effectively dissipate the heat of lamp, it will increase the endurance of the lamp, reduce the use of electricity, and serve for a better environment.

Dr. Kang attributes his invention to the design idea of multiple-core CPU, which initiates him to replace single substrate with multiple one. During the process of research, Dr. Kang adds, “to test the practicality of my invention, I has applied for one school road lamp from Office of General Affairs and replace the original lens and electric wares with my own design. This unique road lamp help me to complete the research, and attract public attention in the 2008 invention fair.” Chien Kun-cheng, co-patent-winner, and Ph.D graduate of Dept. of Mechanical and Electro-

mechanical Engineering, indicates that according to the statistic of NSC, the inquiry rate about his invention in the 2008 fair was the second highest. Dr. Kang intends to promote their patented work by transferring the technology to the enterprises, and benefit the economy. ( ~Chen Chi-szu )

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Dr. Shung-wen Kang, Dean of Research and Development, and Chien Kun-cheng, Ph.D graduate, won US patent for their invention of new LED lamp, and applied it in the school road lamp.