#### **Assembled by David Fine (Slovenia)**

# **Don Smith Replication**

# Zilano's Older Deleted Posts

**Energetic Forum Posts** 

Sept 12, 2011 Zilano Ouote:

Originally Posted by vrand

Hi Zilano

If you are still here can you please comment?

Cheers Mike

Hi Mike!

hope this helps humanity!

Energy Products at Crystal Life Technology®, Inc.

#### **SLIM TOOLS**

# please do not replicate --dangerous stuff

**CADUCEUS coil or tensor** coil are not used in don smith as they create time warp and makes u forget time and affect ur brain and cells and slows down communication from cells to brain making ur brain work at half frequency than a normal one. effects r bad. tesla used it though. don didnt

caduceous coil experimental handbook and my experiments with it.

Caduceus Coil Observations

MOBIUS COIL
Mobius Coils

interesting stuff DONT REPLICATE ELSE U WILL VANISH!

Bajak claim of time travel - 06/27/00

Keelynet - Dimensional Shifts - written 02/14/97 - Updated 01/10/11

a must read but dont apply thing

#### The Time Travel Handbook: A Manual ... - Google Books

Caduceus Coil Used To Time Travel

LV LF resonance setups (5).MPG - YouTube

Running at 50w - YouTube

running at 17w.MPG - YouTube

Sept 12, 2011 Zilano Quote:

Originally Posted by **drak** 

Well, I thought we were going from nst directly to step down. What you just described is a step up. If I do a step down then I have the extra wire. So I'll ask again. Is it ok to have all the extra wire from the secondary not used in the turns, can I coil it up or does it have to be straight? I'd rather not cut it off so I can still have the quarter wave / full wave.

see don setup pic and follow accordingly. xtra wires must not be coiled. use required length so u wont have extra wire except for connexions. u need xtra for sliding in and out of coil. use a string first on pvc and when u find right suitable length of string measure it and make coils accordingly. this is the trickiest part but u can do it.

remember rule of thumb primary=1/4 of secondary and secondary is 4 times primary

dont deviate from this

split secondary in a magnet with blotch wall all same direction. later u can use bifilar.

first same direction secondary coil splitted at blotch wall and join the two coils with and earth it. when u join both ends of secondary with diodes u get voltage that is half of the full voltage secondary eg if u have 6.6 kv then u will have finally 3.3 kv(centre tapped and earthed)and two ends joined of secondary. the output will be from centre and two joins of secondary.

an alien
time to go now!

everybody left

#### Sept 12, 2011 Zilano

#### don circuit coil turns calculation and frequency of operation

Hi folks!

well nst solid state 30-40 khz. 3 kv or 4 kv is required

we use lengths to vibrate em without needing caps. we r just inducing half wave just to make em vibrate at their natural frequency and since natural frequency of vibration depends upon the length of coil thats why lengths r important. we use mhz range coz if we use khz range lengths will be veryyyyy long.

suppose u have 2 inch radius pvc for primary

so length one turn required =2\*3.14\*2=12.56 inches/12=1.046 feet approx

if u need 5 turns then length required=5\*1.046=5.23 feet

and ur secondary length will be= 4\*5.23=20.92 feet

now u can calculate ur frequency at which its gonna work

length(1/4 wave)= 246/frequency in mhz

5.23=246/f in Mhz

f in mhz for quarter wave= 246/5.23=47.03 Mhz

now if u have 3 inch radius for secondary

length required for 1 turn=2\*3.14\*3=18.84 inch/12=1.57 feet

so no of turns in sec wil be =20.92 feet/1.57 feet=13.32 turns

so u will have 5 turns primary with 2 inch radius and 13.32 turns in secondary with 3 inch radius pvc tube.

thats how its calculated.

we r not using full lengths for turns we need extra for connexion and middle join so we take it from lengths calculated so we adjust turns accordingly say 3 turns in primary and 10 turns in secondary. keeping lengths same for primary=5.23 feet and secondary=20.92 feet

if u feed 2000 volt in primary 3 turns then voltage per turn=2000/3=666.66 volts

and since we have secondary 10 turns then voltage per turn across secondary is 666.66 volts

so full voltage across secondary is 10\*666.66=6666.6 volts = 6.6 kv approx

since we treat secondary coil as magnet we have to make space for blotch wall(the middle neutral space of N\_\_\_\_S middle join. so we make 5 turn\_\_\_\_\_Sturn

\_\_\_\_ is sec coil middle in straight line its length=primary coils total turn width. so primary sits between this straight wire joining 5 turns and 5 turns of secondary.

000000000000000

\_\_\_ is joining secondary turns below red 000 not shown

0=secondary coil turns
0=primary turns(slidable)

hope u understand now.

hope my work is over now

i take ur leave now!

alien atlantis and the flight crew

#### Sept 11, 2011 Zilano Quote:

Originally Posted by **drak** 

wish u best of learning and good luck!

only aliens can help u out and am one!

I don't quite understand what you are saying here.

The other parts cleared things up some. I guess the confusing bit is you are describing many different ways of doing it. I have 4 different NST's on order and waiting for them to get here. I haven't tried the longer secondary yet. Is it ok to have all the extra wire from the secondary not used in the turns, can I coil it up or does it have to be straight? I'd rather not cut it off so I can still have the quarter wave / full wave.

Thanks for your help

well just get nst solid state 30-40 khz. 3 kv or 4 kv

we use lengths to vibrate em without needing caps. we r just inducing half wave just to make em vibrate at their natural frequency and since natural frequency of vibration depends upon the

length of coil thats why lengths r important. we use mhz range coz if we use khz range lengths will be veryyyyy long.

suppose u have 2 inch radius primary

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so u will have 5 turns primary with 2 inch radius and 13.32 turns in secondary with 3 inch radius pvc tube.

thats how its calculated.

we r not using full lengths for turns we need extra for connexion also so we adjust turns accordingly say 3 turns in primary and 10 turns in secondary. keeping lengths same for primary=5.23 feet and secondary=20.92 feet

if u feed 2000 volt in primary 3 turns then voltage per turn=2000/3=666.66 volts

and since we have secondary 10 turns then voltage per turn across secondary is 666.66 volts

so full voltage across secondary is 10\*666.66=6666.6 volts = 6.6 kv approx

since we treat secondary coil as magnet we have to make space for blotch wall(the middle neutral space of N\_\_\_\_S middle join. so we make 5 turn\_\_\_\_5turn

\_\_\_\_ is sec coil middle in straight line its length=primary coils total turn width. so primary sits between this straight wire joining 5 turns and 5 turns of secondary.

#### 000000000000

0=secondary coil turns 0=primary turns hope u understand now

regards zzzz

#### Sept 11, 2011 Zilano Ouote:

#### Originally Posted by **drak**

Most of it. Some times it was match your primary frequency to your nst and other times thats not needed. Sometimes a series spark gap will not go OU, and sometimes it will. I'm confused about why the equation of the length of wire is so important and even needed if you are going to cut the wire down anyway and compensate with caps.

Your extra coil thing sounds interesting, but I don't quite understand it. Could you clarify a little more? 90 degrees to primary?

Hi the don thing can be applied in the following ways

- 1. when u have high voltage only nst 60 hz then u have to make it radio frequency and that can be done by pulsing(don way of connecting diode n sparkgap for pulsing primary) so u get high voltage and high frequency.
- 2. when u have high frequency and u wanna large harvest so u wanna increase higher radio frequency in mhz from khz. u do same thing as above .
- 3. when u have 30 khz and high voltage and u want to stay at this frequency only u will just use a transformer(don coil air core) with turns of primary n secondary according to ur choice and make em resonate with ur nst frequency 30 khz for that u have to use caps.
- 4. if u feel u dont want to disturb resonance. just earth secondary and wind another tapping of third coil and make it resonate with secondary and tap it for pulsing trafo. or u convert to dc and voltage divider to make 12 or 24 volts. and use invertor.
- if u want transformer output. the only way is to resonate it at 50/60 hz and that can be done by diode n spark gap. as resonance needs very low input coz it just need a push power to keep it going not much power input as resistance of circuit is zero.

length of coil is important coz it will make it easier to resonate and find matching resonance conditions else u will keep calculating caps for matching resonance. always use primary 1/4 of secondary. this will make u get resonance just by sliding primary inside secondary.

turns ratio are important for knowing the output voltage else u might overvolt output.

#### Sept 11, 2011

#### Vrand Ouote:

#### Originally Posted by **zilano**

yes the length must be longer but turns ratio is smaller. if he has 2000 volt input to primary of 100 turns which gives him 20 volt per turn in primary so he will have 6 turns in secondary giving him 120 volt in secondary.

rgds

ZZZZ

Hi Zilano

Did you post your 10 kw design and parts list? We have seen the Don Smith designs and researchers are having problems making it work to create 10kw.

When will you start selling your 10 kw units? Any time estimate?

Cheers Mike

#### Sept 11, 2011 Zilano

## Quote:

#### Originally Posted by **Zlatko**

Are you joking?

I folow thread from beginning. Why the long dispute about frequence change resistor with that guy where at som point you say you have working device based on it if in reality you used capacitor?

I mean i try to build device exactly like yours and i took ths informations for real and wanted to use resistor just to find out it was wrong info.

Can you at least verify that there is no more secrets before people build?

ALL IS REVEALED NOTHING HELD!

TIME TO TAKE LEAVE FOLKS!

MY SPACE SHIP ARRIVED

ALIEN ATLANTIS AND THE FLIGHT CREW

#### Sept 11, 2011

## Zilano

#### Quote:

Originally Posted by **Zlatko** 

Zilano,

i don't understand.

But resistor change frequence to 60 Hz, then transformer sees 60 Hz and will not fry.

Don explain how to find right frequence change resistor with radio league chart. That's his whole point.

If he means capacitor why doesn't he show it?

What surprise me most is that you said you use frequency change resistor in your home powering device yourself to get to 50/60 Hz and not capacitors and obviously your transformer does not fry and receives 60 Hz from the resistor ?! --> post #160

You explain the concept yourself here: #147

Can you explain that?

well i did not disclose it b4 as it was one of don secret, i used C not R.

well in patrick kelly book. he says don does not disclose everything fully. we have to use minds to grab the thing.

#### Sept 11, 2011 Zilano

#### Quote:

Originally Posted by **Zlatko** 

Here is simplest Don circuit:

Don Smith kindly show it in video here and explain how works: <u>Donald L Smith Device - part 5</u>

*Is without (expensive) capacitors.* 

For everybody who want build with minimal component or save money.

Hi

this circuit will fry transformer. Don was quite clever. he wanted us to learn from mistakes. if u feed 35khz to iron core then core will saturate and heat up. coz iron core cant manage high frequencies thats why we use ferrite cores. moreover don wanted us to get to know wot is R. R is actually capacitor, and a diode is used in combination to pulse the trafo with spark gap in series, same thing done in primary, is done here also, but a pure pulsed dc is fed. means 2 diodes is used to generate 50/60 hz ac through spark gap, triggering the LC circuit to oscillate at 50/60 hz, sine wave.

here u can understand kapanadze also. where he says first filter means diode then 2nd filter means another diode to pulse trafo.read kapanadze patent. and u will understand better. kapanadze did one thing instead of battery as pure feed he added capacitor across the input as a buffer. he charged that cap with battery and that cap fed the circuit containing high frequency module which then filtered and fed to primary. then added cap to primary and said first frequency stabilizer.to make primary resonant with secondary he again used stabilizer cap across secondary then 2nd filter to pulse output trafo.

#### Sept 11, 2011 Zilano Ouote:

Originally Posted by **drak** 

Won't that leave ALOT of extra wire from your secondary just laying there? To get 100 turns in primary thats alot of wire. Then to have your secondary 4 times that length with only 6 turns there will be alot of extra wire left over. I understand the turns ratio needed to drop the voltage down, but wow.

Let's say 100 turns primary with extra for connections comes to about 50 feet of wire. That means secondary must be 200 feet of wire and only maybe 25 to 50 feet is used in the 6 turns, thats 150 foot of extra wire outside of the secondary just laying there. Is that correct?

well step up and step down following don. or keep lengths according to ur desired turns and xtra for connexions and compensate lengths reduced with suitable caps in parallel.

so u have smaller lengths and well managed

#### Sept 11, 2011 Zilano Quote:

Originally Posted by **Dfortune** 

Sorry for my english it is not my native language.

I have listen to a lot of Don Lee Smith videos and seen most of is diagrams on is free energy devices I could have a hand on.

15 years ago Don stated in one of is conference that a solid state device of is invention existed not larger than a small cube.

That "cube" was to be manufacture in Japan,Zilano do you have any knowledge of that and how it could work.(Don mentions that it didn't need capacitors)

I have basic electronic knowledge but I plan to build and test Don's device in the near future.For now I am studying and learning the principles and gathering my parts here and there.

Thanks Zilano, for your patience and good will.

well i dont know anything about that. and if its been there its held as a secret. all i tried the don ciruit. and its worth. well one needs to read a lot and understand basics. only then one can persue don thing. and since am female people think that am bot or disinformation agent. well am not encouraging anyone and wot i posted here is for knowledge purpose only.

Sept 11, 2011
Zilano
don transformer driver circuit

Hi folks

complete don with transformer driver

pic attached

here trafo is pulsed with dc timed by spark gap creating 50/60 hz resonance in trafo primary. match primary Inductance of trafo in nomograph with 50 or 60 hz matched with inductance draw line at two points and select the right cap where it crosses farad line.

the trafo can be 2000 volt to 110 or 120 volt ac or 480 to 120 or 110 v ac. depended on the output of L2 coil. can be managed by variac or a step down at L2 using right turns ratio.

<u>warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!warning!</u>

do it at ur own risk. i wont be responsible for any failures or damages that might occur. High voltages r dangerous and can kill you instantly. read safety norms. i do not recommend you or encourage you to do it. the information here is for knowledge purpose only.

ZZZZ

**Attached Thumbnails** 

#### Sept 11, 2011 Zilano

#### Quote:

Originally Posted by cognito

Why use two HV transformers (NST and air coils) when NST is already HV transformer center tapped ?

Remember, we are talking about different types of setups here but same concept.

Br,

Cognito

follow don and learn from it and when u r an expert in don circuit u can make any circuit the way u want.

#### Sept 11, 2011 Zilano Ouote:

Originally Posted by **nico** 

I wallready finished my oscillator for 50Khz who will drive my flyback. Primary coil (on ferrite) is in 50Khz resonance, 64 turns, 0.470 miliH, capacitor 20nf (5 capacitor of 0.1uF each in series). Secondary is 8 turns CCw and 8 turns Cw, Lsecondary is 7-8 microH each, the capacitor will be 1,5uF for resonate at 50Khz.

Because will be a step down transformer in primary will be 2Kv in secondary 260v -280v at 50Khz frequencies. This can be dangerous for my TV or my computer? or for me?

ferrite core for nst input and don coils must be air cored. keep ur all electronic gadgets switched off. no its not dangerous for u except careful at handling high voltages. They can kill u instantly when handled carelessly. read safety norms below

important read it below

Donald Smith Devices too good to be true

Sept 11, 2011 Zilano Quote:

Originally Posted by cognito

So the HV transformer is a split Tesla coil ala Don Smith?

Two coils center tapped to ground, coils are 180 degrees out of phase (counter rotated from each other ground in center "voltage and current")

## Air-coils are not needed if VAR is high enough for 30kva setup ?

Needed Air-coils are second HV stage for 160kva setup!

Br,

Cognito

use nst for input and use aircore don coil.

#### Sept 11, 2011 Zilano Ouote:

#### Originally Posted by **boguslaw**

I agree.This is all about radiant energy, but nobody knows what is that?

It could be electric field or magnetic wave withtout connection to electrons or simply it could be kind of radio wave in near-field range when magnetic part is not curled into rings. Tesla stated that every radio is working using HIS METHOD, and Hertz method is useless (Well it is useful for short range hieliographic like transmission). He even said that Hertz also stated EM kind being not usable.

Now that would explain a few things. Radio waves in near-field range is the same as longitudinal wave, just need to be properly conducted. A friend of mine told me that while working near big power radio transmitter you can take wire in hand turn around and get spark from itself being a couple of meters from transmitter.

This remind me Kapanadze big 100kW generator enclosed in Faraday cage. Though xDole seems to be safe with his experiments.

That's why I have a problem with ferrite core . SR913 reported his device producing bad radiation, also I know that 21Mhz there is NMR resonant frequency of Iron and here we are using much higher like 123Mhz or so . How we can safetely use ferrite core inside proposed by zilano Don Smith circuits mods , without generating bad radiation ?

#### Just my small anxiety

well screens r used for stopping radio frequency jamming radio bands and troubling neighbours with cable or television reception. don circuits produce rf and can cause interference and disturbance in our ususal audio video electronics.

well don recommended air core. we will stick to aircore. used ferrite fro experimental purposes.

Sept 11, 2011
Zilano
don trigger resonance! must view
Hi folks!

# veryyyyyyyy important basic concept!

must view this to understand with clear concept

learn and understand don trigger

to activate resonance of coil

principle of triggering with diode

Đ'Đ Đ'ĐμĐ¾01 - YouTube

applied trigger to get resonance(kapanadze alias don smith)

(kapanadze used low voltage where as don smith used high voltage. later kapanadze used high voltage)

#### $\underline{\text{D}}\underline{\text{E}}\underline{\text{N}}^{\hat{}}\underline{\text{N}},\underline{\text{D}}^{\circ}\underline{\text{D}}^{1/2}\underline{\text{D}}^{3/4}\underline{\text{D}}^{2}\underline{\text{D}}^{\circ}\underline{\text{D}}^{\circ}$ next 1 - YouTube

when u finish viewing u will have questions

am here to answer

### Sept 11, 2011 Zilano Quote:

Originally Posted by **drak**So when you say:

you are saying his secondary should be longer then his primary?

well secondary is 4 times primary. but we use turn ratio to our advantage. suppose he has 2000 volt fed to primary so he has to have 100 turns so he gets 20 volt per turn in primary. and in secondary he desire 120 volts so 20\*6=120 so he will be having 6 turns in secondary in total but as this secondary coil is magnet he will have to wound 3 turns and 3 turns at the ends of primary

so the primary is in centre of blotch wall of the secondary coil treated as magnet. same direction of 3 turns not bifilar. later he can use bifilar to see wot it brings better for him. the remaining lenghth of extra wire of secondary must be there left free so he gets resonance and if he cuts that short he will have to use caps of larger mkfd. to make up the length he cut off. so length must be same its for us to decide how many turns we want.

basically wot don did he had 2000 volt and 5 turns primary that means he had 400 volt per turn in primary and he had 34 turns in secondary (centre tapped) so he had 400\*17=6,800 volt in each secondary winding and when joined togather he has 6,800 volt fed to caps 2mkfd@8000 volt so he stepped up actually. here we r doing step down from 2000 to 120 volt. here ususal caps of low voltage and higher capacity can be used and a diode and 1:1 ratio isolation transformer( can be made with thick wire iron cored) with suitable cap is used to pulse the transformer thru a spark gap so we get 120 volt ac pure sine wave. either we can step up and then do step down or we can use stepdown at the first step. the thing is to have resonance working here we r saving an intermediate step of big isolation transformer. we r using 1:1 ratio for transformer. also we r saving high cost high voltage capacitors that r beyond affordability and budget constraints and availability.

#### Sept 11, 2011 Zilano Ouote:

Originally Posted by **drak**So when you say:

you are saying his secondary should be longer then his primary?

yes the length must be longer but turns ratio is smaller. if he has 2000 volt input to primary of 100 turns which gives him 20 volt per turn in primary so he will have 6 turns in secondary giving him 120 volt in secondary.

#### Sept 11, 2011 Zilano Quote:

Originally Posted by **drak** 

"4 times of" ... does that mean the secondary is longer then the primary?

in don case yes.

but when u become expert in things u can do wotever u want. like i did.

Sept 11, 2011 Zilano Quote: Originally Posted by **dllabarre** 

As stated previously I have 12kV NST, 30 mAmp

For primary I was going to use 2" PVC. Each turn around PVC is 8" of wire.

100 turns x 8'' = 800'' = 66.7 feet of wire.

Should primary be solid wire?

What size? 12 AWG?

For secondary - I was going to use 6 AWG stranded wire. 1 turn CCW and 1 turn CW. Based on calculation of length of primary how long should the secondary wire be? Should it be primary/4 for step down?

Thanks

Hi

plz read this link below first

#### Donald Smith Devices too good to be true

wire can be solid. but multistranded is recommended. well secondary is always 4 times primary use turns as required and leave remaining as free length. or u can go for 480 volt secondary and use stepdown later and use transformer for output from 480v to 120 volt. first try with don way coil. no bifilar. in secondary. the best way to go is step up n step down. if u can manage 2000-3000 volt using variac the turns of primary coil will be less. so think abt voltage and turns in primary judiciously b4 u make coils.

ask me if u r unable to calculate things. will recommend best for ya

Sept 10, 2011 Zilano Ouote:

Originally Posted by **nico** 

Page 26 on post 762 is a pdf with a summary there.

Hi we r talking about don smith device not kapagen. kapagen is failure only 96% efficient.

Sept 10, 2011 Zilano Ouote:

Originally Posted by **dllabarre** 

Zilano

I'm ready to start building and winding my coils.

I have a 120v AC input NST that outputs 12kV, 2 poles 6kV each, 30mAmp short circuited.

If I use this schematic, how many turns is my primary? 12kV divide by 100 turns is 120v per turn? Then my secondary is only 1 turn CW and 1 turn CCW to give 120v output correct?

OR forget the turns and take length of primary divide by 4 to give me length of secondary? Does the length of primary matter in this case?

Or a combination of length and turns.

Thanks

well dllabarre!

first learn how to? neon sign transformers

very important

caution caution

## SAFETY NORMS TO BE FOLLOWED

**SAFETY** 

\_\_\_\_\_

**NST GROUND** 

NST Ground - YouTube

NST Basics - YouTube

Phasing Neon Sign Transformers for Tesla Coil Use Part-1 - YouTube

and

Phasing Neon Sign Transformers for Tesla Coil Use Part-2 - YouTube

and

Phasing Neon Sign Transformers - YouTube

learn first then decide coiling.

# caution caution

example below if u have 12kv out nst

USE VARIAC FOR VOLTAGE CONTROL AND U CAN KEEP VOLTAGE LOW AT 2000 ITS ALWAYS BETTER TO START LOW SAY 2000 VOLTS

2000/100=20 volt/turn and primary 100 turns

AND 120/20=6 TURNS IN SECONDARY

**DONT USE BIFILAR** 

USE SINGLE COIL 3 TURNS $_{_{_{_{_{}}}}}$ 3 TURNS(SAME DIRECTION) WHERE $_{_{_{_{}}}}$	IS GAF
FOR 100 TURNS PRIMARY(ASK ME WHY) IF U DONT GET IT.	
secondary 000000 (6 turns) primary 000000000 (1 layer)	
= width of primary 100 turns	

#### IF U WANNA FULL SWING 12KV FULL THROTTLE FOLLOW UNDER

its very simple if u have 12kv feed then 12,000/100=120 volt means 100 turns in primary and one turn in secondary. (length of secondary will be 4 times of primary leave extra uncoiled)

now decide the length of primary.

length of primary required = 2\*pi\*r\*100+ extra 3 feet(for connexion)(r= radius of tube)

#### Sept 10, 2011 Zilano Quote:

Originally Posted by **dllabarre** Zilano

I'm ready to start building and winding my coils.

I have a 120v AC input NST that outputs 12kV, 2 poles 6kV each, 30mAmp short circuited.

If I use this schematic, how many turns is my primary? 12kV divide by 100 turns is 120v per turn?

Then my secondary is only 1 turn CW and 1 turn CCW to give 120v output correct?

OR forget the turns and take length of primary divide by 4 to give me length of secondary? Does the length of primary matter in this case?

Or a combination of length and turns.

Thanks

wait i calculate that for ya. how much thick wire ur gonna use? for primary n sec let me know

#### Sept 10, 2011 Zilano Ouote:

Originally Posted by **AetherScientist** 

Well, it can be one of the mechanism that Smith hides.

Well, my turn....

The part that I think is omitted is the part where Smith creates reactive-capacitive current. In my own oppinion Don Smith's device is a reactive-capacitive (scalar field) amplifier instead of transverse-conductive (electromagnetic wave) amplifier. He says that the energy he obtains it comes from the ambient background. And in the ambient background only exist potentials and potential gradients. No amperage exist in the background. So, without exception, it must be a capacitive amplifier.

It's well know that the capacitive energy (time-varying electric field without amperage) can be transformed into conductive-electromagnetic waves. There is an example where a guy use a toroidal ferrite core where he uses as the primary a capacitive current (one-wire), and the output is automatically 2-wire conductive current. So, it can be thought that the higher amount of scalar field-capacitive current we have, the more electromagnetic energy we can get in the output. Since capacitive current can be amplified in terms of "power" (I say "power" since capacitive current has no amperage, so  $P = V \times 0 = 0$ ), we can transform ZPE to conductive-electromagnetic waves. The main point is to amplify capacitive instead of conductive.

Using the configuration Don suggest I think is impossible to get capacitive currents. A small change, like the one I show in the picture attachment, need to be done.

Hi scifi!

plz read this below to understand don better

read all from top to bottom

http://www.panaceauniversity.org/Ain...rick Kelly.pdf

#### Sept 10, 2011 Zilano Quote:

Originally Posted by cognito

Question:

Don tell that for example 60 c.p.s. yields less Joules than 30k c.p.s.

So, how should this setup go OU if the HV transformer is 60 c.p.s.?

This setup can produce about 30kva!!! Limited by capacitor, just replace it with more kva's.

If 30k c.p.s. was used, then we have mega va!!! Too much power, why use 30k c.p.s. then with air-coils!!!

Br,

Cognito

WELL FOR 6KW 120 CPS IS GOOD FEED AND IF U GONNA MAKE GENERATORS FOR MONEY CHURNING ENDEAVOUR THEN 30KCS OR 30KHZ IS GOOD

read this fully from top to bottom

http://www.panaceauniversity.org/Ain...rick Kelly.pdf

u will get to know why

Sept 10, 2011 Zilano don smith complete reference

Hi folks

go thru this

all complete videos and pdf nomographs etc even deleted vdo z of don smith home office.

**Freeenergy inventions** 

practical circuit( the suitcase device!)

**Freeenergy inventions** 

more don smith important

http://www.slock.co.cc/smith/don smith energy guide.pdf
http://www.slock.co.cc/smith/don smi... pwr guide.pdf
http://www.slock.co.cc/smith/don smi...nrgy meths.pdf
http://www.slock.co.cc/smith/don smi...sla patent.pdf
read and understand don much better and kapanadze too
http://www.panaceauniversity.org/Ain...rick Kelly.pdf

MORE TO COME! KEEP LEARNING. wait for more add ons on this page come back to this later also

Sept 10, 2011 Zilano longitudinal waves

longitudinal waves

courtesy xdole

internet-utube

Xdole's Channel - YouTube

Xdole's Channel - YouTube

Sept 10, 2011 Zilano Quote:

Originally Posted by **AetherScientist** 

I have heard different ideas from different people about how Donald Smith's device works. I have my

own idea too.

I think it works as a capacitive current amplifier. It's basically a resonant step-up transformer where the input to the transformer is radiant energy (capacitive current) and the output, from the transformer, is also capacitive current, but amplified. Why capacitive current? Because with electromagnetism is impossible to amplify power. Capacitive current is powerless, since amperage = 0. There is not an electron flow in the circuit. There is a time-varying electric field (pure voltage).

The source of all energy is the ambien background, and you know that in the background there are only potential and potential gradients. No amperage is present naturally in the Sea of Energy. Once the electromagnetic energy has been transformed to capacitive energy and that energy has been amplified, then the next step is to "rectify" that energy to electromagnetism to perform useful (or not useful) tasks with it.

That is the idea that I have found more comprensible.

hi!

its not necessary to store energy in cpacitor and rectify we can directly feed it to the transformer.

#### Sept 10, 2011 Zilano Quote:

Originally Posted by **Kokomoj0** 

I dont understand the smith device.

What energy is there to harvest other than what is put in, and isnt that entropic?

first try to understand wot a magnet is and blotch wall between the poles at the centre of magnet. if u understand u will know.

### Sept 9, 2011 Zilano Quote:

Originally Posted by **nico** 

Hi.

Where i'll find more details about Thief circuit? I want to start with small power to see the effects.

contact pinoy tech.

he used this circuit. or find posts by pinoy\_tech in this thread

#### Zilano Quote:

#### Originally Posted by **cognito**

So if I understand this right, from the capacitor in series a sparkgap to the input of a transformer is connected.

This transformer has inductance and self capacitance (LC: If we grab a 60Hz transformer we have the right values, correct?) and the sparkgap is adjusted for the impulses for oscillation frequency (60hz) when the capacitor is charged with the HV-transfomer pulses and current rushes through the sparkgap into the transformer.

Just like Don Smith has shown in his slides and Tesla in the patent!

If the frequency is not correct there is another capacitor in parallel connected between sparkgap and transformer, right?

Br,

Cognito

trigger resonance of 60 hz with spark gap to caps and isolation transformer(LC circuit)

#### Sept 8, 2011 Zilano Quote:

#### Originally Posted by **webmug**

And if they are added together (using one cap of don) then an isolation transformer with 35,27mH will get the resonance on 60 hz right? So impulse HighVoltage on 60hz is building VAR. Also a resistor on the isolation transformer input will produce the needed reactive power through fase change.

yes right! and there is a spark gap also to trigger 60 hz resonance with isolation transformer. and since its a step down and earthed the secondary spark gap is not needed.

#### Sept 8, 2011 Zilano Quote:

#### Originally Posted by **h2ocommuter**

I chopped this up but the information of the title is here .

Don never did show the true meaning of what he was doing in the pictures.

thick on thick I never thought of wires like that before. But as Z notes above this is a synergy Like a block and tackle. one more turn and it is twice as easy to pull the same load..he was showing step

down but not making any sense of it. The way it really is.

Step up step down. yea well I did not get it.

Thanks ZZZZZBe safe.

#### Hi Zane!

u still need to study a lot b4 u apply things. well download patric kelly book and don smith pdf and don smith2 pdf and read 10 times. and watch videos of don carefully. all 18-19 videos. each 10 time.

u will get the hang of the things.

#### Sept 8, 2011 Zilano Quote:

Originally Posted by **Zlatko** 

Why is device then so different from others?

No resonance on primary, no resonance on secondary.

Then ,as you suggest, only resonance on not visible output transformer?

How to set exact resonance frequency with such caps?

What capacitance would you use for calculation?

this single capacitor is charged by L1 and L2 and is placed b4 isolation transformer 480 volts or if L1 and L2 r not used its directly charged with dual diode input with nst directly. and T=L/R and T=RC used. each half wave of nst that is 120 cycles charges n discharges the cap and that timming is related to 60 hz pulsing of isolation transformer. so resonance is happening in nst can be used directly to charge and discharge cap and pulse the isolation transformer.

#### Sept 6, 2011 Zilano Ouote:

#### Originally Posted by **sinergicus**

From my readings and understanding, Don Smith used little 12 v 7 amp hour battery in his device , to feeding his high voltage 30 ma output nst.

The maximum output of the nst will have somewhere between 100-200 watts . You cannot feed your nst at his maximum ratings using 12 v 7 amp hour battery . This seems to me the power given to the nst from that little battery will be allot less (1 or 2 watt range?) . If this is true, why we need an nst with power rating over 100 watts?

Please clarify this...

Another question what I have is about spark gap....is well known, the spark gap in tesla coils, because of discharges, will heat up the air between terminals; the heated air will have low resistance so the discharge will be produced randomly pushing the system out of resonance...this problem was solved somehow using the well known methods: air pumped between discharging terminals, spark gaps in parallel, rotary contacts, etc....how you solved this problem?

I am also ,curious how Don's Smith spark gap worked ( his spark gap was enclosed from my understanding ( he maybe used enclosures with vacuum inside ?)

Thank you...

well here we r not making high power tesla coil. didnt u see kapanadze spark. the spark here need not be quenched. a tesla coil contains thousands of turns. well here we have 20- 40 turns in secondary so its miniature tesla so power requirements r low. we can make spark even at 1000 volts and it will be sufficient for the process. since we r using air coils thats why we need a lot of magnetic field so we use thicker primary. if we use ferrite power input can be lesser say 6 volt 1 amp or less.KAPANADZE USED DON CIRCUIT. ALL HIS DEVICES ARE DON REPLICATIONS.

THE THIEF CIRCUIT THAT SR 193 USED IS NOT WORTH THATS WHY SR 193 GOT 150 WATT POWER.

#### Sept 6, 2011 Zilano Quote:

Originally Posted by **h2ocommuter** 

Does anyone have this PDF at the bottom of the page Zilina Made?

Thanks Zane

http://www.energeticforum.com/renewa...tml#post154300

#### Sept 6, 2011 Zilano Ouote:

Originally Posted by **h2ocommuter** 

My previous post direction would require what I stated and showed in pic, but that would have created somthing unmanageable. I started to do the numbers as you had suggested before about looking at what the computations should look like and I found what I showed would be 5K over the L1 of 5 turnes that is 25KV going into the L2 which is 1/4 wave so that is 25 KV x 16 each side OMG that would be nearly giga watts. I am not ready for that yet.

Yea I see. thanks Zelina

It will take me some time to get the resources to buy the parts so don't go anywhere ZZZZ promise!

Hi Zane!

if u r gonna get parts then Get NST 4KV 30-35 khz 30ma or 60 ma dual out. and if u wanna use this same nst 50/60 hz u can use single feed and diode it will also work. send me ur nst ratings n details and pic of nst.

then i cna help ya better.

#### Sept 6, 2011 Zilano Ouote:

Originally Posted by **h2ocommuter** 

I am thick.... headed.

LOL composure... allright so I will adjust the capacitance of the output side of the NST using caps to get my L1 to 61.8 kcs this kilicycles or 61.8 khz. this will match my Bi-filer resonance freq.

Zane

Hi zane!

no u r not thick headed but primary coil of don must be thick and multi stranded. jumbo wire or any multiple strand wire. must be thick to induce greater magnetic field.(air-core)

#### http://www.energeticforum.com/attach...-50-hz-nst.jpg

and make coils 246/freq in meghertz. so u will just trigger the primary which in turn will trigger secondary. keep length extra from turns but total length must be exact. say u r using 10 feet then use whole length and make 5 turns coils in centre with it.the point is the coil needs to be connected and if ur turns r exact length and if u use connecting wires then length changes and so is frequency. so keep length extra from turns for connections. with coils set dont use caps at first try getting it to ring by sliding in and out the primary u will get it. sliding primary will get u resonance and u wont be needing caps.

follow above circuit its working circuit.input must be 120 hz dc. use diodes after nst. and feed the coil. if ur nst cant take that and fuse gets blown then use a resistor in series after diode with ur coil.

hope u get it. if not ask me again.

#### Sept 6, 2011 Zilano

### Quote:

Originally Posted by **h2ocommuter** 

Please help me to understand what makes HF from my 60 hz nst, A little picture please ZZZZ if you will.

thanks

hI h2ocommuter!

UNDERSTAND MY WORDS CLEARLY AND U WILL UNDERSTAND WOT U HAVE TO DO.

IF U DONT HAVE THE CANDLE U CANT LIGHT UP ANOTHER AND LIGHT UP THE WORLD.

FIRST MAKE CANDLE AND USE THIS CANDLE TO LIGHT ANOTHER ONE SAME IN LENGTH.

LET ME SEE IF U GET THIS. AM HERE STILL IF U DONT UNDERSTAND THIS RIDDLE.

#### Sept 6, 2011 Zilano Quote:

Originally Posted by **h2ocommuter** 

Zelina,

I do not get the step up portion mathmatically.

I count 12 volts and 4 turnes and 8 turnes on the primary side oif the Ferrite core and 4 of this is the flyback so I don't think that counts for step up for the step up portion. then it goes to 4K turnes. now I can see the voltage being ran up like this; 12/8 = 1.5 volts per turn, then X = 4K = 6KV But lookin close we see 6-12 V in so we can assume you are adjusting the input to get the desired output. 4KV? am I close?

When I realized the documentation was being lost to over crowding and computer crashes I decide to copy the total pages in complete and have them in cronological order by page and reference, every day and whenever I could take the time.

It seems to me you had made a drawing of the flyback step up you are using. I would really like to have it if it is anywhere you know of.

I have two ferrite toroids I would like to see if I could build the NST, HV HF with flyback that would resonate with the coils I built.

I know that is a lot but I will take it one step at a time.

Now with the home made NST we are using the Transistor to Drive resonace at what we want and it is easily programable this way. so the resonant position is in the step down side of the equasion thus the majic happens. is that right completely?

I want to fire this thing up.

I will be patient.... and cautious!!!!!

h2ocommuter

Thanks

#### Hi h2ocommuter!

well that was 1.5 volt magic yes i tried all sorts of 6-12 voltage and i had coil tapped so tried to adjust from 1kv 2kv 3kv 4kv 5kv 6kv and 1.5 v 3.0 v 6v -12 v then i was using 12v and 4kv. all my coils r tapped so i can adjust voltage and frequency for experimental purposes.

#### Sept 5, 2011 Zilano Ouote:

Originally Posted by **boguslaw** zilano

For NST you are suggesting series spark gap in both 60Hz and 35khz situation.What about parallel spark gap? I saw in one of your schematic that it is used for NST because it doesn't load it with large current. Can we use it and in what situation?

One more question: in case of 60Hz NST there is no diode in schematic. Does it mean capacitor must be matched to impedance of NST at that low frequency (60Hz)?

#### Hi there!

we use pure tesla no diode when 50/60 hz to create hf coz we have hv already.(diode can be used but it will deteriorate cycles to 25 or 30 so use inductance filter on both leads of nst. to protect nst 50hz/60hz)

when we have hf and hv we use diode and use don circuit to trigger coils resonance and diode is used.

there is difference between creating hf and triggering hf.

yes cap has to be matched when making tesla coil for fun. but for dons circuit we dont need to match cap with nst(50/60hz nst

## Sept 5, 2011

# Zilano

#### Quote:

#### Originally Posted by **nowatts**

Sorry to be an idiot here. I have gone through all the posts again and am confused about conflicting schematics.

First, I am using an old NST that is only 60 Hz output. Does this mean I put the primary capacitor in parallel and the spark gap in series? Or are both in parallel? I find schematics showing both, which may be related to which NST is being used (60 Hz or 35 khz).

Thank you for all your kind help. I've been working on this for over a year and just now feel I'm moving forward.

Hi no watts and all using 50/60 hz NST'S

use this scheme

for all others having 30-40khz nsts

use this scheme

Donald Smith Devices too good to be true

#### Sept 5, 2011 Zilano

#### Quote:

#### Originally Posted by **broli**

deggers is right, just wrap a small coil and flip it over, it's still has the same winding direction, you need to rewind it to flip the direction or pull the coil through itself, but you're better of rewinding it .

#### Hi Broli!

its nice to see that people have gained here and much brain than i have. am happy to see this change!

yes degger is right. i deliberately pushed in that coil thing.

;-)

now my work is over here!

thankx to u all!

its time for my break!

carry on!

regards

zelina zilano zeis zane!

alien atlantis!

#### Sept 5, 2011 Zilano Ouote:

Originally Posted by **jharmon** 

Thanks for the reply zzz. I will look into solid state NSTs.

The transformers on this page (<u>High Voltage Current Limited Transformers</u>) all seem to be for 60Hz, so I'm guessing that they are iron core although they are rated for the right voltage and amperage.

I now have the PVM 400 from the page (<a href="http://www.amazing1.com/hv-hf-power-supplies.htm">http://www.amazing1.com/hv-hf-power-supplies.htm</a>). The specs say that open-circuit voltage is 20kv and that the output is variable from 1 to 15kv.

However, there is only one potentiometer on this for controlling frequency. Further, the website says it goes from 15Hz-35kHz and the product documentation says 20Hz-50kHz.

usually there is a control in nst to control voltage . if it doesnt have it u can use a high quality dimmer or variac if its ac operated(nst). if u go for 12 volt nst then a variable controller built in and if not use a variable resistance to control dc voltage fed to input of ur dc nst.

So I'm not quite sure what to do with this.

The flyback circuit will take the frequency of its load (my spark and resonant coil), right?

But since this has a driver, I need to tune my load (spark and resonant coil) to it and fiddle with the potentiometer.

And I have no idea how to control voltage with this device.

Hi jharmon!

read first. page 25 post 746

usually there is a control in nst to control voltage . if it doesnt have it u can use a high quality dimmer or variac if its ac operated(nst). if u go for 12 volt nst then a variable controller built in and if not use a variable resistance to control dc voltage fed to input of ur dc nst.

NST MEANS NST NOT PWM GET SOLID STATE

try to find 30-40 khz 4kv dc 12 volt nst or same rating ac nst according to ur grid supply frequency 50 hz or 60 hz and voltage rating in ur country

Neon Transformer 4kv-Neon Transformer 4kv Manufacturers, Suppliers and Exporters on Alibaba.com

dc nst

Neon Transformers, Neon Power Supplies

ebay

neon transformer | eBay

#### Sept 5, 2011 Zilano Quote:

#### Originally Posted by **Farmhand**

Excelent stuff in this thread, Zilano you are putting a lot of time and work in here, good job. Even those of us not paticipating much in this discussion are getting something out of this thread, good to see all the interest and good direction.

I think the way the secondary coils still confuse me, Don says he just cut a long coil in two pieces, so that would mean it should be like one big coil but tapped in the center. Whats you're opinion on that Zilano? Does it matter?

I dunno.

Since there is only one primary wouldn't it be kind of cancelling if it was wound any other way? But since it is in resonance wouldn't both ends alternate thier peak voltage with the center tap between. When the two ends are added and put through one AC side of the FWBR it would give double the duty/voltage-time and the center tap to the other AC side of the FWBR gives all the current. Maybe.

Anyway keep up the good work all.

Cheers

EDIT: When I say "Like one big coil" I was just refering to the direction of winding is all, each side of the secondary would make up one coil each for resonant purposes. As you say earlier.

It's just the direction I'm getting at.

Hi Farmhand!

well top of tesla single coil when base earthed has (voltage peak+current node) and base has (current peak+ voltage node)

when 2 tesla used back 2 back same direction voltage is at each end a a current is at base

but in case of bifilar where one is cw and other is ccw whole thing changes the ccw coil has voltage peak and current node at base and end has voltage node and current peak at end of ccw

when we join the two bases adn join the two ends of cw+ccw coils we have almost same voltage and same current at base (joined) and ends(joined)

resonance is like sleep it has no effect on cw or ccw. either u lie on bed to sleep or sleepwhile sitting. sleep is sleep!

#### Sept 5, 2011 Zilano Quote:

Originally Posted by **sinergicus** *Zilano* 

Regarding your custom made NST; I missed your pictures and some of your explanation regarding this...I found this thread too late; your postings was modified and some things deleted. Sorry if I asking you things about you mentioned already in the past...

Some of details and schematics that was deleted from this topic I found them in an summary pdf made by vrand...but not complete details ...

So;

- 1.Please let me know the primary and secondary wires thickness what you have used for your nst... this will help me better to have a clue about how proportionate and wind my nst....I am a newbie in this kind of stuff
- 2.Regarding the 4000 winds of your secondary this is the real number? Is not a mistake? I made some experiments with fly back cores from tv custom made with 300 winds in secondary at 12 v and 600 ma consumption when secondary terminals is "shorted" with 7 mm air gap between and discharging occurring ...

