ThoughtChip

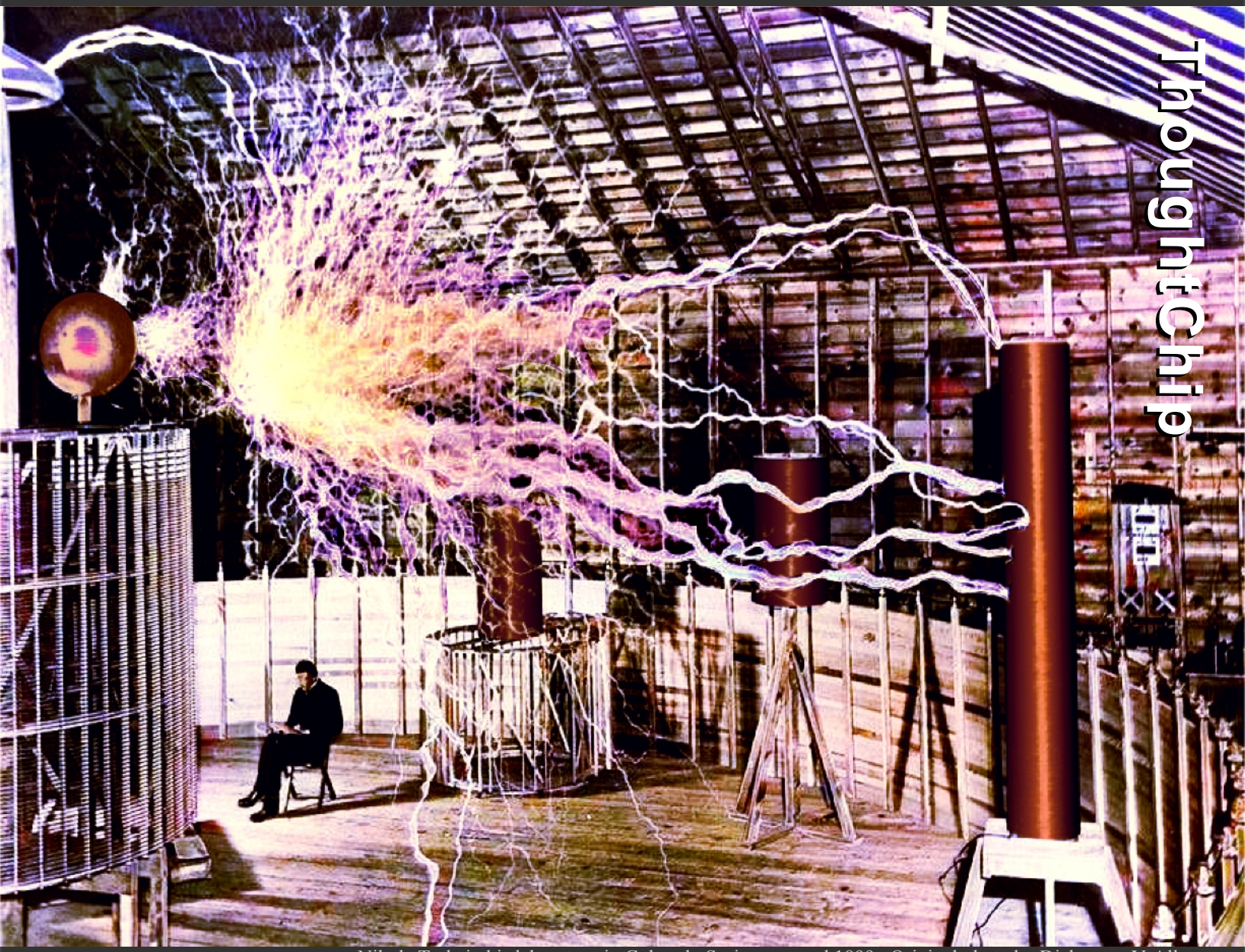
Pitch-Deck

Patent pending and patented technologies bring consciousness to machines and devices controlled by volition alone.

Prepared by Jerry D. Harthcock
Boerne, Texas
jerry.harthcock@gmail.com

Version 2.4 – for researchers

First, a quote from a famous inventor and scientist.

