Free the invention of alternating current, light, x-ray and laser by nikola tesla...

Technology, Innovation



Nikola Tesla was physicist, inventor and electrical engineer in the late 19th and early 20th centuries. He was the inventor of the alternating current-rays and lights as well as the laser during his career of life. During this period, the Edison's lamps were inefficient and weak when they were using direct current. The system of direct current had several limitations such as the system could be neither transported for long disturbances nor stepped up to high voltage for long distance transmission. In addition to that, the uses of direct current system need many sub-power stations which were costly. Therefore, they were a need of inventing a better source of power which will replace the use of direct current.

Nikola Tesla comes up with engineers' ways to solve the above problem by inventing the first alternating current using the generator, motors and transformers system. Since, Nikola was determined to invent an alternative source of power the war between the direct current of Edison and Tesla come in but Tesla invention patents won due to its efficacy and clean use by the public in the Westinghouse.

Tesla had constructed the model ploy phase system that uses the alternating current dynamo, step-down and step up transformers as well as the alternating current motor at the other end. The outcome result during Tesla demonstration in Westinghouse was shocking and attracted the Westinghouse, which later started to fund the large production of Tesla invention of alternating current generator, motor and transformer systems to supply the power to the whole of the present North America.

Tesla did not invent light himself, but he invented how light can be tapped and distributed. Tesla was the father of the invention of fluorescent bulb, which lather was ranged for larger production by industries. Tesla used the glass tubes, which he bent them to create neon signs. Although, this idea of inventing the bulb light come on during the demonstration, when heavy current raced through a primary coil the machine he was using at that time and produced a lightning bolts in his experimenting time in the laboratory (Carlson, 151-154).

Starting in the late 1890s, Tesla began to carry out the research on the radiant energy. He was reported that, focused on the observation of mysterious damage to photographic plates in his laboratory, Tesla stated to find answers for this mysterious damages. To find the answer, he used the Crookes tubes and the vacuum which he had already invented to carry out his experiments. During the experiments there was on damages on the plates since they was no target electrons were accelerated peaks of the electrons generated by the electrical field which were using high voltage coil (Smith, 78-81).

Tesla discovered that, the source of the x-ray was from the first impact of cathode steam found within the bulb, which was in one of the bipolar tube or the glass wall in the un-polar tubes which he invented to use to perform his experiments. To avoid melting and heating of the glass wall while testing his experiments on the x-ray, Tesla used an engineer's way of cooling systems, which was using the idea of cold blast of air along the tubes to conduct away the generated heat during the production of x-rays. Tesla is believed had produced the first image using known radians, when attempting to obtain the Twain make image of which to him he decided to call them x-ray images and that is how this today bear the name x-ray images.

Tesla further carried more experiments with the use of x-rays and little did he know that he was about to discover the lenses do not reflect the x-rays. During his experiments using different surfaces and noting the features of different transmitted reflected rays he thought the aim was to improve the quality of the images but he was disappointed the lenses did not cause any refection on the x-rays (Carlson, 154-158).

Tesla's invention on the other hand, had some negative thoughts, for instant.

In the 1930s, Tesla was trying to come up the invention of particle beams

called the peace ray, the aim to invent to beams rays devices to dispose of the enemy warplanes. However, he never constructed one of beam laser weaponry devices, but his inventions and discoveries contributed to the current existing laser and partial-beam weaponries. Today scientist have developed different attitude with the use of laser by inventing facilities used in the field of medicine to provide healthcare (Smith, 78-81). In conclusion, Tesla careers of inventions were full of philosophies and concepts. Most of the inventions such as the alternating current and its power transmission system open the door to ideas of inventing the light build which was to be used by the current he invented. In addition, during in normal routine performing the experiments on electricity he also, discovered the production of damaging ray which rather found as the x-rays. Similarly, the discovery of x-ray opens the idea of inventing the laser protection

devices, which today is largely used in the field of medicine. Consequently,

Tesla is seen as the father of the exceeding inventions.

Work cited

Carlson, W B. Tesla: Inventor of the Electrical Age., 2013. Print.

Smith, Robert W. Great Inventions and Inventors. Westminster, CA: Teacher Created Resources, 2009. Print.