My question is: if we have a spark discharge 7 mm average between nst secondary terminals this mean we have some 7000 volts ?(1mm spark =1000 Volts (?)). So why need to wind secondary with some 4000 winds (like you done) if we have spark discharge already at just 300 winds? This is not a waste of cooper wire and time?

This was done without any resonant capacitors across wire yet; just for experiment first..

3.In your nst schematic given to us by vrand, I see an 220 OHM resistor in series with the 270 ohm resistor...I modified the design (I mentioned about this in some my earlier post) in my experimental nst -see the picture what I posted -and removed the resistor( mine was 27 OHM ) that going to the

minus and to the emitter and circuit worked just fine...

Here is Zilano schematic with circuit attached

CAn you let me know why in original circuit (yours for example, ), that 220 ohm resistor is used if the circuit seems to work (my design worked) without him? In my circuit without that resistor the consumption decreased ...so why is used however?

Thank you for your time and patience ...and please excuse me for some stupid questions what ,maybe, I enunciate them ....

Hi it was my experimental setup. I tried to make a tesla coil from ferrite core and then did step down. yes i fed 12-24 volts. thats why i used all those resistors. and heavy wire xciting coils for the nst. but later i found out high density and intensity of spark not required when using ferrite tesla.

#### Sept 5, 2011 Zilano Ouote:

Originally Posted by **RAMSET** 

Zilano

Yes you have shared "Heaps" of info, And it is most definately appreciated!!

The problem is in The "Heap"!![for me the "novice"]

....., or pleading, or pleading, or pleading.....

Appeal to your compassion??

Can you Focus a bit more??

Please

Chetkremens@gmail.com

Hi!

radium was found in the heap of dust! be a mole and dig a hole till u find the the secret of power. if heaps rnt there where u r gonna dig the hole? i gave u heap with radium inside , all u need is to dig it right but its surely there in this heap of text and figures.

## yes its the spark!

spark changes the game from low to high and high to low! the game of frequency is played below step up frequency and step up voltage. harvest power lower frequency and step down voltage. and there u go!

these lines above have all the magic from HF TO LF. those who will understand need less components and achieve the desired!

moreover am here to help ya

always!

UNTIL AM NOT CAPTURED BY A UFO

#### Sept 5, 2011 Zilano Quote:

Originally Posted by **abc1200d** @Zilano,

Hello, ZZZ;

Previously u claimed, u were powering ur house with 10 kW using reverse T. (many turns primary few turns secondary) together with parallel C and parallel SG. Slowly you moved away from this concept towards the opposite standard one. Now some of us are surely confused: what concept we should believe? especially you are still ignoring all requests to publish at least a photo of your device!

Thanks

hi!

there r many ways. showed ya how it can be done. well i gave u all the material to study so everyone can understand and use their mind too. and am not forcing anyone to believe me anyways if u want free power its not a piece of cake and needs study of the thing deeply and can take years of understanding. where as on here i speeded up the process of learning and understanding and if one goes through all the material i posted on here can lead any novice to have power thats free. people dont believe Don and people dont believe kapanadze so how can any one believe me? people didnt believe tesla also. don circuit was quoted as failure but its not. yes a stepdown is must to use power. am not deviating from any basic yet there r many ways to achive this. i showed all paths. deeply read wots posted get the feel of the arrangement it will take u six months or one year to understand the concept. and when u understand it u can use it.

Sept 5, 2011 Zilano parallel or series????? resonance!

An electromagnets magnetic field strength is determined solely (without changing the ferromagnetic core material) by the number of turns in its winding times the current measured in amps flowing thru it. With that in mind consider the difference between serial resonance

and anti-resonance (below).

#### Series LC circuit:

Resonance = input current is

#### maximum

at resonance; Current thru drive coil windings

is *maximum*.

#### Parallel LC circuit:

Parallel Resonance/Anti-resonance

= input current is

*minimum* at anti-resonance; Current thru drive coil windings is

#### maximum.

Now, if you were a design engineer after the maximum magnetic field strength for the least input power, which

circuit would you use?

answer: parallel of course!

## Remember these things very clear

- 1. when u have nst of 50 hz then u have high voltage but u dont have high frequency, so make it using primary oscillate at hf.
- 2. when u have nst with high voltage n high frequency u only need to trigger primary and make it to oscillate at hf independent of nst frequency. don't try to match primary frequency with nst
- 3. Hf of nst has nothing to do except inject hv hf into primary to make it oscillate at natural frequency but if it doesnt then use cap across primary, and match primary frequency with secondary.
- 4. use don way of connecting primary,cap,spark gap when u have hv+hf nst.(sr 193 also used this) inject hv+hf+diode. half wave pulses to make oscillate primary at its natural frequency.
- 5. when u dont have hf nst then u must use squire042 way( cap, spark gap, and primary coil) and fire up ur nst 5kv or 3kv or 2kv 50hz/60hz

Coil Construction Techniques - HAMwaves.com

# point to ponder!

If we can use 50hz or 30khz to create 24.7mhz can we not make 24.7 mhz to 50/60 hz?

answer is yes and kapanadze knew well so we too!.

that is the secret of Resistance R in don smith mysterious R b4 isolation transformer.

think! and execute!

final secret revealed!

#### Sept 5, 2011 Zilano Quote:

Originally Posted by **squire042** 

Hello all! This thread has been progressing quiet well and Thank you to all who has helped, especially Zilano, Mr. Clean, Don Smith, Tesla, and so many others.

This is my current circuit for a flyback system and so far out of all the circuits I tried this one has the best charging time for the capacitor(based off of don's smith circuit, bifiliar). I used a 20 second time trail for comparison but I have no idea how close I am to input compared to output. My multimeter can't read the amps while the system is running due to high frequenicies. Any idea's how to compare watts in to watts out?

Also I am curious on how to make this a self running circuit, without the 12volt, seen in the Kapandaze video. I tried some capacitors out front, after the 12 volt, and it helped the circuit to run more cleanly but won't it run after I disconnect the battery.

Another question I have is how do I know my voltage on the output? A flyback can operate anywhere from 20kv to 50kv and trying to get it back down to 12 volts seems quiet challenging. Another observation I noticed too was that the ground seem to hinder my charging capacity but when I do attached it to the spark gap, the coil seems to 'shake'.

Anyways, thanks to all for your ideas and observations, its inspirational to see great minds seeking to benefit the species. Good show.

<i>DC</i>	nefit the species. Good show.	
Ju	st a soul seeking freedom from tyranny.	

What lies behind us and what lies in front of us is nothing compared to what lies within us.

hI SQUIRE042!

TRY LOAD FIRST AND KEEP ADDING LOAD AND WATCH UR INPUT POWER. USE 100 WATT BULBS RATED FOR THE VOLTAGE U SET FOR VERIFY THAT INPUT DOESNT INCREASE WITH LOAD INCREASE.

IF ONE KNOWS TURNS IN THE SECONDARY OF FLYBACK ONE CAN CALCULATE VOLTAGE.

TO CALCULATE HIGH VOLTAGE U NEED PT AND CT I HAVE MENTIONED IN MY POSTS B4 SEE MY THREAD U WILL FIND IT. PT IS POTENTIAL TRANSFORMER AND CT IS CURRENT TRANSFORMER. USED TO MEASURE HIGH AMPS AND VOLTAGE.

BUT IF U DONT HAVE PT OR CT. U HAVE TO DO HIT N TRIAL. USE VOLTAGE DIVIDER AND TRY 12 VOLT LAMPS.
IF THEY BURN OUT VOLTAGE TOO HIGH. REDUCE IT

#### WARNING!

KEEP GROUND CONNECTED ELSE UR COIL WILL SHAKE COZ OF VORTEX FORMATION AND THATS NOT A GOOD THING. ATTACH 2ND GROUND ALSO

UR VOLTAGE WONT BE 30KV OR 40 KV COZ U R USING 12 VOLT TRY COMPARING

120 -130 VOLT IS FED TO FLY BACK TO GET 30KV OR 40 KV. U R USING JUST 12 VOLTS.

An electromagnets magnetic field strength is determined solely (without changing the ferromagnetic core material) by the number of turns in its winding times the current measured in amps flowing thru it. With that in mind consider the difference between serial resonance and anti-resonance (below).

#### Series LC circuit:

Resonance = input current is

maximum

at resonance; Current thru drive coil windings

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maximum.

#### Parallel LC circuit:

Parallel Resonance/Anti-resonance

= input current is

minimum at anti-resonance; Current

thru drive coil windings is

maximum.

Now, if you were a design engineer after the maximum magnetic field strength for the least input power, which circuit would you use?

Remember these things very clear

- 1. when u have nst of 50 hz then u have high voltage but u dont have high frequency, so make it using primary oscillate at hf.
- 2. when u have nst with high voltage n high frequency u only need to trigger primary and make it to oscillate at hf independent of nst frequency. don't try to match primary frequency with nst
- 3. Hf of nst has nothing to do except inject hv hf into primary to make it oscillate at natural frequency but if it doesnt then use cap across primary, and match primary frequency with secondary.
- 4. use don way of connecting primary,cap,spark gap when u have hv+hf nst.(sr 193 also used this) inject hv+hf+diode. half wave pulses to make oscillate primary at its natural frequency.
- 5. when u dont have hf nst then u must use squire042 way( cap, spark gap, and primary coil) and fire up ur nst 5kv or 3kv or 2kv 50hz/60hz

## Sept 5, 2011 Zilano Ouote:

Originally Posted by **jharmon** *Hi zzz*,

I just placed orders for a 120V / 140V Variac and a 4kV 30ma NST. I couldn't find a 4kV 60ma NST, so maybe I need to wait to find another to wire them in parallel. I didn't see any GFCI reset buttons in the picture, so hopefully it's what I need.

Since I'm not using the flyback, the signal I have coming out of this will be roughly 4000V @ 60Hz and 30ma. I would think that I'd want the primary coil ringing at 30kHz across the gap cause it's an even multiple of 60Hz.

I still don't understand the purpose of the gap on the output side. I'm guessing it's only necessary to dump the high voltage if you are using a low turns primary to a high turns secondary. That gets you down to just about 480V or whatever your target is and then the varistor smooths out the rest.

If that's true then the point is that you can go in either direction (step-up or step-down), as long as you dump the excess volts.

I was about to purchase some varistors, but I need to double-check... we are talking about clamping voltage, right? What max voltage and amperage should these be rated for? Also, there aren't any varistors that clamp at precisely 480. They clamp @ 475V and 488V. I'm guessing we should use 475V to protect the 480volt caps downstream.

Sorry I'm behind. This thread is moving fast. I have lots of catch-up reading to do. :-)

I

#### Hi jharmon!

well ur nst is ok first try with this nst. i have uploaded the pic of don arrangement of spark gap on this page see it. use hv diode ok. gap is just use to trigger pulses of hv and hf to xcite primary to set into oscillations. its frequency doesnt depend upon nst frequency it depeds upon LC of primary. anyways wots ur frequency of nst? is it 60 hz or in khz? ITS BETTER U GET NST WITH HF SAY 30-40 KHZ. COZ DON CIRCUITS NEED HIGH FREQUENCY AND HIGH VOLTAGE INPUT.

Sept 4, 2011 Zilano Quote:

### Originally Posted by **energy1**

thats correct Z, the electron spins into one coil as amps, and into the other as volts when center tapped between the two...very significant. the fun part is combining the two again for real useful energy. amps x volts = watts.

E1

Hi energy1!

just join 2 tops of tesla and take one wire----> join bases of tesla (bifilar middle) and take one wire----->

now u have two wires and they have all the power u require buts its hv and hf but u can light bulbs directly.

## Sept 4, 2011 Zilano

Quote:

Originally Posted by **Pendar** 

I'm confused about the location of the spark gap. I have several schematics and drawings and they show different arrangements.

Does the SG go in series or parallel to the coil?

Does the SG go before or after the capacitor?

Does the capacitor go in series or parallel?

Does it matter?

TIA

Hi Pendar!

see pic!

use same position of spark gap in don setup. it works for any frequency. it just triggers hv hf to trigger primary coil. frequency of nst has nothing to do with Lc primary frequency. frequency of primary will depend on its inductance and cap attached to it.

so dont confuse with nst frequency. its just hv hf power supply. use diode(must)

rgds

zelina

Attached Thumbnails

Sept 4, 2011 Zilano

#### Quote:

Originally Posted by **nico** 

Well, lambda is the same for primary and secondari but the primary is 1/4 of lambda, Thats means the frequencies is the same in primary and secondary? I better use L1xC1=L2xC2!?

Hi Nico!

yes frequency is same in primary n sec. well coz of inductance changes as coils turns r close or far we have to compensate with caps so the coils resonate at frequency determined by primary LC. if u use same wire for both coils and same turns spacing then u wont be needing caps but that doesnt happen in real setup so use caps to adjust frequency. measure L and use formula for resonant frequency get value of cap needed. attach it and it rings!

## Sept 4, 2011 Zilano Quote:

## Originally Posted by **broli**

I don't get the whole theory behind why or how one generates voltage and the other current or how it becomes a 1/4 wave resonator while it has a full wave length. Because tesla used both 1/4 wave length for primary and secondary.\*

But that diagram is more clear, so thanks.

The thicker the secondary, the more current can be allowed, the stronger the field, the more output you can generate?

\*sorry this statement is wrong\*\*

\*\*boy this is getting confusing, in tesla's patents he only speaks about 1/4 wave length

#### Hi Broli!

tesla xcited coils using 1/4 wavelength. if we r to xcite 1/4 to 1/4 it means we r inputting 1/4 and getting 1/4 so no gain. gain is when we input 1/4 and get full. so power required is also less. and moreover gain is much higher due to resonance rise. yes we can also use 1/4 and 1/4 + 1/4 so we get half.

well we r using air coils so we need thicker primary and thicker secondary. and if we use ferrite core then not so thicker wires will do. but still to get more amps the output coils must be thicker meaning thicker secondary and it must be a step down. so here we have combo of primary 2 secondaries and third coil to collect harvest and also step down.

#### Quote:

# Originally Posted by **boguslaw** zilano

Forgive me ,I have a black hole in my mind

So each coil of that pair is 4\*1/4 wavelength long and this wavelength is resonant frequency of primary RLC oscillator (which length is 1/4 wavelength btw)? Still don't get it why each secondary is 4 times longer then primary - why not the same length as primary?. Doesn't it mean each secondary has different resonant frequency then primary?

I think I could learn procedure but I'm rather interested in understanding why that is working that way.

#### HI Boguslaw!

well the idea is primary is 1/4 wavelength and secondary each is full wavelength. coz we want over unity output. and we want to fetch full power of one wave. not 1/4. we r here leveraging power to move a load of full wave with just quarter input. We just tap with 1/4 to produce full wave! its like 4 cents in and 1 dollar out!

## Sept 4, 2011 Zilano Quote:

### Originally Posted by **broli**

Is there a reason why you're using the term "bifilar" then. It seems you have one 1/4 wave primary and two full wave secondaries left and right of it. bifilar refers to a way of winding and hooking up a coil, usually by winding a turn of one coil between the turn of the other coil like illustrated above. And also with this correction of yours my remark still stands. Since the "bases" of the secondaries are at 0 volt and they will force a node of the standing wave, which also means nodes will form at the ends of the coils. Thus there will be no voltage there.

#### Hi Broli!

bifilar is nothing! its same coil but ccw. if ur one tesla is cw the other is ccw. joined togather. one produces voltage and other produces current. ccw produces current.

#### rgds

If, however, we ground the base of the coil, this is a forced nodal point and the coil will oscillate at its natural 1/4-wave resonant frequency. The results will be enhanced if the energy is pulsed into the coil at its exact resonant frequency. The effect is called resonant rise, and the coil a helical resonator. A standing wave appears on the classic 1/4-wave resonator which has a current peak at its base or ground point and a current node at the top of the coil. Likewise, there exists a voltage nodal point at the ground or base of the coil and a voltage peak at the top.

well we are always attracted with glitteratti! we always tend to see tesla top as power source but its not its just voltage peak at resonance. thats why we use cap in series with top and light a bulb. here we make current ahead by attaching cap. we never look for ground

base of tesla. ground point of tesla has current peak. however if we place a bulb from ground point of tesla coil and top of tesla u will light the bulb in a good way. since power =v\*i. voltage is at top and current is at base. we combine two with a bulb in series. u will light the bulb.

## Sept 4, 2011 Zilano Quote:

Originally Posted by **broli** 

Your bifilar resonating coil is it wound and connected like the attachment below?

In this thread somewhere there was a statement about the ground forcing a node. Since your bifilar coil is one wavelength long and you force a node in it's middle it means nodes will form at the beginning and end as well. This will cause 0 voltages on both these ends, so it has no use connecting a capacitor or even the ends together. Or am I wrong about this?

Hi BRoli!

well primary is 1/4 wavelength and secondary is 4\*1/4=1 full wavelength.

bifilar are 2 full wavelength that means 2 tesla coils back to back with their bases in the centre and earthed. our xciting primary in centre is at the base of 2 back to back tesla. here we r hitting one arrow to kill two tesla coil. so input is one and output is 2. this is the basic step to overunity.

rgds

zelina zilano zeis zane!

**Attached Thumbnails** 

## Sept 4, 2011 Zilano Quote:

Originally Posted by **jharmon** 

Man,

I have been reading and I'm realizing I need to take this one step at a time. I'm going to start with my flyback.

ZZZ...

can you recommend which of the wound flybacks on this page you would use?

#### **High Voltage Transformers**

I'm happy to wire up the driving circuit, but I don't want to wind it myself. Thanks!

GET ANY SOLID STATE NST WITH 4KV AND 60 MA 30KHZ OR MORE DUAL OUTPUT BETTER IF NOT AVAILABLE GET SINGLE OUTPUT

## Sept 4, 2011 Zilano warning dangerous-Isrovika- resonance!

- One hundred years ago there was no electronic devices that generate a high frequency electromagnetic waves.

But it got a very simple scheme. It was a capacitor that is discharged to the punch. When a spark between the electrodes slipped in the circuit there were fluctuations in a very wide range of frequencies.

Whether by accident, either specially Tesla brilliantly solved the problem simply adjust the resonance.

After all, the electric spark is practically all frequencies, some of them will coincide with the natural frequency of the circuit, and resonance occurs.

This frequency varied depending on the load, but automatically adjusts the contour iskrovik in response.

Iskrovik - a dangerous thing, because some of its spectrum lies in the hard ultraviolet and soft X-rays, which can be learned and quite strongly. This convinced some experimenters who tried to repeat the experiments Tesla: they tend to get cancer and die prematurely.

Electromagnetic spectrum - Wikipedia, the free encyclopedia

#### MAKE UR COILS IN THE SPECTRUM OF RF NOT X RAYS OR UV

#### T=L/R calculation

<u>Instantaneous Current Calculations of an Energizing RL Circuit (Calculator TI-30XIIS)</u>

#### T=R.C calculation

<u>Instantaneous Voltage Calculations of a Charging RC Circuit (Calculator TI-30XIIS)</u>

capacitor charging

**Capacitor** 

**Inductor charging** 

**Reactance** 

best for understanding don idea to drive ironcored transformer from hf hv ac to 110 volt ac

http://www.physics.byu.edu/faculty/b...o/su442/ac.pdf

important

Frequency Response

IGBT=INSULATED GATE BIPOLAR TRANSISTOR

**Insulated Gate Bipolar Transistor** 

An Insulated Gate Bipolar Transistor (IGBT) is a device that combines "the best of" <u>MOSFET's</u> and <u>bipolar transistors</u>. They are characterized by having both high voltage and current capacity. Usually the voltage rating is 600 V or 1200 V. Small IGBTs (around TO-220) can handle around 15 A, where as the larger "brick" IGBTs can handle several hundred amperes. Their typical application is in an <u>H-bridge</u> for high power applications.

Sept 4, 2011 Zilano calc and animation

NOTE: FOLLOW DON WAY OF CONNECTING DIODES AND COIL AND SPARK GAP. IF U HAVE FLYBACK THEN U WILL USE ONE DIODE SO POWER IS NOT MUCH BUT IF U MAKE CIRCUIT USING PRIMARY N FEEDBACK COILS THICKER AND SUPPLY 12 V U WILL GET MUCH INPUT POWER N SPARK WILL BE FAT. FOR AIR COILS ONLY. THOSE USING FERRITE CORE FOR DON COIL. CAN USE NOT SO STRONG SPARK MAKE SURE UR NST OSCILLATOR TRANSISTOR CAN TAKE ALL THAT HEAVY INPUT. USE MJE1300... SERIES.

ALL NST WILL WORK DON STYLE TRIGGERING AND ARE NOT DEPENDENT ON THE FREQUENCY OF THE INPUT. THE COILS AND THEIR LENGTHS DECIDED DECIDE THE FREQUENCY.

#### **Calculations**

If you decide not to use the the <u>TeslaMap</u> program (or other design program) you can use the following equations to design your Tesla coil.

pi = 3.1415926535897932384626433832795

NST VA = NST Output Current \* NST Output Voltage

NST Impedance = NST Output Voltage / NST Output Current

NST Watts =  $((0.6 / NST VA \land 0.5) + 1) * NST VA$ 

PFC Capacitance = (NST VA / (2 \* pi \* NST Input Frequency \* (NST Input Voltage ^2))) \* 1000000

Primary Resonate Capacitance = (1 / (2 \* pi \* NST Impedance \* NST Input Frequency)) \* 1000

Primary LTR Static Capacitance = Primary Resonate Capacitance \* 1.5

Primary LTR Sync Capacitance = 0.83 \*(NST Output Current / (2 \* NST Input Frequency) / NST Output Voltage) \* 1000;

Secondary Coil Turns = (1 / (Magnet Wire Diameter + 0.000001)) \* Secondary Wire Winding Height \* 0.97

Secondary Capacitance =  $(0.29 * Secondary Wire Winding Height) + (0.41 * (Secondary Form Diameter / 2)) + (1.94 * sqrt(((Secondary Form Diameter / 2) ^3) / Secondary Wire Winding Height)) Secondary Height Width Ratio = Secondary Wire Winding Height / Secondary Form Diameter Secondary Coil Wire Length = <math>(Secondary Coil Turns * (Secondary Form Diameter * pi)) / 12$  Secondary Coil Wire Weight = pi \* ((Secondary Bare Wire Diameter / 2)^2) \* Secondary Coil Wire Length \* 3.86

Secondary Inductance =  $((((Secondary Coil Turns ^2) * ((Secondary Form Diameter / 2) ^2)) / ((9 * (Secondary Form Diameter / 2)) + (10 * Secondary Wire Winding Height))) * 0.001) * Secondary Inductance Adjust$ 

,

## **Advanced Theory**

It is actually a bit more complicated then the explanation given above. Although the turns ratio is around 1:100, the transformer operation is based more on resonance then on turns ratio. When the spark gap fires, the electric charge in C1 dumps into L1, and then back into C1, and then back into L1. This is called resonance. C1 and L1 make up what is called a resonator. They are changing an electric field (C1 volts) into a magnetic field (L1 gauss), and back again, at a rate (frequency) determined by the value of C1 x L1. The secondary (L2) picks up some energy from L1 each time L1 charges up. The output terminal C2 gets an electrical charge from L2 each time L2 discharges. The secondary and the output terminal resonate at the frequency determined by L2 x C2. The magic happens when L1 x C1 = L2 x C2, or both resonators resonate at the same rate (this is made to happen by adjusting the tap on L1). When both resonators are at the same rate, the energy in L2 builds by a little bit from L1 on each cycle. This is called resonant rise. The output terminal voltage gets higher on each cycle, until the voltage gets too high to hold, and then ZZZZZZAAAAAAPPPP. This is analogous to a person on a swing. Imagine the legs are a resonator, going back and forth at a certain rate. The swing with the person is another resonator, swinging back and forth at a certain rate. Initially, the swing is hardly moving. The legs start going back and forth and the swing starts going. If done right, the legs change position at the very peaks of swing motion. They are resonating at the same rate as the swing is swinging. As each peak of swing motion is reached, the leg motion adds a little bit to the next cycle so that the swing arc grows a little each time. This can continue until the arc gets over 180 degrees (horizontal at each peak). Then, the chains begin to slacken and things can get pretty unpredictable. In the same way, the resonator C1xL1 acts like the legs, adding a little energy to resonator C2xL2 (swing + person), on each cycle,

until the voltage in C2 gets so high that it just explodes as an electrical discharge in search of ground.

#### VERY IMPORTANT SITE FOR CALCULATIONS

Tesla Coil Design, Construction and Operation Guide

http://www.teslacoildesign.com/#design

## Sept 2, 2011 Zilano Quote:

Originally Posted by **boguslaw** 

zilano and others

I think I'm starting to understand formula of natural resonance.

L=246/f[Mhz]

it's taken from speed of propagation of EM wave along the surface of wire. We match the length of wire (L) to 1/4 of wavelength :

L=1/4 \* alfa (alfa = wavelength)

because f = c / alfa (c - speed of light in vacuum or air (nearly)) f - frequency

then we have :

|a|fa = c/f, a|fa = 4 \* L => L = 1/4 \* c/f

one foot = 0.3048 m (meters) and c = 299792458 m/s

so computing all using feet instead of meters and choosing to cut frequency to Mhz (instead of Hz) we have :

 $L = 1/4 * 983571056,43(...) / 10^6 = 245.89/f [in Mhz], the result is in feet$ 

I hope I understood it correctly zilano? Maybe that helps somebody.

Now if this is the case then 1/4 wavelength is maybe also 1/4 of period of oscillation of that EM wave. Would that mean we are chasing strictly magnetic field of 1/4 of oscillation or so called NEAR field ?

#### Hi there!

"For those not well acquainted with Tesla coil design and operation, Hull begins by pointing out that, fundamentally, grounding the base end of a vertical coil forces a node at that end, and the coil resonates at its natural 1/4-wavelength frequency. A "good" ground

connection is a must. If, however, the coil is ungrounded, and typically placed in an elevated, horizontal position, the coil then self-resonates at its natural 1/2-wavelength frequency with a node forced at the center. "

If we place a quantity of electrical energy into the coil and do it quickly enough, the coil will ring at its natural resonant frequency, much like a bell. Voltage nodes and peaks will appear along the coil. If the coil is floating in free space, it will tend to oscillate at its natural 1/2-wavelength resonant frequency, and each end of the coil will exhibit a voltage peak while a voltage nodal point will exist in the exact center of the coil. If, however, we ground the base of the coil, this is a forced nodal point and the coil will oscillate at its natural 1/4wave resonant frequency. The results will be enhanced if the energy is pulsed into the coil at its exact resonant frequency. The effect is called resonant rise, and the coil a helical resonator. A standing wave appears on the classic 1/4-wave resonator which has a current peak at its base or ground point and a current node at the top of the coil. Likewise, there exists a voltage nodal point at the ground or base of the coil and a voltage peak at the top. Resonant rise is a function of the current value at the base of the resonator and the "Q" or quality factor of the resonator. This quality factor is determined by the inductance of the coil, its resonant frequency and the AC resistive losses within the coil. This is all that enters into the equation as long as the coil is free and floating in the "perfect vacuum" of interstellar space! To my knowledge, no coil in history has ever completely satisfied the equation for Q!

In the real world, Q is most affected by the coil form that the wire is wound upon, specifically its composition and thickness. There is another "evil" with which Tesla did battle constantly, and never so boldly as when at Colorado Springs, that is known as interturn capacitance. In addition to self inductance, a coil of wire also has internal or distributed capacitance created by the proximity of the adjacent turns to one another. Each turn is like a small capacitor plate which interacts capacitively with each turn adjacent to itself. Both the form factor and the internal self capacitance work to reduce the resonator Q. Finally, near effects by things such as the ground, metal objects, etc., all conspire to make the real world Q an almost impossible value to calculate.

Why all the fuss about Q? This is what Tesla terms the "magnification factor" and is directly related to the efficiency of all Tesla coil or similar resonant systems. And, this is what makes a magnifying transmitter into the ultimate Tesla coil.

Sept 2, 2011 Zilano Quote:

Originally Posted by **boguslaw** 

Thank You! That cleared things a bit, but forgive me because I have much more questions

1. You said : two Tesla coils joined at base, or our bifilar Tesla.If one is clock-wise wound and other counter-clock-wise, that's the way we get more amps in one and more volts in other? Or rather

because we connected cap across one forming parallel resonant circuit to get more amps? I saw your other circuit with cleverly joined secondaries outputs without capacitor - does it mean Don Smith has right and winding direction determine if we got amps or volts. Is that correct? That topic surely need clearance.

- 2."DIODE HELPS TO PREVENT DAMAGE FROM SEC COIL VOLTAGE SPIKES TO THE NST" does it mean we still have problem with lenz law or it's just inductive spikes from collapsing magnetic field of secondary? Did you measured input power during loading output? If there is no or almost no Lenz law response on primary then input should stay almost the same with or without large load connected to output of device.
- 3. Ground connection in our Tesla-Smith bifilar (I will address this bifilar that way because there is also pancake flat bifilar and normal bifilar with both coils wrapped on the same place as opposite to Tesla-Smith where both are separated in space) can you elaborate it more?

#### Hi there!

- 1. well here bifilars r not bedini type. they r stretched bifilars don style. since each bifilar here have equal inductance so if we attach cap to one bifilar for matching resonance with primary the second one will also resonate coz its attached to the former coil with cap as an auto transformer. a cap can be attached in series also but our main aim is to align resonance of secondary with primary. see auto transformer+wiki in google search.
- 2. well here diode works in 2 ways first to make dc and as a resistance to hv so when we attach coil of low impedance the the nst is not get short circuited. even if it does get the fuse blown off we must use a resistance in series so fuse is intact. and nst feeds half wave dc to cap n coil. well coils for harvest can be ccw or cw coz in that circuit we r not drawing power from the secondary bifilar directly but we r drawing power from inductive resonance of primary+secondary. well that gives us freedom to choose harvest in multiples by using multiple coils from single resonance unit. well there is spark in parallel to avoid that but when we use it in series then diode with very high reverse voltage handle rf shootups from secondary handle that. well output has no effect on input at resonance.
- 3. well here is no pancake bifilar used. stretched bifilars are used here the don style. and yes centre of bifilars earthed to make each bifilar resonate at 1/4 as in standard tesla coil. coz primary is at the base of each bifilar tesla coil.

## Sept 2, 2011 Zilano Ouote:

#### Originally Posted by **h2ocommuter**

hi ZZZZ, you have show all of us a mastery of the highest order and you should honor us with some way to give you some compensation for your troubles if you please..... If you desire nothing or for other reasons decline I want to say thankyou.

a paypal ID or somthing??

We all want the best for you and to show our appreciation.

Most of all your privacy we want to honor.

Please be as discrete as possible.

Zane

in another vane; I am just getting the understandings to get my plasma globe lab back up again. You stated we should know the freq of the globe. so from that I can choose say 1/4 wave of that as Driver and then build Step up/step down from there, and so on.... I am also truely figuring out what is necessary to getting my Old 5k neon transformer up and going too. I digress; with all the fine questions and unbelievable answers that have fallen off your toung effortlessly I normally can only laugh at the schooling you are giving us. I am at awe as to your repitwar and grace.

I agree, delightfull reading indeed.

Hi Zane!

thankx for appreciation. money is not everything in this world!

## Sept 1, 2011 Zilano Ouote:

Originally Posted by **spark2** 

Hi ZZZ

thank you zzz

impressive documentation

many hours of delightful reading

thanks again

plz re read again things updated

Donald Smith Devices too good to be true

Sept 1, 2011 Zilano Quote:

Originally Posted by **nowatts** 

I've been experimenting with the Don Smith device and am about to reverse the primary and secondary coils as suggested. Interesting approach. This thread is great.

I am now wondering if a major flaw in my replication is due to my not understanding the NST. I am using one of the older, non-GFI iron-cored NSTs. Is this putting out only 60 Hz and not the 35 kz Don talks about? And if it is only 60Hz ouput, will the spark gap be sufficient to raise the frequency?

I also am wondering if it would be viable to put a diode on the line voltage feeding the NST so it outputs pulsed dc. Anyone tried this?

I am really concerned there is a world of difference between the old and new style of NST. Perhaps the best solution is using a new solid-state NST and attempting to bypass the GFI.

hI THERE!

HERE U GET ALL Donald Smith Devices too good to be true

ANY MORE QUERIES R WELCOME!

Sept 1, 2011 Zilano review page 23 for new updates

hi folks

plz review so u get right directions updated changes

Donald Smith Devices too good to be true

## Sept 1, 2011 Zilano Quote:

Originally Posted by **boguslaw** 

zilano, I'm not good in electronics ,could you explain some things?

1. We should match capacitor C1 at primary to impedance of transformer? What does it mean? Is that for minimizing reflections from souce so capacitor is charged from this power source fastest possible way? How fast is that and is that important for final effect? Your computation is for 50Hz which is very slow frequency - does frequency of power source matter?

Thinking about TV flyback with own driver; how we can find output voltage (can be measured approximately by spark length), amperage of spark and frequency (can be measured by scope

probably) to set proper concensator C1?

- 2. We are matching primary RLC to the 1/4 of natural frequency of primary coil length ,right ?
- 3. Secondary length is 4 times primary length means full wave length, right? Do we assume in that case Tesla bifilar (two windings in opposite directions from center) and does it mean 1/2 wavelength for each sub-coil?
- 4. Then we have match secondary cap and coil to this natural full wave frequency making second RLC circuit on output side?
- 5. Using Tesla coils method (two TC; one for step up and one for step down) how the procedure should be corrected?

And finally the most important question: what is that natural resonant frequency of wire? why 246/Mhz? Sorry,if that was explained before (just post link where)

#### Hi Boguslaw!

- 1. well we match impedance of nst with cap. so efficient power transfer of nst to cap. moreover its also to match timming of 50 hz or wotever frequency u have for nst. so cap charging cycles r timed correctly (only when we r using ac) if we r using dc as in case of dons circuit-diodes after the nst then we dont need to calculate cap and just follow length of primary and match cap for the inductance of primary and we can stick to 246mhz or 123 mhz)
- 2. well in case of flyback we dont know voltage and milli amps so we use hit n trial method. as flyback has diode built in(color tv/color monitor) we just calculate L of primary and calculate c using formula f=1/2\*pi\*rootLC. and just feed the two wires of flyback in series with spark gap or parallel spark gap to either parallel LC or series LC primary circuit.
- 3. Well a single tesla when erthed from bottom and around bottom 1/4 wavelength primary triggers it so it resonates at 1/4 of its wavelength. here we have two tesla coils joined at base and we r with primary resonating at 1/4 so it will make 2 tesla coils to resonate independently at 1/4 of its wavelength. coz middle is base of 2 tesla coils joined back to back of bifilar is earthed.
- 4. again at secondary we r matching 1/4 wave but coils r joined so we add cap to one tesla bifilar. so primary n sec resonate at 1/4. here the trick is we harvesting 2 outputs with single primary resonating input. bifilars r used to divide voltage into independent unit one tesla producing amps and other tesla voltage. we can tap more amps and less voltage by tapping less turns on voltage producing tesla and more turns on current producing tesla by using a rheostat like tapping slider on tesla coils.
- 5. there r many ways. one we can step down using similar tesla coil. or when we make coil we decide voltage of secondary by having less turns on secondary so its diameter is bigger. we can make coils to get 110 volts by using a single turn of secondary or by using a little say quarter portion of secondary.

watch carefully the pic of kapanadze coil green box . the coil u see which is biggest has been tapped not at ends but a portion of the turn.

thats giving kapanadze 5kw else kapanadze said it was giving 200kw so they made it suitable for 5 kw.

well the last part of ur question is if we use frequency in kilo hertz say 30 khz=30/1000=.03mhz

formula for finding length of resonant wire is

length of resonant wire in feet=246/freq. in mhz so its 246/.03mhz =8200 feet which is too big coil

so we use 246/246mhz= 1 feet or 246/123=2 feet which are manageable in winding.

## Sept 1, 2011 Zilano Ouote:

Originally Posted by **spark2** 

hi Zilano

I see what you mean now

As I understand

It's up to us during the construction of L1, what is the frequency the more natural and less cumbersome for us.

The frequency of NST do not have any connection with the construction of L1 than to decide the value of the charge rate of C1.

So what we see on the image of Don suitcase is not reality. Because the coil L1 has a length of 2.25 feet, making it a frequency of 109mhz but that is just one example.

Am I correct??

hi spark 2!

yes u are correct. but we dont know dons actual length. so we cant predict the frequency don used. well frequency in range of megahertz makes us manageable lengths to coil and if we go in for kilo hertz lengths are much larger and thousand of turns so 246 mhz is very suitable. also u can divide 246 by any frequency in mega hertz so it gives u enough length to wind primary with 5-10 turns. and make secondary 4 times of primary length.plz read my post that am going to

#### update on page 23 of this thread.

## Sept 1, 2011 Zilano Ouote:

#### Originally Posted by **nowatts**

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I am now wondering if a major flaw in my replication is due to my not understanding the NST. I am using one of the older, non-GFI iron-cored NSTs. Is this putting out only 60 Hz and not the 35 kz Don talks about? And if it is only 60Hz ouput, will the spark gap be sufficient to raise the frequency?

I also am wondering if it would be viable to put a diode on the line voltage feeding the NST so it outputs pulsed dc. Anyone tried this?

I am really concerned there is a world of difference between the old and new style of NST. Perhaps the best solution is using a new solid-state NST and attempting to bypass the GFI.

hi nowatts!

old nst will work fine read my post on page 23 of thread.

nst frequency just help to calculate primary cap of the don coil. and its frequency just help charge capacitor. but it will work.

DIODE HELPS TO PREVENT DAMAGE FROM SEC COIL VOLTAGE SPIKES TO THE NST

## Sept 1, 2011 Zilano Quote:

#### Originally Posted by **Muon**

Very interesting thread. Thanks Zilano for responding to my earlier question.

I'm looking forward to the replications by Mike and Drak and others... More power to you. We need a new source of energy!

Question: what size wire is recommended for the secondary, and the primary?

I built my own Tesla coil as a teenager, a number of years ago... I remember winding the secondary slowly, carefully. Wish I had that coil now!

Hi Muon!

the thickness ratio is 4:8. for experimental purpose use ratio 2:1.

more thicker sec brings more amps.

## Sept 1, 2011 Zilano Quote:

Originally Posted by spark2

Hi Zilano

I do not understand

You speak of the natural frequency of the cable which is like a 123mhz dllabarre as the calculated or that of the nst ???

Hi spark2!

frequency depends upon the wirelength of primary coil we r going to use

its calculated by formula

length of wire in feet=246/freq. in mhz secondary is 4 times of primary and if bifilar wounded its 8 times

read my post on page 23 of this thread where i explained how to calculate the primary capacitor.

even a 60 hz old nst can be used and also latest solid state 30 or 40 khz nst can be used.

nst is just power supply and its freuency only helps to charge primary cap faster.

DIODE HELPS TO PREVENT DAMAGE FROM SEC COIL VOLTAGE SPIKES

## Sept 1, 2011 Zilano Ouote:

Originally Posted by **qvision** 

Has anyone here ever removed the GFI from a modern NST like this one :

Ever light Neon Power Supply 5kv 25ma

Hi qv!

well it can be removed by opening the case it contains a small circuit but as u open it warranty of nst will void. another way out is dont earth the nst and earth the secondary bifilar at centre. and slowely raise the input either using a dimmer in series with ur solid state nst and then pulling it

back and again raising it slowely. use diode in the output lead of nst so to prevent it from high voltage spikes that can destroy ur nst by secondary bifilar voltages that r fed back to primary coil circuit. u have to try it many times and u will get to know that how to handle it without tripping.

i have updated the info in page23 of thread do read it abt tesla coil and links are added.

## Sept 1, 2011 Zilano Ouote:

Originally Posted by **dllabarre** 

So your saying all copper wire, 1 foot long, will resonate at 246mHz?

No matter how think or thin the wire is?

246 / 10 feet of wire = 24.6 mHz 246 /2 feet of wire = 123 mHz

So I have to add a capacitor in parallel to my nst output so they resonate at 123mHz in my example for 2 feet of wire in my primary coil?

I think I have it...

DonL

Hi Dllabarre!

#### YES UR RIGHT!

never confuse wire with a violin string. string vibrate and we feel vibrations where as in wires thin or thick magnetic and electric fields vibrate not the wire. yes thick wire will have low impedance and thin wire have high impedance.

impedance = resistance in ac circuits. if wire is thick oscillations stay longer where as in thin wire they die fast.

Aug. 31, 2011 Zilano Quote:

Originally Posted by **qvision** 

Thanks Zilano.

For all you people spending a lot of time indoors with HF spark gaps, please read this :

"Exposure to an arc-producing device can pose health hazards. In a closed space such as a

classroom or home, the continuous arc formation of an open-air Jacob's Ladder will ionize oxygen and nitrogen, which then re-form into reactive molecules such as ozone and nitric oxide. These free radicals can be damaging to the mucous membranes of people near the spark gap. Plants are also susceptible to ozone poisoning.

These hazards are not present when the arc is formed outdoors since the heated ionized gases will rise up into the air and dissipate into the atmosphere. Spark gaps which only intermittently produce short spark bursts are also minimally hazardous because the volume of ions generated is very small.

Arcs can also produce a broad spectrum of wavelengths spanning the visible light and the invisible ultraviolet and infrared spectrum. Very intense arcs generated by means such as arc welding can produce significant amounts of ultraviolet which is damaging to the retina of the observer. These arcs should only be observed through special dark filters which reduce the arc intensity and shield the observer's eyes from the ultraviolet rays."

From:

Spark gap - Wikipedia, the free encyclopedia

QV.

Hi Qv!

well thankx for the alert!

I recommend spark gap must be contained in a metal container like the spark gap in two wheelers or automobile. it wont radiate uv and bad spectrum and outlet can be tubed to open environment. yes it is harmful for eyes and brain. so watch out!!!!

Aug. 31, 2011 Zilano Quote:

Originally Posted by **qvision** 

If using an NST do we have to remove the ground break thing (what's it called ?) that is a safety feature, and is this easy ?

I am looking at this NST:

Ever light Neon Power Supply 5kv 25ma

Thanks,

QV.

Hi qvision!

yes get an nst without gfi=ground fault interruptor. or if it has it u have to remove it. else it will trip in dons circuits.

## Aug. 31, 2011 Zilano Quote:

Originally Posted by **dllabarre** 

So instead of 35kHz we will be using something in mHz (mega Hertz) range between Generator and Primary coil?

Primary coil being 10 turns coil like Don Smith circuit or the 80 turns coil like Zilano circuit?

Thanks for clarifying.

Hi Dllabarre!

here 35.1khz nst in don circuit is just power supply but coils resonate at 246mhz or 24.6 mhz. we can use don nst 30.1 khz and use wire length it will be very long hard to wind also. so we stick to 24.6mhz or 246mhz and get manageable lengths.

in my case i forced resonate it. but its better to use natural resonant length

## Aug. 31, 2011 Zilano Quote:

Originally Posted by **dllabarre** 

Zilano

"the basic key is 246/frequency in Mhz = length of primary in feet"

Example: 246/.03 = 8,200 feet

This formula will result in thousands of feet of wire.

How do you only get 10 or 20 turns bifilar with that much wire?

Thank you

hI DLLABARRE!

#### PLZ DO READ ELSE U WONT BE ABLE TO FIND RESONANCE.

AM REALLY SO SORRY FOR TELLING U FORCED FREQUENCY CALCULATION OF WIRE. SO AM WRITING AGAIN TO U TO FOLLOW NATURAL RESONANT FREUENCY OF THE WIRE LENGTH. I HAVE LCR METER I CAN MANAGE ANY WIRE LENGTH AND MAKE IT FORCE RESONATE.