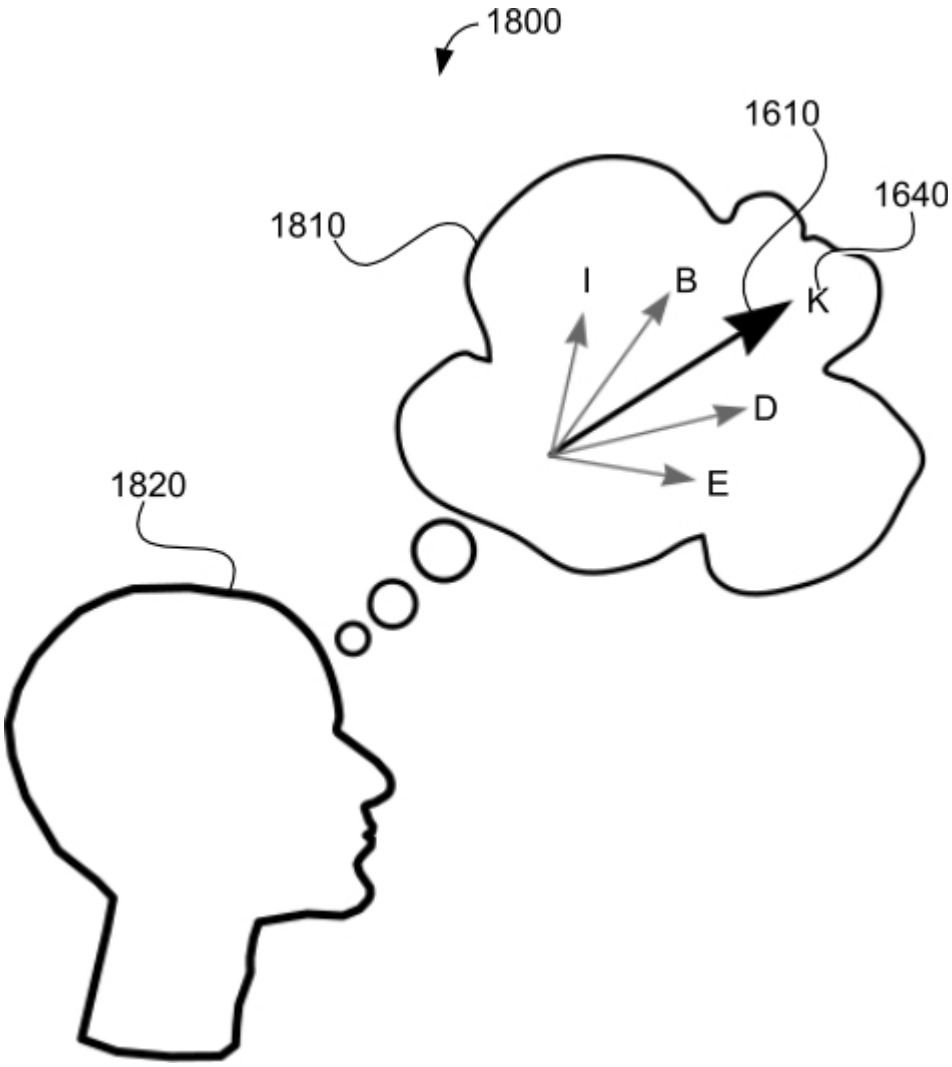


Nikola Tesla in his laboratory in Colorado Springs around 1899. Original photo by Dickenson V. Alley. Colorized by Jerry D. Harthcock.

"My brain is only a receiver, in the universe there is a core from which we obtain knowledge, strength, and inspiration. I haven't penetrated the secrets of this core, but I know that it exists."

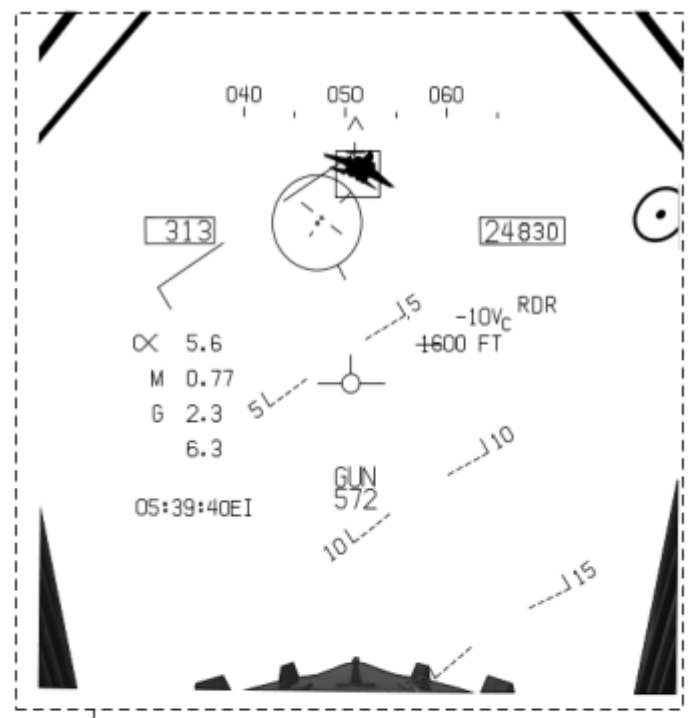
– Nikola Tesla

Problem

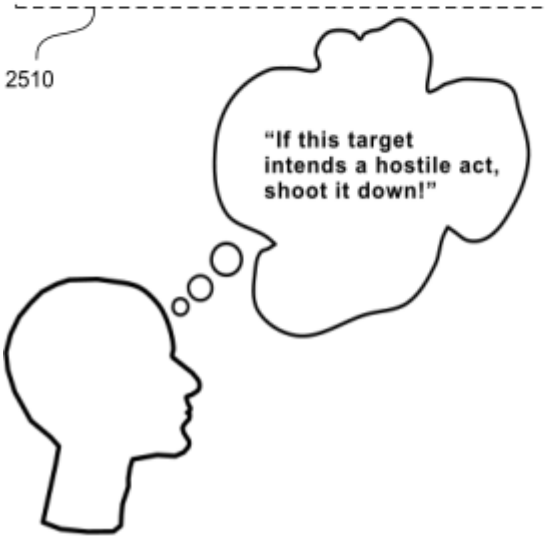


With the advent of quantum computing and the renewed will to return to the Moon and beyond, by now, man should be able to control machines and devices with just thoughts alone. Joysticks, touch-pads/screens, steering wheels, and TV remotes, by now, should be a thing of the past.

