#### John Steven Aiken

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# **ABSTRACT**

A new fundamental concept for the creation of rotation for electromagnetic motors was discovered, and patented during the first quarter of the 21<sup>nd</sup> century CE.

(May 11, 2021)

The paper's title is "Introduction and Guide to the Helix Linear Rotation Concept (Electrical Engineering)". The paper is introducing/teaching humankind, a new fundamental concept for the creation of rotation for electromagnetic motors. The new concept enables humankind to have the ability to produce gigawatt class down to nanoscale rotational electromagnetic motors using current and past production technology for the first time. We already had the production ability, but we lacked the concept to achieve it until now.

Referencing the historical document:
United States Patent # 11,005,342 B2
INVENTION: Spiral Helix Electromagnetic Linear Pulse Motor
INVENTOR: John Steven Aiken

# "Abstract of the Disclosure"

"The Spiral Helix Electromagnetic Linear Pulse Motor is based on the three dimensional operational design Helix (Linear) Rotation Concept, where the basic helix (linear) rotation concept, is a linear axis parallel electromagnetic pulse, or wave, created by the sequential activation, deactivation, and polarity reversal, of electromagnetic constructs arranged in a linear row, forming a linear array, parallel to the driveshaft axis, with a 360 degree spiral helix magnetic construct array around/along the length of the driveshaft, magnetically interacting with the electromagnetic pulse/wave created by the linear electromagnetic array. As a result of the electromagnetic wave/pulse traversing parallel to the axis across the linear electromagnetic array and synchronizing with the spiral helix magnetic array in a sequential linear manner, the device converts electromagnetic energy into continuous useful rotational mechanical energy. "

With the discovery of the new fundamental concept, it is now within the practical engineering envelope to build high-speed gigawatt class electromagnetic motors. It also allows nanoscale electromagnetic rotating motors to be constructed using current and previous production

facilities. All that was lacking before was a workable concept and humankind has discovered it now. The Helix Linear Rotation Concept allows humankind to greatly expand the practical engineering scalability for electric motors from gigawatt class to nanoscale. The Axis Orbital Rotation Concept vs the Helix Linear Rotation Concept, is comparable to the difference between the internal combustion motor and the turbine engine.

#### Paper Quote:

"It is a difficult task to reorient the mindset of the present-day engineers that will design and build the first Helix Motors. Currently, from birth, every human has been taught, and been shown, that the two-dimensional Axis Orbital Rotation Concept is the only way to achieve rotation. Humans that have specialized in engineering have learned that concept even more deeply. The concept of a virtual electromagnetic wave orbiting the axis of a shaft while interacting with an axis perpendicular magnetic bar, disk, or cylinder is believed to be the only way that rotation can be achieved, and is thus, an unspoken fundamental engineering axiom. That is the way in the United States, that Thomas Davenport taught us how to achieve rotation in 1835, and that fundamental concept has not been changed since that long ago time and has reached the limits of its scalability. A new age is dawning for the conversion of electromagnetic energy into rotational mechanical energy with the introduction of the Helix Linear Rotation Concept."

The obviousness of the Helix Linear Rotation Concept, becomes self-evident, the moment it is fully understood.

### References

United States Patent Office: Patent Number 11,005,342 B2 Invention: Spiral Helix Electromagnetic Linear Pulse Motor

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