BUT FOR BEST HARVEST AND LOW INPUT WE NEED TO USE NATURAL RESONANT FREQUENCY OF WIRE

LENGTH OF WIRE IN FEET=246/FREQ IN MHZ

USE 246/246MHZ= 1 FEET OR

246/24.6MHZ= 10 FEET

note here frequency is 24.6mhz so we have to match the right cap for this frequency.

IN THIS WAY U GET NATURAL RESONANT length OF THE WIRE.

## mistake is deeply regretted

Aug. 31, 2011 Zilano Quote:

Originally Posted by **nico** 

for ferrite core , the spark gap is in series with the primary and capacitor in paralel, the calculation will be the same?

HI USE SERIES CAP WITH PRIMARY. ELSE CALCULATION WILL GO WRONG.

HERE WE R MATCHINGING IMPEDENCE OF CAP WITH NST IMPEDANCE.

WELL WE CAN USE SERIES CAP AT PRIMARY AND PARALLEL CAP AT SECONDARY. WHEN WE USE PARALLEL CAP WE NEED TO ADD IMPEDANCE OF SEC COIL + CAP THEN USE FORMULA.

JavaScript Tesla Coil Calculator

Aug. 31, 2011 Zilano Quote: Originally Posted by nico

Thank you, that is what i need.

I belive i need a strong driver for flyback transformer not 2n3055 , like is in my attach filles.

Hi Nico!

u can still use ur flyback if u r using ferrite core. if u want aircore then go for NST. FIRST TRY WITH FERRITE CORE AND UR FLYBACK WITH ORDINARY HOME COPPER WIRE PVC COATED.

Aug. 31, 2011
Zilano
simple calculations that will make u coil ringing correctly

hI Folks!

## important do read and follow!

"For those not well acquainted with Tesla coil design and operation, Hull begins by pointing out that, fundamentally, grounding the base end of a vertical coil forces a node at that end, and the coil resonates at its natural 1/4-wavelength frequency. A "good" ground connection is a must. If, however, the coil is ungrounded, and typically placed in an elevated, horizontal position, the coil then self-resonates at its natural 1/2-wavelength frequency with a node forced at the center. "

Nikola Tesla (1856-1943) among its many incredible inventions / insights, also made this curious machine capable of generating high-voltage discharge. For many a teslacoil is a transformer, but it is an inappropriate term: the Tesla coil is not based on the principle of operation of the common transformer! There are various types of teslacoil:

- -SSTC (Solid State Tesla Coil): teslacoil of this type is called "solid state" as it is controlled by an electrical circuit with no moving parts and no spark gap. The resonant frequency is generated directly by an electronic circuit.
- -VTTC (Vacuum Tube Teslacoil): For fans of the genre, these works with vacuum tubes. To get really interesting discharges, you need to find huge military-type valves such as GU81M in some market places or specialized electronics distributors. The peculiarity of VTTCs is the high frequency of operation, generating harmless sparks via the skin effect, and you can tap them with your fingers! -SGTC (Spark Gap Tesla Coil): This is the most famous and classic teslacoil, which we will explain below. Bases its operation on the appropriate size of a few components.

The aim in any case is to generate a resonant frequency on the primary winding that resonate on the secondary circuit, which must receive energy as a real antenna, but turning it to high voltages by reducing the amperage accordingly: in fact it is not free energy, since the energy output does not exceed the energy supplied.

HERE THE ABOVE STATEMENT IS CORRECT TESLA COIL IS NOT OVERUNITY. BUT ITS TRUE ONLY WHEN THE XCITING PRIMARY IS AT THE BASE OF SECONDARY COIL. IN

DONS CIRCUIT ITS IN THE MIDDLE OF TWO **BIFILARS SECONDARIES** WHICH CHANGES WHOLE SCENARIO AS WE SPLIT TESLA COILS AS ONE PRODUCING AMPS AND OTHER PRODUCING VOLTAGE AND WE CAN TAP MORE AMPS AND LESS VOLTAGE IF THAT IS SUITED TO OUR NEEDS. MOREOVER THE BLUE STREAKS THAT WERE AMAZEMENT FUN IS CONVERTED TO USEFUL ENERGY.

XCESS POWER IS PRODUCED. WITH MIDDLE XCITING WITH BIFILARS. How it works?

# DON SMITH COIL IS TESLA COIL WITH A COMBO OF SINGLE PRIMARY AND 2 SECONDARIES BACK TO BACK. RESONATING AT 1/4

An SGTC teslacoil is based on two circuits oscillating at the same frequency:

Primary oscillating circuit Secondary oscillating circuit A generator produces a frequency of 50Hz at high voltage, typically between 4 and 12kv describing a wave that repeats itself over time 50 times per second:

When the half-wave is rising up, the primary capacitor is charged and the spark gap, which acts as an automatic switch, is opened to allow charging of the capacitor. The circuit must be designed so that the spark gap closes when the half-wave reaches its peak and the primary capacitor is at maximum charge!

When the spark gap closes, the high voltage generator is electrically separated from the circuit formed by the capacitor and the primary winding. In this condition, the capacitor start oscillating with the primary, and acts as a transmitter at a frequency that is the resonance frequency of the LC circuit:

http://www.energeticforum.com/attach...d=131495241 5

The oscillation of the LC circuit is repeated until the charge is dissipated.

When the capacitor charge is completely dissipated during the oscillation, the spark gap no longer has enough energy to stay active, then it opens again, and begins a new cycle of charging the primary capacitor, thus repeating the above steps. This circuit without the secondary, it's just a powerful radio frequency transmitter.

The secondary circuit is a circuit that oscillates at the same frequency of the primary, but the value of the secondary inductance is much larger but still have the same frequency because C2 is a smaller capacitor compared to the primary C1 (the torus). This is the difference that introduce the big voltage amplification!

For optimum configuration of the secondary, you should adjust it to 1 / 4 of its natural frequency of oscillation, this allows for the highest point of the coil, a maximum voltage (this says the legend, and the experiments confirms...) To obtain this frequency is used just to add on top of the secondary coil a toroid or a sphere of the correct capacitance. If you imagine the wave of charge that develops on the side of the coil, you drop the peak point at the summit, the last loop: So here we have the maximum voltage at the minimum current, with discharges less dangerous and more longer! If the circuit is not sized correctly and the voltage peak point was lower, along the winding, this can lead to surface discharges over the coil with the consequent failure of the insulation and winding damage...

Imagine being on the swing, you swing your legs back and forth: the swing is initially barely fluctuates, but insisted the oscillation will increase even more. In this example, your legs are the primary winding and the secondary coil are the swing. If you continue swinging the legs (the primary using the capacitor charge) that will increase more and more and the oscillation of the swing will follow exactly the motion of your legs, but still further increases, is getting higher and higher. This is the voltage increase! The primary continues transmitting its energy to the secondary that is already oscillating, adding the two waves with each new oscillation, just like a swing. This is why it is important that the two circuits can oscillate at the same frequency!

#### The main components of a Teslacoil:

since we r using diode after nst so we have dc(though rippled one. its better we use fwbr=full wave bridge rectifier and make hvdc then feed primary cap) but half wave will also do. kapanadze used fwbr.

FIRST FIND LENGTH OF PRIMARY

LENGTH IN FEET=246/FREQUENCY IN MHZ

SAY U GET X FEET PRIMARY=X FEET SECONDARY BIFILAR=4X FEET AND 4X FEET

MEASURE PRIMARY INDUCTANCE L

AND USE FORMULA for calcualtion of primary capacitor C1

f=1/2\*pi\*squareroot of LC f sqr=1/4\*pi sqrLC C1= 4\*f sqr/pi\*L

(CALCULATION OF SEC CAPACITOR C2)

#### meaure L2 individually make sure both secondary bifilars have same inductance L2

As L2 inductance of the secondary coil and Fq the frequency at quarter-wave of the coil: fq=246 mhz when u r using (1 feet=246/freq in mhz(246))of primary and 4 feet of secondary

 $C2 = 1 / (4*\Pi 2*Fq 2*L2)$ 

or

c2=1/4pi sqrd\*fq sqrd\*L2

attach this cap c2 on one bifilar not across both bifilars

note: the pic attached down below is DONS REVERSE TESLA.
HERE WE DONT USE CAP AND THE HIGH FREQUENCY OF
NST(SOLID STATE) IS DIRECTLY USED. SINCE WIRE
LENGTHS ARE IN 1:4 RATIO SO THE SYSTEM IS IN
RESONANCE. THIS IS CHEAPEST WAY TO GET POWER DON
WAY

#### ALSO VERY IMPORTANT

How To Build A Spark Gap Tesla Coil (SGTC)

JavaScript Tesla Coil Calculator

Also veryyyyyyyyy important

Classic Tesla Coil Design

http://tayloredge.com/reference/Machines/TeslaCoil.pdf

#### QUARTER WAVE LENGTH FREQUENCY CALCULATOR

Frequency Wavelength Calculator

## site for caps and mmc and matching transformer with capacitor

DeepFriedNeon - Tesla Coils

page to understand resonance of the circuit and timing!

Resonant charging

Power harvesting with dons circuit

dons circuit power at resonance

W=0.5\*C\*V.SQRD\*HZ.SQRD

where w= energy in joules or watt second

since 1 joule=1 watt sec

so we raise frequency and voltage it gives greater power.

#### IN SENSE N SANE!

**Attached Images** 

- spark gap position in ac driven tesla coil.jpg (28.1 KB, 146 views)
- Table top SGTC schematic.JPG (13.6 KB, 169 views)
- don circuit for old style 50 hz nst.jpg (35.5 KB, 44 views)
- don reverse tesla easyway.jpg (20.6 KB, 37 views)

Aug. 31, 2011 Zilano Quote:

Originally Posted by **nico** 

I'll use ferrite rings, 12 pieces, which I will stick (glued) together.

ferrite is a 1.8 inch outside diameter and one inch long.

I use flyback transformer with diode built inside.

What will be the value of capacitor placed between flyback transformer and spark-gap?

hi yes stick em togather.

yes wait for my next post happening just now. and u will get everything for caps and inductance calculation.

Posted Now! read it

## Zilano Quote:

Originally Posted by **Muon** 

I'm trying to catch up here. Wish I could contribute.

When you "crack it", Drak, pls let us know. A solid replication would be most welcomed! and appreciated.

@Zilano, Drak, all -- is there some kind of motion here that is itself part of the resonance? perhaps motion between the core and the output coils?

Very interesting stuff. Great to have a woman researching also! reminds me of the very talented electronics gal Jeri Ellsworth.

Hi Muon!

Here we just try to blow a small wind of electrical and magnetic disturbance in primary coils which triggers higher disturbance in secondary and thus resonance is created and this resonance disturbs the ambient( or air) which already contains electrons yet we dont see em. they r disturbed and xcited and change their state and become ionized and they try to come back in former shape thus constitute energy we see as amperes. the core just help to make larger storm. more strong the storm more power produced. strength of storm depends on voltage frequency and the core material and amps fed to primary.

Aug. 31, 2011 Zilano simple message to all!

#### Hi folks!

To fetch power u must have two tesla coil one to step up and one to step down. in my earlier circuit i made nst as tesla coil to step up 4000 volts and then did step down. to 250 volts then added diodes and caps for 250 volts and got results. since all of u cant make heavy gauge nst so its better for u all to use nst/flyback to power tesla as step up and use step down either by aircore transformer or using another tesla as step down. the idea is to get low voltage in range of 110,120,220,250 etc.reverse tesla lowers voltage and keeps resonance working so amps are not lost. dont use choke AT CENTRE OF BIFILAR **choke acts as resistor for ac AND INCREASES VOLTAGE so it slashes amps.** WE NEED AN RF CHOKE to correct ripple after diodes with caps(pi filter configuration) so u get pure ripple free 110,120,250 dc or even 12 v dc by voltage divider circuit. and use invertor or push pull with heavy ac transformer. and if u use ferrite in the centre of primary u get more than 70-100 amps. voltage divider just slashes voltage and amps will always be there.

i gave u all the hint of step down so its easier to handle power produced and ac caps at low voltage r cheap and affordable so the diodes too. all the diodes and caps r needed after step down.

Aug. 31, 2011 Zilano Ouote:

Originally Posted by **vrand** *Hi Drak*,

Your 2 videos with the different coil configurations also looked interesting. Nice work and craftsmanship.

Not knowing what your circuit diagram looked like I can't help you on your spark gap questions. Zilano's is saying that parallel or series spark gap should work with the correct capacitor configurations.

Since you are just testing different setups you might also want to take a look at Dynatron's circuit design, as his is also an all air core transformer setup like your setups so far and has developed to the point with all the circuit component values given. There are already several experimenters replicating OU by following the design.

Here is todays video of one researcher powering his 2200 watt disk grinder from the circuit. (Russian)

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Did you notice any step down in voltage on your 3 turns primary to the 10 turns secondary on you first video?

The sliding in of the primary coil in/out was interesting to see the difference in the wave output on your scope at different positions inside the secondary coil. It looked cleanest at the far end just before going into the secondary. With your single CW secondary that makes sense since standard Tesla Coils have the primary at the bottom of the secondary.

In bipolar Tesla coils with center tap, the primary is in the middle of the secondary coil and is what is the standard configuration. With Zilano & Dynatron's setups the secondary is wound half CW and the other half CCW with center tap so their primary coil works best at the center of the secondary bifilar coil.

In the photo above there are 16 CW and 16 CCW secondary winding over a 4 turn primary winding to get the 1 to 4 windings ratio. Zilano's latests design also incorporates this windings ratio.

Also notice the tall tower coils that are the secondary output "choke" coils that Zilano incorporates in the latest design. I liked how the output diodes are in water (probably distilled) to cool them down.

Cheers Mike

ps forgot to link the circuit

http://www.energeticforum.com/attach...ranslation.pdf

Hi Mike!

this is not water. its linseed oil. it helps to supress streamers or blue voltage streaks! at high voltage!

Aug. 31, 2011 Zilano resonance led tester

Hi folks!

for those who want to find out whether the coil is in resonance or not. either primary or secondary. here is cheap little circuit. it will light up to show coils is ringing or not!

pic attached

Aug. 31, 2011 Zilano Ouote:

Originally Posted by **drak** 

According to that picture, it looks like your primary has a lot less turns then your secondary. Reverse tesla coil not at work here?

It will work for any circuit be it don or reverse tesla or tesla coil. just make sure cap is of high microfarad with high voltage rating. and it will surely fire the gap.u can use matching cap with primary in series or parallel it will work.

Aug. 31, 2011 Zilano Ouote:

Originally Posted by **drak** 

Nah, it's ok. I'm just struggling here on a time table to save the thousands of the 6.9 billion family members I have that are dying everyday because of lack of food, water, heat, and cool air. I will now switch back to a SERIES spark gap, and continue my work. Thank you for all your help.

Hi Drak!

view this and follow, for u and others too.

## Aug. 31, 2011 Zilano Quote:

Originally Posted by dllabarre

1/4 wave Length 246

Hetz 30,000

Pri. Wire Length 8200

Divisor 4096 (2048 or 4096)

Primary in Feet 2.0

Secondary in Feet 8.0 (x 4 of Primary)

Correct??

correct!

u can also make it 2/2=1 feet then sec is 4 feet.

## Aug. 30, 2011 Zilano Quote:

Originally Posted by **dllabarre** 

Zilano

"the basic key is 246/frequency in Mhz = length of primary in feet"

Example: 246/.03 = 8,200 feet

This formula will result in thousands of feet of wire.

How do you only get 10 or 20 turns bifilar with that much wire?

Thank you

Hi dllabarre!

divide it with 2 and keep dividing it with 2 till u get 2feet of wire to wind as primary

## Aug. 30, 2011 Zilano Quote:

Originally Posted by **vrand** 

Hi Zilano

Thanks for the explaination.

*Is the choke wound over the primary coil as shown in your diagram?* 

And by choke shunt to ground in this diagram?

So there are 3 sets of coils, primary, bifilar secondary CW/CW & and a bifilar choke CW/CCW? Did I get that right?

Cheers Mike

#### Hi Mike!

there is no choke here. choke can be put across output. here r 4 coils

- 1 primary.
- 2 secondary bifilar
- 3 output1
- 4 output 2

output 1 and output 2 are joined parallel for final output.

coils wound over ferrite rings and if u cant find ferrite rings u can use cu coated welding rods in pvc tube and wind bifilar first then secondaries at ends and finally primary in centre. mark leads of each coils coz later they will confuse u if same wire is used. use different colored wire. so identificable.

bifilar is shunted and earthed. lengths must be exact 246/freq in mhz=Z divide z by suitable number so u get 1 feet or so adn make each bifilar 4 ft. if the division is not exact then use fractional part also else coil will be needing caps to match pri n sec resonance.

## Aug. 30, 2011 Zilano Ouote:

Originally Posted by **drak** *Mike*,

Im my previous tests <u>here</u> and <u>here</u> I was using a series spark gap. According to zilano you can't get OU with a series spark gap. I'm still trying to get my parallel spark gap to fire. Those pictures are of a parallel gap setup and I got no results with them yet. I'm still having trouble matching between NST and primary. I don't remember the inductance of those coils right off hand. Matching resonant frequencies is easy if you have a scope and a function generator. Or you can just measure the inductance and use on line calculator. I have resonance between NST and primary, but still parallel gap will not fire. Not sure whats going on.

#### Hi Drak!

u can use series spark gap! coz u r not using nst. u r using flyback. really sorry i just forgot that u r using flyabck not nst. for nst users coz they know frequency a parallel spark is suggested. u just need the trigger here but it must be strong. u can go with series spark gap. use cap after diode and then spark and then primary coil with matching cap.

## Aug. 30, 2011 Zilano Quote:

Originally Posted by **vrand** 

Nice setup drak.

Your secondary windings looked to be spaced farther away from your primary than 1/2" spacing?

Zilano says 2" primary and 3" secondary. What are your coil diameters?

Maybe next add some copper coated welding rods inside the primary? Zilano also says that will get you better results/more amps out of the secondary, as the primary coil coupling to the secondary coil increases dramatically.

What does your LCR meter say is the inductance of your coils?

What frequency are you resonating your primary coil? What are your primary caps values?

Do you have a center tab to ground on your secondary?

One theory with the secondary bifilar coil arrangement with the center tap to ground is to "pull electrons" from the ground connection. Another is that the bifilar CW/CWW creates volts on one end and amps on the other end of the coils. A third theory is that it creates "cold electricity" and the ground and capacitors "converts" the cold electricity to real electrons.

Looking forward to your experiments results, thank you for sharing them over here.

Cheers Mike

#### Hi Mike!

energy doesnt come from ground. ground acts as a drain pipe and if we use choke there we can control the hv voltage. of the secondary coil. and if we shunt it means no resistance to ground then hv is at full peak in secondary coil. its the magic of magnetic and electric fileds that produce amps.

Aug. 30, 2011 Zilano Ouote:

Originally Posted by **drak**Well, I'm still working no positive results yet.

Hi Drak!

use ferrite core copper rods inside primary in a pvc tube. since ur flyback is giving low spark so its not feeding ur primary well. use ferrite to increase magnetic field and u will see a great change. if u can then try to flyback fire with more stronger spark. air coils need stronger sparking so the low current is well fed to the coil. but if u use ferrite rods u will get results.

Aug. 30, 2011 Zilano Ouote:

Originally Posted by **sinergicus** 

Zilano ;

I see in your picture near AC source, the number 100; this is a resistor at 100 ohms?

Also ,how will look like your circuit at pulsed dc?

Now;regarding the flyback driver given here:

POWERLABS' High Voltage Solid State Flyback Driver

I made the following modification:

With original design, my circuit draws at 12 v ,700 ma and gave me in secondary (300 turns of 0,3 mm wire ) a flame between terminals about 7 mm long;

With my modification, circuit worked well too, with less energy draw from battery (around 600 ma). In conclusion, in my opinion the 27 ohm resistor is useless ... can somebody tell me why in original schematic, the 27 ohm resistor is used if the circuit working better without him?

Hi there! Sinergicus!

yes its 100 ohm resistor in ac resonance, the more u load it the input goes lesser.

well u must use heat sink with 2n3055. well base is always given high resistance as smaller base variations produce large variations in collector current. morover the circuit is used for high voltage input from 6-24 volts and 2n3055 cant handle that it heats up. well if ur circuit is working fine and transistor doesnt heat up it means ur feedback has right resistance for base of 2n3055. well u can also try to power it up with 3 volts and it will work too. the basis and the

basic here to have spark. and if u r going for air coils u need stronger spark and if going for ferrite u need feeble spark. u can do that by applying 3-6 volts for feeble spark and 12-18 volts for strong spark.

Aug. 29, 2011

**Zilano** 

50 hz resonance input in pico watts output in watts

Hi folks!

### **AC 50 HZ RESONANCE!**

must view

easy solution showed i posted in previous posts. here is screenshot. pic attached!

Aug. 29, 2011

Zilano

Quote:

Originally Posted by **squire042** 

Nice, thanks for the info. I am curious which diode you are talking about? The one after the NST? I noticed the same, the spark gap creates quiet the field that influences the environment around it.

Hi squire042!

yes diode after nst! andif using flyback read below

well if one is using flyback with internal diode then do not use diode in schematic. the flyback is old one without diode then a diode must be used

Aug. 29, 2011

Zilano Quote:

Originally Posted by **boguslaw** 

zilano

What I mean is that new CRT flyback has internally HV capacitor, so it is already resonant circuit.That I saw on russian page.They stated internally flyback is like in picture (when flyback text should be replaced by primary/secondary windings)

That should be easy to check with RLC meter ,right?

Hi boguslaw!

yes right the flyback is resonant! but it has thin coils so amps r missing. thats why we feed flyback high voltage as power source only to resonate with thicks coils to harvest amps loaded voltage! thats the secret else sr 193 or kapanadze or kapagen people have not used coils after mot

#### or flyback.

well if one is using flyback with internal diode then do not use diode which i mentioned in schematic. if the flyback is old one without diode then a diode must be used according to my schematic.

well a flyback is must to trigger the primary n secondary. in my schematic after spark gap is primary(trigger coil sec/4) and then shunted secondary 4\*primary) then above that harvest coils in parallel for output.

## Aug. 29, 2011 Zilano Quote:

## Originally Posted by sinergicus

Hi guys I am new at this thread...I just started to collect informations contained in this topic, to study and try to understand it...

Unfortunately some of Zilano attachments was removed .....

Zilano If you do not mind can you let me know why this happened?

Thanks...

hi sinergicus!

well sometimes bad things happen when we dont want em to happen! same thing happned! at wrong time!

many forum members r having schematics of mine. ask em to help. my comp been formatted so i dont have older schematics that i posted b4.

welcome to thread!

## Aug. 29, 2011 Zilano Quote:

#### Originally Posted by ewizard

Ah Zilano, Where have you been all my life? ... oops sorry I got lost there for a minute the question was supposed to be where have I been the last few weeks. I totally missed this thread until today. Nice work here and congrats on having a home powered with OU and off grid! I do hope you will stick with us until there are some replications as it has happened so many times in the past that some one has something but disappears before any one gets a replication. I always worry that anything less than full disclosure of what you know may put you at risk of visits from bad people.

You had posted a circuit in post #463 but it does not seem to be there. Can you repost that or does anyone have that diagram?

#### well all da credit GOES TO ONE MAN HERE AND THATS MIKE!

He is the one who collected the material i just winked at him and he did all the harvest! CHEERS! TO MIKE!

welcome back! to forum!

enjoy ur stay!

Aug. 29, 2011 Zilano Quote:

### Originally Posted by **LtBolo**

The new circuit is very interesting, Z. A primary, a resonant secondary which is completely unloaded, and then a pair of tertiary coils paralleled to drive the load. You don't mention the tuning of the tertiary coils only the wire size, so I am assuming they are not resonant and simply pushing displacement current into the load. Very curious.

I did some experiments with similar arrangements, but without the resonant secondary stage. I was able to convert spark discharges into into brightly lit halogen bulb on the output stage, but never saw anything I thought was above unity. I can see that the resonant secondary may change the game though, and I'm looking forward to trying it.

Hi Ltbolo!

yes the coils r resonating! but use formula 246/freq in mghz=X divide X by suitable value so u get length suitable for turns say eg. 1.5ft and use scondary 1.5\*4=6.0 feet even a little deviation of x forces u to use caps else u dont need caps.

Aug. 29, 2011 Zilano Quote:

#### Originally Posted by **iharmon**

So... I got my garage cleaned out last weekend. That's my progress so far. :-) Actually, my garage is a basement storage unit in an apartment complex. So I'd like to add shielding for my project right away. What's the best material to use for RF shielding?

J

#### Hi jharmon!

the best shielding material is fine wire mesh. but be careful coz since its metal it must not touch any of ur high voltage spikes or direct contact. first use with open circuit when its working u can enclose it with a metal box ensuring no shortciruit of hv with the walls of the box (kapanadze green box)

## Aug. 29, 2011 Zilano Ouote:

### Originally Posted by dllabarre

Series capacitor?

Your picture of circuit below shows a parallel capacitor across the Fly Back output.

Is this series capacitor in addition to the parallel capacitor that is already shown in your circuit picture below?

Thank you for clarifying.

#### hI dLLABARRE!

well the right way is to put cap in parallel so frequency adjustment according to the frequency of nst or flyback can be matched. when we r not sure of the frequency of flyback then we must use series resonant circuit and just trigger it by charging a cap followed by spark gap and capacitor in series with primary coil. this makes us free tobe dependent on the frequency of nst or flyback and circuit oscillates according to it natural frequency. in this case waveform is not a standing sine wave its like spikes standing on resonance and they r current spikes and have to be collected using caps after secondary that is filtered charging of caps and the dc output.

when we use it in parallel then waveform is good and sine and can be step down to suitable usage either by using a choke or by using turns of coil.

# Aug. 29, 2011 Zilano Quote:

### Originally Posted by **boguslaw**

I've found on russian site something interesting which needs confirmation. They posted schematic of TV flyback, the newer one with built-int diode. They stated it already contain HV diode and capacitor. If that's true some effects could be obtained just with flyback, spark gap and primary of transformer, when matching resonant frequency of flyback and matching primary to this. I'm still searching for a way to measure length of primary and secondary of flyback or car ignition coil for purpose of 1/4 wavelength resonance.

Anybody has idea?

# Just my poor two cents

# Hi boguslaw!

well all new CRT=CATHODE RAY TUBE to and computer flybacks have hv diode built in the red wire with rubber cap in output and this is an advantage where as capacitor acts as current limiter, we can make flyback fire from 1.5 volt to 12 volt by using 2n3055 by winding primary and feedback coils on one limb of flyback ferrite, older tv flybacks didnt have hv diode but they used it externally they r like long tube 2-3 inches look like an elongated ac fuse or glass fuse.

to get power from resonance fly back is just use to tickle and trigger resonance and large harvest can be obtained from secondary directly or indirectly(step down) from same cored coil.

when we use parallel cap across primary then we have to match primary with nst/flyback. here waveform is balanced sine and at resonance its a pure standing sine wave. in case of nst we know frequency where as in case of flyback we dont know its frequency unless cro=cathode ray oscilloscope or lcd oscilloscope is used to measure its frequency. but coz of high voltage protective leads are used for measure else scope gets **destroyed**.

WE ONLY USE FLYBACK TO TRIGGER PRIMARY. FREQUENCY OF FLYBACK HAS NOTHING TO DO WITH FREQUENCY OF PRIMARY WHEN WE USE SERIES CAP WITH PRIMARY. WE ONLY THEN NEED TO MATCH PRIMARY AND SECONDARY FREQUENCIES.

dont go for car coil coz it doesnt have ferrite core it has soft iron core which will heat up at high frequencies and ultimately melt down.

Aug. 29, 2011 Zilano Ouote:

Originally Posted by **nico** 

No more than 4kV, I used 8Kv, my computer and my tv has gone mad, the spark has influence on Them

I belive that diode must be there.

Hi Nico!

yes a diode must be there coz we dont need a trigger with constant variable supply. we need triggering supply and diode helps to get that trigger supply. Rf affects all electronic equipment. so switch off all ur electronic devices when performing trials with flyback and tesla coils. voltages r dangerous keep safe!

Aug. 29, 2011 Zilano New Arrangement For Coil With Low Input

hI FOLKS!

pic attached. but read this first.

HERE IS NEW ARRANGEMENT FOR LOW INPUT. HERE WE JUST TRIGGER RESONANCE SO WE NEED JUST FEEBLE SPARK TO GET COILS RINGING. OUTPUT IS NOT aFFECTED AND HIGH INPUT NOT REQUIRED COZ WE R USING FERRITE CORE OR RODS. AIR CORE

COILS R DEPENDENT ON HIGH INPUT SO MAGNETIC FIELD PRODUCED IS STRONGER. HERE FERRITE STRENGTHENS THE MAGNETIC FEILD SO LOWER INPUT AND EVEN A FEEBLE SPARK CAN TRIGGER RESONANCE. USE PRI 1/4 OF SEC. AND U WONT BE NEEDING CAPS AND COILS CAN BE MADE FROM ORDINARY THICK WIRE. BUT OUTPUT COILS MUCH THICKER TO GET MORE AMPS.TRY WITH SAME WIRE ALL COILS FIRST. WIRE MUST BE PVC COATED. IF LENGTHS R USED IN 1/4 AND 4 RATIO U DONT NEED CAPS. IN CASE U DONT GET IT RINGING THEN USE CAPS. THE SHORTED LENGTH IS REPLACED WITH CAP across one coil of bifilar see 2nd pic.

Aug. 28, 2011 Zilano Quote:

Originally Posted b Do you mean:	y <b>drak</b>		
Primary Secondary	_ /  = X ///  = X/4		

Won't that give us a resonance at a 1/4 harmonic of the primary? We would still have to use caps right? Changing the lengths and size of the wire will not make them resonate at the same frequency. Example:

Primary: 246/.03 = 8,200 feet (for 30khz)

Secondary 8,200 / 4 = 2050 feet which gives us 120khz resonance. We would need caps to bring it down to 30khz. Unless the trick is to use a harmonic of resonance of the primary.

Hi Drak!

well primary is 246/.03 and sec is 4 times of primary. or follow simple rule sec 4 times of primary and primary= secondary/4 and compensate with caps.

we can override the lengths and just keep turns ratio or primary and secondary in 1:4 ratio eg. if length of primary 5 turns then sec is 20 turns and if using bifilar then 20,20 turns in each limb of bifilar. or 10,10 turns in each limb of secondary bifilar.

also we can use formula primary=n turns and secondary 2n. thats is even multiple of turns in secondary

it will coz here at secondary we have two tesla coils back to back and their bases earthed so it will resonate at 1/4. and if we dont earth the middle of bifilar then it will resonate at 1/2. when a tesla coils is earthed at base it resonates at 1/4 and if not earthed it resonate at 1/2.

Vrand
Dynatron's Don Smith Design Notes
Google Translation

**Dushina NA 23.02.2011g.** 

By neonniku.

Detailed analysis of the circuitry Bertonievskogo neonnika, experimental verification of the conclusions of the analysis and confirmation of the findings of this Mrbasil information as an output signal that indicates neonnika output voltage is given by the sine of the seventh harmonic frequency. This means that the output winding BB trance operates in samorezonansa excitation pulses at a frequency of 7 times smaller. This work provides a guaranteed neonnika extinction of the arc discharge and a maximum power level that is a necessary condition of the generator. Here you have neonnik and its significance for Donovskogo connection of the arrester. So check out his neonnika whether he needed.

Basic requirements and adjustment: a scheme to provide neonnika adjust the pulse width of  $1 \ 7$ povtoreniyai period less set a pulse width of the maximum amplitude samorezonansa output winding, the rate should be about samorezonansa 220kgts plus or minus 30kHz. Similarly, the maximum amplitude of the set and repetition rate, it should be 7 times less than the frequency of the BB samorezonansa coil. Then adjust the R2 1S2 on the frequency of BB samorezonansa winding. After this, a frequency output samorezonansa BB winding circuit is configured S1L1, which should thus be a central part of the A2 stock for frequency control circuits associated with respect to the frequency samorezonansa. Reserve adjustment of plus or minus 20-30kHz on the average of input - output A1 to A2. The final adjustment is made by running the generator for maximum displacement of L2 in the glow of neonok A2 halves or by the maximum voltage on C3 at the maximum rate of charge C3. Since we need to maximize the magnetic field on the A2 is set preferably to gauge the magnetic component of the wave. Neonka will glow and the electrical component. So if neonka shines with might and main and generator does not work then a magnetic component of the wave has the intensity necessary to separate the bundles of radiantelectron capture radiant and magnetic field of the current node. Scheme BB converter can be anything, just to make the necessary adjustments and the required form of output current and powering from the battery instead of a single key to reliability is better to put in two parallels. Low-voltage switches are not used, since they limit the emissions of the back-EMF. For maximum energy of the primary connection to the explosive trance must be inserted in the secondary. BB transformer count on the necessary power for operation from 12V, which will allow to increase the frequency of the output transformer samorezonansa neonnika to the desired value. Desired frequency samorezonansa BB winding without the possibility of calculating the need to achieve experimentally. Not bad to limit current neonnika for more stable operation of the arrester. The best option of course to get ready neonnik with the necessary parameters. As it turns out there is such SNGovskie. Check. Knowledge comes in rabote. Uspehov. And not with zhlobtes infoy on such generators. The way individuals in the knowledge of hard and long. Together it is possible more quickly find the necessary knowledge. Only massive and rapid adoption of the generators will enable mankind to save themselves, the habitat, to preserve personal freedom and hence the opportunity for spiritual growth and human life and not life-managed herds with a handful of semi-animal "gods"-pogonychey. For now, "chosen by God" to do everything all the other nations to turn into a herd of semi-animal-govim themselves become gods so that the current scientific knowledge of the closed main mass of humanity can provide right now. A striking

example of Ukraine. What it was before the collapse of the Soviet Union and what it is today and what's going on here now. Other worlds, such as real as our world and if mankind will continue to fall spiritually, and thus grow in evil that could destroy us and the aliens from the worlds of light, because the person has by virtue of their body structure and interaction with matter, a huge energy potential, not only in the material world but also in more subtle matter. That just now, saying forumskim language zafluzhivaetsya worldwide, as well as clear information about UFOs. 've Seen. Fly boldly, openly. And not all alien.

Here, a good scheme for different needs:
RadioKOT> Contest! >
Built-in universal control board laboratory power supplies.

Variants of the key management schemes with adjustable frequency and pulse duration.

Scheme to limit the voltage and current when powering on the 220 instead of P1 220k 22k to put

Scheme to the data boards Don. C3 - Capacitor bank 8000mkf to 2000V in this performance as in the photo. When charging a traveling wave, they are charged sequentially. Therefore, the resulting capacity to 2mkf 8000v

End of part 4 of 4

Aug. 28, 2011 Vrand Dynatron's Don Smith Design Notes Google Translation

Dushina NA 23.02.2011g.

The principle of increasing the capacity of electrical generators in the movements of the Don.

Take for example the battery to 12V and a capacity sufficient for operating the source at the HV generator start time. Making or buying power, respectively, HV circuit including a spark gap and operating

in our case at the frequency 30kHz. According Donovskim arguments for increasing the voltage oscillation power fluctuations increases quadratically, as well as with increasing frequency. Therefore, increasing the voltage fluctuations HV source with roughly 12c do2400v swinging and oscillating circuit to the voltage corresponding to the power performance, we will have the power of these oscillations in the ideal of 40,000 times greater than 12 volts. By increasing the frequency of such a 30kHz to 30MHz (for ease of calculation), ideally we will have more power fluctuations still a million times. But this is an ideal. In reality, these coefficients decrease sharply due to a number of reasons but remained as we see enough to spare. To increase the tension Don uses a high voltage primary waves with a frequency around 30 kHz (or rather 210kgts, but more on that later). For frequency conversion from 30kHz to 37.5 MHz so even with the increase in capacity is used spark gap. The basis of the generator Don got the idea of Tesla's patents on the feeding of electricity consumers with increasing power output through the spark gap, including the usual network of transformers while providing a pulsating current flow through the gap and the load in one direction at a complete elimination of the reverse currents. Here I say: Well done GREAT

#### **MASTER TESLA!**

Frequency conversion to 37.5 MHz and the resonance pumping up the voltage arrester constrained due to the way in turn is a quarter wave piece of wire coil L1. This is a quarter wave resonance (for a better understanding - unipolar) electromagnetic standing wave pumped by a sharp edge of the pulse with the protector. To reduce losses in the coil L1 from the large reactance at such a high frequency is used as a compensator reactance capacitor C1 (and not to the pump resonance 210 MHz mussiruemogo sites for disposal to the side). So from its high-frequency parameters depends on the quality of compensation and thus the quarter-power vibration resonance. Take this seriously because it is the foundation of the power generator. No wonder Don calls a bunch of S1L1 reactor. The same requirements and the capacitor compensation reactance coils A2 - C2. Not complied with this requirement will make the job of the generator is not as powerful as a battery hrenovenkoy batteries. Since the electromagnetic standing wave in contrast to the electrostatic component has a magnetic coil that is in A2 so even with a large inductive reactance compensated induced current. Singles C1 at teslovskom connect to charge the battery C3 entry of. Pulse at the output of an isolating trans load was 170 ohms at 600 volts amplitude and duration is almost identical to the width that is above and below is equal to  $1 \setminus 10$ periods of 50 Hz, which is many times larger than the pulse discharge most likely due to the decay time of the standing wave. So do not forget about the form of the output current to be issued to the generator, and the harmonization of the input isolation trans. Take measures to avoid overloading the output winding of the insulating power of trance, trance or your insulation will burn a blue flame from the data generator for generating a cold current of high power. Dimensions of the coils: R1 - 4vitka on plastic pipe 50mm diameter core - 3mm, stranded. L2 - 40 turns of wire diameter 2.5 - 3 mm, winding length of 25 cm, diameter reel - 75mm. A2 wire is cut in the center of the coil unrolling on either side of two turns and is connected to the terminal block. Connected to the same ground and that part of the scheme. Lengths of A1 and A2 are from the terminal block and correspond to a 4. Measure accurately. Current circuits: 1) Battery neonnik. 2) secondary housing trance neonnika BB - P1. 3) A2 - Bank of C3. 4) Bank of C3 loading or self-trance. 5) The output winding insulation of trance - the load. Gap arrester should provide estimates on 8000v C3. Details and components of the generator have a few appointments so maybe there is not our rolls. Set what should be or with the same parameters. Isolation trances connect with compensating capacitors as in other patents of the author. Donovskie calculations and the theory of the Internet is so abundant here do not bring it.

My box nikradik@meta.ua, If anyone has an interest to fund such research and development as generators of various capacities and sizes, and motor-wheels and much more on this subject for the production including anti-gravity submit proposals well in PM. Nicky forums nik11, grafit, nikolai. This information is open to any use other than patenting. The generation mechanism is declared me my intellectual property only to protect against woodpeckers, patentovateley, for that which is vital for the survival of humanity can not be patented and because of this is derived from mass use. In Ukraine, a small company officially releases electromechanical generators with capacities of 1 kW, 10kW, 10kW with an initial start-up from a small battery. In Russia too there are similar developments. But they are difficult for home-made. Donovskie development easier, and safer, and more powerful. Considered here, too, Don generator is quite difficult to manufacture because of the specific ratings of capacitors and diodes in such a large voltage, the acquisition of suitable neonnika. But if you can buy everything you need then this generator is what you need for the house and not only for the home. At the Don is more simple to manufacture and the details of the generator. That it applies where the ignition coil. Is made, check it, lay out the result.

Don came up with a great way to induction of the longitudinal electromagnetic wave in the secondary with a large inductance with the coil inductance compensation capacitor of large capacity. What reduces the reactance compensated for the induction coil in its longitudinal electromagnetic waves. Therefore, we can and make the TT such a method to issue the energy is driven into the secondary electromagnetic wave and either directly or through an additional coil removal remove her energy. Dynatron see and do. We also have a Smith.

Experimentation with opposing coils and bifilyarami showed in contrast to the secure version of the coils Donovskogo really harmful to the health of some types of winding, forming a vortex fields like energy centers of biological objects. Bought into the simplicity of Romankorpovskogo option, but "teacher" members of the forum memorized as a fiddler on a method so do not tell you how, then do not say that and that's what you've done before now and nafig no need to do differently instead of a simple and clear explanation of the main parts manufacturing - inductor coil connection and pairing. Thing is. And now is the "doctrine" is not on the initial hundreds of kilowatts and the withdrawal of the TT 200-300W, but this already has enough on the Internet. Although the method of generating interesting and easy it is possible for work. Choose a time to try to understand. Remembered Romankorpovskih "exercises" because no good sorry wasted time. Although in fairness say exploring different bifilyary several enlarged their knowledge that in the future prove useful in the manufacture of gravitsapy.

Fig1. circuit board with a split coil Dona additional damper diodes.

Photo1 photo2 and generator

Such inclusion of land not tested. By Don and the logic device is connected to the center of the earth coil L2. Notice the way of winding the throttle, also seen the number of layers and turns in the layer.

Pic2. Example of calculation of the resistive divider to match the load (note the current resistance to cold is not so current constraints it will be the same as that with a divider that without it), So do not draw very taken with gourmet site.

Ris4.Primer connect to more low-voltage load and enable Teslovskogo gap with the same gourmet site. Resistor divided voltage only. For the cold resistance of the current obstacles are not present. 0.047 microfarads capacitance C2. The inverter can connect almost any energized circuit so that current cold walked through the keys and just a primary. In my opinion the best option is the modulation neonnika and isolating trans.

The necessary tables for the calculation

End of part 3

Aug. 28, 2011 Vrand Dynatron's Don Smith Design Notes Google Translation

Dushina NA 23.02.2011g.

We continue on. Donald, studying the works of Tesla, has studied the properties of the cold current and the methods of its production and decided to swing by this current primary of the transformer (which he called insulating) to cause induction in the secondary winding of the transformer, which will be induced already required us to the current of electrons. When you understand the processes occurring interactions of a positive current and a cold electron current from the back emf induced current in the primary winding of the secondary Don derived formulas to calculate the frequency and output voltage of the secondary. Coordinate output voltage of the generator current of cold with the input transformer or converter by a cold current property very weakly interact with matter by using a voltage divider of resistors of high, which makes it very easy to connect to the source of the cold current of almost any trans or converter. The maximum cold current remains practically the same. The biggest mistake beginners in this field is viewing all possible variants of such generators with vdolblennogo us with school-the notion of a stream as a stream of electrons. In reality, as it turns out there is a current of positive particles. The faster you will acquire it more quickly get working BTG. (Beztoplivny generator).

A1 pumping standing electromagnetic wave with a high magnetic field strength at the positive polarization of L1 to break in time for the "pull" of the positive charges in the mode of resonance, and creating conditions in A2 by the compensation inductance L2 of the upper half for the induction of an electromagnetic wave in it with minimal loss of power Don has achieved the required strength of the magnetic field induced by the current wave of nodes in A2 to capture the positive charges. In a standing wave as we all know the form of voltage and current nodes, where the current and voltage almost pass by value in each other. Therefore, the current node at resonance is quite a powerful magnetic field. In essence, this powerful magnetic trap in a mode of resonance has a lot of "space" to capture particles. Connecting a bank of capacitors, designed by Don Charging a cold shock to the traveling wave regime to A2 (traveling wave is formed in agreement with the output impedance of the source-impedance load) Don received a transporter for a cold current in the form of a traveling wave in the A2 and the capacity for accumulation of power in the form of battery bank of capacitors C3, a traveling wave.