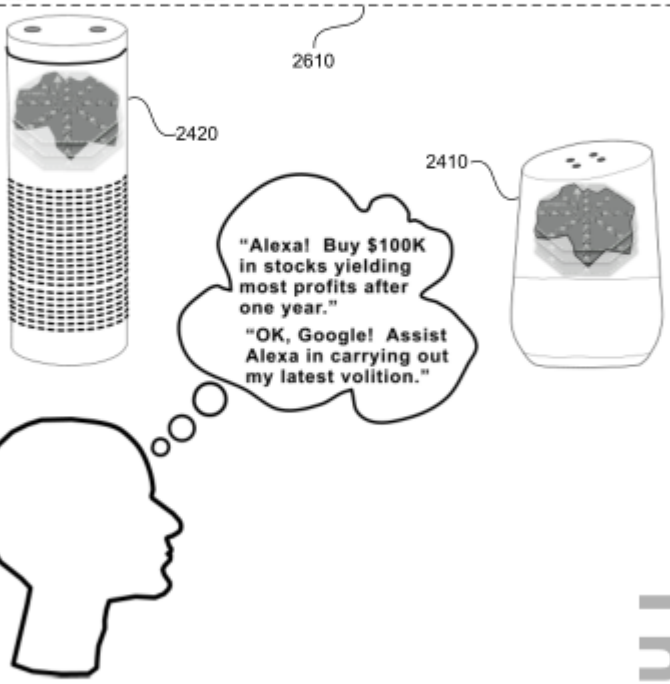
Bigger Problem



2510

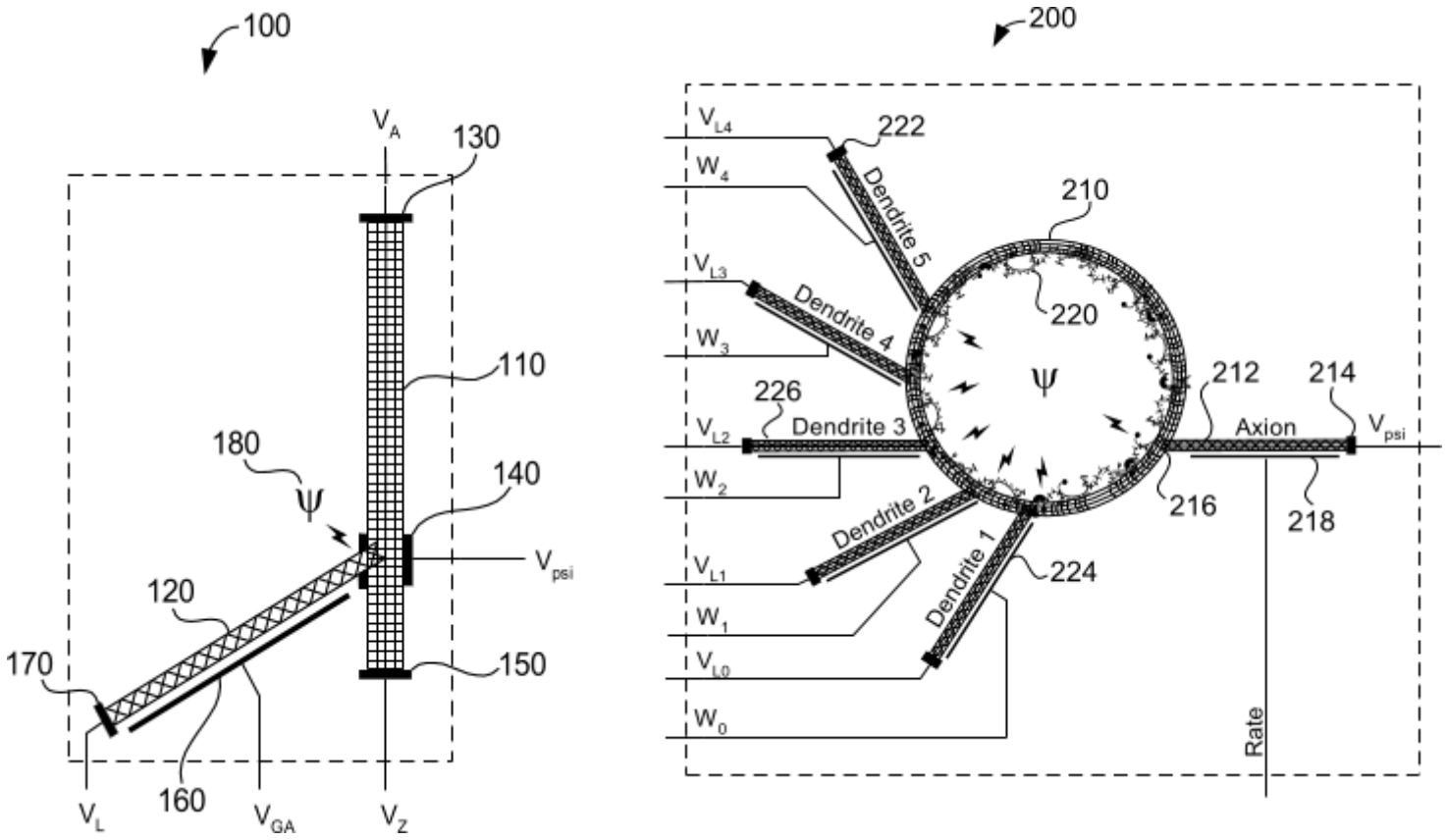


2610



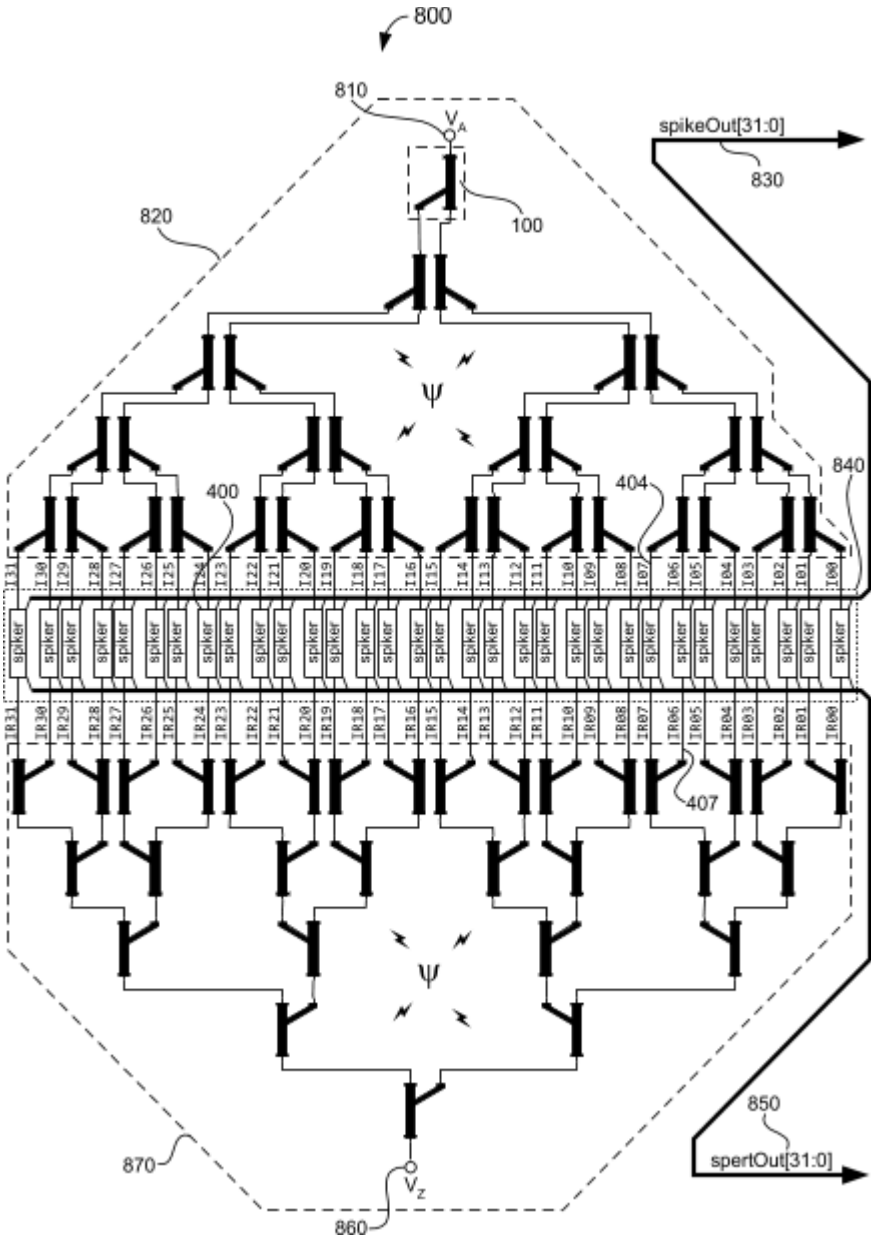
Controlling direction and magnitude with one's volition is one thing, but extracting information about a thing presents an even bigger problem. Like, for example, where does the information come from and, precisely, how to extract and make use of such information?

Solution (Part A)



