

Electro Magnetic Motor - 381968

One the most striking aspects of this patent is how the motion of the rotor in relation to the armature is systematically illustrated. Visualizing this process will help in understanding many other patents.

Many contemporary industrial motors still are built this way. These diagrams can even be useful guides to rewinding motors in some cases.

It has been said that alternating current motors and dynamos are pretty much the same except for the wiring connections. There may be some truth to this, and it is good to keep in mind as you learn more about AC electricity.

A significant feature of this patent is the direct connection of the motor to a generator. This bypassed the need for any kind of commutator assembly, meaning one less part to wear out. Make sure to imagine that there can be any distance of wire between the motor and generator in Figure 9.

Also note that a variety of motor configurations are possible. This is somewhat uncommon in the world of patents, especially now. Most of the time an alternative configuration is an excuse for another patent, whether or not that is really necessary.

If you happen to be one of the people working on a type of magnetic ring self-exciting motor, you need to understand this patent thoroughly in order to avoid duplicating all the past attempts that didn't work out.

There's a paragraph where Tesla specifically condemns the practice of using any kind of pulsed direct current for the purpose of running this type of motor. At that time, presumably under the influence of Edison, other inventors were attempting that technique.