In zagashnikah site is working but there is also a flood zamylennye generators. 101 testatiki group of researchers to understand all this, and created his own version testatiki without disks. For the generation of data ihnim begins in excess to the TT, which is the basis konvergatorov, the threshold in the 3000V. On this threshold mentions dynatron. This threshold is shown in experiments on board the Don. Gray has also discharge the capacitor is charged up to 3000V. Ie splitting neutralized the radiant radiant electrons and the electron is in excess of the threshold potential in the surrounding environment, the work item.

For a more complete load carrier of the magnetic traps traveling wave in the cold shock A2, Don uses the same mechanism as in Gray: - positive polarization of the working body of a high voltage in the period and wave dorazryadny neutralized during the discharge, freeing positive particles charging in Gray mesh and a This generator - A2.

Scheme of the board with photos of a DC generator or a pulsed cold current (the organization of intermittent sparking process by modulating the source HV) with a current of 3A and above with an exact copy 8000v boards including the connection of the arrester. When connected to a spark

gap Tesla output current of the diode at the output of A2 is increased to 20 - 30A. A simple show of voltage to the desired value by applying the relevant parts of the generator output power can be increased up to megawatts. The application of this scheme to pump through the gap of appropriate power isolation trance - even more. The potential of this scheme is amazing as well as the talent of its creator.

The layout of the scheme and selection of sites made by Don for maximum ease of assembly with minimal configuration for the generator manufacturing a simple man without any knowledge about the way his work so requires accuracy in copying.

In the manufacture of generator according to the principle - the fact that there is a need to adhere to the size and proportions of the installation and following rules.

- 1.Neonnik Bertoni as in the photo board in its parameters and circuit performance is ideal for connecting the arrester on the board as to Smith's "soft" double-pump coil. Circuitry and a job description for independent manufacturing neonnika will be filed at the end. Another type of neonniki not form the necessary impulses will not work. In the absence of such neonnika gap must be connected to the scheme Tesla: neonnik Diode Capacitor gap the coil L1. Neonnik or other source of viral load in this case must provide for synchronous operation (operating at full capacity), operation at each pulse of power BH (neonnika) that requires more power from this source up to 150 200 watts and voltage of 3500v and above depending of type of your calculations to charge C1 0.2 microfarads to the breakdown voltage of a single pulse. Otherwise, the instability of the discharge lead to large fluctuations in output voltage or pulse output with a frequency of discharges.
- 2. Arrester is better to use gas-filled lightning, designed for high current and voltage providing a specified output voltage. In his absence make adjustable air gap from the fact that there is a connection given the large stranded wire coil L1 directly to the conclusion of the arrester. The breakdown voltage in the air on the found data about 1Q to 1mm gap. To improve the stability of the discharge, use invented my way around the location of the discharge gap discharge lamp with one or two sides. Also for the stability of the discharge electrodes should have the greatest possible radius.
- 3. The wire from which the L1 is made to be stranded (primary tube 5 to 50 turns (chosen at setup) litz wires 50 enameled wire of 0.5 mm. Secondary housing, air, 75mm 2x16 turns of 2mm pitch 5mm) and have a maximum conductor cross-section (optimal for the board 3 mm) allows your design to excite the most powerful standing electromagnetic wave (with the length of the wire A2 = 8m, the frequency is 37.5 MHz). The studies were conducted only with the recommended ratio of the lengths L1 to L2 as a  $1 \setminus 4$ . L1 is the length of wire with the connecting wire to the junction with the C1 and the wire must be continuous with no joints and ration to avoid reflections of the wave.
- 4. Capacitors C1 IS2 apply not only to set up a resonance L1S1 and A2-1S2 (crushed concrete from large imbalances of capacity and inductance to eliminate vibration at the resonance frequency) at a frequency of the seventh harmonic (210kgts,) on the frequency of power BH (30kHz), which is not used only to improve the inductive coupling between coils, but for the fullest compensation reactance katushekL1 and A2 for a smooth passage through them of an electromagnetic wave with a frequency of 37.5 MHz. Without such compensation the same way you get a standing wave, but the density wave electric field is not electromagnetic with the corresponding result.

Therefore, capacitors must be calculated on the operating frequency. Otherwise the momentum will lose a lot of power for the induction of A2. that is expressed in a squalid charge C3.

- 5. Remember one of the main rules in the performance of this device: chained pump standing electromagnetic wave in the coil L1 and L2 excluded any reverse current as a quenching in varying degrees, the generation of energy up to a full stop it. The use of equalization resistors on the chain of diodes is not set, nor desirable, and long chain of diodes. It is better to connect them in parallel as the Don but not consistently. If you Teslovskom chain performance gap you have any noticeable fluctuations in A2 frequency 210kgts of the significant increase in power of the spark you need to shunt damper diodes both polukatushki A2.
- 6. Diodes in the respective circuits to withstand a minimum of two times of the rated voltage overload, and preferably radio frequency. Diodes used in a small footprint. Like Don. For example the length of the line common to 1000V Diode in a 25-30kv line will be about 50cm. Not only that, this will make a substantial length of the mismatch between the A2 and C3, the bank, but will disperse into the environment most of the trapped magnetic traps radiant traveling wave of the weakening of rassoglasovki for these traps. Just when the diode at a constant current of cold continuous frequency properties fade into the background. And no equalization resistors for the cold current is a fault. Experiment someone diodes in excess.
- 7. Bank of capacitors C3 must be installed in the form and proportions as in the photographs in compliance with the lengths of the wires from the coil to a bank and between the capacitors of the bank, this will depend on the degree soglasovki A2 and C3. Its design concept shows the organization of the bank charging capacitor C3 in the mode of traveling electromagnetic waves is possible with the full input resistance soglasovke C3 impedance A2. For traveling wave capacitors bank really connected in series. Without all the equipment in detail why not explore in detail describe this process as long as I can not. All lengths of connecting wires from A2 to the output pad to expose the proportions of the photo. It seems that after C3 length of connecting wires should not play a role as radiant in the capacitor is electrically connected with the charge of another plate Conder but better to be safe. Critical length of the wires I did not check.
- 8. A very important role in the stability of the amplitude of the electromagnetic wave is the output choke, or rather the quality of its performance for the operating frequency (37.5 MHz I). It must reflect the maximum wave energy must therefore be made by all the canons of manufacture of such reactors at such high frequency and output current on the principle of minimum interturn capacity a maximum inductance. Otherwise, the amplitude of the waves in A2 will depend on the load with the consequences. Judging from the photo choke diameter 35-40mm, width 20mm winding, 6 layers with 10 turns, wire diameter 1-2mm.
- 9. When you connect the output (isolation) trance directly to the output terminals with an appropriate input voltage and power with a simple modulation of meander ext. generator with a frequency source network BH (neonnika) you will get the output square wave AC 50 Hz. This will provide an opportunity to get rid of the inverter and battery after variaka. Generator output behaves like Don said: the battery with constant charge. This board is the most versatile for use, so many loads of connectivity options, including quite exotic at first glance, the options with resistive dividers. As you can see in this generator, all calibrated, subtly and gracefully done. Well done GREAT CARPENTER DONALD SMITH!

# End of part 2

Aug. 28, 2011 Vrand Dynatron's Don Smith Design Notes Google Translation

Dushina NA 23.02.2011g.

Supplemented with the main conclusions of the work and construction of the generator by Donald Smith on the circuit with a split coil with reduced below the photo. May God grant us all the knowledge to look into the book and see fig.

Testing of purely materialistic version of the generator led to results that have changed my views on electricity.

Open here to see the principle of this type of generator is based on the properties of standing and traveling waves of electromagnetic separation of neutral and charge cords radiant - the electron in a huge number of those present in the environment, with a high voltage of at least 3000V with the subsequent capture of magnetic traps radiant current nodes of the longitudinal electromagnetic wave mode resonance in contrast to the author's concept of left-and right-spin electrons is my intellectual property and can not be applied to patent by third parties and given to the free use of all of humanity. Donald Smith, according to the technical design of the bank of capacitors C3 as load coils L2 guided by the properties of a traveling electromagnetic wave but sounded a slightly different mechanism of generation. In fact, Donald Smith announced as a basis for the separation of the generator on the charges in his expression of non-ionic charge of the electron and C3. I defined the mechanism of capture and transportation of the magnetic fields of the current node of the longitudinal wave mode resonance at the correct polarization process, positively charged particles loose from the radiant after using the high capacity of at least 3000V of them neutralized the free electron. Since the particles of the radiant is very weak for small sizes interact with matter that they generate little stream, you must still hold it in Windows Explorer. It must be remembered that the isolation of constraining the electrons to the radiant barrier is not. Only with the help of electric and magnetic fields we can manipulate the particles and their radiant shock. Therefore, the energy barriers in semiconductors will be in the case of radiant power to fulfill his role, which can be used in the circuits of radiant power. Resistance is only possible to manipulate the voltage. These are the basic properties of the identified yet radiant.

Before you begin the manufacture of generator remember the most important rule when working with voltages and currents boobies do not last long, learn the rules of working with high voltage.

Before you begin to familiarize with the circuitry of the generator should be familiar with the principle of this device. Not understanding the principles of operation of these generators is very hard to get it working and only the wise decision of Donald Smith to create a generator of finished units available on the market makes it possible to build it even a schoolboy. A deal in principle of what he had not been working with the machine much easier.

To understand the processes occurring in the generator must understand and accept that in addition to the negatively charged electrons even more widespread phenomenon is positively charged particles with sufficiently small size that a stream of particles with almost no loss, as the Tesla, passes through the planet. The source of these particles are stars and the sun in the first place. This phenomenon is called the Tesla radiant. Current caused by these particles called cold. Cold because the particles are too small radiant mass, even against the electrons and therefore can not be transferred to the atoms in the collision of matter no matter how significant the moment either. Tesla called his greatest discovery of the radiant opening. These particles could easily be split with ether, the residue reactions solar reactor. To set a specific origin of these particles requires fundamental research, for our purposes will suffice and that the concept around in the environment is a positive charge carriers is much smaller in size and charge versus the electron. It is obvious that some of the particles passing through the radiant substance or of the effects of electromagnetic fields is stalled and must interact with the negatively charged free electrons and ions partially or completely neutralizing them. Now it becomes clear why indoors where there is no ionizing factor electrons and negative ions emitted by the ionizer quickly disappear, their charge is neutralized by the inhibited part of the radiant. Here, words pop up on the Don "nonionic" (ie, neutralized) electrons, which are separated by its dual coil. Electrons merge into the ground and polarize one capacitor plates, the second positive particles coalesce. In this scenario, incorrect polarity processes in the nodes of the circuit will also lead to full inefficiency of the generator. As you can see the most "wild" to the ears of novice "free energolyubov" Don remarks on the principle of operation of the generator in learning more about becoming quite real. At least for me at the beginning of the study generator is all the contradicting statements of Don pledged knowledge are not taken for granted and perceived as not truthful. But the elegant building maintenance scheme with excellent clear on the purpose of engineering solutions, one bank of capacitors which is, has shown that this generator is in contrast to other mass must be working for with such refined technical solutions would never have been used in the chippie. That was confirmed in the future but not at the beginning of the study estimated the type of charge carriers.

End of part 1

Aug. 28, 2011 Vrand 001Lab Dynatron early comments on his design back in May 2011: Google Translation

#### **Questions:**

Please tell me how many of the items on your reel fits into the description of the Smith and / or what is the difference?

- 1. The length of the wires of the primary exactly 4 times shorter than the length of wire in each half of the secondary.
- 2. Search neonkoy max. glow in the secondary housing, the conclusion at this point and rollback unnecessary (it is not clear in what mode?).
- 3. The resonant frequency of the primary and the secondary is equal to the frequency of pumping strochnika.

4. Weekend Conder geometrically in parallel, and in fact consistently (there generally is not clear).

Thank you for your work and the openness of the people!

**Answers:** 

Hi!

- 1) yes the length of the inductor is equal to the quarters of the coil, ie length of both halves it must be to agree on a quarter-resonance
- 2) Search hgfdbkmyjcnm set quarter-resonance neonkoy not necessary, if the length of the primary equals the length of the secondary, well, if you want to do it, then fold the capacitor with vtrichki and make sure that the ends of the coil a maximum of
- 3) The resonant frequency of LC resonant frequency is vtrichki LC circuit of the primary, the resonant frequency of the transformer assemblies do not have anything to do with the frequency of the primary and the secondary coil itself Smith. TVS simply pumping, ie charges the capacitor outline, which is then discharged through a spark gap in the inductor
- 4) Output Conder included so that the total capacity was approximately 8 microfarads and voltage 8.2 kV.
- 5) The capacitor is switched on all the secondary
- 6) reactor at the midpoint of the coil is mandatory (see diagram that I post), without the choke coil is not free rezontorom Well, for starters I think is enough ...

Aug. 27, 2011 Zilano Ouote:

Originally Posted by **LtBolo** 

Don't you mean 246/frequency in MHz?

Hi Ltbolo!

sorry misquoted!

error will be corrected.

thanks

error has been corrected.its 246/freq in mhz

# Zilano Get The Coil Ringing And U Will Be Gigling!

hI FOLKS!

for starters!

the basic key is to get resonance. get it anyhow. the basic key is 246/frequency in Mhz= length of primary in feet use secondary 4 times of primary length in feet.USE BIFILAR 1 feet= 12 inch

no of turns=length in feet/2\*pi\*r PI=3.14 OR 22/7

where r is in inches=outer diameter of pvc tube/2

we can override the lengths and just keep turns ratio or primary and secondary in 1:4 ratio eg. if length of primary 5 turns then sec is 20 turns and if using bifilar then 20,20 turns in each limb of bifilar. or 10,10 turns in each limb of secondary bifilar.

also we can use formula primary=n turns and secondary 2n. thats is even multiple of turns in secondary

it will coz here at secondary we have two tesla coils back to back and their bases earthed so it will resonate at 1/4. and if we dont earth the middle of bifilar then it will resonate at 1/2. when a tesla coils is earthed at base it resonates at 1/4 and if not earthed it resonate at 1/2.

then u will be needing lesser capacity caps to match resonance of nst to primary and to secondary if u use parallel spARK gap and if u use series spark gap then u only have to match resonance secondary with primary.

and morover if u dont get proper caps then resonance can be matched with sliding primary inside secondary and if that dont work then try caps to match resonance.

GET THE COIL RINGING AND U WILL BE GIGLING!

Aug. 27, 2011 Zilano Quote:

Originally Posted by **vrand** *Hi Zilano* 

So you wound your 16mm coil by way of #A (spiral) or #B (flat spiral) in the photos above?

Don showed the way of Tesla! Looking forward to your AA battery design!

Cheers Mike

#### Hi Mike!

dons circuit can give u much more mega watts!. well my coils r not much that thicker as they used to in my earlier experimental design. am using multi tap with multiple tapping from same dons coil. we can copy source and feed multiple outlets and source keep on providing its like getting power from same source without depleting it. am working also with tower arrangement of don.

# Aug. 27, 2011 Zilano Ouote:

Originally Posted by **vrand** *Hi Zilano* 

Yes I remember the 5 turns CW and 5 turns CCW center tap to ground bifilar coil L2 secondary windings, 16mm (0.63" or close to 5/8" wide) secondary flat copper strap.

You mentioned 4 turns per 1" for the secondary? 0.63" wide can only fit 1 turn per inch?

- A) Do you wind your 5 turns secondary this way?
- B) Or do you wind the secondary this way, flat spiral?

Cheers Mike

well i just went for the required output voltage to suit me so i used caps or diodes or resistors or chokes for the 250 volt range saving me lot of costs. cheaper is better. i was striving for cheaper. thats where 5 turns counts.

and there are many ways to get the required output. and wot we need is just frequency matching even a voltage lesser than 120 volt will work and even we can bypass spark gap and derive power. we can use solid state tesla coil the don way and can use ferrite rings also so we can use lesser voltage but we have to use high frequency in 200 to 300 khz or 1 mhz. we can use crystal oscillator and as we move to mhz the coil length becomes smaller...... am trying now small footprint but powerful device which can be initiated by just 3 volts pencil lite or AA BATTERIES. SINCE DONS ARRANGEMENT IS AIRCORE THATS WHY WE NEED TO FEED HIGHER AMPS TO GET HIGHER AMPS BUT IF WE GO FOR LOW VOLTAGE AND HIGH FREQUENCY WE STILL GET AMPS BUT WE MUST USE FERRITE CORE.

I HAVE USED MANY ARRANGEMENTS IN COILING FROM BARS TO SPIRALS DOUBLE SPIRALS AND MULTI TAPS AND EVEN USED HOLLOW CYLINDERS WITH PRIMARY INSIDE.MY CURRENT COIL IS FERRITE CORED WITH COPPER ROD INDUCER AS PRIMARY AND SECONDARY IS SPIRAL COIL A BIFILAR.

note: if u r using air core then to have high Q WE NEED TO HAVE 4 TPI COILING AND IF WE USE FERRITE THAT CAN BE BYPASSED.

DON WAS NEVER WRONG.....

Aug. 27, 2011 Zilano Quote:

Originally Posted by **vrand** 

Hi Zilano

That site has LOTS of circuits! Which one is yours that makes 5-10kw energy that powers your house!

I could not find it!

Cheers Mike

Hi Mike!

you found it. remember 16 mm? thats the key.

thicker the better.

sec coil.

Aug. 27, 2011

Vrand

**Dynatrons PDF circuit design:** 

Google translation:

Instructions for assembly free energy generator.

Part 1 components and materials

1) High Voltage Power Supply 3000V 100 - 200 watts. You can use transformers for neon lamps, or any similar amateur design with a high conversion efficiency and stabilization output current.

A possible embodiment of the transducer assemblies

2) High-frequency resonant system L1 / L2 Coil L1 dangle high quality audio cable sechenirem 6.10 mm2, or homemade litz by appropriate cross-section. Approximate length from conclusions obtained litz (audio) - approximately 2 meters.

Coiling is performed on the pipe kanlizatsionnoy £ 50 mm, number of turns 4-5 (left wrapped).

The remaining conclusions of the coil is not brezaem and conclude by mid-pipes connected to the surge of the primary loop and capacitors.

Available variants

Secondary coil L2 of the resonant circuit is performed bare copper (preferably silver-plated, tinned worse) a wire diameter of 2-3 mm. The diameter of winding secondary coil is about 75mm. The coil tap is performed from the middle. both half have one winding direction (clockwise, ie right).

Approximate number of coil turns, 2x16, 2h18 turns. coil must perform air version with mounting holes in the 4.3-fixing brackets. Mounting kotuschek should not allow runoff vyokochastotnyh high charges in any other part of the scheme and design. Conclusions coils clamped in Enclosures pads placed on the mounting plate for connection of other earthly circuit elements. Ratio of the lengths of wire coils L1 to L2 1 to 4, including the length of vyvov connection to the elements of the scheme.

A possible embodiment of the coil vtorinov

High-voltage diodes (pillars)
You can use store bought or make your own.
Diodes of each arm must have current rating of at least 10 amps reverse voltage of 25-30 kV
Parallel connection of several columns for required current.
Version of the high diode

#### Contour capacitors (for coils L1, L2)

Kondenysator circuit of the primary is chosen to work nepryazhenie at least 4 kV, capacitance depends on the frequency of the secondary circuit (the author of 28 nanofarads at the resonant frequency of 600 kilohertz). Capacitor should have minimum dielectric losses and keep Soline power (kvar) Usually typed composite capacitor bank and a low-power. most

Osually typed composite capacitor bank and a low-power. mosoptimal types kondensaktorov -

- K78-2, k78-15 k78-25 or other similar well able to withstand pulse currents of the discharge.
- The secondary condenser.

It is best to use capacitors of the above types but with a voltage of at least 10 kilovolts. Excellent work Capacitors KVI-3 type, and even better-K15-U2. Secondary katuschka with the capacity of the capacitor form a resonant circuit. capacity capacitor of the secondary zayisit the desired resonant frequency (the author - capacitor kvi3 2200 pF 10 kV).

Photos of the condenser of the secondary

High-frequency inductor with a minimum recuperation passage capacity Olrientirovochnaya inductor 100 - 200 uH. Variants with obmotkok sectioning. Wire diameter, 1.5-2mm in enamel izolitsii. Photo options throttle.

choke dangle on PVC 50-75mm mandrel.
Battery storage capacitors
You can apply a voltage capacitors 5-15 kV with total capacity of about 2 microfarads.
Suitable oil-filled capacitors, all types of type-1 k41, K75-53 and other ..

Diodes VD1, VD2 - high poles.
Diode ultrafast VD5-1200-150 volt30 amps.
Drosse5l L3 anyone with a non-closed magnetic core wire
(bus) at least 6mm2, 5.1 mH inductive .. Load (inverter or a dc motor) to use low input voltage of 12-110 volts (voltage nirzhe - more energy output)
To be continued ...

If you build and the experiments do not forget about safety when working with voltages over 1000 volts.

Permanent link to download the original file:

The scheme of the converter

DYNATRON / Đ"лаĐ²Đ¹½Đ°Ñ� / FreeEnergyLT

Youtube Videos:

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**Cheers Mike** 

ps created a PDF of Dynatrons Circuit Design (Google Translated) attached

Aug. 27, 2011 Zilano Quote:

Originally Posted by **drak** zilano,

I'm curious as to the CT capacitor in your "the circuit.jpg". Is that capacitor there to adjust the resonance of the secondary of the NST, or is it there to adjust the resonance of the primary of the step-down? I know its there to match the frequencies of the NST with the step-down, but it looks like in the circuit that it is adjusting the resonant frequency of the secondary of the NST unless the spark gap does something weird when it fires that I don't understand. And if so, don't we need a capacitor for the primary of the step-down so it will resonate at 30khz also? Damn, I feel like the guy in idocracy trying to figure out time travel.

#### Hi Drak!

match ur nst frequency with ur primary without the secondary. when its matched then add secondary and match primary with ur secondary. follow step wise. well my circuit i kept on matching from nst to primary and secondary. and so on.

# Aug. 26, 2011 Zilano Quote:

Originally Posted by **dllabarre** 

Zilano

Did you build and test this circuit?

Is this the circuit you're powering your house with?

Thank you for your help

DonL

hI DonL!

this was just a rough design for drak when he was working to make him understand the method of connecting his circuit to light the bulb. yes it will work to light a lamp. but output is hv+hf ac.

# Aug. 26, 2011 Zilano Quote:

Originally Posted by **vrand** 

Hi Zilano

This one where it says "copper coated welding rods". Is the coil tube full of these welding rods to increase the inductance?

Cheers Mike

YES AND TO CONTROL VOLTAGE!

Aug. 26, 2011 Zilano hI FOLKS!

MUST VIEW! better than all sites

for all ur clarifications and needs about don circuits, and sr 193

just scroll down in dynatrons link page and see don smith circuit working and circuit diagram and sr 193 diagram and kapanadze too

DYNATRON / Đ"лаĐ²Đ½Đ°Ñ÷ / FreeEnergyLT

for all other free energy devices and downloads pdfs and videos and iso html text free info for all

Đ"лаĐ²Đ½Đ°Ñ÷ / FreeEnergyLT

Aug. 26, 2011 Zilano Quote:

Originally Posted by **vrand** *Hi Zilano* 

Is the air core transformer full of copper welding rods to increase the coils L inductance? Or are the welding rods only used for tuning the L1 & L2 transformer coils and the 2" pipe is not full of welding rods?

Cheers Mike

Hi mike!

plz quote which circuit u r talking about.

Aug. 26, 2011 Zilano Quote:

Originally Posted by **Pinoy\_Tech** *Mr zilano*,

Thanks for the reply... another inquiry is from the attached pict. I just observed it and got a little confusion. The 230V from inverter output is directly connected to 25T modulator coil which I think a very low reactance. Do you think is it not a short circuit to the inverter?

pinoy\_tech

hI PINOY\_TECH

YES I ADMIT THE MISTAKE. USE A 50 WATT BULB IN SERIES WITH FEEDING MODULATING COIL TO PREVENT SHORT CIRCUIT.

Aug. 25, 2011 Vrand Ouote:

Originally Posted by zilano

Hi folks!

i saw here that there are many people who have more intellect even greater than Tesla. So its better i leave the reins into the hands of these people and hope they guide all with their wisdom and experience and ability to judge and express opinion with sprinkles of salt and pepper wrapped up beautifully.

regards

ZZZ

Hi Zilano

Great to hear from you! The confusion I had was the many different circuits. Could you please post your circuit that you got to work with the component values? That would greatly simplify for other researchers trying to replicate a working unit!

Aug. 25, 2011 Zilano many people are more intelligent here!

Hi folks!

i saw here that there are many people who have more intellect even greater than Tesla. So its better i leave the reins into the hands of these people and hope they guide all with their wisdom and experience and ability to judge and express opinion with sprinkles of salt and pepper wrapped up beautifully.

Aug. 23, 2011 Vrand Quote:

Originally Posted by **zilano** 

Hi Mike!

### **MAGNET CORE (WELDING ROD)**

**Purpose** 

To provide a low reluctance path that increases the magnetic flux through the coil.

Specifications

Low reluctance, high permeability magnetic material: Welding rod; 0.042" inch diameter copper coated steel

regards

zilano zeis zane!

Hi Zilano

Are the copper coated welding rods to fill in ALL of the 2" inside diameter coil space, in order to raise the coil inductance for higher magnetic coupling to the secondary thick windings?

Aug. 22, 2011 Zilano Ouote:

Originally Posted by **dllabarre** zilano

Regarding your homemade fly back transformer:

what is the measured inductance of your primary coil, trigger coil and most important secondary coil?

Thank you

Hi there!

my primary lc oscillator had 0.1 mh and i used 2 micro farad capacitor.

my secondary is 5mh and 0.01 uf capacitor. i did not measure the feedback coil but its 4 turns.

Aug. 22, 2011 Zilano Quote:

Originally Posted by webmug

A scalar wave is a standing wave if i'm understanding correctly.

yes u r right. scalar is standing wave!

### Aug. 22, 2011 Zilano Ouote:

Originally Posted by **Redisnoc** 

Zilzno,

Would you post your flyback build?

Hard to find 35kHz unit.

Thanks,

Redisnoc

Hi its posted in one of my posts. just browse.

### Aug. 22, 2011 Zilano Ouote:

Originally Posted by webmug

And my question is: are we using transverse resonance freq or are we using longitudional resonance freq of primary.

Hi

I'm reading stuff from Dr. Meyl and these two give different phases of magnetic and electric fields. The longitudional gives no transmission losses. But the transverse one is a side effect of the longitudional. tesla uses the longitudional version because thats the one without losses. But we are in the near field so maybe it doesn't matter. Any thoughts on that?

I'm still guessing if the First part of the secondary coil uses also a capacitor to change the phase of the current to create usable watts.

well i dont know abt that stuff. all i get is power and i dont care wot gives me. but i feel resonance is the key. we r using RF SO WE R USING TRANSVERSE WAVES creating standing waves at resonance. thats wot tesla did.we r definitely not using scalar waves here coz then our coils wud be in the shape of number 8.

### Aug. 22, 2011 Zilano Quote:

Originally Posted by **Pinoy\_Tech** *Mr Zilano*,

Please check also the attached pict.

- I have this picture of Don's device long time ago but if you take a closer look to the picture, it's look like that the circuit you are referring to us has a little difference, please compare.
- About the HV, you mentioned that you've made a customized NST and the winding output appears to be 4,000 turns. Did you use partitions on that output or anything?
- Let's imagine that we just wound only primary coil without secondary. You told that the "Spark
  Gap" must be connected in parallel with the Primary Coil, do you think the spark gap will still spark
  if there is no secondary winding?
- You mentioned some danger on using TV flybacks because of its extremely high voltage output. Yes,
  I am with you but it will happen only if we will use it on the standard supply voltage of TV or
  Computer flyback's B+ on the range of 90~115V DC. Do you think it will still give an output of the
  same if we will just use it on 12VDC?
- Don's winding coils have no insulations at all, do you think the normal stranded wires with insulation sleeve will work too like TK device that shown in many of his vids that it appears that he is just using a normal household wirings.

Thanks, Pinoy\_Tech

Hi pinoy\_tech!

well don circuit uses two hv supply followed by diodes but its not necessary. u can use singe hv followed by diode. well with 12 volt nst will still put up high voltage enuff to Lurking dangers. though it will not be very high compared to 190v dc input.

well i did not use partition. i wound in 4 layers heavily insulated. my output is single.

yes normal wires can be used for don coils. don used naked coils so he can tune the frequency with neon connected to earth. with covered coils u cant do that. but u can still use neon between one end of coil and earth with coils with insulated covering. also we can tune with variable caps used in parallel with don coils -primary n secondary. the 1/4L and 4L with less capacity capacitors help us to tune faster and easy. but u can still get resonance without caps also if u slide in and slide out the primary in dons arrangement. Tariel kapanadze tuned with caps so his coils r covered.

yes the spark gap will work if primary tuned to the resonant frequency of nst in parallel.but it wont give u resonance. L1 and L2 must resonate-this is the basic. either u step up or step down.

SR193 DID NOT USE RESONANCE SO HE GOT LESSER OUTPUT. in my circuit am using dons resonance. and then using induction to get power.

u followed sr193 but use don and sr193 u will get power. and there are many arrangements am working on that produced results better. i will e posting various arrangements. but i found the circuit which i uploaded last as the cheapest so everybody can built.

i saw ur video its good. but try resonance output and u will gain considerably.

we use dual diodes and dual caps to match the required one.

### Aug. 22, 2011

#### Zilano

### Quote:

Originally Posted by **the bob** 

That step down transformer looks like a step up transformer. Primary has 100 turns, and output secondary has 230 turns?

Hi its step down coz we have 60kv and we down it to 230 v.so its a step down. we r sparking to ground so 100 turns give enuff induction.

#### Aug. 22, 2011

### Zilano

### Quote:

Originally Posted by **Redisnoc** 

Zilzno,

Would you post your flyback build?

Hard to find 35kHz unit.

Thanks,

Redisnoc

Hi i made it of my own. u can get 30khz or 40khz 4kv nst solid state but without gfi=ground fault interruptor.

### Aug. 22, 2011

#### Zilano

### Quote:

### Originally Posted by **dllabarre**

Confusing....

So are you now saying L1 & L2 is a step UP transformer like Don Smith says or is it still your new reversed step DOWN transformer?

Thanks for helping.

Hi! here we r using don method step up coz we r sparking to the ground directly and using induction method to fetch power. here a step down is through the 230 volt winding of ferrite transformer. no we r not using reverse tesla here. here we r using induction method in ferrite transformer. to get 50 or 60 hz

Aug. 21, 2011

Zilano

**Quote:** 

# Originally Posted by **Parav**

Hi Zilano,

Yes , that looks a bit simpler.---So for 120v/60hz. Are the turns ratio s of the modulating coil and the other two newer coils with it are going to be slightly different?? like 120 turns instead of 230 turns on that one ??

### Thanks again-Paul

Hi paul!

for 60 hz u need to use invertor for 120v 60 hertz for modulation of 60 hz.

# Aug. 21, 2011 Zilano Quote:

Originally Posted by **Parav** *Hi Zilano*,

Yes , that looks a bit simpler.---So for 120v/60hz. Are the turns ratio s of the modulating coil and the other two newer coils with it are going to be slightly different?? like 120 turns instead of 230 turns on that one ??

Thanks again-Paul

Hi Paul!

well yes. if u need 120 volts then u might be needing 120 turns(may be less or more) depending on many things. so u start with 100 turns and check voltage if less then add more turns to get 120. u need to experiment with that. and yes the modulating and high tension coil needs no changing.

### Aug. 21, 2011 Zilano

# **Quote:**

Originally Posted by **Parav** 

Hi again Zilano

Just wondering, are the transistors on that schematic marked wrong or are the transistor symbols drawn in the wrong place??

Great stuff though, this looks like a winner.==Paul

Hi Paul!

i have updated the circuit without 555 modulator circuit. check it out.

#### Aug. 21, 2011

### Zilano Quote:

Originally Posted by **Zlatko** 

Zilano great stuff! I happy to find this information about Don Smitha in this forum.

I will build like you with resistors for 50 Hz frequence. 555 circuit too much complicated hehe.

Then i can power my house

Hi Zlatko!

good luck. u can use invertor in series with a bulb to the modulating coil if u dont want to make the circuit.

### Aug. 21, 2011 Zilano

# Quote:

Originally Posted by **Parav** 

Hi again Zilano

Just wondering, are the transistors on that schematic marked wrong or are the transistor symbols drawn in the wrong place??

Great stuff though, this looks like a winner.==Paul

Hi paul!

if u have difficulty in making the 230v ac circuit. u can easily feed invertor ac with a bulb in series to the modulator coil.

#### Aug. 21, 2011

#### Zilano

#### Quote:

Originally Posted by **Parav** 

Hi again Zilano

Just wondering, are the transistors on that schematic marked wrong or are the transistor symbols drawn in the wrong place??

Great stuff though, this looks like a winner.==Paul

#### Hi paul!

use irf 9130 instead of 2n3055.

### **Zilano**

### Quote:

Originally Posted by **drak** 

Thats kinda vague, lol. But I get your point.

Hi Drak!

see my post with attachment. u will have easily replicable. cheapest power source. with 50 hz ac. with touch start by 12 v.

### Aug. 21, 2011

#### Zilano

### Quote:

Originally Posted by **deggers** 

Hi Zilano, What is cheaper about this circuit? I see that there is no diode before the output transformer.

Thanks!

Duane

Hi Duane!

see my last post. u will have cheapest circuit.

### Aug. 21, 2011

#### **Zilano**

# Quote:

### Originally Posted by **vrand**

Nice cheap circuits Zilano, when can we buy one! Maybe sell a small cheap Don Smith unit like Bedini's "school girl" project! Bedini gave out the specifications for his "school girl" project design. Do you have the specifications for your unit for a small output like 5 amps at 240v?

Cheers Mike

Hi Mike!

see my last post and u will have cheapest power 50 hz ac 230 volt. easily replicable.

Aug. 21, 2011

**Zilano** 

Cheapest-don-final Circuit 50 Hz Ac Output-zilano Zeis Zane

hI folks!

final and cheapest circuit attached.

easily replicable

and much cheaper with and without 555 modulator circuit.USE SINEWAVE INVERTOR TO FEED SINEWAVE IN MODULATOR COIL SO U GET SINEWAVE OUTPUT.

can be self started with 12 volt battery. touch and start.

!DANGER......WARNING!...DANGER!

**HIGH VOLTAGE!** 

**HIGH VOLTAGE!** 

**HIGH VOLTAGE!** 

A single ground in this circuit. so u must have a ground properly secured with heavy ground wire. HIGH VOLTAGE RULES APPLY HERE.DO IT AT UR OWN RISK! I WILL NOT BE RESPONSIBLE FOR ANYTHING!.

best wishes! to all!

thanks for ur cooperation.

Aug. 21, 2011 Zilano don 50hz-60hz modulation technique

Hi folks!

get 50 or 60 hz 220 or 230 volt final output.

circuit attached.

Here we use crystal radio technique to get desired frequency. dons circuit is based on radio telephony. since coils are very close. the power is very high. and tapped.

here capacitor bank just bypasses RF signal 30khz and 50 hz component is retained and resistance acts to stabilize impedance matching with transformer input.

Aug. 20, 2011 Zilano Quote:

### Originally Posted by **deggers**

I thought the diode was required to make the conversion to 50/60 Hz. If not, what is the diodes function?

Thanks!

Duane

Hi Diode just acts as rectifier. converts alternating current to direct current. see

Diode - Wikipedia, the free encyclopedia

and also

Rectifier circuits: DIODES AND RECTIFIERS

# Aug. 20, 2011 Zilano Ouote:

### Originally Posted by **deggers**

Zilano, I know you have probably tried this. Can you feed 145VDC / 290VDC straight to the buss of a 115/230 volt inverter?

There is a diagram on page two of the manual in this link: <a href="http://www.xantrex.com/documents/Pow...7">http://www.xantrex.com/documents/Pow...7</a> rev- %29.pdf

This is the 115 volt version.

Thank you very much, you 14 YEAR OLD, CAPS TYPING, MO-FO!!! D

Hi yes we can we just have to by pass dc to dc convertor and feed 145 v dc straight. but we have to find the input points in the invertor. but output power will be limited to the mosfets capacity for output wattage.

so its better to use a transformer based invertor for heavy loads. means capable of handling high amps. or use a better version of this for higher wattage.

### Aug. 20, 2011 Zilano Ouote:

Originally Posted by **deggers** 

Hi Zilano, What is cheaper about this circuit? I see that there is no diode before the output transformer.

Thanks!

Duane

Well its cheaper coz we r getting direct ac in output. and there r no diodes used. the output depends on the transformer. say 120 or 110 or 115 volts ac.

yes there is no diode.

Aug. 20, 2011 Zilano don cheaper arrangement

cheaper circuit

Aug. 20, 2011 Zilano Solutions Zzz

ATTACHED PIC

FIRST TRY WITH STEP UP AND THEN STEP DOWN AND VERIFY RESULTS.

Aug. 20, 2011 Zilano dons calculations updated

Hi there!

dons calculation updated. plz read.

Aug. 20, 2011 Zilano Quote:

> Originally Posted by **Parav** *Hi Zilano*

You have been giving us valuable sources of information on this and I am truly greatful for your help.

My quick question is, Can I use a micro wave oven transformer as a "potential transformer" so I can measure the voltage coming off this home made neon transformer I'm making?? If so, when I hook up

the 0 to 120 volt meter to it.-- What voltage reading should I see?-- I think most MOTs are rated @ 3 to 5 kv -- I'm thinking then that if the MOT is rated @ 5kv and I see 120 volts on the meter then the neon transformer is putting out 5kv. If I'm barking up the wrong tree on this please let me know. I thank you again for your kind help and patience.--Paul

hi

first make it and try the load and light bulbs. and later u try to use transformer. yes mot can be used. but u must know wots input and output voltage of it. send me its ratings then i will give u better advice.

# Aug. 20, 2011 Zilano Quote:

Originally Posted by **vrand** 

Thanks Zilano

For the spark gap in Kapanadze's videos it shows the gap really close.

Do we want our spark gap to fire on every 30khz DC pulse from the 4kv output from flyback?

What determines the correct spark gap spacing?

Cheers Mike

u have to tune it by adjusting and is very important. i have updated the calculations of don plz re read it.

# Aug. 19, 2011 Zilano Ouote:

Originally Posted by spark2

Hi Zilano

so as per your your reply

For a quarter wavelenght, lamda /4 in foot = 983619054/4 = 245904763 245904763/30000= 8196.8 feet would be a very long coil !

the L1 of don is only 2.25 feet long?????

And for 2.25 feet long we are in the 220 mhz band

pls explain thanks

go through my posts and download handbook of electronic tables and go to page 38

# Aug. 19, 2011

# Zilano

### Quote:

Originally Posted by dllabarre

Zilano

Have you uploaded a more clearer image of your circuit yet and I missed it?

Thanks

Hi dllbarre!

no not yet but will be coming soon!

### Aug. 19, 2011 Zilano

# Quote:

Originally Posted by **vrand** 

Thanks Zilano

For my 4kv 30ma flyback transformer output, will a 12kv 350ma microwave diode work okay?

Cheers Mike

Hi mike yes it will work.

# Aug. 19, 2011

# Zilano

uote:

Originally Posted by **vrand** 

Hi Zilano

On the above circuit you show a diode D1 from the flyback secondary before the spark gap.

The below circuits does not show the D1 diode from the flyback.

Is the D1 diode necessary from the flyback secondary output?

Cheers Mike

yes mike! its necessary to pulse the transformer.

## Aug. 19, 2011 Zilano Ouote:

Originally Posted by **dragon** 

Zilano, Your calculation of the energy in the cap is slightly off... it should be;

 $.5 x (4/1000000) x 120^2 = .0288 Js$ 

At 60 hz it would be pumping .0288 x 120 or 3.45 Js assuming your filling and discharging the cap every half wave.

Unless your assuming a 4 farad (instead of a 4uf) capacitor that can handle that kind of voltage - maybe an extremely huge stack of series and parallel caps.

I don't think Don ever showed the actual "output" circuit for his device although I've seen renditions for various ideas drawn by Kelly in his pdf's .

Hi dragon!

the error has been corrected see my newer post for the correction. and everybody who is following me plz ignore previous calculations and follow the correct ones i posted.

## Aug. 19, 2011 Zilano Ouote:

Originally Posted by spark2

Hi Zilano

thanks for your fast reply.

i had thought the construction of L1 is base on rf half wave so i divide by 494

Another question please for you.

How Don decide the lenght of L1 coil ??

have a nice day

### Free energy for free people

Hi Spark2!

Wavelength frequency convert lambda Hz sound conversion acoustics acoustic audio radio speed of sound and radio waves wave length light vacuum equation formula speed of light - sengpielaudio Sengpiel Berlin

don used wavelength/4 for primary and for secondary is 4 times length of primary. he used 30kz or 30000hz to calculate wavelength. in his text replace mhz with khz and follow.

# Aug. 19, 2011 Zilano Quote:

Originally Posted by spark2

Hi

i am new bee too in this great forum,

seem the right forum for my question.

would have a question, maybe for Zilano or someone who can answer me.

Talking about frequency of L1 in Don device.

The nst frequency is 35.1 khz and it seem that L1 is about 4.3 turns

So the lenght of *L*1 is 2*XPIx*4.3= 27.017 inches /12 = 2.2514 feet

To find frequency; 247/2.2514 = 556 MHZ or 494/2.2514= 219.4 MHZ

So could we say the operating Fregency of Don device is 219.4 mhz??

Have a nice day

Hi Spark2!

no dons operating frequency is 30khz.

Aug. 19, 2011 Zilano Don-final Calculation

THE DON SMITH PDF DESCRIBES A DEVICE OF 28.8 KW ref: smith pdf uploaded in my posts. see as attachment(pdf ones)

don says the transformer is rated for 60 amps and 480 volts that is  $60 \times 480 = 28800$  watts =28.8 Kw

the method to FIND THE REQUIRED RESISTANCE TO CHANGE FREQUENCY TO DESIRED

#### CYCLES PER SECOND

since don uses 8000 mfd capacitors

voltage desired/capacitor in farad= required charging frequency

480/.008=60000hz

this means 2 cycles of 30000hz used to charge caps to 480 volts since our transformer is 480 to 120 volt

T=RC AND T=L/R

1 micro farad=10^-6 F

so 8000 micro farad= 8000/1000000=0.008 F

where T= frequency desired IN CPS OR HZ, R is resistance IN OHMS and C is capacitor in FARAD

#### now we lower frequency

if we desire frequency 120 cps(60 up and 60 down)

then R = T/C

- =120/.008
- =15000 ohms
- =15 Kohm(15 kilo ohm) wattage to be calculated by finding voltage and amperes. Since P=VxI

we have T=L/R

R=L/T (here we further stabilize 120 hz.calculate R and attach it across the input side of transformer.) here L is unknown and have to be measured by lcr meter(L=PRIMARY OF TRANSFORMER)

R = L/120

NOTE: NOW THE BASICS BEEN CLEAR I REQUEST MEMBERS TO FIRST TRY DON SMITH CIRCUITS AND THEN TRY MINE.

Aug. 19, 2011 Zilano Ouote:

Originally Posted by **vrand** 

Thanks Zilano

What LCR meter do you use and recommend?