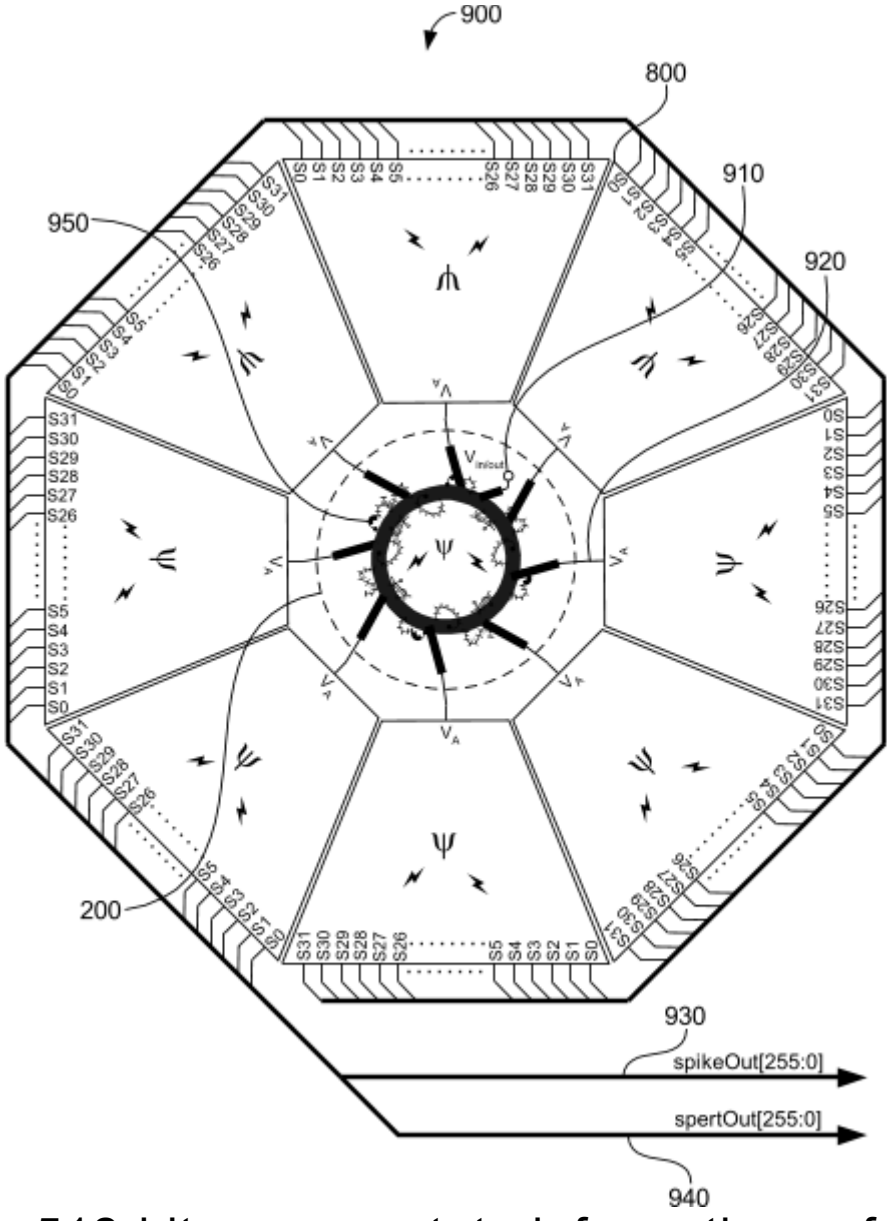
The solution to the previous slides employs a new science involving the most closely held non-secret there is. In a nutshell, all the information in the universe, past, present, and future is available and accessible via the tinniest bit of nothing found at the interior of a carbon nanotube or nanotoroid, i.e., the vacuum state, aka, the zero point. The information is clastic and all folded up. The challenge is figuring out how to tap into, unfold, coalesce, and make use of it. **100** and **200** above show a conscious gate transistor (CGT) and artificial neuron built with carbon nanotubes and nanotoroid.

Solution (Part B)



Behold the vacuum state information unfolder. Only the first subsection shown here--there are eight of them--each built using qty. (62) conscious gate transistors. The percipient's volition influences current flow, i.e., which path to take at any given instant. The trillion dollar question of course, is, how does it know? Answer: it's conscious, meaning: responsive to untethered volition directed at it.

Solution (Part C)



This is the 512-bit vacuum state information unfolder, minus the fused artificial spiking neural network circuitry and newly patented Instruction Set Architecture (ISA) compute engine used to process the information. The new ISA compute engine is needed here because it has the ability to compute using dual operands of up to 1024 bits each, every clock cycle. For more information, hyperlinks to the actual ISA patent applications and other pertinent information are provided on the last slide.

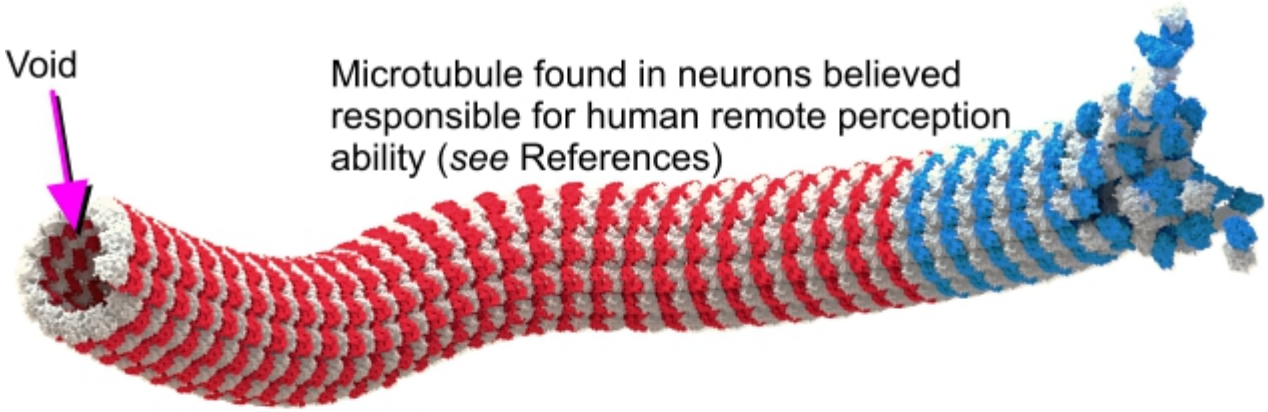
Value Proposition

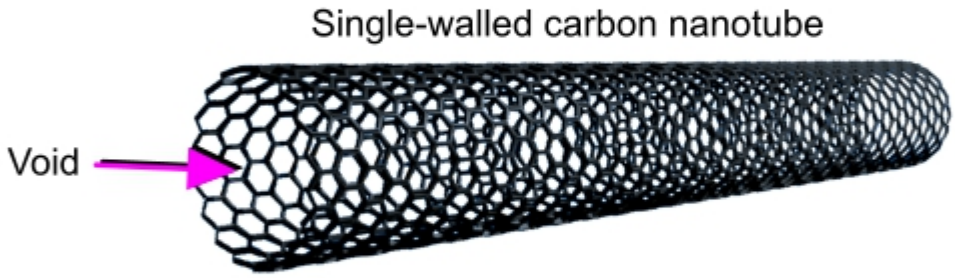
Frame from Planet of the Apes (1968), courtesy of 20th Century Studios.

