- 1. Cover Page : Project Title, Project Team Members, Faculty Advisor, Date
- **2. Summary (****):** 1 paragraph of condensed description of the entire report
- 3. Problem Statement (start from last semester's)
- 4. Design Requirement s(***)
 - Make sure they are
 - (a) <u>quantified</u>, and
 - (b)include <u>constraints (social, cultural, political, environmental, economic, time, etc</u>)
 (*****)
- 5. Solution Design (*****)
 - Patent-Like Description (*****)
- 6. Project Implementation Process (****)
 - Describe what you have done
 - Figures and Pictures
 - Flowcharts & Screen Shots
- 7. Conclusions
 - 1 paragraph concise and condensed conclusion
- 8. References

Final Report Format [Details]

• NOTE:

- Build from last semester submissions
- Write in full sentences.
- Do not bullet itemize
- Grading Emphasis Points (* marks)
- 1. Cover Page
 - Project Title, Project Team Members, Faculty Advisor, Date
- 2. Summary (****)
 - 1 <u>paragraph</u> of condensed description of the entire report

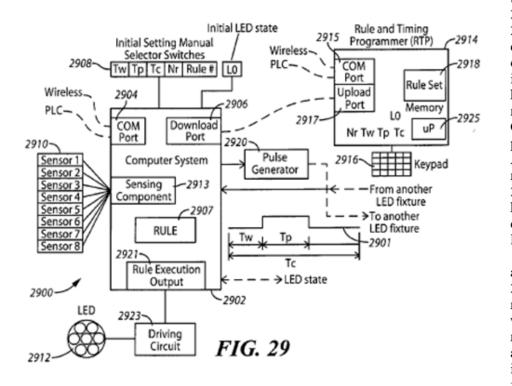
• 3. Problem Statement (start from last semester's)

- Long-term goal
- Current academic year goal
- 1 paragraph or sentence problem statement
- 4. Design Requirements (***)
 - Make sure they are
 - (a) quantified, and
 - (b) include <u>constraints (social, cultural, political,</u> <u>environmental, economic, time, etc</u>) (****)

5. Solution Design (*****)

Patent-Like Description (all teams) (*****)

- Drawings/Figures should have indicating numbers
- Text body should include numbers for corresponding parts in the figures/drawings The initial items can be either determined by the manual



selector switches 2908 separately placed in the LED fixture or by downloaded from a Rule and Timing Programmer (RTP) 2914, a separate system not installed in LED fixture. The RTP 2914 includes a processor 2925 and can be realized by a computer system which is capable of wired communication downloading and wireless or PLC communication of the items needed in the LED fixtures that can be typed in by a keypad 2916 attached to the RTP 2914 or available in a memory 2918 inside the RTP 2914. The RTP 2914 includes a COM port (to receive wireless or PLC data) and an upload port 2917 (to upload information to the download port 2906). A rule 2907 is downloaded via COM port 2904. The information from the sensors is processed by sensing components 2913. A rule execution output 2921 (with instructions as to how to drive the LED 2912) drives a driving circuit 2923 that converts the instructions to electrical signals to control the LED 2912.

Another approach for initializing the items mentioned above, whether via manual selector switches **2908** or by RTP **2914**, is to obtain the row number (Nr) and a table of the row number and the timing pulse information for the row number, which is stored inside the memory of the controller and retrievable to the computer system, instead of reading them all separately. This alternative approach is advantageous if the initial setting values are to be downloaded or communicated from the RTP **2914**.

6. Project Implementation Process(****)

- Describe what you have done
- Figures and Pictures
- Flowcharts & Screen Shots

• 7. Conclusions

- Concise and condensed conclusions
- 8. References