Cheers Mike

#### hI MIKE!

ANY GOOD LCR METER. WHICH CAN MEASURE L C AND R IN VARIOUS DENOMINATIONS FROM STANDARD UNIT TO MICRO, MILLI, PICO AND MICRO OHMS TO KILO OHMS MEG OHMS ETC

Aug. 18, 2011 Zilano Ouote:

Originally Posted by **jharmon** *Hi. Few things...* 

1. I am very excited to see some interest / movement in this area. I have failed at a Bedini replication... i believe because the tuning was hard and because taking measurements off the battery was a slow going cycle (at least the way that I had structured my charge / discharge tests).

The Don Smith device (in my mind and after having read this thread) seems a bit less complex.

2. I'm interested in some feedback on my understanding of the theory.

I had seen the experimental evidence on the spark gap producing extra power a few years ago and it had always driven me toward the pure tesla stuff.

If I had to explain what is going on, i'd say that the extra energy comes off the spark and as collected in the resonant LC circuit. When the LC circuit is at resonance, it has effectively zero resistance and so collects and preserves the power without losses.

Large gauge for the secondary (for amps) also makes sense to me since we are simply trying to eliminate the resistance on charge carriers.

It also makes sense that it really doesn't matter whether your step up or down, since the gain is in the spark gap. This seems to prove out with the spark gap experiments that drive the output of the gap directly into a capacitor.

It's just that different collectors (capacitors, batteries, LC circuits) have different capacities to collect charge coming off of the gap. Capacitors can't be pulsed to hard or frequently cause they have limited total charge capacity. Batteries have lots of charge capacity, but particular resonant frequencies that require the driver to hit them less frequently (i.e. and therefore at lower power).

But the LC circuit. Ah. With a great big coil, you can store lots of power. And you can tune the thing to extremely high resonant frequencies, so you can drive the gap at huge cycles per second, which means big gains. And further, they are easy to tap.

I like your approach zzz to avoid the rectification and inversion. I kindof always wondered... why?

3. One thing I really liked about the Bedini SSG project was the awesome experimenters guide.

It covered "theory" "objectives" "parts" "safety" "measurements" etc. All in one. I'm thinking of producing such a guide for this before I start. I don't like the feeling of having to search through the forums over and over for hints and tips. It should be in one place.

4. On subject of videos...

I understand, zzz, the importance of people learning these principles deeply themselves. I'm a big fan of teaching people to fish. Our society is too spoon fed. We are intellectually lazy overall. However, there are many smart people on this forum that could and would easily learn the principles if they had the confidence that their time was well spent. I, personally, don't want to invest another year into something that doesn't work out. I feel like there is enough knowledge out here that we should all be able to produce 10kW systems for our homes. The more of these that make it out into the wild, the better, and the more people get exposed to them, take and interest in them, and learn how they work. It's like this... I dissassembled a lawnmower engine when I was 12... because it was there. I probably wouldn't dissassemble my home power station while it was in use, but I would definitely pull off the cover and take a look. And maybe even try to replicated it. So, in short... I'm a big fan of videos and pictures. As a professional software engineer in the media business, I believe that video is the new email. It's rapidly becoming the new preferred medium of communication. Particularly by young people. I make games. I know. :-)

People just need to know what to pay attention too. Give them something inspiring and the revolution will proceed... (just in time for 2012. :-).

5. Practical advice...

I found a good supplier of NSTs... <u>High Voltage Current Limited Transformers</u>

Which one should I use for this experiment. I want 10kW. ;-)

J

PS. I was up until 2am reading this last night. And I guess I'm not the only one. zzz you are one of the most insightful experimenters I have seen posting in any forum. :-) Many thanks for your late nights and interest in this forum.

Hi Jharmon!

welcome to the forum! am glad u joined us.dont feel dishearten by failures. failures make us learn. failures tell us that we did not do our homework well so we must learn more and gather and scatter knowledge for mankind and people who want to learn.

enjoy ur stay here!

#### Aug. 18, 2011

# Zilano

Quote:

Originally Posted by **vrand** 

Hi Zilano

Thank you for the clarification.

The spark gap (SG1) should also have a center post to ground? Is that needed?

Cheers Mike

#### Hi mike!

yes its needed when u r not reducing voltage. otherwise a 2 pin spark can work also. here i did not reduce voltage so a 3 pin spark gap and middle is earth.

## Aug. 18, 2011

Zilano

**Quote:** 

Originally Posted by **vrand** 

Hi Zilano,

Is there any benefits to copper coated welding rods vs non copper coated?

Cheers Mike

Hi Mike!

#### **MAGNET CORE (WELDING ROD)**

Purpose

To provide a low reluctance path that increases the magnetic flux through the coil. Specifications

Low reluctance, high permeability magnetic material: Welding rod; 0.042" inch diameter copper coated stee

Aug. 18, 2011

Zilano

**Quote:** 

Originally Posted by **vrand** 

Hi Zilano

So the above design is for the R1 circuit to convert the secondary to 60hz output?

And the below circuit is for inverter output?

The below circuit only has 1 capacitor between the NST and the primary, while the above circuit it has 2 capacitors. Is that correct?

Cheers Mike

#### Hi mike!

this circuit i sent to drak! to make him understand how to use spark gap b4 L and C combination. and how bifilar is connected, its the raw circuit it wont convert hf to 60 hertz

## Aug. 18, 2011 Zilano Quote:

Originally Posted by **NOMDI** 

Hi ZILANO!

Very interesting design! What about C1 and L2-L3?

Are these parts the same that Don's design ? A isolation 1:1 transformer and a high voltage capacitor bank ?

There is a 10KVA transformer on your actual device? A bit expensive...

Best regards and thanks again for all you share with us!

Hi nomdi!

#### c1=capacitor bank

l2 and l3 are primary and secondary of transformer(it can be 1:1) if u use step down like i have done. but if u follow dons circuit then u have to make it according to the high voltage of dons secondary. so it will be a step down from the voltage of ur dons sec coil to 110 or 120 volts ac

Aug. 18, 2011 Zilano

#### useful tools nomograph and nomogram oscilloscope etc

Hi folks!

useful site for u all

What's a Nomograph and How Do You Use It? also calculate number of turns

Design News - Blog - What's a Nomograph and How Do You Use It?

Martindale's Calculators On-Line Center: Electrical Engineering & Computer Engineering: Section M-O - Databases, Courses, Textbooks, Lessons, Manuals, Guides, Publications, Technical Reports, Videos, Movies, Calculators, Spreadsheets, Applets, Animat

<u>Free Online Calculators for Engineers - Electrical, Mechanical, Electronics, Chemical, Construction, Optical, Medical, Physics, etc...</u>

Aug. 18, 2011 Zilano Ouote:

Originally Posted by **gropx** hi zilano ... can i use ZVS for HV source ??

Hi gropx!

yes u can use it as hv source but i wont recommend it to u. coz it has very high voltage and it will be difficult for u to find caps and diodes to use in circuit for getting amps juice. if u want to feed more ma's to ur tesla coil. use parallel nst rated 4kv 30ma each. with a diode feed joined to give u 4kv at 60 ma.

Aug. 18, 2011 Zilano Hi folks!

simulations for all

#### learn basics!

#### **Electronics Demonstrations**

http://www.falstad.com/circuit/e-index.html

Aug. 18, 2011 Zilano Ouote:

Originally Posted by **vrand** 

Thank you Zilano

- The attached pic was not really clear.
- 1. In between the NST and the air coil primary there looks like a cap (parallel), then a spark gap with center tap to earth (parallel), then another cap (parallel), then the air core primary 80 turns.
- So there are 2 caps in there?
- 2. After the air core 5CW/5CCW bifalar secondary there is a cap in parallel to the whole coil.
- This version is missing the center tap to earth?
- Is this version for the non-bifilar version?

Maybe it would be easier if you labeled each version of your circuit, A, B, C etc... as that will make it easier for researchers to read.

Cheers Mike

Hi mike!

i will upload more clear arrangement. so wait for that. yes there is cap across 80 turns and there is centre earth too but position changed. its parallel now. it is bifilar version. coil is bifilar.

Aug. 18, 2011 Vrand Ouote:

Originally Posted by **zilano** *hI FOLKS!* 

SPECIALLY MIKE!

MY ALTERED CIRCUIT!

MUST VIEW pic attached

regards

zilano zeis zane

Thank you Zilano

- The attached pic was not really clear.
- 1. In between the NST and the air coil primary there looks like a cap (parallel), then a spark gap with center tap to earth (parallel), then another cap (parallel), then the air core primary 80 turns.
- So there are 2 caps in there?
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- This version is missing the center tap to earth?
- Is this version for the non-bifilar version?

Maybe it would be easier if you labeled each version of your circuit, A, B, C etc... as that will make it easier for researchers to read.

Cheers Mike

## Aug. 18, 2011 Zilano Ouote:

#### Originally Posted by **LtBolo**

I can easily believe some variation of that...meaning...none of us really fully understand the source, even if we have a pretty good sense of where it is.

So if spark + resonance is the key, then everything else is what we in the engineering world call "implementation detail". The reverse Tesla isn't the source of energy, it is the mechanism for converting high voltage, high frequency, high impedance energy into a usable current. Which is a pretty big deal, mind you, since the kinds of voltages that exist in a high Q resonant systems are a PITA to do anything with, especially at high frequency.

I had theorized years ago that a Tesla coil was OU as it sat, and that Tesla well knew the difference between 'magnification' of energy vs 'amplification' of voltage. But I wasn't convinced strongly enough of it being OU to work through whatever it was going to take to convert that wispy sparky purple power into something usable...which is exactly what your reverse Tesla is...and is exactly what Tesla showed in many, many of his drawings. The clues were there if we had just paid attention. It always bothered me that Tesla believed the magnifying transmitter to be his greatest invention, and it is one that we really use the least.

Thank you for taking the time to lead us through this, and thank you for taking the time to work through it yourself. I'm gonna be very pissed if you are yanking our chain...

Hi there!

AT HIGH VOLTAGE AMPS ARE LOWERED AND WHEN U STEP DOWN AMPS R HIGH AND VOLTAGE IS LOW. ITS JUST REVERSE. AND POWER REMAINS SAME AT RESONANCE COZ THE RESISTANCE OF CIRCUIT IS ZERO. MOREOVER AT HIGH VOLTAGE ELECTRONS DONT GO INSIDE THE WIRE THEY TRAVEL ON SURFACE SO LESS RESISTANCE.

WE SEE POWER WHEN ELECTRONS TRAVEL INSIDE CONDUCTOR GIVING HEAT AND LIGHT.

U HAVE SEEN BULB LIGHTING FROM TESLA COIL WITH A CAPS IN SERIES. CAPS JUST MAKE CURRENT FORWARD IN PHASE OF VOLTAGE AND LOWERS VOLTAGE.

AT HIGH VOLTAGE AMPS ARE LOW AT LOW VOLTAGE LAMPS GLOW

Aug. 18, 2011 Zilano Quote:

Originally Posted by **LtBolo** 

I appreciate what you are saying Zilano, but many have tried and failed to convert apparent power (high VARS) into real power. If it were truly that simple I think this would have been solved many years ago.

Is the key the reverse Tesla coil? Or is the key in the high frequency to low frequency crystal radio conversion? Or is the key in the spark + resonance?

If it is spark + resonance, and the other things are just about converting the power to a usable voltage, current, and frequency, then I would strongly suggest that the extra power is coming from some quantum source and what appears to be a conversion of apparent power to real power is really just an impedance matching of the power already gained up in the primary.

But that's just my opinion. You are the one with the functional generator, I'm just wanting one.

#### Hi there!

when there are millions of raindrops falling how will u collect them as water to shower? with a bucket of course. here caps r buckets and u r filling them at 110 or 120 volts and electrons r coming 30 thousand times a second.

Aug. 18, 2011 Zilano Quote: Originally Posted by **LtBolo** 

I appreciate what you are saying Zilano, but many have tried and failed to convert apparent power (high VARS) into real power. If it were truly that simple I think this would have been solved many years ago.

Is the key the reverse Tesla coil? Or is the key in the high frequency to low frequency crystal radio conversion? Or is the key in the spark + resonance?

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But that's just my opinion. You are the one with the functional generator, I'm just wanting one.

Hi!

use caps! to store each cycle and cycles can be 30khz or more.

## Aug. 18, 2011 Zilano Quote:

Originally Posted by dllabarre

Zilano

Please explain " by using 1/4L and 4L."?

Give examples.

I thought I understood the relationship between the coils but this now has me confused.

Is this 1/4L inductance? for which coil?

What is 4L? 4 times inductance?

Thank you

Hi there!

if u r following don then primary is 1/4 of secondary and secondary 4 times of primary.

Aug. 18, 2011 Zilano Ouote:

Originally Posted by **LtBolo** 

I appreciate what you are saying Zilano, but many have tried and failed to convert apparent power (high VARS) into real power. If it were truly that simple I think this would have been solved many years ago.

Is the key the reverse Tesla coil? Or is the key in the high frequency to low frequency crystal radio conversion? Or is the key in the spark + resonance?

If it is spark + resonance, and the other things are just about converting the power to a usable voltage, current, and frequency, then I would strongly suggest that the extra power is coming from some quantum source and what appears to be a conversion of apparent power to real power is really just an impedance matching of the power already gained up in the primary.

But that's just my opinion. You are the one with the functional generator, I'm just wanting one.

well buddy!

the power comes from spark gap and resonance and resonance is termed as ambient of zpe=zero point energy or radiant energy. but its resonance of electrons. they r xcited and comes back to normal and release energy.

## Aug. 18, 2011 Zilano Quote:

Originally Posted by **dllabarre** 

Zilano

Please explain " by using 1/4L and 4L."?

Give examples.

I thought I understood the relationship between the coils but this now has me confused.

Is this 1/4L inductance? for which coil?

What is 4L? 4 times inductance?

Thank you

hi!

L= length in feet or metres

Aug. 18, 2011
Zilano
My Altered Circuit
hI FOLKS!

SPECIALLY MIKE!

MY ALTERED CIRCUIT!

MUST VIEW pic attached

Aug. 18, 2011 Zilano Don And Crystal Radio

hI FOLKS

DON AND CRYSTAL RADIO

PIC ATTACHED VIEW IT

Aug. 18, 2011 Zilano Don Smith Message For All

hI folks

Don smith wanted us to use our head. but nobody did. when we use nst(the iron cored) we have hv supply with low frequency say 50hz or 60 hz and its not a tesla coil. then we make a tesla coil-a resonant transformer. by using 1/4L and 4L. but when we use solid state nst-its a tesla coil in fact-it has high frequency and high voltage. so wot we need just a step down. morover in Don circuits we make tesla coil and then do step down to suit our requirements like voltage dividers etc. but handling high voltages is not easy unless we r running a power company. most of want to build this device not to earn money but just to power our homes and verify that don was right or wrong, when we step down its easy to find and afford components, and get usable power at the voltage we desire.

What i did i tried to understand Dons device. Many people Fail in replicating Don is because they use spark gap in series and get output under unity or unity. some dont know how to handle high voltage step down. some stick to myths that resonance degrades when we use its power. but like crystal radio resonance dont degrade and when we tune it to a station we keep listening to the station at its resonant frequency unless we rotate the dial.

My experiments and my suggestions are not based on fantasy or myths. its true the output is in VAR=VOLTS AMPERE REACTIVE. WHICH MEANS WHEN WE USE LOAD POWER DECRESES. FOR THAT WE HAVE TO USE CAPS SO THEY KEEP GIVING CONSTANT AMPS FOR A PARTICULAR VOLTAGE.

when we use solid state nst. we have one tesla coil. all we need is to use use it as step down and use AC

## CAPACITORS WHICH ARE EASILY AVAILABLE AND GET REQUIRED VOLTAGE OUT.

bUT WE MUST NOT FORGET ONE SIMPLE FACT RESONANCE. its the only key for power. when we step down we keep resonance working with the nst frequency and with our coil combination of step down tesla.

thats all.

if u have any queries and questions they r welcome!

Aug. 17, 2011 Vrand Quote:

Originally Posted by **zilano** 

hI FOLKS!

SEE THE ATTACHED PIC!

AND GET THE SOLUTION FOR FREE!

DON SECRET REVEALED FINALLY!

WISH U ALL THE LUCK!

LETS SEE SOME DEVICES FROM MEMBERS AND GUESTS!

VIEW THE CIRCUIT AS ATTACHMENT

REGARDS

ZILANO ZEIS ZANE!

#### Thank you Zilano

Keep up the good work!

For initial testing I will just plug in light bulbs to test for amps.

It would be fantastic to get the values of the R components for 60hz 240vac output.

Cheers Mike

Aug. 17, 2011 Zilano Ouote:

Originally Posted by **zilano** 

hI FOLKS!

SEE THE ATTACHED PIC!

AND GET THE SOLUTION FOR FREE!

DON SECRET REVEALED FINALLY!

WISH U ALL THE LUCK!

LETS SEE SOME DEVICES FROM MEMBERS AND GUESTS!

VIEW THE CIRCUIT AS ATTACHMENT

REGARDS

ZILANO ZEIS ZANE!

Aug. 17, 2011 Zilano Ouote:

#### Originally Posted by **Xenomorph**

So first you state that in your supposed device all frequency correction is being done with one magic resistor, now you suddenly state that power factor caps and diodes are the "solution" and no talk anymore of "parallel R-Lowpass-filters"?

I mean come on ...

hI XENO!

well we lowered the frequency at powerfactor capacitor. and used R to make voltage ahead than current like we have in our usual AC POWER we get from the grid. and the R also works as a stabilizer for the lowered frequency at power factor capacitor. we used a single diode to charge the capacitor with just half wave and control the inrush current to the transformer.

thats all!

Aug. 17, 2011 Zilano

The Final Solution To Don Circuit!

hI FOLKS!

SEE THE ATTACHED PIC!

AND GET THE SOLUTION FOR FREE!

DON SECRET REVEALED FINALLY!

WISH U ALL THE LUCK!

LETS SEE SOME DEVICES FROM MEMBERS AND GUESTS!

VIEW THE CIRCUIT AS ATTACHMENT

Aug. 17, 2011 Zilano Ouote:

Originally Posted by **NOMDI** 

Hi ZILANO!

Your device seems to be incredibly simple compares to all the schematics seen everywhere, so i have a question: In your opinion what is the use of the sinewave generator followed by powerful Push-pull and connected to an extra coil on mots schematics?

Best regards and thanks for all your data!

#### Hi NOMDI!

WELL my crude circuit is based on oscillator. sine wave. i used reverse tesla. i made my own nst(without gfi) and fed it to primary 80 turns and output coil 5 turns bifilar so i have low voltages 250 v to handle. thats wot i did. i did not use push pull. reduced voltage to 12 v and used invertor. later i used 24 volt and used invertor. then i didnt use invertor i drove the transformer.

Aug. 17, 2011 Zilano Ouote:

Originally Posted by **Xenomorph** 

So first you state that in your supposed device all frequency correction is being done with one magic resistor, now you suddenly state that power factor caps and diodes are the "solution" and no talk

anymore of "parallel R-Lowpass-filters" ?
I mean come on ...

Hi xeno!

see my previous post as a reply to u.

u will have the solution!

Aug. 17, 2011 Zilano Quote:

Originally Posted by **Xenomorph** 

What you describe:

RL circuit - Wikipedia, the free encyclopedia

Parallel Circuit

Quote:

A resistor across an inductor is **NO** Lowpass Filter!

A Low pass Filter requires a **series resistor**!

Low-pass filter - Wikipedia, the free encyclopedia

And even if you would use a Lowpass Filter, your "All-frequency"-signal would still INCLUDE the frequencies in the Passband below 50 Hz, like 40 Hz,30 Hz etc that would NOT give you a clean 50 Hz AC output.

It is impossible to run appliances with such a signal, so your device cannot work.

Hi Xeno!

its nice to see u here!

u r right. we have to use a capacitor and a resistor(lower the frequency here 50 or 60 hz that is power factor capacitor and use a diode to join R (across the transformer) b4 R and join R across the transformer input.

thats the solution!

Aug. 17, 2011 Zilano Quote: Originally Posted by **vrand** 

Ah, okay thanks

Yeah, Don also mentioned that in one of his lectures. Surprised that this is not common knowledge with an online calculator. There are online calculators for everything else LOL

Cheers Mike

Hi mike!

well most people who r programmers know BILL AND WINDOWS. not don smith n resonance!

but this will help ya a little

Frequency - Reactance Nomograph - RF Cafe

http://www.rfcafe.com/references/electrical/frequency-reactance-nomograph.htm

<u>Coilwinding Calculators - AWG, SWG, Optimum Wire Tension, Correction Factor for Coil</u> <u>Resistance, Efficiency, Toroid Winding</u>

http://www.calculatoredge.com/electronics/coilwinding.htm#awg

Aug. 17, 2011 Zilano

Quote:

Originally Posted by **vrand** 

Hi Zilano

Very nice

So your R acts like a high bandwidth filter and low bandwidth filter and allows only 50hz to the 1:1 isolation transformer?

Is there a program that can calculate the R values?

Cheers Mike

well ves.!

and for r value calc there is no program. u have to print dons nomograph and use a transparent paper and draw lines and get R.

Aug. 17, 2011 Zilano

#### Quote:

Originally Posted by **vrand** 

Hi Zilano

Thank you for the clarification. Do you also downgrade the frequency from 30khz to 50hz after the secondary? Or before the primary?

Cheers Mike

hI MIKE!

MY R DOES IT! AFTER SECONDARY AND B4 MY 1:1 TRANSFORMER RATED AT 60 AMPS 250 VOLTS. R ACTS AS LOW PASS PASS FILTER. AND ALLOWS FREQUENCIES LIKE 50 HZ TO PASS THRU TRANSFORMER. AND STOPS HF PASSING ONTO TRANSFORMER.

Aug. 17, 2011

**Zilano** 

The R Factor B4 Transformer

hI FOLKS!

THE R FACTOR B4 TRANSFORMER

**MUST READ** 

PDF ATTACHED

# VERY IMPORTANT=ALL FREQUENCIES ARE PRESENT AT SPARK GAP

Aug. 17, 2011 Zilano

**Quote:** 

Originally Posted by **vrand** 

Hi Zilano

So you lower the voltage after the spark gap? Do you have a schematic on this setup?

How do you do the resonate between the NST and the air core primary at such low voltage? We needed the 4kv to jump the spark gap.

Cheers Mike

hI MIKE!

NST IS 4KV FED TO PRIMARY. SECONDARY DOWNGRADES IT TO 250V. VOLTAGE IS NOT LOW ITS 4KV. DONT HAVE SCHEMATIC RIGHT NOW. BUT ITS SIMILAR TO THE ONE I POSTED AS A CRUDE CIRCUIT. MY SPARK JUMPS ALSO AT 4KV.

Aug. 17, 2011 Zilano Quote:

Originally Posted by **LtBolo** @Zilano

Eighty turns at 2" produces a wire length of about 42'. Five turns of 3" produce a length of about 4'. That disagrees with your statement about the secondary needing to be 1/4 of the length of the primary.

Please explain.

Hi there!

yes u r right. i did not follow don basics here. coz i used c with L to get resonance. but for newbees and novices following don basic is must till they get to know the basic behind don. morover its easy to get resonance with 4L and 1/4L and smaller caps values can be used to tap natural resonant frequencies of the coils.

in my case i made transformer and than used caps to match frequencies. this wisdom comes after experiments.

Aug. 17, 2011
Zilano
don tower power must see
Hi there all!

must watch and admire tower power! http://rutube.ru/tracks/2001717.html?v=b85de85815d155b15111efc2155584b7

Aug. 17, 2011 Zilano Quote:

Originally Posted by **vrand** 

Very nice, 2mm primary windings to 16mm secondary

Do you lower your 30khz frequency after the 5 turn bifilar secondary, 30khz to 50hz? Or before?

How do you measure your modified 4kv NST output frequency of 35khz?

Cheers Mike

Hi mike!

my nst is sine wave 4kv 500 ma. downgraded voltage from 4kv to 250v hf. then i used r across my transformer that is 1:1 rated for 60 amps.and get 250 v ac. 50 hz

## Aug. 17, 2011 Zilano Quote:

Originally Posted by **vrand** 

Hi Zilano

Very nice

Is the 16mm a flat ribbon similar to this spiral design or is a 16mm copper tube?

Cheers Mike

yes its same that i have used!

solid copper hammered over iron pipe for coiling

# Aug. 17, 2011 Zilano

Quote:

Originally Posted by **vrand** 

Hi Zilano

The 16mm thick secondary is a nice size to pickup lots of amps. What amp and volts does it output?

Cheers Mike

Hi mike!

40 amps output at 230=250 v

Aug. 17, 2011 Zilano Ouote:

Originally Posted by **Escalator** *Hi*.

I am following the work of this guy from Russia, he is doing some interesting work based on D. Smith devices. His channel on YouTube: TheDynatron's Channel - YouTube shows some big current on output with heavy loads plugged with only a 100w switching supply as source. He is publishing and sharing advances and information on this forum: Donald L. Smith, unfortunately is in russian so Google translation is not a great help but it seems that he is doing a very good work. You can find more than 2 hours long videos about his work. I enclose a google translated pdf with the first part of instructions for replication published by him.

At least, someone that wants to share his work , get results and try to improve without hidden magical ingredients. The last 4 pages of the thread have a lot of information.

Hi there!

TRANSLATED VERSION OF WEBSITE USE LINK BELOW

www.001-lab.com/001lab/index.php?PHPSESSID=8c2be678a709116 10256e0180ad9c612&topic=639.3600 - Translator

Aug. 17, 2011 Zilano Ouote:

Originally Posted by **webmug** *Lol! tnx...* 

My setup is using 12V 9Ahr lead accid battery with an inverter to 110V max 150Watt and with a neon dimmer i can turn my NST to max 9KV 30mAmps output.

But that maximum not needed I guess otherwise i will burn out my caps because of max amps that is going to swing through the cap and primairy coil.

I will also try to use a sparkgap in parallel of the tank circuit, because de tank also needs to be on resonance i can try sparkgap but also use a surgearrestor/lightingarrestor to limit the power, max amps will flow through primairy tank with both setups.

For the secondary side i'm not sure what to use yet, a parallel sparkgap and a tank to resonate through a isolation transformer i guess, and thats then also possible with surgearrestor/lightingarrestor.

But I think I'm needed to make al large primary also otherwise i't is to much power, i'm always searching for big isolation stepdown transformers but they are not so common so step down in this coil setup is safer to do and to test.

br, Webmuq

Hi thanks webmug for the info. use parallel spark gap across primary. so dont worry about the high voltage u can join same coil reversed to ur present coil and do a step down. and use hf diodes and filter hf with low amps and use invertor. or u have a choice to make ur own air core transformer. the best method is to make dc and use invertor. since this device is suceptible to rf interference unless enclosed in a metal cage. and when we have dc its not that much problem if we have hv spikes coz diodes take care of that. but always use proper caps across ur rectified dc to smooth dc output.

# use spark gap-very important

wish u all the luck. and if u feel u r not able to handle high voltage then use reverse tesla design. (make L1=primary 4 times of secondary L2.this means If L2 is 1 feet then L1 is 4 feet) and if using bifilar L2 then 1 feet+1 feet and 4 feet L1. Good luck to u!

best wishes and if u need any help we r all here to advice u!

i request all members to help eachother and not just be selfish.

united we stand and divided we fall!

remember this motto!

Aug. 17, 2011 Zilano Quote:

Originally Posted by webmug

He! Thats my coil

I'm waiting for caps to connect my nst and to resonate the primary the turns and length counts for 1/4th so the sec should get a harmonic freq and also resonate.

Currently i've used 3v input dc from pulse gen. and on resonance a led burns up bright But thats on the coils itself in the mhz.

Br, Webmug

Hi thanks webmug!

plz explain mike wot voltages ur going to feed to ur coil.

i changed the courtesy tag to webmug!

sorry for the jesture u were silent i wanted u to speak up!

## Aug. 17, 2011 Zilano Ouote:

Originally Posted by **vrand** *Thanks* 

U are always welcome mike!

## Aug. 17, 2011 Zilano Quote:

Originally Posted by **Parav** *Hi Zilano*,

Am just getting all the coils, caps, Sg's etc together and am having trouble finding High Voltage Diodes. I had some old micro wave oven diodes kicking around here someplace, if I can find them again. Will these MO diodes work --These diodes are rated at 12kv and 550ma? --I'm afraid that the current rating might be too low though. What do you think? -I'll be using also a 9v dc neon tube transformer modual out of an old neon sign from a bar that was shaped like a Martini glass --I'm guestimating that it will put out, maybe 3kv-judging by the length of the neon tube and the spark length.

Thanks again for all the valuable info you have given us and am looking forward to trying this out soon.---Paul

#### Hi paul!

these diodes wont work for rectification purpose when u will be having more amps in reverse tesla design. get diodes for high frequency and more amps not milli amps.

yes u can use one diode to feed ur hv to primary coil. it will work but consider ur hv input voltage that u r gonna feed to ur primary.it must not be above 12kv and 550ma.

Aug. 17, 2011 Zilano Ouote:

> Originally Posted by **vrand** *Hi Zilano*

Interesting design. 7 turns primary and 20 turns secondary. What is the input voltage to the thick primary coil? Output voltage from secondary?

Cheers Mike

HI THATS JUST A PIC TO SHOW DRAK! AND ALL OTHERS WHO DONT UNDERSTAND BIFILAR BASICS IN DONS CIRCUIT. ITS FOR ALL THOSE WHO WANNA KNOW HOW TO WIND BIFILAR.

Aug. 17, 2011
Zilano
bifilar don coil
hi folks!

COURTESY: webmug (esteemed member-energetic forum)

don bifilar

pic attached

Aug. 17, 2011 Zilano Ouote:

Originally Posted by **vrand** *Hi Zilano* 

Thank you for the explanation. What wire size have you found that works in your 80 turn primary coil? Windings/turns per inch?

Cheers Mike

hI i just used pvc insulated insulated wire i found lying in my home did not measure the gauge of it but its solid copper single strand.and used basic rule of thumb primary coil wire is half thick than secondary but results were low as i was not getting the amps. so i used thicker copper wire like kapanadze. and got amps. the basic is when u have resonance the thicker coil generates more amps and if u wanna keep input low make primary thinner. experiments make u learn wots better for u. i used single strand copper ac wire 2mm thick 220-230 v A.C. and for secondary used thicker alluminum wire first then changed to copper. 16mm thick.

Aug. 17, 2011 Zilano Quote: Originally Posted by **dllabarre** Zilano

What diameter is your primary coil (many turns/HV)? and how many turns? 80?

Which way to wind primary cc or ccw or doesn't it matter?

How many turns is your secondary coil?
4 turns cc & 4 turns ccw???

Thank you

Hi!

inner 2" coil outer 3" coil diameter. 5 turns bifilar(5cw+5ccw) primary 80 turns. voltage fed 4kv=4000 volt. so voltage per turn in primary is4000/80=50v per turn so it will not burn insulation. see tesla is just a transformer that happens to be a resonant one. usually tesla coils r step up so we can swap wires and dont worry abt insulation if we keep voltage per turn lesser than 300 volts. it can be used as stepdown also. only u have to swap wires. when u using it as step up the secondary has high voltage and insulation dont burn up so when u use it as a step down it will handle high voltage input. but make sure primary and secondary must have distance greater than hv voltage breakdown between them

### Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** *Yeah* 

Only ferrite rods I have laying around are 1 inch long and 6mm in diameter. Lol, Can I tape them in one long rod?

Also I have a TON of coils and time. Would this scenerio work:

A 5khz train from the flyback to a 1:1 Air core (series spark gap) to a Step Down Air core (parallel spark gap). All coils in resonance except flyback?

I will also try old setup with ferrite if taping 1inch rods together will work. I just don't have everything I need so I'm trying to make due.

well yes u can tape or stick with super glue and make length enuff for ur coil. first try series spark gap and then parallel spark gap. with ferrite and without ferrite. and then swap wires of primary n secondary and when u go thru all steps u will learn a lot and u will know wot works best. failures let us learn.

good luck!

always here for ya

#### Aug. 16, 2011 Zilano

# Ouote:

Originally Posted by **drak**.

I didn't have resonance between flyback and primary. I had resonance between primary and secondary. And with a series spark gap, it doesn't matter how you charge the cap, the coil won't be taking all the energy. I charged the cap with a 5khz pulse from the flyback.

omg!

thats why i was thinking why ur bulb not lighting brighter. u were feeding with low train pulse and that not in resonance with flyback and coil. ok u got it

## Aug. 16, 2011 Zilano

Quote:

Originally Posted by **drak** *But I thought you said:* 

I don't want underunity

u wont be under unity. first try it use welding rods and see the difference. it will let u learn wot ferrite can do. later u get right caps and use parallel spark gap. and fire ur setup.

## Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** 

Sorry, calc does give cap value, my L is 37.7 micro henry's so it says I need a cap that is 4.74e+5 pico farads in order to get a resonance of 38khz. So, back to the I don't have a big enough capacitor problem.

Hi Drak!

it says u need 0.5 microfarad caps to have 36.65 khz

if u have that use it else

so use ur oldsetup and use ferrite rods. and series spark gap.

Aug. 16, 2011

Zilano Quote:

Originally Posted by **drak** 

That calculator will not allow me to enter 38khz in it. It only allows me to enter the induction and the capacitance to give me frequency. Am I correct in saying that if I have a parallel spark gap it will not fire unless I have resonance between the fly back and the primary? If thats so then please refer to my post #293. I can't go that low. So my spark gap will never fire if my coil primary resonance is 400khz and my flyback is coming at 38khz. Lol, maybe I'm just beyond confused.

listen drak! this is a flexible calc use it.

#### L/C Resonance Calculator

use this and keep L fixed and change c and see if f matches near ur 38khz

yes resonance is needed between ur fly back n primary. if u got it with series spark gap then just use welding rods in pvc tube and insert inside primary.

try that now if u can.

Aug. 16, 2011 Zilano Quote:

Originally Posted by **drak** 

Ok, If I have 38khz coming out of the flyback, and I have the induction in henry's of my primary. Then what again is the calculation for the cap farads I need?

use online calc

LC Resonance Calculator

or tell me ur L u told me f only

Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** 

after about 38khz it won't fire anymore. but that is not because of the flyback... its because of my driving circuitry. I don't have the electronic components to get it faster then that

HI Drak!

use 38khz. use it. dont worry u will get resonance. use wotever frequency u can fire with without

needing components. try with that.

or use coil pairs make a step up and step down. or use series spark gap as u did b4 but use welding rods. same old combination with welding rods. can u do that again?

tell me can u do that same old stuff with welding rods?

## Aug. 16, 2011 Zilano Quote:

#### Originally Posted by **drak**

I must be missing something then. If the spark gap is in parallel, then how will it ever spark? The coil is taking all the energy.

#### Hi drak!

spark not firing means u need to adjust caps. wot happns is caps get overcharged and fires (short circuit L) so current flows in primary and energy stored in magnetic field of primary. when magnetic field collapses it induces current in primary which charges cap again. and cycle continues and losses r fed back thru ur flyback to the cap/caps. and cycle goes on endlessly.

## Aug. 16, 2011 Zilano Quote:

#### Originally Posted by **drak**

Thats the thing, I don't have the electronic components to pulse my flyback at 400khz. 400khz Is the lowest I can get the resonant frequency of my coils because I don't have very high farad high voltage AC caps. So I'm stuck with a set of coils that the lowest that will resonate is 400khz. I can not get my flyback to pulse that fast. The setup in the videos you seen is a SERIES spark gap and they were in resonance. If I added a capacitor to either coil the bulb would get dimmer and the same if I removed a cap. I tested the resonance on the scope with the function generator to get them in perfect resonance with each other before letting it fly. So in order to get a spark out of a set of coils with a PARALLEL spark gap, I need 400khz pulse, which I can get with a second set of coils with a series spark gap.

Or I could just wait a week and order all the parts I need to get a 35khz resonance and I'm not in the mood to wait Unless you have another suggestion.

Hi drak! wot max frequency u can fire ur flyback?

Aug. 16, 2011 Zilano

#### Quote:

#### Originally Posted by **drak**

Thats the thing, I don't have the electronic components to pulse my flyback at 400khz. 400khz Is the lowest I can get the resonant frequency of my coils because I don't have very high farad high voltage AC caps. So I'm stuck with a set of coils that the lowest that will resonate is 400khz. I can not get my flyback to pulse that fast. The setup in the videos you seen is a SERIES spark gap and they were in resonance. If I added a capacitor to either coil the bulb would get dimmer and the same if I removed a cap. I tested the resonance on the scope with the function generator to get them in perfect resonance with each other before letting it fly. So in order to get a spark out of a set of coils with a PARALLEL spark gap, I need 400khz pulse, which I can get with a second set of coils with a series spark gap.

Or I could just wait a week and order all the parts I need to get a 35khz resonance and I'm not in the mood to wait. Unless you have another suggestion.

#### Drak!

wotever frequency u can feed with ur flyback feed it. keep spark gap before c and L parallel make it resonate. here frequency dont matter. all thats matters is resonance. if u get resonance. even at high frequency u will get results. dont downgrade ur frequency try to get resonance only. don even asked to use frequency in mega hertz also. so dont worry.

fire ur flyback. feed to primary. match cap and get resonance. forget 30-35khz ok.

do this.

Aug. 16, 2011 Zilano Quote:

#### Originally Posted by LtBolo

Now I'm confused. Since the two ends are tied, and the center goes to ground, that is just 2 wires in parallel and there is really no bifilar effect at all. Isn't the point of it to cancel the magnetic induction, and if so, it seems that you would center tap one cw or ccw winding?

Hi there!

two ends r joined making one wire and the centre tap is another wire. cw coil and ccw coil makes amps and volts equally if they have same turns. we combine amps and voltage by joining two ends and centre tap is our ground and neutral wire. see the circuit i posted earlier.

Aug. 16, 2011 Zilano Quote:

Originally Posted by **dllabarre** *I see*.

So once you get it started you feed some of the output back in to the input so it self runs.

Hi dllabarre!

yes u got it. self running like kapanadze. touch to start. thats why i used 4700 mfd caps as buffer. regards

## Aug. 16, 2011 Zilano Quote:

Originally Posted by **drak** 

Yes I know I'm working on converting to parallel spark gap. I have to think of ways to do it. I will probably have to use two sets of coils to do this. Thank you for all your help zilano

#### Hi drak!

u dont need 2 pairs of coil combination. u only need ur flyabck and the step down. wot u just did with ur bulb. keep that as it is. just match right cap for primary. use a variable cap as u used in ur earlier setup. and if that caps capacity is low add parallel cap across it. ur fly back has high frequency ac already. so u dont need extra pair of coils. just match cap to primary and thats it.

regards

## Aug. 16, 2011 Zilano Quote:

Originally Posted by **dllabarre** 

zilano

I just read through all the threads since you started posting.

I must have mis-read something.

Can you tell me how you're powering the device that is powering your house?

Is it:

12v battery ---- inverter ----- neon sign transformer ----- your D.Smith circuit?

Thank you

Hi there!

12v 15 sec touch and start supply. custom made nst tesla stepdown tesla dsmith circuit

customised. driven transformer 1:1 250 v ac and 12 dc 2 amps fed back.

regards

## Aug. 16, 2011 Zilano Quote:

Originally Posted by **drak** 

I was never trying to get the perfect voltage by calculating the turns. I just wanted to blow up a 6 watt 120v bulb with 2 watts of power. At least then I would know I'm getting somewhere.

Hi drak!

u have gotten somewhere. coz u got partial resonance till now and ur bulb lit. try again and u will get resonance and u will get it. dont worry abt voltages. now cheer up kid!

regards

## Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** 

I was never trying to get the perfect voltage by calculating the turns. I just wanted to blow up a 6 watt 120v bulb with 2 watts of power. At least then I would know I'm getting somewhere.

Hi Drak!

dont loose hope. u will light a bulb ok. just follow wot i tell u. ok do this basic. make sec twice thick of primary. and keep 20 turns for primary and ten turns for secondary and dont use bifilar. ok try with single coil. when u get resonance u will be so happy.

regards

Aug. 16, 2011

Zilano

watch caps inseries with tesla hv and then bulb and then earth

hi folks

must watch! for who have plans for megawatts designs( coil glimpse)

courtesy (http://.rutube.ru)

http://rutube.ru/tracks/2512838.html?v=f165671162dfcd2ced0b10fdb64304ba

Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** 

Ok I guess I am getting confused as to what you guys are referring to when you say bifilar. I always thought bifilar meant wrapping TWO wires, then connecting the end of wire two to the beginning of wire one. OR do you mean wrap one single wire, and tap from the center of the one wire?

hI dRAK!

U R RIGHT. when u make bifilar for bedini school girl circuit. u can do that. but here bifilar is stretched. wind one coil cw and wind another ccw and join them at centre. so u have cw----centre jointed----ccw

cw= clockwise ccw= counter clockwise or anticlockwise

regards

Aug. 16, 2011 Zilano In A Nutshell

hI FOLKS!

U CAN USE RESISTOR ACROSS THE INPUT SIDE TRANSFORMER OF UR OUTPUT OF UR COIL TO GET 50 OR 60 HZ. COZ IT BYPASS HF AND ALLOW PRIMARY OF TRANSFORMER(IRONCORE) TO OSCILLATE ACCORDING TO THE PEAKS OF HF. WITH 50 OR 60 RATES. LOOK FOR 100 HZ IF U NEED 50 AND LOOK FOR 120 IF U NEED 60 IN CHART. THE COMBINATION DAMPENS FREQUENCY.

AND FOR THOSE WHO DONT AGREE TO MY SUGGESTIONS HAVE THE OPTION TO RECTIFY AC WITH BRIDGE AND USE DC AND INVERTOR. no hard feelings

ZZZ

Aug. 16, 2011 Zilano

#### Quote:

Originally Posted by **vrand** 

Hi Zilano

What would you recommend for 8 awg L2 secondary wiring 5 turns (thick one)?

Litz wire? Copper tubing?

Because of the "skin effect" copper tubing works well. Even better is silver plated copper stranded teflon cable.

Kapanadze used a copper tubing for his L2 heavy secondary. It worked for Kapanadze?

Cheers Mike

hI MIKE!

