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Training Mode of the Grassroots Technology Business Leaders Based on the "Target-driven, Real-life Education"

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Abstract: According to the needs of state grid talents, this paper puts forward the training mode of grassroots technology leading talents based on "task-driven and real-life education" and focuses on the writing method of invention patents in order to accelerate the establishment of a world-class power grid and a world-class enterprise Provide talent support.

Keywords: invention patents; state grid talents; task-driven; real-life.

1. Introduction

During the "Twelve-Five Plan", State Grid Corporation have made outstanding achievements in science and technology work, with a total of 19 national science and technology awards, 46 patents in China, the first prize of China's standard innovation contribution is 2; the newly authorized invention patents are 7696 and the new International patent applications are 672. The number of patent applications, authorized amount and cumulative ownership is the first place in the first five consecutive years among the central enterprises. The above data shows that the invention patents occupy an important position in the evaluation system of state-owned science and technology innovation companies. Therefore, as a grassroots technology leader of a state-owned enterprise, they must possess the scientific research capacity to write high-end journal articles and invention patents.

However, most employees do not master the key links of technological innovation such as theory, method, process and practice of technological innovation, resulting in the failure to carry out technological innovation. This paper puts forward the training mode of grassroots technology leading personnel based on "mission-driven and real-life education" based on the manual of electronic backbone users of grassroots technology innovation in electric power enterprises.

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The selection of technological leading talents of power grid companies is integrated into the training and teaching. The "grassroots" personnel are guided in a "task-driven" manner to enhance the capability of scientific and technological innovation and assist grassroots personnel in the transformation of scientific and technological innovation with "real-life education". Through the curriculum reform, we can guide the effective implementation of grassroots technology talent work in electric power enterprises, and also play an exemplary and guiding role in other industries.

2. Curriculum system reform based on the “Target-driven, real-life education” [1]

In the book of《Power enterprises grassroots technology innovation backbone electronic version of the user manual》, we reconstruct the curriculum system and reform the course contents with the mode of ″Target-driven, real-life educating″ personnel training mode, and added Science Citation Index（SCI）/ The Engineering Index（EI）jurnals, invention patents and the National Natural Science Foundation Writing skills. “task-driven” as the guide, take the initiative to adapt to the development needs of the State Grid Corporation, to cultivate the urgent need of the power industry innovative technical personnel. Adhere to the “real-life education” personnel training model of the “heavy foundation, thick theory, long practice” and cultivate a double first-class power enterprises high-end leaders.

① Establish a mission-driven performance management system: According to the evaluation indicators of innovative leading talents of State Grid Corporation of China, develop corresponding training courses to enhance the application and writing of high-level dissertations, invention patents and national-level projects by professional and technical employees of enterprises ability. By using the standard model of quantitative evaluation of competencies and performance, we set up a standard of occupational evaluation that focuses on professional ability and job performance and emphasizes professional ethics and professional standards.

② Realization of scientific and technological innovation based on “Real-life education”

On the basis of the existing simulation equipment in the national grid Jilin electric power training center, the problems that may occur in the demonstration of equipment failure are presented, and the high-level solutions are put forward in a targeted way. The latest theoretical algorithms are applied to the simulation model to extract sufficient innovation points for writing invention patents and high-level journal articles.

3. Patent writing skills [2-6]

Patent is an important supporting material to characterize the advanced nature of technological innovations. Among them, the invention patents of science and technology awards reviewed by the government and State Grid Corporation are the most important and also the important supporting materials for the appraisal of experts at all levels. Patents include invention patents, utility model patents and design patents. According to the Patent Law of our country, inventions and utility models that grant patents should possess novelty, creativity and practicality.

3.1 Novelty of the patent

Before the application was submitted to the Patent Office, no identical inventions and publications had been published in domestic and foreign publications, which include not only books, newspapers, magazines, but also audio and video files such as audio tapes, video tapes and records.

The applied patent is not publicly available at home or abroad, or otherwise known to the public. The so-called public used, refers to the sale of goods in the form of technical exchanges or other means of communication, application, and even through the television and radio known to the public.

Before the filing date of the application, no entity or individual filed an application with the Patent Office for the same invention or utility model and was recorded in the patent documents of the patent application or announcement published later.

3.2 Creativity of the patent

Compared with the existing technology before the filing date, the invention has outstanding substantive features and remarkable progress. The utility model has the substantial features and progress.

The so-called "substantial features" means that there are substantial differences and qualitative leaps and breakthroughs compared with the existing technologies, and the technical changes and breakthroughs are not the ones that are common to those skilled in the art Obvious.

Compared with the existing technology advances means that the invention or utility model than the prior art has technical advantages or obvious technical advantages.

3.3 Practicality of the patent

The invention of a patent application can be mass-produced in the production of industry, agriculture and other industries or applied in industry or in life, and can have a positive effect.

3.4 Writing skills of the patent

Title: A brief description of the content of the invention.

Technical field: The specific technical field to which the claimed invention or the utility model belongs or directly applies.

Background of the invention: What are the related art at home and abroad that have the same technical contents as the present invention or the same purpose as the present invention? It points out the shortcomings of the related advanced technologies or the problems to be solved. What inventive technical solutions have been adopted in the present invention and solved the problems that have not been solved in existing or similar or related technologies at home and abroad

Summary of the Invention: The technical problems to be solved and the technical solutions adopted are described in detail in the light of the prior art.

Brief description: The description of the drawings omitted

Detailed description: The specific preferred embodiments are described in detail, and can be specifically described with reference to the accompanying drawings.

Abstract: The abstract shall state the name of the patent and the technical field to which it belongs, clearly reflect the technical problem to be solved, the main points of the technical solution to the problem, and the main purpose of the patent, and in particular shall state clearly that the patent is made in shape and structure with respect to the background art Improved technical features must not be written as advertisements or simply functional product descriptions.

- Abstract Title may not be the title of a patent.

- Abstract can have chemical or mathematical formula.
- The summary text part (including punctuation marks) can not exceed 300 words.

Brief Description of the Drawings: The drawings that best illustrate the main technical features of the technical solution of the present invention should be selected as the abstract drawings. The abstract drawing should be one of the drawings in the specification.

The accompanying drawings shall be drawn using drawing tools including computers and black ink. The lines shall be uniform, clear and deep enough not to be colored or altered, and the blueprint shall not be used.

If the applicant fails to submit the attached drawings, the examiner may notify the applicant to make corrections or appoint one according to the authority and notify the applicant.

The examiner confirms that no suitable abstract drawings may be specified, and may not require the applicant to make corrections.

The protection scope of the invention or utility model patent shall be subject to the claims of the claims. The description and its drawings may be used to interpret the claims. The claims are legal documents that are used to determine the scope of protection for a patent for invention or utility model. Whether the subject matter of a patent application falls within the scope of the patentability granted, whether the invention claimed is of novelty, inventiveness and practicability, whether the patent application meets the singularity requirement, whether the enforcement action of others infringes the patent right, All depending on the content of the claims, or directly related to the contents of the claims.

4. Conclusions

This paper starts with the training quality of the leading talents in grass-root technology in electric power enterprises, puts forward the training model of education based on "Target-driven and real-life education", and introduces the introduction of the invention patent writing skills in order to enhance the grassroots level of innovation of staff pointed out the direction of efforts.

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