

## Evolution of the Tesla's technology

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# Introduction

I find it pretty difficult to say in a few words what I want to say. I just begin to catch up. Like my friend would say, I've been dead stupid.  
Stanley Windrush

I am researching Free Energy systems for many years now. Just recently understanding of some things begin to unleash. I was wondering many times - what was known at the beginning of the 19th century and what we don't know now ? How they built OU devices without complicated electronics ?

We were cleverly deceived by bullshit science, some very interesting parts are being stripped off or put under taboo for discussion.

If you read something about Tesla saying that he use "different kind of waves" in best case you will see something like "we all know, no such waves exist, we don't know what he was talking about, he probably was delusion". In worst case you will see all kind of magic junk gibberish.

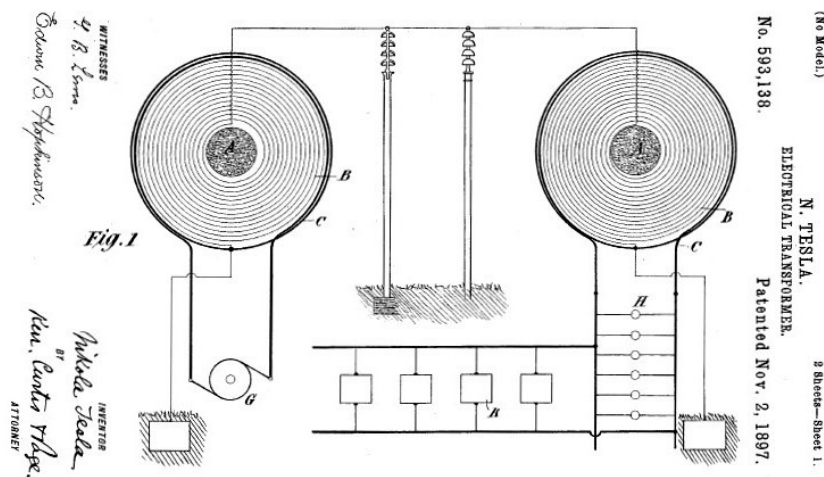
But in reality it is very simple.

## What Tesla was doing

After creating AC power system, Tesla was looking how to enhance it. He was studying properties of high frequency currents and looking for ways economically and efficiently transmit electricity. Cost of copper was high, and it still high today.

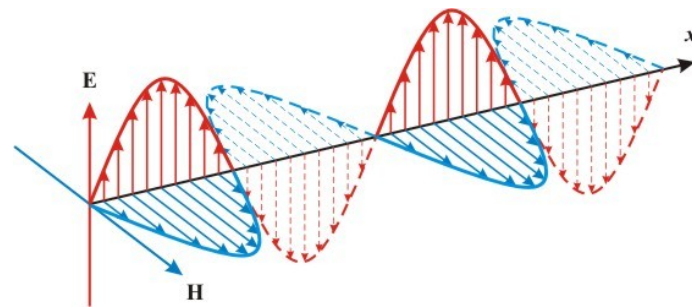
## What he found

Tesla found that he can use one wire e.g. water pipes for electricity distribution.

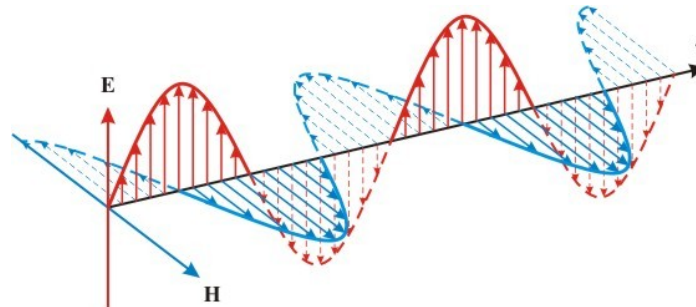


He used special coils, we call them Tesla coils nowadays. We know now that Tesla coil secondary is an asymmetric transition line. If properly excited, standing waves produced in it.

These waves are more like longitudinal waves. They have quite different properties.



regular EM wave



standing wave

## How it is different

If such wave used for electricity transmission there is no heat losses. You can transmit kilowatts of power through a thin wire. I think this is why some people call it “cold current” (unfortunately, usually they fail to explain what is it :)

Anyway, if you want efficiently transmit electricity you need add second frequency, so you get not a standing wave, but “running wave”.

