

2003 TAIWAN INTERNATIONAL SCIENCE FAIR

CATEGORY : Engineering

PROJECT TITLE : Universal Cable Tester

AWARD : Third Award

SCHOOL : Duineveld High School

FINALISTS : Jean FE uan zyl

COUNTRY : South Africa

Universal Cable Tester

a. Purpose of the research:

The purpose of the research was to develop an easy to use/ affordable product that can indicate defects in any kind of cable carrying an electrical current or signal without any damage to the cable... and if there are defects, it can show you the kind of defects.

b. Procedures:

I examined all the products currently being used on the market, but did not find any that fit up to my standards.

I gathered all the parts that I needed to build the product.

I finished the product with success and all proved that it could be done.

I went to some computer and electrical stores to experiment with the product and to see the viability of the product.

c. Data:

The knowledge I needed to build this product came from years of first hand experience and scientific research in building, designing and repairing of mechanical and electronic devices.

The data gathered from the research showed that the parts and manufacturing of this product can be very cost effective, especially because it needs no batteries or external power source to operate, It comes with an "easy to understand" manual.

(Layout is confidential... Patent Copyright)

d. Conclusions:

This is a good product that can withstand harsh circumstances and it can be used by almost anyone.

The computer and electrical stores were impressed and they want to use this product.

To protect the copying of this patent, it was camouflaged to distract "would-be-copiers".

The product will be patented under the name U C T (Universal Cable Tester)

評語

本作品已是可產品化的一個電纜檢測器，其特點是以一個小型手動的發電機產生電流，用以測試電路是否聯通，是其創意。