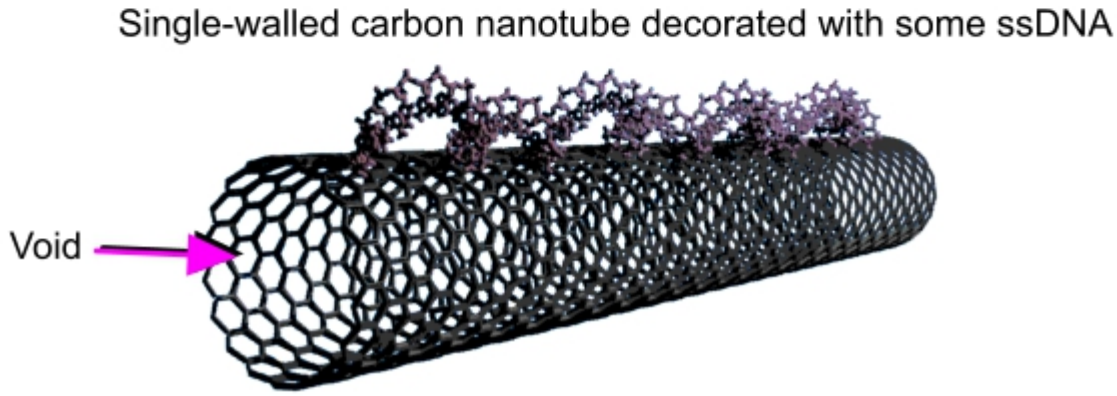
The new conscious gate transistor and vacuum state information unfolder technologies, along with the newly patented ISA compute engine technologies, will render all presently known quantum computer and microprocessor technologies obsolete. These new technologies, once employed, will forever alter the destiny of man.

Moreover, the new technology is not limited to use by humans alone. For example, with proper training of both the subject and the system using real-time feedback, a common brown bat will be able to pilot an F-22 fighter jet into combat and achieve a higher enemy kill rate than a human pilot. A pet dog will now be able to have a meaningful conversation--in English or other language--with its human master.

How/Why Does It Work?



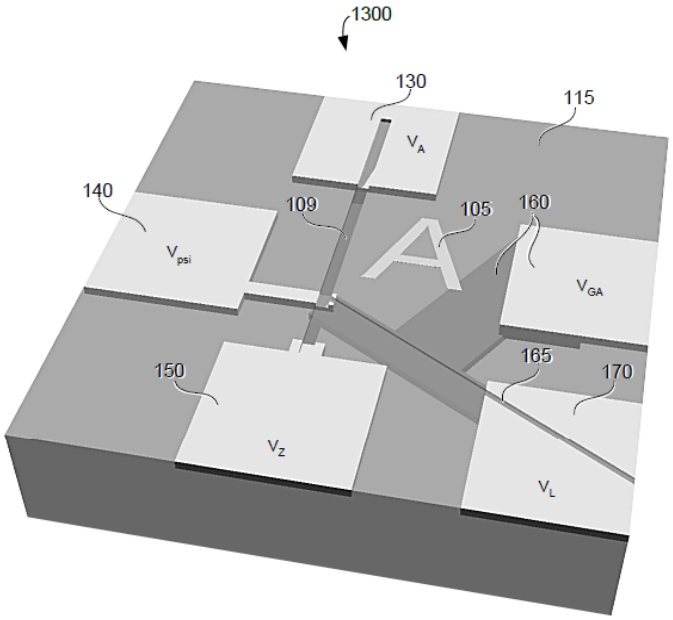




All the information in the universe, past, present, and future (albeit clastic and all folded up) is available and accessible in places comprising the tiniest bit of nothing, i.e., the vacuum state or zero point. Due to their electrical properties, all of the above have the ability to be modulated by the very information that is conveyed through them, some configurations being more efficient or application-specific than others.

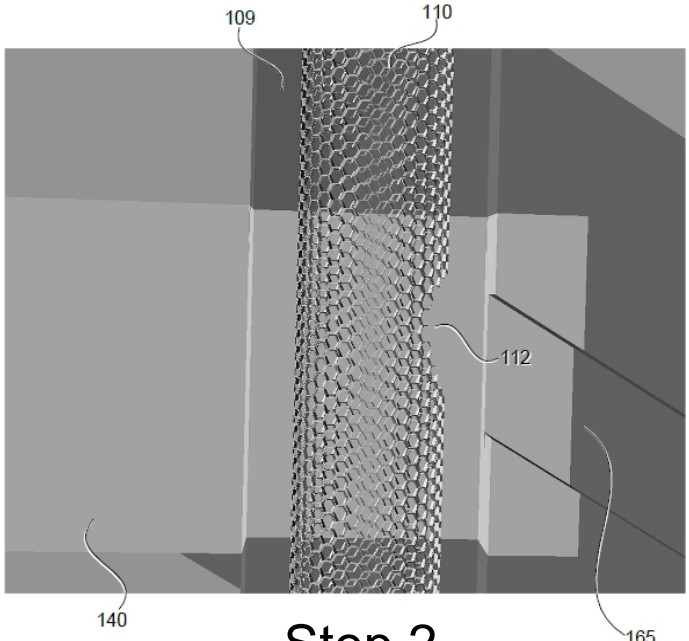
Assembly Steps

(Refer to published specification at link provided on last Slide.)