FOLLOW KAPANADZE FOR COIL.
IT WORKED FOR HIM AND WILL WORK FOR U ALSO

regards zzz

Aug. 16, 2011 Zilano

Rl Circuits Band Pass Filter Xtention-c

- 1. When analyzing a filter, our primary interest is in determining the maximum value of *Av* and the value of the *cutoff frequency* (or frequencies).
- 2. The maximum load voltage for an RC low-pass filter occurs when fin = 0 Hz. It is found from , where RF is the filter resistor.
- 3. The value of Av(max) for an RC low-pass filter is always less than unity (1). It can be found from .
- 4. The process for determining the cutoff frequency of an *RC* low-pass filter is demonstrated in Example 15.15.
- 5. A *bode plot* is a normalized graph that represents frequency response as a change in voltage gain (*Av*) versus operating frequency.
- 6. A bode plot is an ideal plot of frequency response, because it assumes that gain remains constant until the cutoff frequency is reached. (See Figure 15.17.)
- 7. The advantage in using a bode plot is that only the value of the cutoff frequency varies from one filter to another of the same type.
- 8. The cutoff frequency of a given filter is commonly referred to as the *3 dB point* or *3 dB frequency*.
- 9. The *roll-off rate* of a filter is the rate of change in gain experienced by the circuit when operated outside of its frequency limit, normally expressed in dB per *octave* or dB per *decade*.
- 10. A roll-off rate of 6 dB per octave equals a roll-off rate of 20 dB per decade.
- 11. All low-pass *RC* filters experience the same 6 dB per octave (20 dB per decade) roll-off

- rates. The rates are independent of the values of *R* and *C*.
- 12. The gain and frequency calculations for an *RL* low-pass filter are slightly different from those of the *RC* low-pass filter. However, all the concepts relating to response curves, bode plots, and *roll-off rates* are the same.
- 13. The process used to determine the cutoff frequency of an *RL* low-pass filter is demonstrated in Example 15.16.
- 14. *High-pass filters* are formed by reversing the positions of the resistive and reactive components in *RC* and *RL* low-pass filters.
- 15. An *RC* high-pass filter and response curve are shown in Figure 15.22.
- 16. The value of Av(max) for an RC high-pass filter is approximately equal to one (1).
- 17. The process used to determine the cutoff frequency of an *RC* high-pass filter is demonstrated in Example 15.17.
- 18. The bode plot for a high-pass filter is simply a mirror image of the plot for a low-pass filter.
- 19. The analysis of an *RC* high-pass filter is demonstrated in Example 15.17.
- 20. The process used to determine the cutoff frequency of an *RL* high-pass filter is demonstrated in Example 15.18.
- 21. The most common passive *bandpass* and *notch filters* are *LC* filters.
- 22. The operation of a series LC bandpass filter is based on the relationship between its input frequency and its resonant frequency: f in = fr . </B></B>At resonance XS 0 so IT = VS/RL. The circuit is resistive and the phase angle is 0°. f in </B>< fr . </B>Below resonance, XS is capacitive and has a negative phase angle. XS increases and gets more negative as f in </B> decreases. f in </B>> f r . </B>Above resonance XS is inductive and has a positive phase angle. XS increases and gets more positive as f in </B> increases.
- 23. The operation of a shunt LC bandpass filter is based on the relationship between its input frequency and its resonant frequency as follows: fin</B> = fr</B> . When the circuit is operating at resonance, IL = IC, and XP approaches infinity. As a result, the filter is effectively removed from the circuit and The circuit is resistive and the phase angle is  $0^\circ$ . fin</B> < fr</B> . </B> Below resonance, XL decreases until at 0 Hz it effectively shorts out the load and VL = 0 V. fin</B> > fr</B> . Above resonance, fC decreases. As fin</B> continues to increase, fC approaches fC , shorting out the load. Once again, fC fC v.
- 24. The *Q* of a filter is approximately equal to (or less than) the *Q* of its inductor.
- 25. The loaded Q(QL) of a filter is the quality of the circuit when a load is connected to its output terminals.
- 26. The loaded *Q* of a filter is significantly lower than the unloaded *Q* of the inductor.
- 27. The process used to determine the bandwidth of a series *LC* bandpass filter is demonstrated in Example 15.19.
- 28. Once we know the bandwidth of a series *LC* bandpass filter, we can solve for the cutoff frequencies using the value of *f* ave.
- 29. The process used to determine the value of *QL* for a *shunt LC* bandpass filter is demonstrated in Example 15.20.
- 30. A *series LC notch filter* can be constructed by placing a parallel *LC* circuit in series with the source and the load.
- 31. A *shunt LC notch filter* can be constructed by placing a series *LC* circuit in parallel with the source and the load.

#### Rl Circuits Band Pass Filters Xtention-b

- 1. The primary limitation on dB values is that they cannot be used in circuit input/output calculations without being converted to standard numeric form.
- 2. When filters (or amplifiers) are connected in series, they are said to be *cascaded*.
- 3. Each filter (or amplifier) in a cascade is referred to as a *stage*.
- 4. The *dBm reference* represents an actual power value. It references a power level to a constant of 1 mW.
- 5. The ratio of circuit output voltage to input voltage is generally referred to as *voltage gain* (*Av*).
- 6. The voltage gain of a circuit equals 70.7% of its maximum value at the cutoff frequencies. Expressed mathematically:  $Av = 0.707 \, Av(\text{max})$  when f = fC. This relationship is based on the fact that power gain equals 50% of its maximum value when voltage gain equals 70.7% of its maximum value.
- 7. The dB voltage gain of a circuit is found as twenty times the common log of *Av*. By formula:
- 8. When dB power gain drops to 50% of its maximum value, the change in dB power gain is –3 dB.
- 9. When dB voltage gain drops to 70.7% of its maximum value, the change in dB voltage gain is 3 dB.
- 10. The process for converting a dB voltage gain to standard numeric value is demonstrated in Example 15.14.
- 11. dB current gain principles are identical to those of dB voltage gain.
- 12. When a capacitor (or other component) is connected from a signal path to ground, it is referred to as a *shunt component*.
- 13. When analyzing a filter, our primary interest is in determining the maximum value of *Av* and the value of the *cutoff frequency* (or frequencies).
- 14. The maximum load voltage for an RC low-pass filter occurs when fin = 0 Hz. It is found from , where RF is the filter resistor.
- 15. The value of Av(max) for an RC low-pass filter is always less than unity (1). It can be found from .
- 16. The process for determining the cutoff frequency of an *RC* low-pass filter is demonstrated in Example 15.15.
- 17. A *bode plot* is a normalized graph that represents frequency response as a change in voltage gain (*Av*) versus operating frequency.
- 18. A bode plot is an ideal plot of frequency response, because it assumes that gain remains constant until the cutoff frequency is reached. (See Figure 15.17.)
- 19. The advantage in using a bode plot is that only the value of the cutoff frequency varies from one filter to another of the same type.
- 20. The cutoff frequency of a given filter is commonly referred to as the *3 dB point* or *3 dB frequency*.
- 21. The *roll-off rate* of a filter is the rate of change in gain experienced by the circuit when operated outside of its frequency limit, normally expressed in dB per *octave* or dB per *decade*.
- 22. A roll-off rate of 6 dB per octave equals a roll-off rate of 20 dB per decade.
- 23. All low-pass *RC* filters experience the same 6 dB per octave (20 dB per decade) roll-off rates. The rates are independent of the values of *R* and *C*.
- 24. The gain and frequency calculations for an *RL* low-pass filter are slightly different from those of the *RC* low-pass filter. However, all the concepts relating to response curves, bode

- plots, and *roll-off rates* are the same.
- 25. The process used to determine the cutoff frequency of an *RL* low-pass filter is demonstrated in Example 15.16.
- 26. *High-pass filters* are formed by reversing the positions of the resistive and reactive components in *RC* and *RL* low-pass filters.
- 27. An *RC* high-pass filter and response curve are shown in Figure 15.22.
- 28. The value of Av(max) for an RC high-pass filter is approximately equal to one (1).
- 29. The process used to determine the cutoff frequency of an *RC* high-pass filter is demonstrated in Example 15.17.
- 30. The bode plot for a high-pass filter is simply a mirror image of the plot for a low-pass filter.
- 31. The analysis of an *RC* high-pass filter is demonstrated in Example 15.17.
- 32. The process used to determine the cutoff frequency of an *RL* high-pass filter is demonstrated in Example 15.18.
- 33. The most common passive *bandpass* and *notch filters* are *LC* filters.
- 34. The operation of a series LC bandpass filter is based on the relationship between its input frequency and its resonant frequency: f in = fr . </B></B>At resonance XS 0 so IT = VS/RL. The circuit is resistive and the phase angle is 0°. f in </B>< fr . </B>Below resonance, XS is capacitive and has a negative phase angle. XS increases and gets more negative as f in </B> decreases. f in </B>> f r . </B>Above resonance XS is inductive and has a positive phase angle. XS increases and gets more positive as f in </B> increases.
- 35. The operation of a shunt LC bandpass filter is based on the relationship between its input frequency and its resonant frequency as follows: fin</B> = fr</B>. When the circuit is operating at resonance, IL = IC, and XP approaches infinity. As a result, the filter is effectively removed from the circuit and The circuit is resistive and the phase angle is  $0^{\circ}$ . fin</B> < fr</B>. </B>Below resonance, <math>XL decreases until at 0 Hz it effectively shorts out the load and VL = 0 V. fin</B> > fr</B>. Above resonance, XC decreases. As fin</B> continues to increase, XC approaches 0, shorting out the load. Once again, VL 0 V.
- 36. The *Q* of a filter is approximately equal to (or less than) the *Q* of its inductor.
- 37. The loaded Q(QL) of a filter is the quality of the circuit when a load is connected to its output terminals.
- 38. The loaded *Q* of a filter is significantly lower than the unloaded *Q* of the inductor.
- 39. The process used to determine the bandwidth of a series *LC* bandpass filter is demonstrated in Example 15.19.
- 40. Once we know the bandwidth of a series *LC* bandpass filter, we can solve for the cutoff frequencies using the value of *f* ave.
- 41. The process used to determine the value of *QL* for a *shunt LC* bandpass filter is demonstrated in Example 15.20.
- 42. A *series LC notch filter* can be constructed by placing a parallel *LC* circuit in series with the source and the load.
- 43. A *shunt LC notch filter* can be constructed by placing a series *LC* circuit in parallel with the source and the load.

ZZZ

#### Zilano

#### Rl Circuits Band Pass Filters Xtension-a

#### **Frequency Response and Passive Filters**

The following summarizes the major points made in Chapter 15:

- 1. Signal loss caused by the frequency response of a circuit is referred to as attenuation.
- 2. Attenuation is normally described using the ratio of a circuit's output amplitude to its input amplitude. In most cases, a power ratio is used.
- 3. The frequency at which the power ratio of a circuit drops to 50% of its maximum value is referred to as the *cutoff frequency* (*f C*).
- 4. Filters are circuits that are designed for specific frequency response characteristics.
- 5. There are four basic types of filters. The *low-pass filter* is designed to pass all frequencies below its cutoff frequency. The *high-pass filter* is designed to pass all frequencies above its cutoff frequency. The *bandpass filter* is one designed to pass the band of frequencies that lies between two cutoff frequencies. *The band-stop* (or *notch*) *filter* is designed to block the band of frequencies that lies between two cutoff frequencies. The *basic frequency response* curves for these filters are shown in Figure 15.3.
- 6. The cutoff frequencies of a bandpass (or notch) filter are referred to as the lower cutoff frequency (fC1) and the upper cutoff frequency (fC2).
- 7. Because bandpass and notch filters have two cutoff frequencies, there are two values that are not commonly applied to the low-pass and high-pass filters used to describe their operation; *bandwidth* and center *frequency*.
- 8. The bandwidth of a filter is the range (or band) of frequencies between its cutoff frequencies.
- 9. The *bandwidth* of a filter equals the difference between the cutoff frequencies.
- 10. The *center frequency* (*f* 0) of a filter is the geometric average of the cutoff frequencies. By formula
- 11. The ratio of fC2 to f0 equals the ratio of f0 to fC1.
- 12.Low-pass filters are normally described using their cutoff frequencies. Example: A low-pass filter with a 10 kHz cutoff frequency.
- 13.Bandpass and notch filters are normally described in terms of bandwidth and center frequency. Example: A 20 kHz bandpass filter with a 150 kHz center frequency.
- 14. The quality (Q) of a bandpass or notch filter equals the ratio of its center frequency to its bandwidth. By formula: .
- 15. The value of filter *Q* actually depends on circuit component values. The bandwidth of a filter depends on the values of center frequency and *Q*.
- 16. The average frequency (f ave) of a filter lies halfway between its cutoff frequencies. This frequency is used in conjunction with the circuit bandwidth to determine the values of the cutoff frequencies.
- 17. When  $Q \ge 2$ , the values of f0 and f ave for the filter are approximately equal. When Q < 2, the value of f ave can be found as demonstrated in Example 15.6.
- 18. Frequency response curves normally use *logarithmic frequency scales*. The value of each increment on a logarithmic scale is a whole number multiple of the previous increment. An *octave scale* uses a frequency multiplier of 2 between increments. A *decade scale* uses a frequency multiplier of 10 between increments.
- 19. The ratio of circuit output amplitude to input amplitude is normally expressed using *decibels* (dB). Decibels are used because they allow us to easily represent very large and very small values.
- 20. The ratio of output power to input power for a component or circuit is commonly referred to as *power gain* (Ap). The word *gain* is used in reference to amplifiers, which can increase the power level of an ac input signal.
- 21. Passive filters all have power gains that are less than one (1).
- 22. The term *unity gain* is commonly used to refer to a value of Ap = 1.
- 23. The *bel* representation of a value indicates the power of 10 that equals the ratio. Expressed mathematically: If log10 (y) = x, then log10 (y) = x (x) = x (x)

- 24. The bel representation of a number is positive when Ap > 1, zero when Ap = 1 (unity gain), and negative when Ap < 1.
- 25. Reciprocals have equal-magnitude positive and negative bel values. Expressed mathematically: If log10 (y) = x, then .
- 26. At some point, the industry switched from bels to tenths of bels, or *decibels* (dB).
- 27. There are 10 decibels (dB) in one bel (B). Therefore, dB power gain is found as ten times the common log of the power ratio.
- 28. The dB power gain of a circuit is found from .
- 29. Power gain (in dB) is converted to standard numeric form as demonstrated in Example 15.10.
- 30. Decibel representations of gain are used because a very large range of values can be represented using relatively small numbers and because the total gain produced by series filters and/or amplifiers can be determined using simple addition.

ZZZ

Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** *zilano*,

Ok, I think I understand now. I was always putting my spark gap in series. I tried putting it in parallel and got no spark. The capacitor will never charge to a high enough voltage to spark because the energy is being consumed by the coil. Sooo, I'm guessing the frequency that charges the capacitor must be same as the resonant frequency of the LC therefore the coil will not accept the energy as well and will be dumped into the capacitor. I think that is what I was doing wrong. And that is why you are saying charge your cap with sine wave?

hI dRAK!

U GOT IT.thats wot i meant. spark wont fire if u dont get resonance for L1 right. when its resonating spark will fire automatically. BUT DONT REMOVE DIODE IN THE INPUT ITS TO SAVE UR FLYABCK COIL WITH HIGH VOLTAGE FLASH BACK.

regards

Aug. 16, 2011 Zilano parallel LR CIRCUIT XTENSION

hI FOLKS!

Resistive-Inductive (RL) Circuits



The following summarizes the major points made in Chapter 11:

- 1. A resistive-inductive (RL) circuit is one that contains any combination of resistors and inductors.
- 2. Many values in resistive-reactive circuits must be added as *phasor* quantities. Because the component voltages in an *RL* circuit are at 90° angles, geometric addition must be used to add two or more phasor quantities. For two phasors (a and b) at 90 degree angles, the geometric sum of the phasors (c) is found as .
- 3. In a series *RL* circuit the source voltage equals the geometric sum of the resistive and reactive voltages and the total impedance equals the geometric sum of resistance and reactance.
- 4. The values of source voltage and total impedance in a series *RL* circuit each have a phase angle that is normally expressed as part of the value.
- 5. Inductor voltage leads resistor voltage by 90° in a series *RL* circuit.
- 6. The source phase angle () is the phase difference between the source voltage and the circuit current. Voltage leads current in a series RL circuit. The source phase angle falls within the limits of  $0^{\circ} < 90^{\circ}$ .
- 7. Since circuit current is in phase with resistor voltage, can be measured by measuring the phase difference between VS and VR.
- 8. The total impedance in a series RL circuit equals the geometric sum of XL and R. By formula
- 9. The *impedance phase angle* in a series *RL* circuit equals the voltage phase angle. By formula
- 10. *Inductive reactance* leads circuit current by 90° in a series *RL* circuit.
- 11. In a series *RL* circuit we can calculate the component voltages using a voltage-divider relationship, but the phase angles must always be taken into account.
- 12. The term *frequency response* is used to describe any changes that occur in a circuit as a result of a change in operating frequency. The responses of a series *RL* circuit to an increase in operating frequency are listed in Table 11.2. The responses of a series *RL* circuit to a decrease in operating frequency are described immediately following the table.
- 13. In any resistive-reactive circuit, resistive power is measured in watts. *PR* is the power that is actually dissipated in the circuit. Reactive power is measured in volt-amperes-reactive (VAR) and apparent power is measured in volt-amperes (VA).
- 14. The effect of *inductor winding resistance* (*Rw*) on the value of apparent power is usually negligible.
- 15. *Apparent power* leads the circuit current in a series *RL* circuit.
- 16. The *power factor* for a series RL circuit is the ratio of resistive power to apparent power. By formula . The power factor can also be found as the cosine of the phase angle. By formula  $PF = \cos x$ .
- 17. A parallel *RL* circuit is one that contains one or more resistors in parallel with one or more inductors, each branch containing only one component.
- 18. In a parallel *RL* circuit, the total circuit current equals the geometric sum of the currents through the resistance and the reactive branches, by formula . The inductor current lags the source voltage by 90° and the resistor current is in phase with the circuit voltage.
- 19. The current phase angle () in a parallel RL circuit is the phase difference between IT and VS. By formula . Because voltage is assumed to have an angle of  $0^{\circ}$  in a parallel circuit, the current phase angle is always negative. For a parallel RL circuit, the current phase angle (relative to the source voltage) has limits of  $-90^{\circ} < 0^{\circ}$ .
- 20. The *product-over-sum method* for calculating total impedance is preferred for parallel *RL* circuits. (The geometric sum of *KL* and *R* is used in the denominator.)
- 21. The impedance phase angle in a parallel *RL* circuit is always the negative equivalent of the current phase angle.
- 22. The impedance phase angles for series and parallel *RL* circuits are calculated using reciprocal fractions, as follows:
- 23. The responses of a parallel *RL* circuit to an increase in operating frequency can be summarized as follows: When *f* increases, *XL* increases, which causes *IL* and to decrease. The decrease in *IL* causes *IT* to decrease, which means that *ZT* increases.
- 24. Analyzing a series-parallel circuit is simply a matter of combining series components according to the

- rules of series circuits and combining parallel components according to the rules of parallel circuits.
- 25. The analysis of a series-parallel circuit with resistive and reactive components gets a bit complicated because of the phase angles involved. Geometric addition is used to determine the sum of two phasors that are at 90° angles. Rectangular notation is used when adding two phasors that are at any angle other than 90° (or 0°).
- 26. To add two phasors that are at angles other than 90° (or 0°), you should convert both phasors to rectangular form, add the two rectangular values, and convert the result back to polar form (if needed).
- When the total impedance of a parallel *RL* circuit is converted to rectangular form, the new value is the series equivalent of the parallel impedance network.

**REGARDS** 

Aug. 16, 2011 Zilano Lr Circuits And Frequency Band

RL circuit

PLEASE READ THE RED TEXT BELOW

Series RL circuit

This shows that, if the output is taken across the inductor, high frequencies are passed and low frequencies are attenuated (rejected). Thus, the circuit behaves as a <u>high-pass filter</u>. If, though, the output is taken across the resistor, high frequencies are rejected and low frequencies are passed. In this configuration, the circuit behaves as a <u>low-pass filter</u>. Compare this with the behaviour of the resistor output in an <u>RC circuit</u>, where the reverse is the case.

The range of frequencies that the filter passes is called its <u>bandwidth</u>. The point at which the filter attenuates the signal to half its unfiltered power is termed its <u>cutoff frequency</u>. This requires that the gain of the circuit be reduced to

Parallel circuitThis section requires expansion.

Parallel RL circuit

The parallel RL circuit is generally of less interest than the series circuit unless fed by a current source. This is largely because the output voltage *Vout* is equal to the input voltage *Vin* — as a result, this circuit does not act as a filter for a voltage input signal.

With complex impedances:

and

.This shows that the inductor lags the resistor (and source) current by 90°.

The parallel circuit is seen on the output of many amplifier circuits, and is used to isolate the amplifier from capacitive loading effects at high frequencies.

also important. parallel RL circuit demo practical

http://www.wisc-online.com/objects/ViewObject.aspx?ID=ACE10304

**REGARDS** 

Aug. 16, 2011 Zilano

**Spark Gap Position Very Important Must Read** 

hI FOLKS!

**MUST READ** 

#### very important

the position of spark gap in my circuit is important. dont use spark gap in series. caps must be parallel with primary and a spark gap in parallel before LC combination. if u change spark gap position all u will be getting induction power which is always under unity and we dont want that. so keep spark gap as shown in above figure. veryyyyyyyy important.

regards

Aug. 16, 2011 Zilano Ouote:

Originally Posted by **vrand** 

Hi Zilano

The bifilar is it center tapped to ground (per your drawing below)?

Is the bifilar like the diagram below where 5 turns from center are lower half CCW and upper half are CW 5 turns?

Is there any advantage in using copper tubing for the bifilar windings vs stranded wire vs solid copper wire?

Cheers Mike

#### Hi Mike!

### very important

the position of spark gap in my circuit is important. dont use spark gap in series. caps must be parallel with primary and a spark gap in parallel before LC combination. if u change spark gap position all u will be getting induction power which is always under unity and we dont want that. so keep spark gap as shown in above figure.

# <u>veryyyyyyyyy important!!!</u>

regards

Aug. 16, 2011 Zilano Quote:

Originally Posted by **vrand** 

Here is a strange transformer with flat windings: tesla coil, primary inductor, copper wire base, wraps, taps

I was always fascinated by Don's lectures and writings where his says his little table top coils/caps/resistors setup produces 30kw to 200kw of output to megawatts for country size units. So its all about the secondary wire size to being able to take the amps. Interesting indeed.

Cheers Mike

Hi mike!

the flat panel good for tesla hv spark stuff. but for power u need not that. its whopping more wot u need. see the awg chart i have uploaded in one of my posts. and consider wire with amps n frequency in the chart, the standard chart provides amps but not frequency handling capabilities. get the chart with amps n frequency ratings for proper coiling, but its not necessary, u can use any copper the basic is. L1 (thin one) is half diameter of L2(thick one)

regards

Aug. 16, 2011 Zilano Quote:

Originally Posted by carmine

Hi, which Barker & Williamson coil would be better,@4 turns per inch . Airdux TL what would be 2404TL P/N or in the Miniductor the 3064 P/N . Thank You 4 your help

Hi Carmine!

quote Don Smith and get coils from barker williams. they will send u primary n secondary. talk to their outlet.

regards

### Aug. 16, 2011 Zilano Ouote:

Originally Posted by **vrand** 

Hi Zilano

By thick do you mean like a copper tube or large diameter > 2 awg copper cable?

I like your 10kw design so I would like to experiment with a secondary that can take 50-100 amps to connect to my house 60hz 240/120v split phase 100 amp panel.

Cheers Mike

#### Hi mike!

solid copper thick coil. dont use hollow copper. think a transformer(induction) and make it tesla(resonance). i made a transformer and made it to resonate like tesla coil. consider how many amps u want in the output. and choose copper wire accordingly. if u need 5 amps. 5x110=550 watts or 5x120=600 watts. or 220x5=1100watts etc. hope u get my point! use wire according to amperage handling capabilities of the wire.

regards

### Aug. 16, 2011 Zilano Quote:

Originally Posted by **vrand** *Hi Zilano* 

Yes, Don Smith talked about using the magnetic end of the EM field to create the "amps" and he also showed that Tesla diagram of the bifilar cw/ccw coil with center tap.

In the Kapanadze photos of his secondary air coil it doesn't show this center tapped bifilar secondary. Was his system under-producing in electrical output?

Cheers Mike

Hi mike!

a single coil can also produce amperage too. kapanadze single coil also produced it. we use bifilar so we can control voltage and amps or reduce voltage and amps by increasing cw or ccw turns using something like a rheostat combination. u can use single coil but make it thick.

regards

#### Aug. 16, 2011 Zilano Ouote:

Originally Posted by **vrand** 

Hi Zilano

The bifilar is it center tapped to ground (per your drawing below)?

Is the bifilar like the diagram below where 5 turns from center are lower half CCW and upper half are CW 5 turns?

Is there any advantage in using copper tubing for the bifilar windings vs stranded wire vs solid copper wire?

Cheers Mike

Hi mike!

yes diagram is correct. copper is good conductor of electricity alluminium is 2nd to copper. its better to use solid copper rather than stranded. but stranded can be used.bifilar contains two things one is voltage and other is amps here we combine both and use for our benefit. if u can afford barker and williams coil that option is better. cos they have high mutual inductance. here we overcome this mutual inductance factor by using copper coated welding rods a cheap substitute to ferrite toroidal core. in case of ferrite toroidal core we cant change the the q factor but using copper coated ferrite rods we can by increasing and reducing rods.it doesnt matter wot way u wind ccw and cw coils wot matters is we combine the ends and take output from combined end and centre of bifilar. yes bifilar centre tapped grounded.

regards

Aug. 16, 2011 Zilano

#### Quote:

Originally Posted by **vrand** 

Thanks Zilano, I can get some 14 AWG GTO-15kv cable

- Is the 80 turns all in one direction?
- For the 5 turns secondary air coil, is 1/4" (6.35mm) copper tubing okay?
- Spaced 6.35mm apart? Or can be closer? I guess can get as close as the 250 V air breakdown voltage (240vac output)?

Cheers Mike

Hi mike!

coil 80 turns cw. coil 5 turns is a bifilar(cw5,ccw5 turns). 250 v hf.rectified with in 4007 or higher combination. coil primary 2" and sec 3". with 4 turns per inch secondary bifilar.

regards

Aug. 16, 2011 Zilano Simplest Cheapest Energy Circuit!

hI FOLKS!

CHEAPEST SOLUTION!

PIC ATTACHED

regards

Aug. 16, 2011 Zilano Quote:

Originally Posted by **vrand** 

Thanks Zilano

For the 88 turns primary air coil do you use neon sign HV wire, for the input from 4kV from the NST? Wire insulation needs to be rated at least 4kV?

Cheers Mike

HI mike!

yes its not 88 turns its 80. sorry for crude pic. yes insulation 5k will work fine.

regards

#### Aug. 16, 2011 Zilano

### Quote:

Originally Posted by **deggers** 

For those who don't know there's some info to be had in the radiant\_energy yahoo group.

You have to join to get to the files section.

<u>radiant energy: Radiant Energy Power Generation</u>

Nothing earth shattering, but some stuff I haven't seen elsewhere.

Also, don't forget to visit FreeEnergyInventions.com

<u>Freeenergyinventions</u>

Duane

Thanks Duane!

i posted this circuit also in one of my posts. but it uses caps so costs escalate! i want people to build output through a transformer not using invertor. but the circuit is xcellent. only if u get high voltages caps and diodes.

if costs dont matter members can go thru this circuit and use it. for novices and newbee this is a good one.

regards

#### Aug. 16, 2011

#### Zilano Quote:

Originally Posted by **drak** 

I still have another wind to add, and that will put them closer together. I will finish this one try it, then build one with turns closer together and try that too.

Edit to add: or build a longer primary.

Hi Drak!

have an idea first wot voltage u r feeding in primary. and wot voltage u want in secondary. and make primary turns according to secondary output desired voltage. the thickness is only for more amps and no of turns in secondary for the voltage.

regards

### Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** *Hi zilano*,

I'm making a new bifilar outer coil. this one will be as wide as the inner coil and is made up of 6 strands of 14 gauge wire, if this is not big enough, I can add more strands. It is half way done I still have to add the second wind and tie them together. I hope multi strand will work. Will this one be big enough? Thanks for your help

Hi Drak!

keep turns not apart. keep them close. we r downgrading voltage so keep turns closer but not joined. see kapanadze coil. its insulated though but turns closer. even u can use a thick copper strip or alluminium strip wonded as coil. its not necesary to make and stretch the coil to cover the whole width of primary with secondary. keep the basic of tesla. centre coil long and outer coil short in width. but in centre.

reverse tesla means primary and secondary interchanged but structure remains same.

regards

#### Aug. 16, 2011 Zilano Ouote:

Originally Posted by **vrand** 

Hi Zilano

Here is the schematics on that NST, PVM400: <a href="http://www.amazing1.com/download/PVM...CSCHEMATIC.pdf">http://www.amazing1.com/download/PVM...CSCHEMATIC.pdf</a>

Do not see any GFI.

Thanks again you for your help and in sharing your fascinating insight to Tesla's/Don Smith's

resonant electrical energy technology. Keep up the good work!

Cheers Mike

HI Mike!

regards

this will work.

Aug. 16, 2011 Zilano Quote:

Originally Posted by **drak** 

Where would I be using the sine wave at? It was my understanding that when the spark happens the capacitors drain to the coil then bounce back to the caps and then back to the coils etc at a certain frequency, the resonant frequency, until the energy is dissipated. At that point the spark bridge goes away only to be started again once the caps get charged again by your NST or fly back or whatever you are using to charge the caps. So a sine wave is automatic. Or are you talking about a sine wave to charge the caps from your NST or fly back? Does it matter how you charge those caps as long as they get charged fast enough to keep a steady stream of sparks?

1632: Radio FAQ Part 1 — Spark and Crystal

Well, my latest coils, not much more results. 10 gauge outer secondary 22 gauge inner primary.

Hi drak!

try alluminium thick wire the coil must be thicker. ur outer coil is thin still. but try with this first and use copper coated welding rods. and u will find the great improvement. make sure resonance happens. when u add welding rods coil inductance will change and u need to adjust resonance with caps in primary and secondary accordingly. but result will be best. when u dont have resonance working well results will be low and r just based on induction and thats wot we dont want. we want resonance give us the results.

Aug. 16, 2011 Vrand Quote:

Originally Posted by **zilano** *hI MIKE!* 

NST U QUOTED ON PAGE WILL WORK FINE.if they dont have gfi(ground fault interruptor) not built in. coz whenever u earth it it will go off and trip in don smith circuits. thats why i made it on my

own. without gfi.

regards

zilano zeis zane

Hi Zilano

Here is the schematics on that NST, PVM400: <a href="http://www.amazing1.com/download/PVM...CSCHEMATIC.pdf">http://www.amazing1.com/download/PVM...CSCHEMATIC.pdf</a>

There is a ground connection, would this be a GFI?

Thanks again you for your help and in sharing your fascinating insight to Tesla's/Don Smith's resonant electrical energy technology. Keep up the good work!

Cheers Mike

Aug. 16, 2011 Zilano Quote:

Originally Posted by **drak** 

Where would I be using the sine wave at? It was my understanding that when the spark happens the capacitors drain to the coil then bounce back to the caps and then back to the coils etc at a certain frequency, the resonant frequency, until the energy is dissipated. At that point the spark bridge goes away only to be started again once the caps get charged again by your NST or fly back or whatever you are using to charge the caps. So a sine wave is automatic. Or are you talking about a sine wave to charge the caps from your NST or fly back? Does it matter how you charge those caps as long as they get charged fast enough to keep a steady stream of sparks?

1632: Radio FAQ Part 1 — Spark and Crystal

Well, my latest coils, not much more results. 10 gauge outer secondary 22 gauge inner primary.

Hi Drak! make ur coil bifilar. this thick coil a bifilar.

regards

Aug. 16, 2011 Zilano Quote:

Originally Posted by **vrand** 

For those building their own 4kv, 35kHz NST driver using a Flyback here some info on converting

one from an old 1970's B/W TV:

Flyback Driver

POWERLABS' High Voltage Solid State Flyback Driver

Hi Zilano

The above Flyback driver is close to your flyback design. Would an off-the-shelf adjustable 0-20kV, 15-35khz work in your design?

Here is one from the popular Information Unlimited website:

Neon Transformers, Neon Power Supplies

If this NST would not work, do you recommend one that would work?

Those old '70's flybacks are getting impossible to find.

Cheers Mike

#### hI MIKE!

NST U QUOTED ON PAGE WILL WORK FINE.if they dont have gfi(ground fault interruptor) not built in. coz whenever u earth it it will go off and trip in don smith circuits. thats why i made it on my own. without gfi.

regards

Aug. 16, 2011 Zilano Ouote:

Originally Posted by **drak** 

To get the resonate frequency of a very low induction coil (thick wire small turns) down to 35khz you must be using some very high farad capacitors. I'll have to look around for some of those caps.

Hi if u dont find the right caps. just try wotever caps and frequency u r using. just make sure. both coils r resonating. dont worry abt frequency yet try to get juice. coz u r still in experimental stage. later on u can go down in frequency and use 30-35 khz frequency range.

regards

Aug. 16, 2011 Vrand NST/Flyback Driver

#### Quote:

Originally Posted by **zilano** 

hI FOLKS!

this is zilano zeis zane

hope u see wot i was reffering to. here CL=capacitor oscillatory value depends on L primary. use online resonance calc to calculate value for 30khz. CT= same way and CO same way. just go on matching frequency. always measure L with LCR METER AND THEN FIND THE REQUIRED C. THE CAPS ARE 300V 2.5 MFD in pi filter. please read 4700 mfd not 47000 mfd. mistake is regretted.

A MUST DO: USE 10 MEG OHM RESISTORS ACROSS CAPACITORS TO AVOID SHOCK AFTER POWER IS SWITCHED OFF.

WARNING!!!!!!!! DO IT AT UR OWN RISK WARNING !!!!!!!!!!!

WARNING: DC VOLTAGES R ALSO FATAL ABOVE 50 VOLTS THEY STICK YOU WHEN U R ON GROUND AND 250V DC TOUCHED BY U.ITS MORE FATAL THAN 250 V AC. SO WATCH OUT. WORK WITH SHOES ON AND WOODEN FLOOR AND WOODEN TABLE. USE VOLTAGE DIVIDERS TO GET SUITABLE DC 12 OR 24 VOLTS. MEASURE VOLTAGE. TRY ATTACHING LOAD AND IF ITS OK THEN USE INVERTOR.

REGARDS

ZILANO ZEIS ZANE

in sense n sane!

For those building their own 4kv, 35kHz NST driver using a Flyback here some info on converting one from an old 1970's B/W TV:

Flyback Driver

POWERLABS' High Voltage Solid State Flyback Driver

Hi Zilano

The above Flyback driver is close to your flyback design. Would an off-the-shelf adjustable 0-20kV, 15-35khz work in your design?

Here is one from the popular Information Unlimited website:

Neon Transformers, Neon Power Supplies

Quote:

PVM400 Powers up to 48" Plasma Globes Single Electrode Operation

FEATURES:

OUTPUT - Variable 1-20kv

FREQUENCY - Variable 15-35khz

CURRENT - Reactance Limited to 25 ma.

INPUT - 115/220 50/60hz 1-2 amps

If this NST would not work, do you recommend one that would work?

Those old '70's flybacks are getting impossible to find.

Cheers Mike

#### Aug. 16, 2011 Zilano Ouote:

Originally Posted by **deggers** 

Hi Zilano,

Keep up the good work! Very impressive thread!

I'm curious what diodes you are using in your output circuit that you have a pic of in post #78. I'm assuming that there is a full wave bridge. It's kinda hard to tell from the pic. Are they high frequency - fast recovery or anything special?

Thanks!

Duane

Hi Duane!

its a bridge rectifier high amps high frequency low voltage 250 v. u judged right.

regards

### Aug. 16, 2011 Zilano Ouote:

#### Originally Posted by **drak**

Where would I be using the sine wave at? It was my understanding that when the spark happens the capacitors drain to the coil then bounce back to the caps and then back to the coils etc at a certain frequency, the resonant frequency, until the energy is dissipated. At that point the spark bridge goes away only to be started again once the caps get charged again by your NST or fly back or whatever you are using to charge the caps. So a sine wave is automatic. Or are you talking about a sine wave

to charge the caps from your NST or fly back? Does it matter how you charge those caps as long as they get charged fast enough to keep a steady stream of sparks?

1632: Radio FAQ Part 1 — Spark and Crystal

Well, my latest coils, not much more results. 10 gauge outer secondary 22 gauge inner primary.

Hi Drak!

ur coil is ok. use copper coated welding rods inside the primary. use a pvc tube and insert the rods in pvc tube slide the made core of pvc tube inside the primary coil. the diameter of the tube is one cm less than ur primary diameter try this first.

u can use sine wave. according to the circuit(crude circuit i have posted) or u can use nst (not solid state) also. u r right. the lc combination oscillates according to c and L combination but the wavefeform is according to ur hv supply waveform. if u r using 555 timer based flyback then ur waveform is square. always use bifilar secondary coil.

regards

Aug. 15, 2011 Zilano Quote:

Originally Posted by **drak**Can it be higher?

Hi Drak!

yes it can be higher but power produced will be higher and u need heavy amps transformer. if u need 5-10 kw use 35khz.use sine wave for better results.and heavy secondary coil for greater amps.

regards

Aug. 15, 2011 Zilano Hi folks!

tesla step down arrangement.

pic attached.

primary thin more turns(adjust ratio of ur hv input voltage with no of turns and voltage per turn in primary in accordance with output voltage in secondary).

follow this for secondary coil to get amps and low voltage.more thicker more amps.less thicker

less amps. more turns high voltage. less turns low voltage.

maintain resonance a must for juice fp=fs

fp=frequency primary
fs=frequency secondary

keep frequency in the range of 35khz. frequencies from 1-20khz give u less juice.

regards

Aug. 15, 2011 Zilano Quote:

Originally Posted by LtBolo

Crystal radio...hmmm...

Perhaps a subtle adjustment of the center tap ground point creates a slight imbalance in the two halves of the bifilar that mixes to produce a low frequency envelope riding on the high frequency resonating in the coil halves. Feed that through a diode with an RC and you can have your 60Hz.

Just a guess, though...

Hi there!

see beyond and behind the coil. forget primary.

regards

Aug. 15, 2011 Zilano Ouote:

Originally Posted by **Parav** 

Just my thoughts and I may be wrong, and so please correct me accordingly.

I think Zilano is suggesting that we can fine tune the frequency by positioning these copper coated welding rods back and forth inside primary coil and also repositioning the secondary (the thick coil) over the primary till we find that perverbial sweet spot --as a Ham radio guy we tune coils for proper frequencies with our home made antenna tuners, kind of like that---what do you all think??---Just my thoughts---Paul --VE3 UNF

HI there!

u r right! keep coils fixed just move ur home made ferrite core called copper coated welding rods.

### Aug. 14, 2011

Zilano Quote:

Originally Posted by MonsieurM

There is a method i use to find information, and most of you know it, and that is triangulation, so far you have given one clue, i need two more and i'll have a clearer picture...so I'll be patient, do some research, and mostly wait to see what you will be posting Z....

HEART TO IT AND U WILL HAVE IT AND U WILL SAY AWWW I KNEW THAT ITS SO EASY!

goodluck to all

cya soon with ur progress!

God bless u all

Hope u make Dons dream come true!

regards and thanks for ur support!

#### Aug. 14, 2011 Zilano

**Quote:** 

Originally Posted by **nvisser** 

What is the wattage and losses over voltage divider 11 to drive a transformer, to successfully drive a load?

hI Nvisser!

to avoid losses apply reverse tesla. so u get 110 volt or 120 volt and use IGBT!

Aug. 14, 2011

Zilano

Quote:

Originally Posted by **nvisser** 

The Amplitude Modulated carrier frequencies are in the frequency range 535-1605 kHz. Carrier

frequencies of 540 to 1600 kHz are assigned at 10 kHz intervals. How do you get to 60Hz from 600Khz .

Read crystal radio thoroughly and u will get it! think hard. and apply thought!

regards

#### Aug. 14, 2011 Zilano Ouote:

Originally Posted by **nvisser** 

What is the wattage and losses over voltage divider 11 to drive a transformer, to successfully drive a load?

Hi there!

try crystal radio and let me know if u loose station once tuned to and once tuned do u stop listening to musik if that is a load? i bet not. so no losses once tuned and listen to the music continuously.

regards

### Aug. 14, 2011 Zilano Quote:

Originally Posted by MonsieurM

let me make this clear, you want me to get acquainted with 50 hz and 60hz,

HI there!

u know 50 and 60 hz. but u dont know how to make 50 or 60hz or generate!

think hard see cystal radio. and u will generate 50 or 60hz easily with of course amps in consideration say 20 amps.

regards

Aug. 14, 2011

Zilano Quote:

Originally Posted by MonsieurM

thanks this goes well with our current group research...

Harvesting Energy From the Sun Using Crystals

Hi MonsieurM!

hi am not talking to steal AM/FM/LW/SW1-SW3 RADIO STATION ELECTRICITY.

here am after 50 hz and 60hz (sweet frequency we all love)

think hard! again wot am trying to say

regards

Aug. 14, 2011 Zilano **Secret-Construcion** 

Hi folks!

Greetings!

learn more!

sycret-konstrucion

cirkuit attached!

regards

ZILANO ZEIS ZANE!

Aug. 14, 2011 Zilano crystal radio! think hard!

Hi folks!

presenting!

crystal radio! imagine the possibilities. read more.... google and get aquanted! 50 hz and 60 hz pic attached.

regards

### Aug. 14, 2011 Vrand Quote:

Originally Posted by **zilano** .

Hi mike!

well am in the custody of negative attitude crowd. so i have the right to remain silent. and wotever i have to say here will be spoken by the people who r trying the way i posted and they will tell u wot i meant!

but i like ur statement. coz i love negative attitude of people coz it fills me with enthusiasm!

thanks for ur support

take good care

keep watching

regards

zilano zeis zane!

Hi Zilano

No negatives from me just, just an observation of where we are since Tesla discovered it 110 years ago. I will buy one of your home units and look forward to that day when you sell them or the plans so we all can make one. At least you will make something that works.

Keep up the good work.

Cheers Mike

Aug. 14, 2011 Zilano greenbox kapanadze alias don smith

Hi folks!

new arrangement pic attached must view! updated. regards

### Aug. 14, 2011 Zilano Quote:

Originally Posted by **vrand**.

Hi Zilano

After 110 years from Tesla and 20 years from Don Smith, no one has replicated the resonate designs to power homes for a reason.

Need exact plans and parts list, as there are too many variables to get one working.

Cheers Mike

Hi mike!

well am in the custody of negative attitude crowd. so i have the right to remain silent. and wotever i have to say here will be spoken by the people who r trying the way i posted and they will tell u wot i meant!

but i like ur statement. coz i love negative attitude of people coz it fills me with enthusiasm!

thanks for ur support

take good care

keep watching

regards

### Aug. 14, 2011 Zilano

Quote:

Originally Posted by **drak**.

Where do the caps go on the secondary in the drawing you attached?

Hi Drak!

see pic attached again see position of caps on secondary.

regards

### Aug. 14, 2011 Zilano Quote:

Originally Posted by **drak**.

Where do the caps go on the secondary in the drawing you attached?

Hi!

Drak!

same as spark gap-2 position. attach caps.(parallel with spark gap)

regards

### Aug. 14, 2011 Zilano Quote:

Originally Posted by **drak**.

Ok I have a 14 gauge bifilar secondary with a 22 gauge primary. I'm getting twice the glow on the bulb as I was getting before. I'm not sure of the voltage because its more turns on the secondary then I had before so way above 450v and I didn't want to subject my scope to it. I would do the calculations for primary vs secondary, but I don't even know what the voltage coming out of my flyback transformer is. But I do know the input to the system, and its 12-13 volts with an amp meter hooked up in the video. The bulb is a 6 watt bulb according to the package. At the best Freq, duty cycle, and spark gap distance, and glow from the bulb, my input is about 5 watts and the bulb is glowing as you see in the video. Still way under unity but I'm getting closer and its fun climbing this wall. I test more then what I did in the video, was just showing the possibilities. In thinking ... I wonder if the analogy of pushing someone in a swing when relating to this means... do you have to push the swing every time comes back to you? Can you just push the secondary at half the resonance of it so just to tap it along? Primary 1/2 res of secondary, 1/4? 1/8? Will test. Still working. More tips zilano? please.

video: <u>Don Smith device Just testing 2 - YouTube</u>

Maybe I should post a diagram of my circuit so you can tell me if I'm doing anything wrong. I don't have a ground hooked up, but I tried hooking a ground all over the place and it didn't make much difference. I only have one ground not two separate ones, is that important? And the bulb is hooked in parallel directly on the secondary.

if u r not using spark gap in output then just earth the middle tapping of bifilar and keep circuit same as i uploaded in pic.

regards

### Aug. 14, 2011 Zilano Quote:

Originally Posted by **drak**.