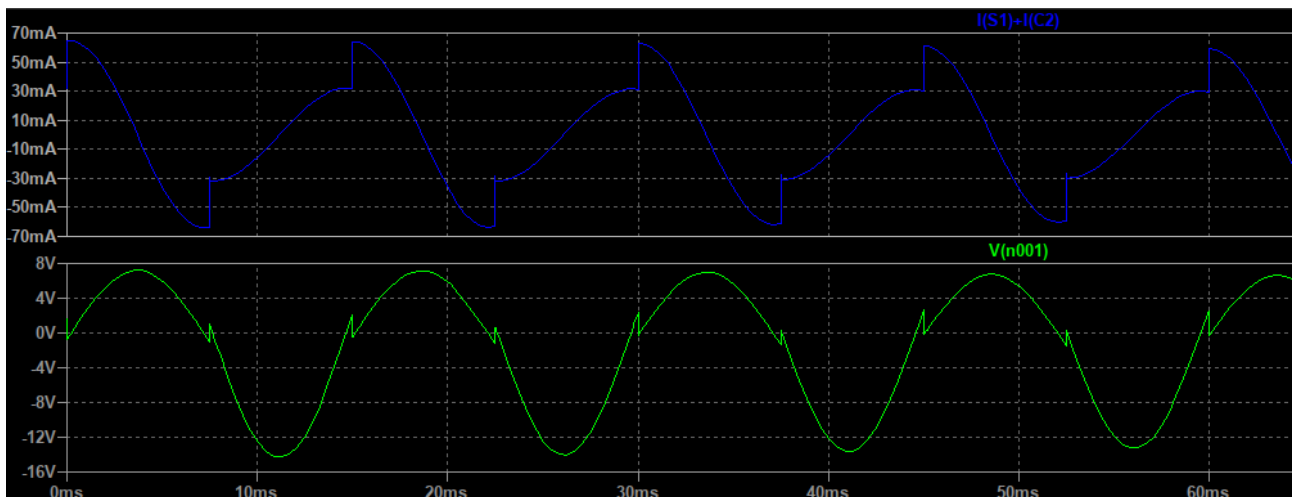
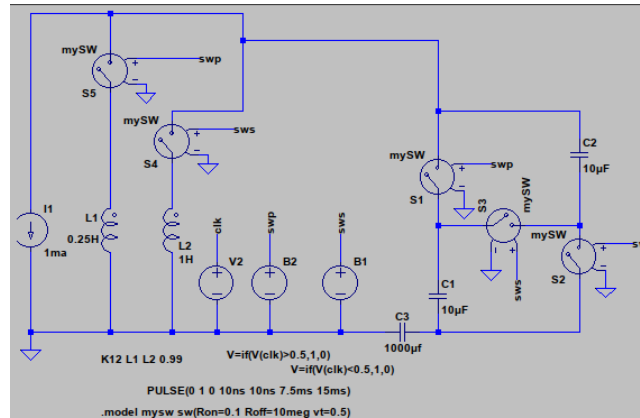
This can be explained with mechanical analogy. You probably saw this kind of devices



Tolchin's inertial drive

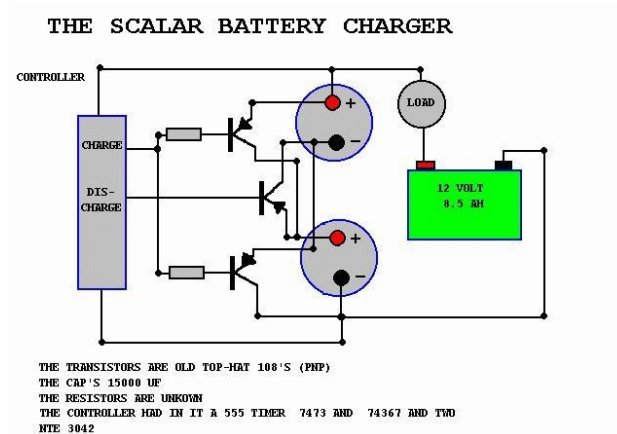
It is a simplest inertial drive. There are two counter rotating weights. Rotation made cyclically irregular, so mechanism as a whole can gain linear movement.

We can do similar thing with charges by mixing two frequencies (or by parametric switching)



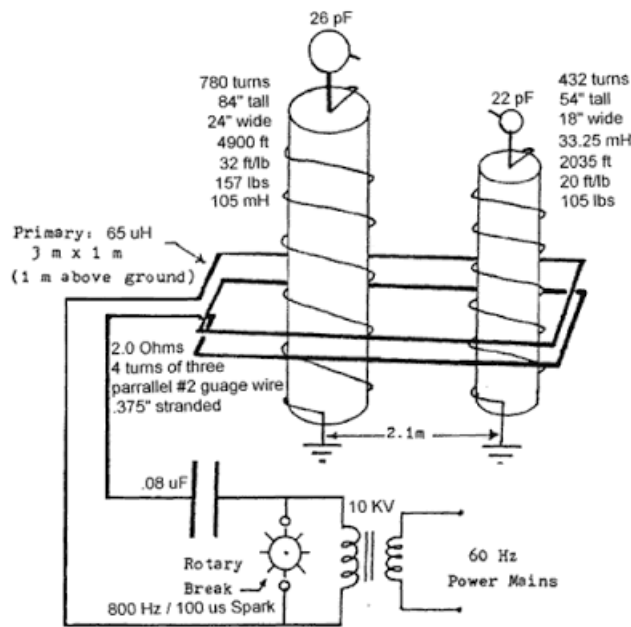
note an asymmetric current in the oscillations