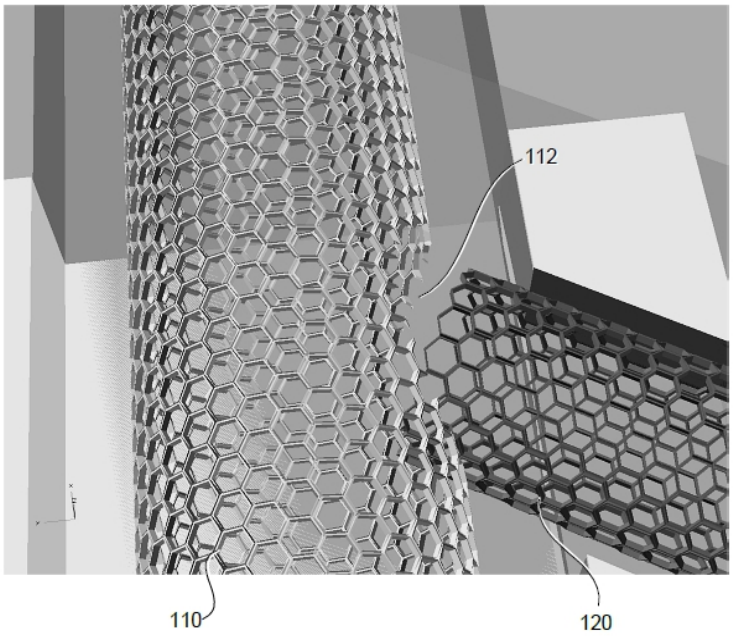


Step 1

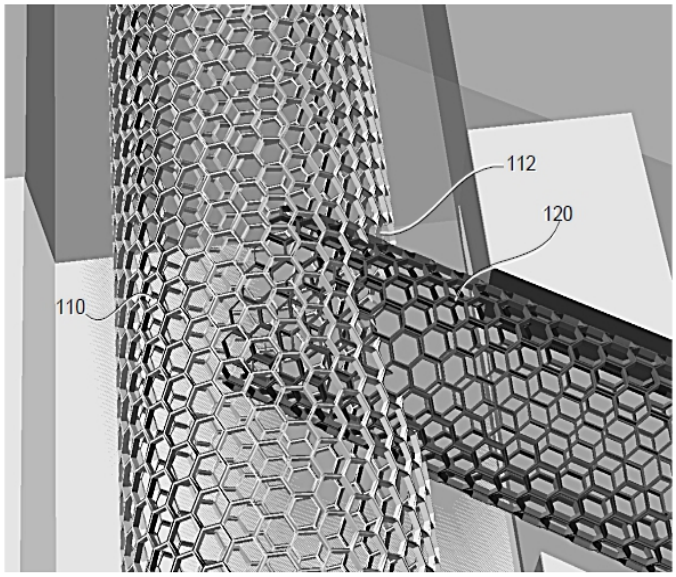
(Note: Refer to Specification. Fields are not necessary if both CNTs are metallic.)



Step 2



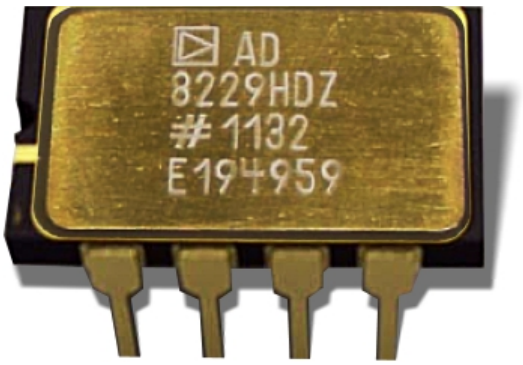
Step 3



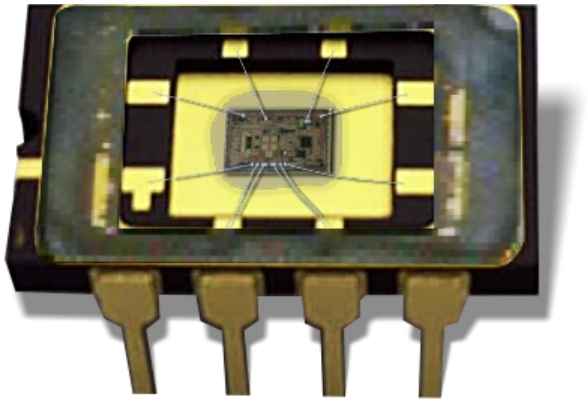
Step 4

(Note: ideally, the centers of both CNTs should intersect as shown.)

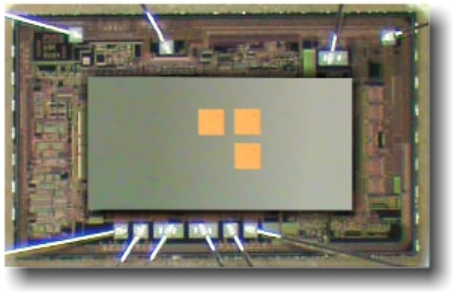
Stack-Mounted Prototype



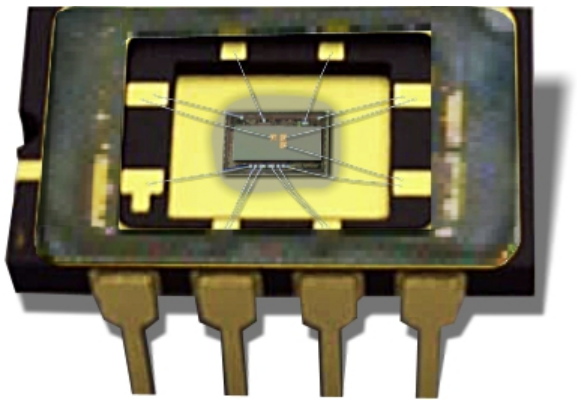
Step 1: Obtain Analog Devices AD8229HDZ low noise instrumentation amplifier from distributor like Mouser Electronics.



