



## Nikola Tesla

1856-1943

If Thomas A. Edison has a rival for the title of the world's greatest inventor, it is certainly the Croatian-American engineer, Nikola Tesla. When the tall, lanky Tesla arrived in the United States in 1884, the country was in the middle of the "battle of the currents" between Thomas A. Edison, promoting dc, and George Westinghouse, leading the ac forces. Tesla quickly settled the argument in favor of ac with his marvelous inventions, such as the poly-phase ac power system, the induction motor, the Tesla coil, and fluorescent lights.

Tesla was born in Smiljan, Austria-Hungary (now Yugoslavia), the son of a clergyman of the Greek Orthodox Church. As a boy Tesla had a talent for mathematics and an incredible memory, with the ability to recite by heart entire books and poems. He spent 2 years at the Polytechnic Institute of Graz, Austria, where he conceived the idea of the rotating magnetic field that was the later basis for his induction motor. At this point in Tesla's life his father died, and he decided to leave school, taking a job in Paris with the Continental Edison Company. Two years later he came to America, where he remained until his death. During his remarkable lifetime he held over 700 patents, settled the ac versus dc dispute, and was primarily responsible for the selection of 60 Hz as the standard ac frequency in the United States and throughout much of the world. After his death he was honored by the choice of *tesla* as the unit of magnetic flux density.

(Source: D. Johnson, J. Johnson and J. Hilborn, *Electric Circuit Analysis*, Prentice-Hall, 1989)