Does it look familiar ? And this way ? ;)

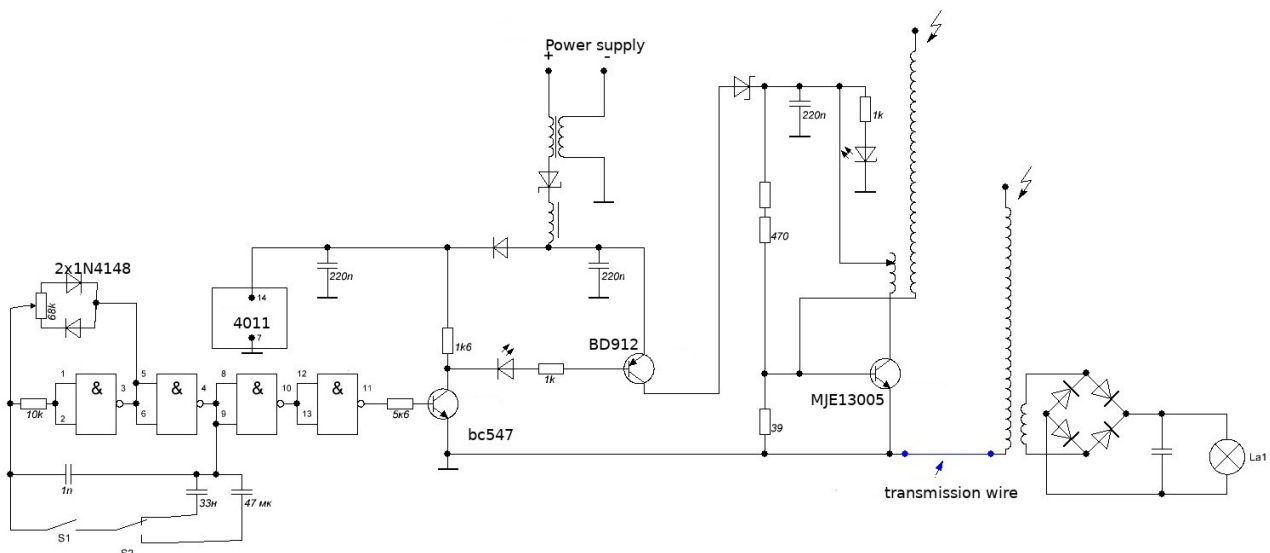


You probably been wondering WTF why this is a *Tesla* switch :)

It because of this



you can implement same idea in a Tesla coil :) this kind of system will work as charge pump.



one wire transmission setup with modern components, you can try yourself  
picture source: user rk2188, realstrannik.com

Important outcome of this is that we can move charges *without* using magnetic field directly.

## Combining magnetic field and current from different sources

It is pure speculation, but I think that it took Tesla some time (until 30's) to recognized fully implications of this. We can move charges efficiently with waves and use magnetic field from other source to produce "efficient" power in the load.

# OU setups

Here as illustration, I will list typical setups using idea described above. Surely you can recognize them in many of OU devices found in the internet :)

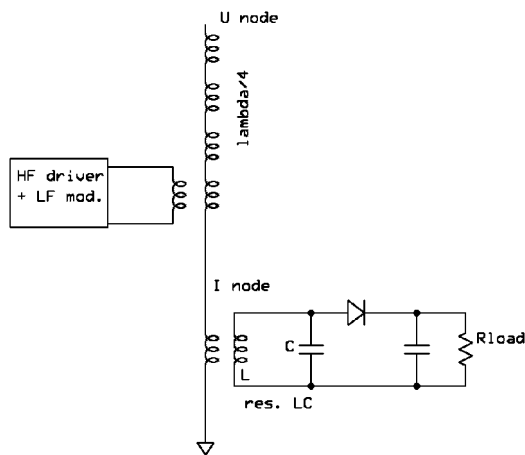
## “Generator” setups

In this setups, single Tesla coil used to produce HF “running” wave. It is usually AM modulated. LF signal used to create strong magnetic field and “capture” charges moved by HF part.