Ok I have a 14 gauge bifilar secondary with a 22 gauge primary. I'm getting twice the glow on the bulb as I was getting before. I'm not sure of the voltage because its more turns on the secondary then I had before so way above 450v and I didn't want to subject my scope to it. I would do the calculations for primary vs secondary, but I don't even know what the voltage coming out of my flyback transformer is. But I do know the input to the system, and its 12-13 volts with an amp meter hooked up in the video. The bulb is a 6 watt bulb according to the package. At the best Freq, duty cycle, and spark gap distance, and glow from the bulb, my input is about 5 watts and the bulb is glowing as you see in the video. Still way under unity but I'm getting closer and its fun climbing this wall. I test more then what I did in the video, was just showing the possibilities. In thinking ... I wonder if the analogy of pushing someone in a swing when relating to this means... do you have to push the swing every time comes back to you? Can you just push the secondary at half the resonance of it so just to tap it along? Primary 1/2 res of secondary, 1/4? 1/8? Will test. Still working. More tips zilano? please.

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Hi Drak!

suggestion attached see the pic and follow. u r catching on! good work. good luck!

regards

Aug. 14, 2011 Vrand Quote:

> Originally Posted by **zilano** . *Hi Mike!*

u dont have to buy one. u will make one.

regards

ZZZ

Hi Zilano

After 110 years from Tesla and 20 years from Don Smith, no one has replicated the resonate designs to power homes for a reason.

Need exact plans and parts list, as there are too many variables to get one working.

Cheers Mike

#### Aug. 14, 2011 Zilano

### Quote:

Originally Posted by **vrand**.

Hi Zilano

Yes, 5k is good price range. Any estimate on when we can buy one? This year?

Cheers Mike

Hi Mike!

u dont have to buy one. u will make one.

regards

## Aug. 14, 2011

### Zilano Quote:

Originally Posted by **vrand**.

Hi Zilano

Thank you for the info.

Why is the cost so high for the 5kw unit? Is it because of material costs or labor costs?

Are the Materials precious metals like gold or silver or something very expensive?

Cheers Mike

Hi Mike!

well that includes taxes and components uphaul from overseas. duty paid. and without tax duty payoffs it comes to around 5k

regards

### Aug. 14, 2011 Zilano Quote:

Originally Posted by **drak**.

Hi zilano,

I spent the day cleaning house and making a new bifilar secondary and a thinner primary. Will test later tonight or tomorrow. I can do 30khz, but I have to increase the duty cycle to about 80 or 90 percent. the input watts works out the same though with 2-6khz on a duty cycle of 25-50 or at higher frequencies at higher duty cycle. Every time I try a new coil pair I try input frequencies of 1khz to 300khz with different duty cycles and adjust spark gap. Nothing special yet. but I have a few more things i want to try yet before i come back for advice. Still working...

Hi Drak!

see kapanadze coil i just uploaded pic. make like that, thin primary inside and thick secondary outside. u will get juice. 100%

yes try also wot comes to ur mind also. but if u try the above u get more than 50 watts i can bet!

take good care.

God bless ya

be safe.

regards

Aug. 14, 2011 Vrand **Quote:** 

Originally Posted by **zilano** 

#### hI Mike!

i have no selling plans as yet. i have to test run for a period of 6 months so i see its performance and durability to sustain continuous operation.

well the cost to make one is not much high! a 5 kv device wud cost \$10K inclusive of shielding and grounding.

am working on for a more cheaper version.

regards

zilano zeis zane!

#### Hi Zilano

Thank you for the info.

Why is the cost so high for the 5kw unit? Is it because of material costs or labor costs?

Are the Materials precious metals like gold or silver or something very expensive?

Cheers Mike

### Aug. 14, 2011 Zilano No Selling Plans Yet

#### Quote:

Originally Posted by **vrand**.

Hi Zilano

Do you have the time to make units for sale to power homes (10kw)? Cost estimate?

Or selling plans, so that others that have the time and knowledge, can build their own home 10kw unit?

Cheers, Mike

#### hI Mike!

i have no selling plans as yet. i have to test run for a period of 6 months so i see its performance and durability to sustain continuous operation.

well the cost to make one is not much high! a 5 kv device wud cost \$10K

```
inclusive of shielding and grounding.

am working on for a more cheaper version.

regards
```

### Aug. 14, 2011 Zilano Quote:

Originally Posted by **drak**.

pulsing the flyback with about 5.8khz dc 50% duty load. Still playing.

Hi Drak! make flyback pulse at 30 or above khz it will get u great results!

good luck!

regards

### Aug. 14, 2011 Vrand

**Plans or Homes Units** 

#### Quote:

Originally Posted by **zilano** .

hI folks!

don smith vs Kapanadze

see urself

pic attached

regards

zilano zeis zane

Hi Zilano

Do you have the time to make units for sale to power homes (10kw)? Cost estimate?

Or selling plans, so that others that have the time and knowledge, can build their own home 10kw unit?

### Aug. 14, 2011 Zilano Quote:

#### Originally Posted by LtBolo.

Contrary to some assertions here, varying the resistance of the ground path does alter the apparent capacitance of a bifilar in proximity of a resonant primary. Think of it this way: how much current will flow into a capacitor with one end disconnected? Virtually none, and the effective capacitance is quite low. If both ends are connected, the capacitance is the rated value.

Disconnected is simply infinite resistance. There is obviously a continuum between fully open and fully short that allows the effective capacitance to move from a low to high value. If that capacitance is part of a tank, the resistance will directly affect the tuning. Not sure that is what DS was alluding to, but it is incorrect to say that resistance cannot affect resonant tuning.

I have been playing in my lab for quite some time with resonant primaries and bifilar displacement current secondaries. Only at low voltage though, mostly interested in the basic behavior, not so much trying to make big power. It is no problem at all to use that technique to light a bulb on the output, and I've been driving small florescent tubes with a small fraction of a watt. I wasn't convinced that the wide band resonance was the source of free energy though...never really convinced myself that what I was doing was OU since measurement becomes so difficult, although I had a pretty good theory of how it might be.

I am still very puzzled about the 50/60 Hz output though. Would love to get a hint from you Zilano. PM me if you are willing.

#### Hi LtBolo!

am of the opinion that if we can make 12v dc or 110v ac to 60 or 50hz and change it to 30khz then we can also make 50 or 60hz. the basis and the basic is to ring down voltage to s suitable level and that can only be done by a step down. if one uses computer flyback it delivers 50 kilovolt means 50,000 volts and to bring it down to 110 volt then u have to make a transformer with 50,000 turns primary and 110 turns secondary thats impossible and costs escalate larger than sky scrapers moreover high voltage caps and diodes r very costly and think of copper costs too. so the solution is bring down voltage and convert into high amps and low voltage and costs wud be lesser.

if am rich it doesnt means everybody is rich and can afford costly equipment. am just suggesting a cheap and easy to make device so every one can afford and work at suitable voltages.

yes its true u have great insight and am charmed with ur knowledge and expertise!

its good to have u here! regards

Aug. 14, 2011 Zilano Quote:

Originally Posted by **LtBolo**. *Interesting stuff Zilano*.

I have been pondering lately that the quantum source presents its energy as ultra high frequency at ultra high impedance which is nearly invisible. Think about the difference between a very large wave crashing onto the beach every minute, vs a billion tiny waves crashing every minute. We could ride the big one pretty well, but we'd have a seriously difficult time with the billion small ones. If there were 1 billion of us, each one 1 billionth of our size, we might manage, no? That is one way of visualizing the impedance matching that would be required to interact with the quantum source. Subatomic particles are very small and very fast and well suited to interacting with such an energy source.

So when we resonate a coil at a very wide bandwidth, the resonance contains more and more energy of very high frequency, superimposed on the coil's fundamental frequency. I think that the higher the resonant energy and the higher the frequency the greater the tendency to interact with that source, and we start cohering a bit of the source's energy. I think we observe that tendency to cohere when we see resonant things tend to lock to one another or resonate sympathetically.

From that line of reasoning, a Tesla coil resonating over a very wide bandwidth is actively cohering an abundant amount of energy, and would be significantly OU as it sits. Except for one huge problem: the energy is very high impedance and any effort to interact with the coil interferes with the resonance of the coil. We can interact with it, but must do it through the electric field using displacement current.

The bifilar coil coverts the electric field energy coming from the primary into a displacement current without inductively interacting with the primary and damping its resonance. Normally the Q of such a circuit...a very small inductance and a relatively large capacitance...is very low, but by using a very thick conductor you raise the Q to reasonable values by nature of the resistance being well less than 1 ohm. The resulting resonant tank produces a very high current at a comparatively low voltage, and responds to a very wide bandwidth of energy. I would speculate that the secondary needs an asymmetrical overlapping with the primary to encourage the resonance to establish, or you could build the bifilar with two different wire sizes.

So...wideband resonance coheres quantum energy...the wider the bandwidth and the higher the voltage the more energy is cohered...a secondary bifilar tank with very low resistance converts a portion of the resonant energy into usable power...effectively impedance matching quantum energy to useful levels. The key is in keeping the voltage and bandwidth of the primary as high as possible, and the resistance of the secondary as low as possible.

Itst a theory...

Hi LtBolo!

Thanks for the elaborative and informative and suggestive thought.

i welcome ur suggestions!

thank you for enlightening me!

regards

Aug. 14, 2011

Zilano
Don Smith Vs Kapanadze Circuit

hi folks!

don smith vs Kapanadze.

see kapanadze coil(greenbox) is same as don 6A coil=6turns

see urself
pic attached

### Aug. 13, 2011 Zilano Resonance Is Real Phenomena

Quote:

regards

zilano zeis zane

Originally Posted by **MonsieurM** .

sorry to intrude , but it almost sound as if you are talking about about tunable forks and octaves...except using coils

looking forward to reading the clues you'll be divulging .

Hi there!

resonance is real thing! watch below

#### PIC ATTACHED

COURTESY: MR.CLEAN (video and pic)

<u>Don Smith Device Project Part11: Coil Tuning Demo - YouTube</u>

regards

### Aug. 13, 2011 Zilano

**Quote:** 

Originally Posted by **drak**.

Still working, had to take a break to sleep. Winding more coils. I'm not really looking for 10kw of power, I would be happy with 50 watts just for a proof of concept.

Hi Drak!

yes sleep is a must never loose sleep.sleeping well makes our mind works better. try bifilar if u can and if not u will still get power. make sure ur outer coil is thick and inner thin. and u r gonna light the bulb very bright! zzz

#### Aug. 13, 2011 Zilano Ouote:

Originally Posted by **Parav**.

Hi Zilano

I have been working on the Don Smith systems on and off for the past 2 years with no luck.

After reading your posts over and over , I am beginning to see that you could really be on to something.

Please don't despair --keep up the good work and I for one will be eagerly waiting for more tid bits of infortmation.

Paul:

Hi Parav!

am glad u have been reading my posts. my reverse tesla concept is the key to get power. u can see Mr. Clean also used same design. and he lit up the bulb. the basic reason with don original circuit is primary is thick that means higher input power and thin output coil means high voltage and low amps. we have to change that and that can only be done when u use reverse tesla concept. make ur primary thin giving u low input and thick secondary bifilar gives u amps at low voltage. the key to get amps from higher voltage is just reduce voltage. since coils r resonating

the resistance between coils is zero so power is there that was being eaten up by resistance is also there. when we lower voltage power still remains same but it is there in the form of high amps and low voltage. this is the key don never told. i have spent 5 months reading and experimenting i also failed to get power then i read transformer basics where i got this idea, why not make a transformer first and then make it resonate. i tried and i got superb results. my first attempt gave me 2.5 kw. Don has explained everything but i agree he did not disclose 2 basics but they r hidden in his text and schematics. one i told u is reverse tesla coil and another is still a secret with me. i want u to use my concept and reach output high amps and low voltage. i will disclose more but try first wot i have posted. if u have been trying for 2 yrs till now try the way am telling u and show me that u have high amps and i will show u the way to get 50 or 60 hz. but u must lightup a load. reach this stage first.

i know i have it. and its my decision to video it or not. i never despair coz i know how to do it coz i have done it already. i want u to pull on wot am telling ya here is not gibberish its based on expertise and experience. its true when i joined the race i was just novice. i gained knowledge applied it and i got it.

report me ur progress. and i guide u more.

regards

### Aug. 13, 2011 Zilano Ouote:

Originally Posted by **Xenomorph**.

Surprise!

That's the common response to a OU video challenge.

The community is waiting for years for "promised" videos by

various claimers that just talk.

If you can't provide, you are just like one of them.

Together with the technical errors in some of your statements, it gives you a poor credibility.

Hi there!

Well at present i agree with ur statement. later u will agree with my statement.

just wait.....

regards

Aug. 13, 2011 Zilano Quote: Originally Posted by **Xenomorph**.

You ARE talking castles in the air.

How about you make a video of your working 10kW OU device powering house-hold appliances at 50/60 Hz 4.25Kw worth?

Not having a camera to do it would be a bad excuse.

Maybe borrow a mobile phone from a friend, easily available.

If you can't provide it, your claim unfortunately means as much as all the other claims of individuals in various forums stating they would have such device but refuse to provide evidence. I am sure everybody here would like to see it too.

Please make sure to zoom in on the magical resistor to convert your output frequency. I know a couple of electrical engineers who would like to see that one.

I have a feeling somehow though, this video will never happen. Until then, you ARE talking castles in the air.

Hi xeno!

yes u r right! evidence and a visual one is needed. i will post it. but i wanted to see some progress on here b4 i post the video. i wanted some one here reach the finale as i have done. i want forum members understand the basics first and the nook and crannies of the don circuits. i want people to understand basics so they can make replications from 250 watt to kilowatt devices. most people here dont know how to calculate this stuff. i dont want to spoon feed things. i want people to learn and use their minds first.

i will post video let the time come. i will share each bit of info i learned and gained. i wont hold back anything. am seeing progress with my reverse tesla concept. some more to come though in this forum. am awaiting that.

regards

Aug. 13, 2011 Zilano Ouote:

Originally Posted by **drak** .

Well, I did the reverse tesla coil, and now the output voltage is 450v and i'm getting a slight glow out of a 120v 6watt bulb, which is better then I was getting before. However I don't have the capacitors to bring my coils down to 35khz. I could only get them down to 385khz. Would building a bigger coil help or would I have to throw more input to it?, I was only throwing 12.6v .30amps at it and pulsing the flyback with about 5.8khz dc 50% duty load. Still playing.

Hi drak!

how u doing? any progress?

regards

#### Aug. 13, 2011 Zilano

#### Quote:

Originally Posted by **Xenomorph**.

Again, you are driving the secondary of a transformer with a 30 kHz frequency.

#### **Quote:**

### Originally Posted by **Xenomorph**.

The self resonance frequency of the secondary coil is in the **Mega-Hertz** range due to the very small inter-winding capacitance in the piko- to nanofarad range.

So first you will never hit resonance at all like this and second

even if you did, **a parallel resistor does not magically change the driven and dominant frequency** in the secondary circuit to 50/60 Hertz.

You simply don't know what you are talking about.

This is **driven oscillator 101.** The driving voltage will be across that resistor.

I did even try this experimentally with a resonant circuit back in the Don Smith hype days, because he came up with that frequency-correction resistor disinfo, and it does not work. Do the experiment, see for yourself. Don't just quote Smith.

#### Hi XENO!

I am running the thing flawlessly and my laptop and my home is being powered with it as i write this am using Dons power i got my grid power disconnected. so am not talking castles in the air. i persued dons circuit 6 months back it took me six months to reach this on my own.

my home load is 4.25 kw and its providing me all power.

am happy with my find and i want to help u all.

regards

zilano zeis zane! not a booster or boaster just here to help forum coz i learned a lot from forum i wanna give back!

Aug. 13, 2011 Zilano Ouote: Originally Posted by **Xenomorph** *In #145 you stated:* 

#### Quote:

Originally Posted by **Xenomorph**.

And in your following post, you also referred to a resistor without an additional cap.

Of course you can change the resonance frequency of the secondary circuit with additional caps. My point is a single resistor will not do it alone. Smith was wrong about this.

#### Hi there!

Don Smith was never wrong! read his pdf again there still lies a hidden secret but u have to guess! its there but its hard for everyone to find. go thru it and u will get it. Don Smith wanted us to learn deeper and then apply. Smith wanted us to use our minds. not just make us dumb followers. I found it and used it and so will each one at this Forum. and the power s all urz for free. Kapanadze is one Guy who found it and used it. Sr193 followed suite of kapanadze. but his output i dont think is 50 hz. and same applies to kapagen.

#### Regards

Zilano zeis Zane Think and read Again!

## Aug. 13, 2011 Zilano Ouote:

Originally Posted by **drak** . zilano,

Does lowering the frequency also raise amps? Because i was trying to light that bulb at 385khz 450v directly on the secondary.

Hil

lowering frequency has no effect on lamp bightness. amps burns it bright when voltage is right.

regards

Aug. 13, 2011 Zilano Hi folks!

the R takes the toll when frequency is low and L takes the toll when frequency is high! thats all i know and maybe the difference works for me so.

regards

Aug. 13, 2011 Zilano Quote:

Originally Posted by **Xenomorph**.

In #145 you stated:

And in your following post, you also referred to a resistor without an additional cap.

Of course you can change the resonance frequency of the secondary circuit with additional caps. My point is a single resistor will not do it alone.

Smith was wrong about this.

Hi there!

those who dont agree with the R. CAN bridge and use push-pull transformer with 12/24v dc and chime the output and brighten their lamps with no hassles of learning reactance charts and understanding!

although i use resistor and it saved me from a bunch of circuit.

regards

Aug. 13, 2011 Zilano Quote:

Originally Posted by **drak**.

What do yo mean by don't use cap? With out a caps i can't match resonance.

and thanks .

Hi there!

keep caps for matching frequency. but dont use caps inseries with output.

regards

## Aug. 13, 2011 Zilano Quote:

## Originally Posted by drak.

Well, I did the reverse tesla coil, and now the output voltage is 450v and i'm getting a slight glow out of a 120v 6watt bulb, which is better then I was getting before. However I don't have the capacitors to bring my coils down to 35khz. I could only get them down to 385khz. Would building a bigger coil help or would I have to throw more input to it?, I was only throwing 12.6v .30amps at it and pulsing the flyback with about 5.8khz dc 50% duty load. Still playing.

Hi drak!

also try. making primary inside and secondary(thick) outside it will enhance results also.

regards

## Aug. 13, 2011 Zilano

#### **Quote:**

#### Originally Posted by **drak**.

Well, I did the reverse tesla coil, and now the output voltage is 450v and i'm getting a slight glow out of a 120v 6watt bulb, which is better then I was getting before. However I don't have the capacitors to bring my coils down to 35khz. I could only get them down to 385khz. Would building a bigger coil help or would I have to throw more input to it?, I was only throwing 12.6v .30amps at it and pulsing the flyback with about 5.8khz dc 50% duty load. Still playing.

#### Hi Drak!

if u use any thicker wire. or even a thick alluminium rod or coil. u will get more amps. its not necessary we just use copper coil. alluminium can be used for test purposes. the bad thing abt alluminium is that it oxidises fast and contacts loosening happens.

reduce turns in secondary and make it thick as much u can afford and u will light a bright bulb.

also u can use 1/4 turn of coil as output and ur voltage will be low and not 450v use output coil as a rheostat so u get 110 or 120 volts.

but make thick so u have more amps.

dont worry abt frequency keep it as it is. and dont use cap it will increase voltage.

congrtats! u r learning well! see attachment

## maintain resonance. keep this frequency. increase input.

regards

zilano zeis zane! resonance musik play it one!

## Aug. 13, 2011 Zilano Quote:

Originally Posted by **Xenomorph** .

Again, you are driving the secondary of a transformer with a 30 kHz frequency.

The self resonance frequency of the secondary coil is in the **Mega-Hertz** range due to the very small inter-winding capacitance in the piko- to nanofarad range.

So first you will never hit resonance at all like this and second

even if you did, **a parallel resistor does not magically change the driven and dominant frequency** in the secondary circuit to 50/60 Hertz.

You simply don't know what you are talking about.

This is **driven oscillator 101.** The driving voltage will be across that resistor.

I did even try this experimentally with a resonant circuit back in the Don Smith hype days, because he came up with that frequency-correction resistor disinfo, and it does not work. Do the experiment, see for yourself. Don't just quote Smith.

Hi there!

WELL turns thickness and gauge and length dont matter all matters is right caps u can oscillate 1 inch of wire at 30 khz( not natural frequency of coil) but LC combination. frequency changes when c attached to coil. so here we oscillating combination not just a coil. moreover LCR meter tells c also of coil. add it to the oecillating parameter so total c is value is suitable for the applied frequency. frequency will remain same and not shoot to mhz!

i have not used natural resonant frequency of coils. we r feeding oscillating power so we force resonate coils. when caps added resonant frequency of coil changes.

we make L slave with capacitor and make it oscillate and dance on 30 khz in my case.and whole circuit dances at 30 khz.

regards

zilano zeis zane lets understand oscillatory dance!

## Aug. 13, 2011

## Zilano Quote:

Originally Posted by **gropx**.

Hi zilano

its sounds like a transverter by hector....but with HV can u upload ur schematics more clearly ? please ?? i am very interested.. thanks & keep posting brother.

sorry my bad english .

Hi there!

well i just resonated the ferrite local sine wave oscillator with feedback. (like real tesla coil) and then just did step down with reverse tesla coil. i have uploaded though crude circuit but it shows wot i did. i will upload more clear one also.

dont worry abt english or any language as long as u get understood by people language is no barrier.

here i use chat like langauge and people understand it. its faster shorter and gets point across. we r here to discuss technology and not english. lol

# Aug. 12, 2011 Zilano

# Quote:

Originally Posted by **Xenomorph**.

WRONG

A lonely parallel resistor is not changing the frequency.

*It is DRIVEN by the coil* 

Test it yourself, run a motor and use different parallel resistor values to one generator coil. Will that change the frequency you measure in the generator circuit across the resistor or the load? Complete BS.

Hi there!

RESISTOR IS NOT LONELY. ITS IN RESONANCE TOO.( and inductors have capacitance too)

the graph u plotted by u is not a resonating circuit. nomograph is based on resonance circuits. where xc=xL.

DO READ!

Since (

*XC*=*XL* ) at resonance, by drawing the straighline across the inductance value and the frequency we can find the required resistor which will have the desired frequency. nomograph attached.

## Aug. 12, 2011 Zilano Quote:

Originally Posted by **webmug** . @zilano,

I have simulated the primair with a surge arrestor, when the primairy is in resonance the current builds between primairy capacitor and coil, pulsed with a nst. The surge arrestor does not work like a sparkgap and only limits voltage on a maxmum. With a nst and 4000v 30mAmps i simulated 2amps at 200v swinging through the primairy. So constant em field applied to the L2 coils.

I'm waiting for parts to test this.

So you have the nst sparking on a reverse teslacoil and you directly have more power on this output? Thus having high freq with 110 volts and high amps? How do you lower this output freq? Or is this coil on a 60hz lower freq harmonic resonating?

Br, Webmug

hi Webmug!

use spark gap or lightening arrestor.dont use surge arrestor u wont get overunity. kapanadze or sr193 or kapagen have used it if surge arrestor is worth but they used spark gap instead. see the point.

when ur nst frequency matches ur primary coil spark gap fires else it wont fire. so tune it first.

simulation n practical are different.

frequency downgrading: from khz to hz

u can use resistor or caps across secondary. but u must know voltage and amps for resistor so u can use proper wattage of resistor. if u using caps then u must know output voltage.

use page 23 of handbook of electronic tables book uploaded by me in one of my posts. there u find reactance chart.

yes i used single spark gap and its firing fine!

## Aug. 12, 2011 Zilano Ouote:

Originally Posted by **Escalator**.

Hi Zilano:

Thanks for your info. In your "reverse Tesla coil" used as stepdown transformer are you doing bifiliar winding on primary(80 turns) or secondary(5 turns) or simple winding? Antoher question: Is it your custom nst driver generating sine waves or pulses?

Hi Escalator!

yes am using bifilar 5 turns(10 turns total) in secondary. primary 80 turns simple coiling.

yes i just used ferrite from tv and wounded turns myself. i used lc oscillator and fed back to base of transistor. see my crude circuit lol am not artist and i hate to draw. see in one of my posts. the uploaded circuit.

i made (nst as tesla coil resonating) so i just needed stepdown. in this case step down must also resonate. yes all pure sine wave circuit. so i had no difficulty with wave output as square wave produce hum in fan motors or ac motors. and not sabotage my ac equipment in my home.

regards

zilano zeis zane think b4 u leap and if leapt dont look back!

## Aug. 12, 2011 Zilano Ouote:

Originally Posted by webmug.

Hi there!

How do you guys ground these setups on the output side?

Using a extra grounding rod? Don shows a diodecapacitor to keep the voltage on the output high, any experiences with this?

I'm still thinking not using a sparkgap but a sa to keep voltage and currents at a usable maximum on the primairy coil. A sg generates more power but with these amplifications on power output it seems to me that we could do with less output.. 150watt input and 10kw output... Pff if i can fry potatos i'm already happy.

Also should the power cap bank be of a specific type?

Br, Webmug

## Hi webmug!

Grounding is necessary. two grounds are needed one at spark gap and other in the output side. spark plays a vital role as all frequencies exist at spark gap and it has to be tuned also by varying the gap so it matches the frequency of ur nst(if solid state or tesla transfomer) view my crude drawing circuit in one of my posts.it has 2 earths.

keep hv low in range of 2kv or 1.5 kv. suppose u have 2kv=2000 volts and u need 120 volt out then 2000/50=40 volts per turn in primary and make secondary 3 turns. means 40v x 3=120 volts. its better u decide ur transformer input n output and work accordingly.

make primary thin(high impedance) and secondary thick for more amps.(low impedance) so u can test amps using a load in raw ac hf power. u can also use same coils but power will be less.

i have no idea wot u been thinking may be u have better idea without spark gap. try it.

## Aug. 12, 2011 Zilano Quote:

Originally Posted by **drak** zilano and mr. clean,

Did you use some special technique when using different gauge/type wire to get resonance between them, like measuring length, or weighing the wire to get 1/4 the size? Or did you just use caps only to bring them into resonance? I rebuilt my primary using the same wire as my secondary both are thin now and I seem to be getting better results. My second set of coils are drying now and will work on them later today. Will try thicker gauge output on my second set of coils this weekend. Thanks for your help guys.

#### Hi drak!

i dunno wot Kurt alias mr. clean did. wot i did i made a transformer first= reverse tesla coil= thin primary and thick secondary. i had 4kv hv so i had 4000 volts so i made a transformer with 80 turns primary so i had 4000/80= 50 volts per turn (primary) and 5 turns in secondary thick as output. so i had 50vx5=250 volts out. i measured L of Primary with lcr meter and calculated caps value for 30 khz using online resonance calc. and used it. same thing i did for secondary L2 and attached cap.

the number of turns and thickness dont matter. but if u want low input and high output. use thin primary and thick secondary so u get more amps.

resonance is just a frequency does not depend on length ONLY IF u attach caps across it and make it Lc circuit.even a single loop can be resonated at 30 khz just use right cap.

hope u understand and if not go thru all my posts i have described it all. and am always here to

help ya out.

Aug. 12, 2011 Zilano

Quote:

Originally Posted by mr.clean

very cool, yes im trying all different combinations.

Hi Kurt!

use an RF(radio frequency coil) or slide a ferrite tube on both limbs of ur dc output. thats is negative(-) feed and positive feed(+) then measure amps then ur meter wont go berserk! will give u stabilized measurements though not fully but wud be more stable. better than u have now.

Aug. 12, 2011 Zilano

Quote:

Originally Posted by **mr.clean**.

Wow buddy, cant wait to see that monster in action.

Hi Kurt!

mine is just 10 kw 230-250v ac sinewave. but urz seem to be 18kw unit. so urz is a monster!

reverse tesla helps u to scale down voltage. try lower voltage else its gonna be hard to manage high voltage output. first try the don 6kw output.

important!: tune ur spark gaps so u get smooth flow out. gap is important. its also a tunning factor in don smith circuits. input n output spark gaps must be tuned so u get smooth output not the intermittant one. i saw ur bulb flickering means u need fine tune the gap. use screw and unscrew left n right and centre fixed peg.

Aug. 12, 2011 Mr. Clean

Don Smith replication & Thane Heins & Kapanadze plans

Quote:

Originally Posted by **penno64**.

Hi Kurt,

Nice to see you here.

Have you made more progress on the REGENERATION (Hanes) gear?

If you're looking for someone to replicate your DS stuff, drop me an PM or just post it.

Have a good one,

Penno

Thanks man i appreciate the welcome.

Oh jeez i cant wait to build a massive vehicle-driving perepiteia/Thane Heins. I want to use a more functional horsepower motor, plus have HV coils that read in the hundreds of volts, not just 30 something volts.

But the Don Smith was actually on the list first, & with electricity going up here, im eager to work on this one.

I also have what looks like the full schematic for the Kapanadze 9volt single pulse self-running 3-5kw deal. not the JLN.

Never lost faith in Don, his is simply a magnetic induction version of PATENT 336,961 & 336,962 being the improvement.

Kapa has even said he used a Tesla design Lol

The ONLY missing piece to the kapa is the k561 hex inverter, what that is & how to connect it. Then i will test the Kapa that SR193 & FreenergyLT have built.

I will make a schematic of the present state of my DS, but just never made one for this build, just used Teslas old 1880 something drawings but using induction instead of the armature...very easy, just tuning is not obvious to the eye, & just like the radio station, a bit over or below & it wont work.

I owe my results to the closeness in weight in copper of L1 & 2, not so much the length of wire, but im always learning.

\* so ultimately big deal, you may go thru a bunch of L1s to find the right tune, but i think tuning could be done with perfect lengths alone to resonante, then use storage/smoothing caps somehow except caps have only diminished output for me so far... more experiments will tell:J

## Aug. 12, 2011 Zilano Quote:

Originally Posted by **mr.clean** .

Yes, im not yet set on one or the other kind of primary, i like the idea of a heavy gauge wire, but have just had better results with the thinner high turn primary.

But i'll be able to tell even better with the B&W coils that should be here soon. I can tell the dinky copper tubing is holding back a lot of induction.

I look forward to your progress, any vids?

Hi kurt!

i havent made any vids till now. i want people to strive and learn and use brains first. coz if u

give knowledge as a throwaway replicators can replicate easily but they wont know the idea and the basic behind the dons technology. let people learn. give them knowledge. but let people try it first themselves. i will be posting vids also but this is not right time. lets see no no members replicate with knowledge gained on here.lets see some progress!

though i have posted my crude circuit. my first attempt circuit which gave 250 v dc 2.5 kw output with 12 volt 120 watt input on here. i fine tuned it and scaled up to 10 kw 230-250 ac 50 hz.

Aug. 12, 2011 Zilano Ouote:

Originally Posted by mr.clean

Yes, im not yet set on one or the other kind of primary, i like the idea of a heavy gauge wire, but have just had better results with the thinner high turn primary.

But i'll be able to tell even better with the B&W coils that should be here soon. I can tell the dinky copper tubing is holding back a lot of induction.

I look forward to your progress. any vids?

Hi Kurt!

To get overunity the input must be low(thin primary-high impedance) and secondary output(low impedance) high amps. this is the magic behind dons circuits. but don never disclosed this magic trick. people who saw dons designs made primary thick and secondary thin they had failures in output power. underunity. or unity. i call this REVERSE TESLA COIL. MAKE primary as secondary and secondary as primary. kapanadse got this idea and u can see his green box coil is based on don circuit. see my attachment in one of my posts dons smith pdf dated 1994 bottom circuit. the 6A coil 6 turns is same as dons circuit.

Aug. 12, 2011 Mr. Clean Don Smith replication

#### **Quote:**

Originally Posted by **zilano** .

hI MR.CLEAN!

u r using reverse tesla concept-thin primary more turns and thick sec less turns. don never mentioned it. but its the only way to free power.

regards

zilano zeis zane!

Yes, im not yet set on one or the other kind of primary, i like the idea of a heavy gauge wire, but have just had better results with the thinner high turn primary.

But i'll be able to tell even better with the B&W coils that should be here soon. I can tell the dinky copper tubing is holding back a lot of induction.

I look forward to your progress. any vids?

## Aug. 12, 2011 Zilano Ouote:

Originally Posted by **mr.clean** .

Hi guys, love the discussion.

i appreciate the reference to my vids.

I want to be clear that Im doing this build because Don had said himself that if we're interested in this device, & we wanted to actually see one in our lifetime...that we'd be better off building our own.

Don's credentials on top of his verbal recommendations...on top of his info, AND instruction, were enough for me to at least try it.

So far im enjoying the progress. From no light at first, to being able to burn out bulbs is very exciting.

Zilano, it seems you have done a lot of study, cant wait to see what comes out of your work.

#### hI MR.CLEAN!

Thankx for reading my posts. i have it working in my home a 10 kw device. 230-250v sinewave. i did not use 555 timer based nst. i made it on my own. made to oscillate at 30 khz. a 4kv power pack and then just did step down. am using it.

you are on the virge of a one step away. and u will get it. any more queries welcome!

i posted ur progress without ur knowledge sorry abt that. i tried to contact ya but failed coz google didnt let me. here i never saw u online. am glad u are here! congrats on ur progress!

may God bless u always!

good wishes from my side!

u r using reverse tesla concept-thin primary more turns and thick sec less turns. don never mentioned it. but its the only way to free power.

## **Don Smith by Mrclean**

#### Quote:

Originally Posted by **zilano** .

hI Penno!

thanks for the support. dont worry am not dettered easily. knowledge must be shared. and i will keep sharing. keep posting. people who dont try say it cant be done. am of the thinking when it cant be done then it must be done.

i never loose hope. failures do happen but they make u learn more. edison tried 1000 times for electric bulb why cant we?

regards

zilano zeis zane

Hi guys, love the discussion.

i appreciate the reference to my vids.

I want to be clear that Im doing this build because Don had said himself that if we're interested in this device, & we wanted to actually see one in our lifetime...that we'd be better off building our own.

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So far im enjoying the progress. From no light at first, to being able to burn out bulbs is very exciting.

Zilano, it seems you have done a lot of study, cant wait to see what comes out of your work

Aug. 12, 2011 Zilano Must Read Back To Basics- Early Radio

HI THERE!

WE MUST HAVE STRONG BASICS.

LEARN AND UNDERSTAND BASICS

A MUST SEE TO UNDERSTAND DONS CIRCUITS

EARLY TRANSMITTERS N RECIEVERS

## **History of Radio**

LARGE PROJECTS

ARE BUILT ON SMALL BASIC BLOCKS

ZILANO ZEIS ZANE

A 14 YEAR CAPS LOCK BOY

Aug. 11, 2011 Zilano Quote:

Originally Posted by **penno64**.

Zliano,

Do not be discouraged.

Keep up your efforts to educate those that wish to learn and try.

Regards, Penno

p.s. I asked a member from OU to have a look at your postings. Unfortuantely, he does not have an account here and said he could not see the diagrams etc. He is very good and I believe he has had limited success.

## hI Penno!

thanks for the support. dont worry am not dettered easily. knowledge must be shared. and i will keep sharing. keep posting. people who dont try say it cant be done. am of the thinking when it cant be done then it must be done.

i never loose hope. failures do happen but they make u learn more. edison tried 1000 times for electric bulb why cant we?

Aug. 11, 2011 Zilano Phasing Neon Sign Transformer Nst

HI THERE!

WATCH N LEARN

#### **COURTESY: U TUBE**

#### PHASING NEON SIGN TRANSFORMER NST PART -1

Phasing Neon Sign Transformers for Tesla Coil Use Part-1 - YouTube

PHASING NEON SIGN TRANSFORMER NST PART -2

Phasing Neon Sign Transformers for Tesla Coil Use Part-2 - YouTube

Aug. 11, 2011 Zilano Quote:

Originally Posted by **Xenomorph**.

Just a last note on correct measurements.

An AC clamp meter is made to measure ONLY **50-60 Hz AC** currents.

It will not correctly work with pulsed DC of 30 kHz.

So all the clamp meter readings are false measurements.

Why does pretty much every guy fall into that trap.

It unnecessarily discredits the experiment.

Same reason Naudin believed to have OU in his Kapagen.

The spark gap creates enormous HF noise that cripples

all sensitive equipment's functionality (especially if you use it 20cm

next to the spark,but even 10 meters away).

For that purpose shielded 20k + equipment is being used.

There might be excess energy, but that has to measured differently

than with an AC clamp meter.

#### Hi there!

u said dc pulsed. its true every dc half wave or full wave rectified ac is always pulsating called ripple. here we have rf ripple but it can be smoothed by using pi filter and an extra rf coil so we get smooth dc. most adaptors we use in daily life converts 110 v ac to 12 v or 5 v dc. they overcome the ripple effect by making dc and generating ac square wave and then again rectified to get pure dc. square waves dont have much ripple and its straight line dc. we can use that here also. and measurements can be done easily using shunts for DC amps.AND VOLTAGE too. measurement is not a problem with filtered dc how high voltage it can be.

please go thru web and read measuring HVDC AND HVAC and u will know how its done.

we are just interested in ac sinewave output. but we can measure dc amps and volts and add rms factor and we get ac measurements. its simple.

all ya need is calculation. kapanadze did not have shielded 20k \$ + equipment but he still did it.

when funds r low and u have a drive to go! innovations happen. necessity is the mother of invention u see!

bypass solutions are always there. just we have to think harder to get wot we want.

am not saying i have all knowledge of everything. i did and learned. so will all the people.

regards

Aug. 11, 2011

Zilano Quote:

Originally Posted by **Xenomorph**.

This is starting to become entertaining.

So all OU motor-based systems like Adams Motors, Muller Motors, Kromrey Converters or magnetic systems like Floyd Sweet's device or Kron's negative resistor or not to forget the Moray valve are NOT OU devices then according to you because they are lacking a spark gap?

hI!

OVERUNITY IS JUST A TERM AND HERE WE R DISCUSSING DON SMITH AND NOT OTHERS.

BASICS OF DON- HIGH FREQUENCY. HIGH VOLTAGE. AND SPARK GAP WITH RESONANCE. (TESLA BASICS).

OVER UNITY CAN BE ACHIVED IN OTHER WAYS TOO BUT RESONANCE AND BUFFER SYSTEM IS USED.

A BUFFER CAN BE CAPS/BATTERY/ OR INDUCTION DEVICE.

MORAY DEVICE IS ALSO BASED ON RESONANCE AND ION VALVE( LIKE SPARK GAP) BUT ITS NOT OVER UNITY DEVICE COZ HE USED RADIANT ENERGY TUNED HIS CIRCUIT TO IT AND JUST DREW POWER. HE DID NOT PRODUCE A SELF PRODUCING AND SELF FEEDING DEVICE. NOT A STAND ALONE SYSTEM. HIS DEVICE DEPENDED ON RADIATION FOR THAT HE USED ANTENNA OR A WIRE HUNG ON TWO POLES.

SOLID STATE RESONATING SYSTEMS ALSO USE RESONANCE AND FLUX MANIPULATION( TIMMING CIRCUIT) EQUIVALENT TO SPARK GAP.

IN DONS CIRCUITS SPARK GAP IS TIMMING DEVICE AND RESONATES ACCORDING TO THE FLUX CHANGES IN SECONDARY.

A SYSTEM WITH SPARK GAP+BUFFER+RESONANCE BECOMES SELF RUNNING AND SELF FEEDING DEVICE.

## Quote:

Originally Posted by **zilano** .

hI THERE!

THERE HAS TO BE A COMBO FOR OVER UNITY DEVICES.

A SPARK GAP + RESONANCE.

THEN U GET OU(OVERUNITY)

Aug. 11, 2011

Zilano

**Getting A Spark Firing Is Not Over Unity!** 

hI THERE!

THERE HAS TO BE A COMBO FOR OVER UNITY DEVICES.

A SPARK GAP + RESONANCE.

THEN U GET OU(OVERUNITY)

KAPANADZE HAD SPARK GAP AND RESONANCE.

MR. CLEAN ALSO HAVE.

KAPAGEN HAD SPARK GAP BUT NOT RESONANCE SO ITS NOT OU(OVERUNITY)

SR193 HAD SPARK GAP BUT NOT RESONANCE HE USED INDUCTION SO OUTPUT IS JUST 150 WATTS JUST A RESULT OF SPARK GAP AND NOT RESONANCE. IF SR USED RESONANCE THEN HE WUD BE IN THE CATEGORY OF KAPANADZE LONG B4.

I HAVE BOTH IN MY SETUP AND AM FINE WITH OUTPUT. AM USING IT FOR MY HOME A 10 KW UNIT. 220-250 VOLT 50 HZ SINE WAVE. AM HAPPY WITH IT!

Aug. 11, 2011

Zilano

**Quote:** 

Originally Posted by **Xenomorph**.

Just a last note on correct measurements.

An AC clamp meter is made to measure ONLY **50-60 Hz AC** currents.

It will not correctly work with pulsed DC of 30 kHz.

So all the clamp meter readings are false measurements.

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Same reason Naudin believed to have OU in his Kapagen.

The spark gap creates enormous HF noise that cripples

all sensitive equipment's functionality (especially if you use it 20cm

next to the spark, but even 10 meters away).

For that purpose shielded 20k \$ + equipment is being used.

There might be excess energy, but that has to measured differently

than with an AC clamp meter.

Hi there!

u r right!

but if u r getting juice and lighting 10 amps bulb then voltage measurements are not the highlights. although voltage is 1.8kv and if u r lighting 10 amps bulb it means u r getting 1.8kv x 10= 18kw power rippled dc output. its huge!

naudin did not use resonance. he just used output with spark gap! so it cant be over unity(ou) def. NOT.

Aug. 11, 2011 Zilano Quote:

Originally Posted by **Xenomorph**.

I have no problem with your spelling, i tolerate that some people consider it unimportant to verify their spelling.

Honestly i don't care if you are right or wrong. What you suggest here has in my eyes nothing to do with Don Smith. I am after high COPs of 300 like in the picture of the Don Smith device that you have swapped the primary and secondary in to illustrate your energy "saving" concept.

But good luck with it.

hI THERE! GREETINGS!

watch! thick secondary and thin primary. primary 100 turns longer and secondary 30 turns than primary. bifilar coil. SINCE ITS BIFILAR SO 15 TURNS ACTUALLY USED AS OUTPUT. AS CENTRE TAPPED.

Don Smith Project Part 12: Getting dangerous courtesy: mr. clean

**COURTESY: MR. CLEAN** 

REVERSE TESLA CONCEPT WORKING- MORE AMPS OUT THAN IN.

PRIMARY VOLTAGE=12,000 VOLTS TURNS=100 VOLT PER TURN=12000/100=120 VOLTS

#### SECONDARY=15 TURNS BIFILAR

#### VOLTAGE INDUCED IN SECONDARY=120\*15=1800 V

12000-1800=10200 VOLTS STEP DOWN

A CLEAR CUT STEP DOWN U SEE!

Aug. 11, 2011 Zilano Ouote:

Originally Posted by **Joit**.

Actually thats the other Thing i miss, no real Backround there, just Castles in the Air, a lot 'Suggestions' what may some take blind over, in hope that there is something, but there will not be anything.

The Theories what he sproad can anyone else put together, when he looks some closer at Don Smith Devices, doesnt mean, that someone really has something, and what we now here got is more Mess and Misinformations then anything.