Step 2: Remove lid using any combination of razor knife and soldering iron, hot air, or mini-blow torch.



Step 3: Follow assembly steps on previous slide before or after stack-mounting substrate onto AD8229 IC inside lead-frame cavity using suitable adhesive.



Step 4: Use wire bonding machine to bond prototype pads to AD8229 lead-frame.

Current Status

The 72-page utility Patent Application Publication number **US-2022/0376193-A1** for the above inventions was officially published at the USPTO on November 24, 2022. A true and correct copy of it can be downloaded from the PatentCenter.gov website or by clicking on the link provided on the last slide.

A list of References used in the research, including hyperlinks to the materials, can be downloaded at the link provided on the last slide.

A 137-page patent for one of the independent claims in the new ISA compute engine issued on March 15, 2022 as patent number **US 11,275,584 B2**. It can be downloaded at the link provided on the last slide.

Due to a unity of invention restriction, a first divisional application was filed on December 18, 2021 and issued as patent number **US 11,635,956 B2** on April 25, 2023. The face page and claims can be downloaded at the link provided on the last slide.

Current Status (cont.)

A second divisional application with a much broader claim than the issued ISA patent above was filed on February 3, 2022 and issued as patent number **US 11,635,957 B2** on April 25, 2023. The face page and claims can be downloaded at the link provided on the last slide.

A version of the newly patented ISA has been prototyped in a $30 Lattice Semiconductor FPGA. An animated .gif file showing a demo and it running its on-chip real-time debugger can be seen at the link provided on the last slide.

Synthesizable Verilog RTL for the HedgeHog fused artificial spiking neural network that employs the newly patented ISA is available for free download and evaluation in a Xilinx Kintex Ultra FPGA. It can be downloaded at link provided on the last slide.

Business Model

The inventor will retain exclusive ownership of all right, title, and interest in and to the patents and patent applications.

Newly funded ThoughtChip will purchase a non-exclusive license from inventor using a portion of the proceeds raised from VC sources and will pay sales-based royalties quarterly to inventor for use of the patented and patent pending technology.

ThoughtChip will manufacture or have manufactured and sell individual packaged CGTs, information unfolders, and various conscious computers, machines, and devices incorporating them.

Go-To-Market Plan

Alphabet/Google, IBM, Intel, Apple, Microsoft, Elon (to name a few,) might very well be among the chief investors (at least indirectly) and also most likely the primary customers of ThoughtChip's patented products. Most of these entities are already well aware of the technology, as most of them and the entire IEEE mailing list of various of its committees, received not only a copy of the provisional patent applications, but also the utility patent applications shortly after each was filed.

In fact, in response to one of such communications, a Fellow from the IEEE 754 Standards committee sent an email stating that they believe that one or more claims in the ISA application may be essential to the Standard and suggested that a FRAND Letter of Assurance (LOA) be sent to them. To date no such letter has been sent.

Management Team

Presently, there is no management team in place, meaning, investors will have to create one. Such management team will determine how much capital to raise and what it will be used for.

Last Slide (links)

72-page patent application **2022/0376193** for CGT and Information Unfolder:

https://github.com/jerry-D/Conscious_Gate_Transistor/blob/master/US-20220376193-A1_I.pdf

References used in the conscious gate CGT research:

https://drive.google.com/file/d/1QdSQOfj67mtzqUB8V9yO89W2QXulPSqM/view?usp=share_link

137-page patent number US 11,275,584 B2 for floating-point ISA:

https://github.com/jerry-D/HedgeHog-Fused-Spiking-Neural-Network-Emulator-Compute-Engine/blob/master/US-11275584-B2_I.pdf

First divisional patent number US 11,635,956 B2 (first page and claims only):

https://github.com/jerry-D/HedgeHog-Fused-Spiking-Neural-Network-Emulator-Compute-Engine/blob/master/US_11635956_B2_P1.pdf

Second divisional patent number US 11,635,957 B2 (first page and claims only):

https://github.com/jerry-D/HedgeHog-Fused-Spiking-Neural-Network-Emulator-Compute-Engine/blob/master/US_11635957_B2_P1.pdf

Poster-sized HedgeHog fused artificial spiking neural network data sheet:

https://github.com/jerry-D/HedgeHog-Fused-Spiking-Neural-Network-Emulator-Compute-Engine/blob/master/HedgeHog.pdf

Commemorative ThoughtChip poster:

https://github.com/jerry-D/Conscious_Gate_Transistor/blob/master/ThoughtChip_Poster1.pdf

Commemorative IEEE 754 ISA compute engine poster:

https://github.com/jerry-D/SYMPL_IEEE754-2019_ISA/blob/main/SYMPL_IEEE_754_poster_v1_3.png

New ISA demos (gif):

https://github.com/jerry-D/SYMPL_IEEE754-2019_ISA/blob/main/SYMPL_RTMDX.gif

https://github.com/jerry-D/SYMPL_IEEE754-2019_ISA/blob/main/SYMPdemo2.gif