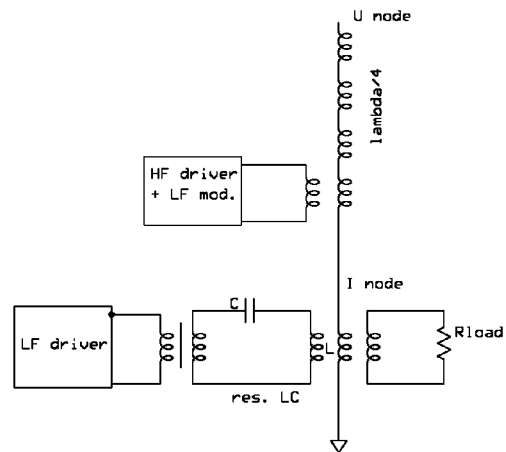
Earlier designs used crystal-like radio setups, but later regenerative approach become popular. In such setups there is a additional LF generator for creating magnetic field.

Based on mode of HF part setups can be  $\frac{1}{4}$ ,  $2 \times \frac{1}{4}$ ,  $\frac{3}{4}$ , full wave, some other combinations, while general idea is the same.

### $\frac{1}{4}$ wave



Crystal radio setup

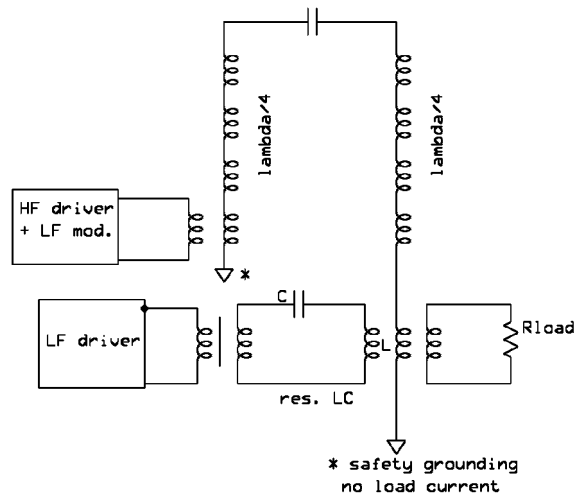


Regenerative setup

These setups have significant disadvantage – need of grounding.

This can be solved using two coils.

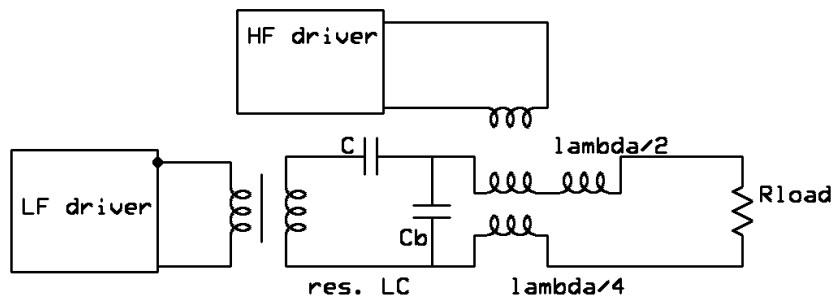
## 2x $\frac{1}{4}$ wave



This kind of setups don't have significant current in ground wire, grounding used only for safety.

## “Direct flow” setup

Other type of setup usually constructed so that load connected into LF resonance circuit through bifilar coil (or some variant of it). So LF and HF loops can function independently.



# Afterword

Look, you've got it all wrong.  
 You don't need to follow me.  
 You don't need to follow anybody.  
 You've got to think for yourselves.  
 Brian

I hope that it was interesting read this and you found something useful.  
 Have fun :)

# References

1. Wizard. The Life and Times of Nikola Tesla, book by Marc J. Seifer
2. Prodigal Genius: The life of Nikola Tesla, book by John J. O'Neil
3. Single wire transmission of energy  
<https://teslaresearch.jimdofree.com/one-wire-transmission-of-energy/>
4. Tolchin presents his inertial drives  
<https://www.youtube.com/watch?v=pcEdpb-rIX4>
5. Gennadi Shipov shoing his big inertial drive  
<https://www.youtube.com/watch?v=-i3p0AMj1yY>
6. Making Ball Lightning to Order  
<https://teslauniverse.com/nikola-tesla/articles/making-ball-lightning-order>
7. Tesla's Thoughts on Ball Lightning Production  
[https://www.bibliotecapleyades.net/tesla/esp\\_tesla\\_20.htm](https://www.bibliotecapleyades.net/tesla/esp_tesla_20.htm)
8. Getting Serious About Crystal Radios  
<https://hackaday.com/2016/04/07/getting-serious-about-crystal-radios/>
9. High performance regenerative receiver design  
<http://www.arrl.org/files/file/Technology/tis/info/pdf/9811qex026.pdf>
10. I'am all right jack movie  
[https://www.youtube.com/watch?v=L\\_TQ\\_AWZ9UQ](https://www.youtube.com/watch?v=L_TQ_AWZ9UQ)
11. Life Of Brian movie  
<https://www.youtube.com/watch?v=KHbzSif78qQ>