The only thing you really can do at Don Smith's Devices is, build it, tune it, Days or even Weeks, change the Coils, and Components and then you can show something, but not hypothetically shot in the Dark with any Informations what you can find, and hope someone do rebuild it.

And when you wanna have really Informations about it, then the Informations what you allready can download are actually enough.

Hi there!

greetings!

see and believe it!

watch! thick secondary and thin primary. primary 100 turns longer and secondary 30 turns than primary. bifilar coil. SINCE ITS BIFILAR SO 15 TURNS ACTUALLY USED AS OUTPUT. AS CENTRE TAPPED.

Don Smith Project Part 12: Getting dangerous courtesy: mr. clean

REVERSE TESLA CONCEPT WORKING- MORE AMPS OUT THAN IN.

PRIMARY VOLTAGE=12,000 VOLTS TURNS=100

VOLT PER TURN=12000/100=120 VOLTS

SECONDARY=15 TURNS BIFILAR

VOLTAGE INDUCED IN SECONDARY=120\*15=1800 V

12000-1800=10200 VOLTS STEP DOWN

A CLEAR CUT STEP DOWN U SEE!

**COURTESY: MR. CLEAN** 

kdkinen's Channel - YouTube

Don Smith Project Part 12: Getting dangerous - YouTube

Aug. 11, 2011 Zilano Quote:

Originally Posted by **ewizard**.

Probably more like Italian and English is not his first language or maybe he's using a translator like Google. If he has anything it's certainly not making any sense to me either. I don't think he's a bot or spammer though and I doubt a disinfo agent either as his disinfo wouldn't fool anyone. I'm more inclined to think he has something but can't clearly convey it. Maybe some pictures or video's well done would clarify if there is anything here.

Hi there! greetings!

see and believe it

**COURTESY: MR. CLEAN** 

Don Smith Project Part 12: Getting dangerous - YouTube

kdkinen's Channel - YouTube

Aug. 11, 2011 Zilano Quote:

Originally Posted by **drak**.

???? Are we still talking about two sets of coils? Or are you saying I only need a primary and a secondary? Reverse the secondary? The secondary is glued in place and no mater which way I flip it it is still wound in the same direction. I was thinking I have an L1/L2 then another set of L1/L2 with

L1 being the same as L2 in the first set of coils and L2 being the same as L1 in the first set. You are confusing me, lol. I appreciate your help though.

Hi there!

watch!

don smith working project!

**COURTESY: MR. CLEAN.** 

kdkinen's Channel - YouTube

Don Smith Project Part 12: Getting dangerous . - YouTube

SEE AND BELIEVE.

DONT LET PEOPLE DISHEARTEN U. U TOO CAN DO IT!
READ MY ALL POSTS. U WILL GET A GOOD UNDERSTANDING. AND THEN APPLY IT.

Aug. 11, 2011 Zilano

Don Smith Project Part 12: Getting dangerous courtesy: mr. clean

Hi there!

watch! thick secondary and thin primary. primary 100 turns longer and secondary 30 turns than primary. bifilar coil. SINCE ITS BIFILAR SO 15 TURNS ACTUALLY USED AS OUTPUT. AS CENTRE TAPPED.

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A CLEAR CUT STEP DOWN U SEE!

#### kdkinen's Channel - YouTube

## Don Smith Project Part 12: Getting dangerous . - YouTube

## Aug. 11, 2011 Zilano Quote:

Originally Posted by **gyula** .

Hi zilano.

Have you actually assembled the two transformer setup as you described?

What capacitor values did you have to use for tuning? (I know this is very much transformer-dependent but what were the values in your case?)

Speaking of gain: how do you mean it? Say you have a bulb at the primary output of the tuned 2nd transformer as a load, (say your system is 120V AC) and the bulb is rated as 25W at 120V. Now your input power to the untuned 1st transformer taken from the 120V AC mains is less than the 25W the bulb consumes (as measured)? Please clarify if this is what you mean by gain.

Thanks, Gyula

Hi there!

the circuit is used to reduce transformer load(resistance) between input and output. measure the power changes urself. coz at resonance the resistance of circuit is zero. plz just do the practical. and find out.

get a good lcr meter. and use online resonance calc. i have given a link for it in my previous post.

## Aug. 11, 2011 Zilano Ouote:

Originally Posted by **Xenomorph**.

I have no problem with your spelling, i tolerate that some people consider it unimportant to verify their spelling.

Honestly i don't care if you are right or wrong. What you suggest here has in my eyes nothing to do with Don Smith. I am after high COPs of 300 like in the picture of the Don Smith device that you have swapped the primary and secondary in to illustrate your energy "saving" concept.

But good luck with it.

Hi the basic key is resonance and the spark. until u have both working u will have xcess

energy always. and when u step down it doesnt mean u r reducing power as its known, at resonance resistance of circuit is zero so u have power available whether u step up or step down.

# Aug. 10, 2011 Zilano

Quote:

Originally Posted by gyula

Hi zilano,

Have you actually assembled the two transformer setup as you described?

What capacitor values did you have to use for tuning? (I know this is very much transformerdependent but what were the values in your case?)

Speaking of gain: how do you mean it? Say you have a bulb at the primary output of the tuned 2nd transformer as a load, (say your system is 120V AC) and the bulb is rated as 25W at 120V. Now your input power to the untuned 1st transformer taken from the 120V AC mains is less than the 25W the bulb consumes (as measured)? Please clarify if this is what you mean by gain.

Thanks, Gyula

#### Hi there!

yes i have done it practically. u try it also.

yes u can use bulb according to ur transformer secondary wattage. measure input n output. see it urself

## Aug. 10, 2011 Zilano Quote:

Originally Posted by **boguslaw** .

zilano

Please explain your experiment with transformers. Is that one transformer with two caps (one on primary and one on secondary) or two transformers each with two caps? I found it interesting.

#### Hi there!

yes they r iron cored transformers. its one transformer with caps at primary and secondary. another same type transformer(without caps) is to feed 12 volt 1 amp ac to the transformer with caps.

but we can use 5kv 110v to 110v transformer for home use and reduce bills. since at resonance the transformer load(resistance) is negligible so power transfer is efficient. and u r billed less.

its just to save electricity bills.

Aug. 10, 2011 Zilano Apply My Concept

DONT BE A Theorizer.

Theorizer----- are like High Voltage. A lot hot Air with no Power behind but they are the dead of applied Work and Ideas.

APPLY THE IDEA AND SEE THE DIFFERENCE! BE PRACTICAL

ZILANO ZEIS ZANE!

TRY DOING!

Aug. 10, 2011 Zilano Quote:

Originally Posted by **ewizard**.

Probably more like Italian and English is not his first language or maybe he's using a translator like Google. If he has anything it's certainly not making any sense to me either. I don't think he's a bot or spammer though and I doubt a disinfo agent either as his disinfo wouldn't fool anyone. I'm more inclined to think he has something but can't clearly convey it. Maybe some pictures or video's well done would clarify if there is anything here.

Hi there!

I gave wot i learned and experienced! thats all.

take it and benefit from it or leave it and stick to the no no attitude and close the thread.

God bless ya always

zilano zeis zane gave u gain! and things to try! and see the gain. Aug. 10, 2011 Zilano

Quote:

Originally Posted by **Xenomorph**.

You got a point.

Swapping primary and secondary? Funny. So he/she changes the whole Smith design around until he gets his voltages right.

hi there!

spellings dont make any1 have more wisdom n experience. if u have a solution for the lowering of voltage then do let me know. try it urself practically and see if am right or wrong. am not a bot am no sabotager or a spammer. wot i did is to give u solution for free. i feel free advice is rediculed always coz people only realize free stuff is a hoax and spam and a bot. anyways thanks for the compliments. but who understand wot i have specified and work on it they will get it. thanks for reading my posts.

God bless u always.

regards

Aug. 10, 2011

Zilano

don CLEAR CONCEPTS FOR CLEAR UNDERSTANDING

hI FOLKS!

ZZZ AGAIN!

TELL U WHY AM ZZZ COZ LIGHTENING BOLTS R ALWAYS Z SHAPED. LOL. TESLA STREAKS!

DON BASICS SAY HAVE HIGH VOLTAGE AND HIGH FREQUENCY AND THEN JUST STEP DOWN.

NST= NEON SIGN TRANSFORMER

<u>CAUTION:</u> NST HAVE HIGH VOLTAGES CAN EVEN KILL U IF HANDLED IMPROPERLY. BE CAREFUL WHILE HANDLING THEM. DO FOLLOW SAFETY NORMS. READ SAFETY POSTS I POSTED EARLIER

UR NST SOLID STATE IS ONE TESLA COIL IT HAS FERRITE CORE. IT HAS HIGH VOLTAGE AND HIGH FREQUENCY. HERE U DONT NEED ANOTHER TESLA COIL. U JUST NEED STEP DOWN ONLY AIRCORE OR FERRITE CORE.

FERRITE CORE USED FOR HIGH FREQUENCIES. AIRCORE CAN ALSO HANDLE HIGH

FREQUENCIES IF U DONT HAVE FERRITE BUT OUTPUT AMPS HAVE NOT MUCH STRENGTH. AS COMPARED TO FERRITE CORES IN OUTPUT TRANSFORMERS.

NORMAL NST HAVE JUST HIGH VOLTAGE AND THEY HAVE IRONCORE. FREQUENCY IS 50 OR 60 HZ DEPENDING ON GRID SUPPLY FREQUENCY. SO U HAVE TO USE TESLA COIL TO MAKE HIGH VOLTAGE AND HIGH FREQUENCY. AND THEN U NEED STEP DOWN.

STEPDOWN CAN BE AIRCORED OR FERRITE CORE UNLESS U HAVE FREQUENCY 50 HZ. OR 60 HZ

FERRITE CORE CAN BE USED FOR 50 HZ OR 60 HZ THEY RUN COOL. THEY DONT HEAT UP.

WARNING: NEVER FEED HIGH FREQUENCY ABOVE 50 HZ OR 60 HZ TO IRON CORED TRANSFORMER IT WILL BURN TO FLAMES. USE FERRITE OR AIRCORE FOR HIGH FREQUENCIES.

READ TRANSFORMER BASICS LINK IN ONE OF MY POSTS AND MAKE STEP DOWN TRANSFORMER ACCORDINGLY. BUT U MUST KNOW OUTPUT VOLTAGE AND MAKE COILS ACCORDINGLY OF THE TRANSFORMER WITH AMPS IN CONSIDERATION IN OUTPUT AS WELL AS AMPS IN THE INPUT SIDE OF TRANSFORMER.

AN AIRCORE TESLA COIL CAN BE USED AS STEP DOWN IN REVERSE TESLA COIL FASHION. MEANS THIN PRIMARY AND THICK SECONDARY AS (OUTPUT) INSIDE THE THIN PRIMARY, AT THE CENTRE.

IMPORTANT: A STEP DOWN MUST RESONATE!

TIP: COPPER COATED WELDING RODS CAN BE USED IN A BUNDLE AS A REPLACEMENT OF FERRITE CORE. A SUBSTITUTE. WORKS FINE.

IN A NUTSHELL: MAKE AIRCORE REVERSE TESLA COIL. MAKE IT RESONATE WITH UR NST. THEN USE DIODE BRIDGE AND VOLTAGE DIVIDER AND USE PI FILTER GET 12 OR 24 VOLTS DC. then invertor OR use RESISTOR ACROSS INPUT SIDE OF IRON CORE TRANSFORMER MEASURE L WITH LCR METER AND USE REACTANCE CHART PAGE 23 OF BOOK ELECTRONIC TABLES AND FORMULAS UPLOADED BY ME IN ONE OF MY POST. TO FIND VALUE OF RESISTOR IN ACCORDANCE WITH 100 OR 120 HZ FOR GETTING FREQUENCY 50 OR 60 HZ BUT U MUST KNOW WATTAGE OF RESISTOR FOR THAT U MUST KNOW VOLTAGE AND AMPS USE FORMULA P=VI WHERE P= WATTS V= VOLTS AND I= AMPS AND ALSO V=IR AND R=V/I

**IMPORTANT:** USE PT= POTENTIAL TRANSFORMER TO MEASURE HIGH VOLTAGE AC AND CT=CURRENT TRANSFORMER TO MEASURE AMPERES

MYTH: PEOPLE TEND TO THINK LOAD ALTERS RESONANCE BUT ITS JUST FALLACY TO THINK THAT. U HAVE CLEAR EXAMPLE OF CRYSTAL RADIO SET. THE TUNED

FREQUENCY REMAINS SAME AND U HEAR MUSIK STILL. SO LOAD DONT CHANGE RESONANCE AND DERATES IT. IT JUST A SWITCH of TAP AND WATER KEEPS COMING! wash or bathe ur decision.

HOPE U UNDERSTAND BASICS NOW

AND FOLLOW ACCORDINGLY.

Aug. 10, 2011 Zilano Quote:

Originally Posted by **drak**.

???? Are we still talking about two sets of coils? Or are you saying I only need a primary and a secondary? Reverse the secondary? The secondary is glued in place and no mater which way I flip it it is still wound in the same direction. I was thinking I have an L1/L2 then another set of L1/L2 with L1 being the same as L2 in the first set of coils and L2 being the same as L1 in the first set. You are confusing me, lol. I appreciate your help though.

#### Hi there!

wot coil u have now u just need that only. no another set. just swap wires of primary with secondary.means two wires of ur primary is ur output the shorter coil. and two wires of ur long coil that is outer coil becomes ur primary. and u have step down instead of step up. u dont have to tear apart setup. let as it is just swap wires only.hope u get me now.u have L1 and L2. L1 IS UR PRIMARY AND L2 IS UR SECONDARY. USE WIRES OF L2 AND CONNECT THEM WHERE UR PRIMARY L1 CONNECTED B4. DO SAME FOR L1. CONNECT L1 WIRES WHERE UR SECONDARY L2 WIRES WERE CONNECTED. SO U HAVE A STEP DOWN MORE TURNS IN PRIMARY AND LESS TURNS IN SECONDARY. SO U GET LESS VOLTAGE AS OUTPUT. THE BETTER WAY IS ALWAYS TO MAKE PRIMARY LONGER AND THIN WIRE AND SECONDARY SHORT THICKWIRE SO U GET HIGH AMPS LOW VOLTAGE IN OUTPUT. REVERSE TESLA MEANS NOT THE ARRANGEMENT BUT SWAPPING OF COILS and WIRES TOO.

general tesla coil have thick primary outer coil and thin secondary inner coil. reverse tesla means thin long primary outside and thick short secondary inside. and use it as step down transformer. means high volts input from ur nst in primary long coil. and output is ur short thick coil. physical arrangement will remain same

thick inside and thin outside dont change that keep as it is. only wires r swapped.

PIC ATTACHED WILL GIVE U IDEA PIC REVERSE TESLA COIL

Aug. 10, 2011 Zilano

The Shortest Way To Success Easy Way No Sparks No High Tension To Mention

# A NEW BREAKTHROUGH in don technology.

reduce electricity bills!

must read

a small scale demo setup! can be upscaled for home use!

take a 12 v 220 or 110 volt 1 amps step down transformer with 2 wires primary and 2 wires secondary measure L of primary with lcr meter and use resonance calculator to calculate caps for 50 or 60 hz. use this cap across primary, then calculate L of secondary with LCR meter and use resonance calc to get secondary caps value for secondary 50 or 60 hz. now take another 12v 220 v or 12 v 110 v 1 amp transformer, feed 12 v ac to ur resonating transformer with caps to its primary it will make it oscillate in resonance with secondary of resonating secondary with caps, attach a 220 v or 110 v as ur transformer u r using attach load, measure input power and output power and calculate gain, use iron cored transformers, core is suitable for 50 hz resonance, attach caps in parallel across primary and secondary of the transformer.

RESONANCE FREQUENCY IS 50 OR 60 HZ DEPENDING UR GRID SUPPLY FREQUENCY COUNTRY DEPENDENT. FIND CAPS ACCORDINGLY. VOLTAGE WILL BE 12 VOLT OR 110 OR 220 VOLT OR CAPS.EG C=X MFD 60 HZ 12 V OR C=X MFD 120 V. MFD= microfarads.

try it! circuit is below as attachment.

Aug. 10, 2011 Zilano Quote:

Originally Posted by **drak**.

Ok, making another coil exactly the same, but reverse. Once that is done, how do I connect the coils together. Directly or through some circuitry? Because if i do it directly won't that effect the resonant frequency because it would look like one big coil? Thanks zilano

HI Drak! greetings!

b4 u read this go to bottom of page and read text in red first.

u can connect directly. it will be a step up and step down. but u must know voltage of primary of step up.the coils can be connected secondary to secondary air core. try connecting raw load as mr clean did. get to know amps. now u know I. but u must have idea of voltage that can be only

done by using PT= potential transformer. i have posted my circuit where i used 4kv in primary and 5 turns in secondary to get 250 volts in secondary with 5 amps out. amps depend on wire used in secondary. am not good at art the circuit diagram looks crude but works. try myway u get juice. keep reading all my posts. in my case i made custom made nst and made it work as tesla coil so i have high voltage 4k and high frequency and just did step down with aircore. since u already have high voltage and high frequency its not wiser to make another tesla coil means step up. u just need step down. i dont know wot voltage u will have in ur seconday of step down. but its gonna be huge. make ur nst like i did. tune it as tesla coil then do step down. dons point is if u have just nst with 50 or 60 hz then u have high voltage but not high frequency. to make high frequency u need a coil and caps and spark gap to make a secondary resonate with primary. but if u have nst with 12v input and high frequency and high voltage then u just need step down. a 12 v 30-35 khz 4-5 kv is good nst or u can get 50 v ac or 110 v ac 30-35 khz 4-5 kv nst u just need step down. thats why i made nst myself and had high frequency and high voltage. so nst was my tesla coil and i did step down aircore only. to reduce voltage in primary stage is is easy.decrease input power in ac feed using varactor and in dc input use pot.

never use 45 to 50 kv nst(all tv or comp flyback have this much voltage) start with low kv just enuff to get spark going. but still u can reduce voltage using a variable capacitor air core in series with ground in output and measure it with PT(POTENTIAL TRANSFORMER) KEEP PT EARTHED ALSO TO AVOID DANGERS OF HV. SEE MY ARRANGEMENT OF PT I HAVE uploaded image how to use PT AND CT. GO THRU ALL MY POSTS. hope u get the idea wot am talkin about. any more queries r welcome. keep reading my post u will get more info and better understanding of dons devices. take good care till then..... God bless u and keep u safe!

PS: SHORTCUT: JUST REVERSE UR COIL THEN U DONT NEED ANOTHER COIL. make primary coil as secondary and secondary as primary so it will be a step down. u will get resonance this time also but it will be a step down and resonating too.dont change physical arrangement of the coil just swap primary and secondary wires

Aug. 9, 2011 Zilano Electric Shocks Caution N Prevention

hI FOLKS!

**MUST READ** 

**SAFETY** 

http://www.sayedsaad.com/fundmental/23 ELECTRIC%20SHOCK%20.htm

**USEFUL AC FORMULAS** 

#### **USEFUL AC FORMULAS**

http://www.sayedsaad.com/fundmental/24\_USEFUL%20AC%20FORMULAS%20.htm

regards

zilano zeis zane!

PREVENTION IS BETTER THAN CURE!

Aug. 9, 2011

Zilano

handbook of electronic tables and formulas sams

Hi folks!

go to this link below

<u>Handbook of Electronics Tables and Formulas - Free eBooks Download</u> http://www.ebook3000.com/Handbook-of-Electronics-Tables-and-Formulas 85355.html

then use deposit file link to download the ebook

use free download wait for requisite time then u get a flash which says download File click it and u get it free.

and go to page 23 to find the requisite reactance charts in chapter 1.

other stuff is also included browse for urself

regards

Aug. 9, 2011 Zilano

Quote:

Originally Posted by **h2ocommuter**.

I appreciate your replies ZZZ, you are a master. way to go.

Thank you so much i am happy you have joined us. I am so new at much of the true understanding about all of this technology and general transforming of energies i must ask this question about how changing Hz is accomplished.

I realize how voltages are changed by step up and step down transformers but what changes to frequencies?

Another observation I must cite is when I fired up my 5,000 v mid tap luminous tube transformer it

was mounted to wood and on a wood desk and it was blowing large continuous sparks onto the board.. well no expanation necessary just learning to be way way cautious!

Oh is it true that the ambient energy that Don speeks of is activated by use of the spark gap?

Thanks zane

Hi zane!

keep safe burning by sparks can make u loose memory sense of touch and can even burn ur flesh deeper not visible with naked eyes. so be careful.

Aug. 9, 2011 Zilano more pics

Hi folks!

too less limit for upload! huh! 6 files max. anyways dont worry. will keep posting.

regards

magic of CW AND CCW when i joined the race i didnt know wot is cw and wot is ccw but i know now. cw= clockwise turns and ccw= counter clockwise= anticlockwise turns= opposite to the direction clock hand.

BIFILAR= IS JUST A COIL WITH EQUAL TURNS WOUNDED CW AND CCW JOINED TOGATHER SO SIMPLE.

#### **VARISTOR**

the pics u see extreme right n b4 next to it are VARISTOR. IT LOOKS LIKE CAPACITOR BUT ITS NOT!

zilano zeis zane

A novice and a nerd!

but still learning! keep learning!

Aug. 9, 2011 Zilano

Picture Speak Louder Than Words!-don Smith Support Collection

hI FOLKS!

MUST SEE ALL PICS

GET UR HEAD REELING AND REEL IN IDEAS!

ATTACHMENTS ATTACHED VIEW AT UR LEISURE WITH PLEASURE!

LINKS BELOW

first pic is dons nomograph. 2nd is dons circuit. 3rd is 555 timber based tv/comp flyback 4th is ignition coil driver circuit 5th is inside the nst and 6th is just resistance color code chart. always count rings colors from opposite end of silver or gold linning. there are online resistor calculator programs here is link

#### Handbook of Electronics Tables and Formulas - Free eBooks Download

http://www.ebook3000.com/Handbook-of-Electronics-Tables-and-Formulas\_85355.html

Resistor Color Code Calculator

Resistor Color Code Calculator

http://www.csgnetwork.com/resistcolcalc.html

another link related to same things inclusive of LCR AND RESONANCE CALC SAME PLACE <u>Electronics Converters and Calculators</u> <u>http://www.csgnetwork.com/electronicsconverters.html</u>

FREQUENCY AND WIRE LENGTH CALCULATOR

Wire Length From Coil Frequency Calculator

http://www.csgnetwork.com/wlfmcoilfreqcalc.html

Aug. 9, 2011 Zilano

Wire Basics For Coilers A Must See
hI folks!
u must see this
Wire and Cablehttp://www.windsun.com/Hardware/Wire.htm
regards
Aug. 9, 2011 Zilano Quote:
Originally Posted by <b>h2ocommuter</b> . I appreciate your replies ZZZ, you are a master. way to go. Thank you so much i am happy you have joined us. I am so new at much of the true understanding about all of this technology and general transforming of energies i must ask this question about how changing Hz is accomplished.
I realize how voltages are changed by step up and step down transformers but what changes to frequencies?
Another observation I must cite is when I fired up my 5,000 v mid tap luminous tube transformer it was mounted to wood and on a wood desk and it was blowing large continuous sparks onto the board well no expanation necessary just learning to be way way cautious!
Oh is it true that the ambient energy that Don speeks of is activated by use of the spark gap?
Thanks

Hi Zane!

zane

greetings!

the energy produced by both spark gap and resonance combination. spark gap is just a trigger to tune up resonance its like tapping resonance frequency of the secondary coil. its like drums beating when u stop beating drum sound stops. if u keep beating drum with drum stick the sound continues and if u get the the timming correct drum continues to emit sound when beaten at its resonance frequency then u have lesser hits to make drum emit continuous sound and u can rest ur hand till its time again to hit it b4 the drum sound is on the verge of dying out. you hit again and cycle continues.

we can use resistor across the input side of the transformer but we must know the wattage. in dons circuit people dont know how much voltage is at output but they do know amps. since V=IXR. AND P=VXI ,P IS WATTS .We must know V and I both to decide wot wattage to use. the reactance chart also shows C values also

we can use C also across input side of transformer then u can see the LC combination and LC we get it that LC have frequency. since don said caps r costly and resistances are cheap its better to use R to save cost. moroever kapanadze converting ac high frequency low voltage using voltage divider circuit and then using class c amplifier using two transistors u must have seen fan cooling two transistor on top of green box. view my pdf and u see kapanadze circuit based on dons circuit. read pdf uploaded by me dsmith-reference... scroll to bottom see the circuit of don the 6A COIL is the same coil u see on kapanadze greenbox larger thicker 6 turns. hope u get my point.if u have any more queries u r welcome to ask me.

regards

Aug. 9, 2011 Zilano Tools For Ur Help

hi Folks!

voltage divider calculator link

BeyondTTL Resistor Voltage Divider Calculator

2n3055 reference pinouts

2N3055 Power Transistor, 2N3055 Datasheet PDF, Circuit Schematic, Pinouts

tesla coil single transistor solid state

Single transistor solid state Tesla Coil

electroniks learner goodies Basic Electronics

transformer basics

**TURNS AND VOLTAGE RATIOS** 

transistor substitution chart

TRANSISTOR SUBSTITUTION CHART

wire gauges

The Energy Experimenting People. - Wire Sizes - Powered by ForumCo.com - The Forum Company

#### **SAFETY FIRST**

DeepFriedNeon - Tesla Coils

tesla coil text as pdf attached-make led tester for testing resonace included scroll down in pdf to see it

Aug. 9, 2011 Zilano BUFFER the basis of FEEDBACK CIRCUITS

Hi Folks!

this is zilano zeis zane again!

we always talk about closing the loop when output is ample than the input. to make automatic feedback to make circuit self feeding we have to have a temporary storage area called BUFFER it can be a battery or a capacitor or capacitor combination. mostly auto feedbacks do not use battery they use capacitors, capacitors acts as battery without acid and weight of the lead plates, they keep storing and feeding input fetched from output, in any self running machine a BUFFER or intiator is required, if we use battery we have to see its not overcharged and it becomes a headache with a cutoff circuit and since battery deplete and have fixed life they die sooner or later, the smart generation called caps comes in and they r far much better than battery although they hold less charge but large enuff to keep feeding circuit in auto feedback loop, the 4700 mfd(microfarads) do this, hope u understood the basic behind caps at input.

regards

Aug. 8, 2011 Zilano The Circuit Don Smith Simplified

hI FOLKS!

this is zilano zeis zane

hope u see wot i was reffering to. here CL=capacitor oscillatory value depends on L primary. use online resonance calc to calculate value for 30khz. CT= same way and CO same way. just go on matching frequency. always measure L with LCR METER AND THEN FIND THE REQUIRED C. THE CAPS ARE 300V 2.5 MFD in pi filter. please read 4700 mfd not 47000 mfd. mistake is regretted.

A MUST DO: USE 10 MEG OHM RESISTORS ACROSS CAPACITORS TO AVOID SHOCK AFTER POWER IS SWITCHED OFF.

WARNING!!!!!!!!! DO IT AT UR OWN RISK WARNING!!!!!!!!!!!

WARNING: DC VOLTAGES R ALSO FATAL ABOVE 50 VOLTS THEY STICK YOU WHEN U R ON GROUND AND 250V DC TOUCHED BY U.ITS MORE FATAL THAN 250 V AC. SO WATCH OUT. WORK WITH SHOES ON AND WOODEN FLOOR AND WOODEN TABLE. USE VOLTAGE DIVIDERS TO GET SUITABLE DC 12 OR 24 VOLTS. MEASURE VOLTAGE. TRY ATTACHING LOAD AND IF ITS OK THEN USE INVERTOR.

## Aug. 8, 2011 Zilano Ouote:

Originally Posted by **h2ocommuter**.

I simply want to give you credit for pointing out many of the highlights Don had mentioned and highly respect you estute claification of these matters.

I must try your setups. I am afraid of my 5 K volt Neon sign transformer.

LOL I have been bit hard by my plasma globe.

I have some 20KV gloves now but it is still a scary adventure!

glad to see you here.

Dustan Zane Muckey

hi there DZM!

!!!! **HIGH VOLTAGE**!!!! !!!!**CAUTION**!!!!!

**SAFETY FIRST!** 

WELL KEEP ALL PRECAUTIONS! WORK WITH SHOES WOODEN TABLE AND WOODEN FLOOR MUST. WHENEVER U MAKE ADJUSTMENTS TO HV SETUP MAKE SURE U TURN OFF POWER FIRST. ALWAYS USE BLEED RESISTORS ACROSS CAPS IN MEG OHM TO DISSIPATE CHARGE AS CAPS HAVE A TENDENCY TO HOLD CHARGE. IF U USE BLEEDERS THEY DISCHARGE SAVING U FROM SHOCK. REALLY FELT SORRY FOR THE MISHAP. AM GLAD U ARE ALIVE JUST BE CAUTIOUS AND FOLLOW SAFETY RULES.

but there is a saying

#### FEAR IS THE KEY!

fear makes us learn and excel and shine out!

we learn from mistakes

God bless u and keep u safe!

high voltages r fatal keep safe!

regards

Aug. 8, 2011 Zilano Quote:

Originally Posted by **drak**.

Still trying to figure out what to do with the captured radiant energy. Resonance is easy, its the high voltage output, what do you do with it? How do you turn high voltage low amps back to usable energy? <u>&#x202a;Don Smith device just testing&#x202c;&rlm; - YouTube</u>

Hi there!

greetings!

#### WARNING AND CAUTION:

#### THINK B4 U ACT!

PLZ HAVE AN IDEA WOT INPUT VOLTAGE U R FEEDING UR PRIMARY. COZ IF U R FEEDING SAY 12KV AND U HAVE 3 TURNS PRIMARY THEN 12KV/3 MEANS U R FEEDING 4KV PER TURN AND IF U HAVE 20 TURNS SECONDARY THEN U HAVE20X4KV=80KV IN SECONDARY. SO ITS BETTER U THINK OF TURNS AND VOLTAGE FOR A STEP DOWN MEANS U HAVE TO HAVE 80K TURNS IN PRIMARY OF UR STEP DOWN AND 12 OR 24 TURNS IN SECONDARY OF STEP DOWN.FOR 12V OR 24 VOLT OUTPUT. THIS IS HUGE AND IMPOSSIBLE.

### THE SHORTCUT IS:

make a transformer according to ur requirement have it aircore only and just use caps in parallel of ur primary step down only u dont need cap on secondary output coil of ur step down transformer. so turns are controlled within limits and frequency with caps.

its always better to use low voltage enuff to get spark going so u can control voltage at input and output also easy way. i used 4 kv and 250 volts out. go thru my posts i have given elaborate explanation to get anyone going to get juice my way.

The best solution in in ur case is to use same coil but reversed connected to ur setup coil. so u have two stages now. one is step up and another is step down. now u have step down use low voltage high amps and high frequency diodes to get dc and a low voltage high capacity capacitor across the dc output to smooth out ripples and its much better to use PI filter which consists of two caps and an inductance in between so u get pure dc low voltage. try a load and measure amps

and use voltage divider circuit to get 12v or 24 volts as ur case may be and use an invertor to get ac power output. hope u try and if u get low juice try inserting copper coated welding rods in ur step down coil as core. but make sure all setup ur step up n step down resonating. if ur step down is not resonating with ur step up then u wont get juice so match frequency and then add core of welding tube sticks. the core enhances induction and gives more strength to output amps. hope u try that gonna work. report me ur adventure.dont use raw ac power without rectifying it in stepdown else u burn up ur invertor coz high frequency will saturate core and sending ur invertor transformer in flames. always make dc after step down before u attach invertor. regards

Aug. 8, 2011 Zilano measuring high voltages

Hi folks!

greetings!

to measure high voltages and high currents(high amps) we need PT= potential transformers and for amps CT= currents transformers. am attaching a pic see the configuration how to use PT AND CT. a flyback driver circuit(use 4700uf 20 volt across the 12v input for better performance of fly back to reduce load on battery and saving circuit from hv kickbacks. Also u can use a capacitor across the primary matching with L of primary to make it oscillate for 30khz. measure L with LCR METER and use online resonance calculator for caps specifications here is a link LC Resonance Frequency Calculator at WhatCircuits.com) reactance charts. and a 12 volt to 220 volt simple invertor circuit. use a 110 volt transformer rated 15 amps for 110 volt invertor circuit. lol i ran out of the space allotted for upload i have a dump of info to share with u all let me know how to increase upload space.so more juicy and important info can be uploaded for all of ya to use.

Aug. 7, 2011 Zilano Ouote:

Originally Posted by **h2ocommuter**.

I simply want to give you credit for pointing out many of the highlights Don had mentioned and highly respect you estute claification of these matters.

I must try your setups. I am afraid of my 5 K volt Neon sign transformer.

LOL I have been bit hard by my plasma globe.

I have some 20KV gloves now but it is still a scary adventure!

glad to see you here.

Dustan Zane Muckey

Hi Dustan Zane Muckey!

# greetings!

well the basis of don globe is based on matching frequency of the globe with ur coil. the coil must be in resonance with the globe frequency. so tune that with caps caps added. this can also be done by using the length of the coil without caps. also u have to use 4L LENGTH OF THE COIL THAT IS THE CROWN.or if u have smaller coil then use caps to match it. then do the step down with a single diode and caps for storing power just half wave will do. people think just putting up a coil crown make it resonate its not that case we have to match resonance frequency first then tap the juice. view my posts i have simple solution without a globe thats will get u juice faster n smarter way. with experience and expertise that u get while performing experiments will lead u to learn how to self start generator with just 9 volt dc battery. all it takes to learn from mistakes. i learned a lot so will u.

well formulas are universal i just elaborated on them.am not an inventor just a discover agent.

wish u all the very best!

# Aug. 7, 2011 Zilano Quote:

Originally Posted by **penno64**.

Hi Zilano,

Below the submit button -

Select "Attach Files" Manage attachments button.

Penno

Hi Penno! greetings!

thanks for the help. you r a friend in need indeed. please let me know how to increase upload limit. so i upload more info.

here am attaching relevant things for understanding the circuits related to don.

Regards

# Aug. 7, 2011 Zilano misconceptions related to don smith circuits

Hi greetings to all!

This is zilano zeis zane again.

hope u all r listening!

its a misconception that don smith circuits draw power from ground which is not actually true. the energy is drawn from the resonance where minimal input needed for maximum output. earth grounding is necessary to maintain proper voltage for the circuit to operate.since here we r dealing with high voltages and high voltages often associated with streamers they are small arc voltages jumping like small tesla arcs which are irritating, they r produced by high voltage leakage causing imbalance to resonance.

we often come across having one phase with low voltage and if one need to increase voltage one can use this phase and an earth ground as neutral wire and light a bulb better than using one phase and a neutral wire.

earth just sucks in power not give out power. earth is just a great good conductor. so fellows shun ur misconception that dons power or kapanadze power coming from ground. its not its coming from resonance. and resonance is often reffered to as ambient environment. it just multiplies input to give multiplied output. we have two inputs frequency and voltage and resonance gives squared product of the two. if ur input is twice u get (2x2)x(2x2) = 4x4 = 16 times more with twice times input. that is voltage squared X frequency squared, thats the little secret!

tesla found it used it and all others followed tesla including me.

regards to all

Aug. 7, 2011 Zilano Quote:

Originally Posted by **drak**.

Still trying to figure out what to do with the captured radiant energy. Resonance is easy, its the high voltage output, what do you do with it? How do you turn high voltage low amps back to usable energy? <u>&#x202a;Don Smith device just testing&#x202c;&rlm; - YouTube</u>

Hi There! greetings!

please keep in mind never use 555. use LC CIRCUIT FOR OSCILLATOR. so u have a pure sine wave. as input. i saw ur setup the waveform is not balanced. since waveform is not balanced as input resonance waveform also deteriorates. first check the waveform of input it shud be perfect sine wave. then apply it. so u get perfect resonance. ur resonant waveform is not perfect. so it will causes problems in output usage unless u rectify it to dc. try reading my post and u will get to the solution. low voltage high amps. and a sine waveform as output.

regards

#### Aug. 7, 2011

#### Zilano

Quote:

Originally Posted by **penno64**.

Hi Zilano,

The simplest way to post a schematic is to hand draw then take a photo, then upload as an attachment.

If you need more help let me know.

Some nice drawing programs for circuits are available for free, but these are messy until you become familiar with their operation.

Regards, Penno.

Hi there!

thanks for reading my message! let me know where is the upload button? hope u send me relevent info.

regards

# Aug. 7, 2011

# Zilano Quote:

Originally Posted by **drak**.

Still trying to figure out what to do with the captured radiant energy. Resonance is easy, its the high voltage output, what do you do with it? How do you turn high voltage low amps back to usable energy? <u>&#x202a;Don Smith device just testing&#x202c;&rlm; - YouTube</u>

Hi greetings!

try doing what kapanadze did. get an empty ferrite core. and wind primary 8 turns and 4 turns independent coils of same gauge. and wind secondary about 4000 turns. measure L(8turns) of primary and use an online calculator to calculate capacitor to make it resonate at 30 khz. here is link

Resonant Frequency Calculator

use L(4 turns as feedback coil) and use any high hfe transistor as switch to make oscillator resonating at 30khz all sine wave circuit. so it will induce 4 kv 30 khz .THIS IS UR CUSTOM MADE NST. IT WILL WORK FOR 9-12 VOLTS DC. PRODUCING AC 4kv 30 khz. use diode to make dc. just half wave. since ur custom made nst oscillating at 30 khz u dont need to use resonating length of Lpt=length of primary tesla coil just use 80 turns of thin wire 4000/80=50 volt per turn as primary it will oscillate at 30 khz then wind secondary thick wire 5 turns giving u 5x50=250 volts output as primary induces 50 volt per turn into thick secondary. try resonating. if it fails hopefully not. even if it does fail. measure with lcr meter the primary(80 turns) and use Resonant Frequency Calculator

to calculate caps for 30 khz. use it.do same for secondary that is 5 turns tesla coil. match right cap for it. now it will work. so ur output is 250 volts and ampere depend upon the wire u used i mean at which amps rating thats rated. suppose its rated 10 amps so u r having power ouput from this output coil=250x10=2500va=2.5kw. now voltage is in control. now to control frequency either convert it to dc using high amps low voltage diodes. and use class c amplifier with power transistors and produce ac of 50 hz or 60 hz. use 1:1 isolation transformer. use varistor at the output rated for 250 volts.

another method is to use 1:1 isolation transformer and measure the inductance L of the input side of transformer that is input side of ur setup to the input leads of the transformer put R across two input points R can be calculated from american radio relay league graph that is reactance chart. now u know the amperes so u can calculate the wattage of resistor, the sixth edition of howard and samson book "handbook of electronic tables n formulas" also contains the reactance charts. for 50 hz look for 100 hz entry in chart and for 60 hz look for 120 hz entry in chart with ur inductance value of the transformer primary input. plot the line and where it cuts the resistance line use that value. Now u have everything decently calculated and managed setup. use varistor at the output of isolation transformer, its better u make isolation transformer using an old empty bobbin iron cored unused transformer or use any robust ferrite core to keep it cool. thats it just make sure the wires u use for transformer are rated 20% higher ampearage rating of the ampeares u r gonna use. here u have 10 amps so calculate 20% plus of 10 amps-A SAFETY FEATURE. ISOLATION IS MUST. COZ WE DONT WANT ACCIDENTS AND WE WANT SAFE FREE POWER. when power is more in output looping back and closing the loop is as easy as a wink, feedback 12v 5 amps(mysetup) in ur case may be different, use AMERICAN -AWC RATINGS OR CANADIAN RATINGS FOR WIRE GAUGES WITH AMPS N FREQUECIES TABLES. SELECT RIGHT ONES FOR UR SETUP

EMPOWER URSELF

FREEPOWER TO ALL

**REGARDS** 

Aug. 7, 2011 Zilano Ouote:

Originally Posted by **Kokomoi0**.

I was not aware they really existed.

I look forward to testing them.

where can I go to do that please?

#### hI GREETINGS!

google is the best place to search all ya need. i used google and found out everything. keep digging and keep watching my posts. there is always fire where there is smoke. people dont try things and say things dont work. and feel that they r super intelligent and say the devices r not

good enuff to be true. to succeed in anything go to the root. keep thinking and keep searching and u get it all. just keep asking questions and get answers. i was a novice and still i am but i dug it deep and found the right things to make the device running and in control.

well the basic part is nst neon sign transformer.since old nst uses iron core they cannot be resonated at high frequencies as core will saturate and transformer will burn up in flames. todays nst's use ferrite cores so high frequency is not a problem but they have gfi=ground fault interruptor built in thats trips the nst when grounded in dons circuits. so its better to make ur nst customised by winding primary and feedback coil and secondary using any ferrite core from old tv eht=extra high tension= flyback transformer. tv flybacks can be used but they have 45kv rated or more so dangerous voltages. we just need 3kv to 4 kv to get spark going so why we use 45 kv flyaback? nst is nothing but a high voltage step up transformer where u feed oscillatory power in khz in primary to get high voltage and high frequency in the secondary output winding of nst. tv flyback cores can also be used to make customised nst. with controlled voltage that is 4kv. tv flybacks have one good thing they have high voltage diode built in. but they have 45kv to 50 kv outputs very hard to handle unless u keep voltages in control.

the input voltage is the primary factor that controls how many turns u wanna have in ur primary. to make a step down tesla transformer. higher the input voltage makes primary to have more turns. as compared to secondary

secondary where u wanna have 110 to 250 volts output. the voltage applied to primary divided by turns gives u volage per turn in primary and since each turn induces voltage to secondary turns. so if u have higher voltage per turn in primary ur gonna get higher voltage per turn in secondary. its better to think tesla like a normal transformer and create primary n secondary according to ur needs. in this case frequencies dont match. to match frequencies we have to use caps in parallel to get resonance. so number of turns and thickness of coil dont matter if we get them resonating. its always better to reverse the tesla coil. make primary more turns and secondary less turns and thicker to get amperage.

can any one help me how to post schematics i will give u more links and more juicy things to get u going from scratch to free power. am new to this forum and i dont know how to upload schematics.

dons circuit operate like a radio set. resonance happening at the transmitting station to listen to radio we need a coil and tune it with tha variable capacitor to get in resonance with the transmitting station. when our reciever coil is in resonance with transmitting station we get musik. so dons primary is transmitting station and our coil is just secondary and its not far from transmitting station its so close. so we have less losses as distance is negligible and we can get musik just by tunning our secondary coil which is our recieving primary.thats the basis of dons power.

i will keep u informed with more ...... till then

take good care and use google and search wotever comes to ur mind regarding don smith and u keep saving pdfs and all titbits. google is a wonderful thing just scribble wot u need and in seconds u get it!

i googled and found everything!

and if u dont find anything...... just keep reading my posts and u will get all ya need!

regards

ZILANO ZEIS ZANE

# Aug. 7, 2011 Zilano Quote:

Originally Posted by **baroutologos** .

I have been devoted past week at studying Donanld Smith's devices and theories.

This man seems serious and claims that overunity or an extraordinary energy gain can be achieved with moderate means.

One device illustrated, and as claime, it was presented at a Tesla symposium, it was the image below.

Don Smith claims that a high frequency alternating current could be modified in frequency by the application of a resistor, a capacitor or perhaps a coil (choke) wired in parallel to the initial HF source.

Does it tell anything to anyone that? Is it makes any sense? That illustration uses a 12 volt powered Neon Sign Transfromer to charge 8000uF caps at 400 volts or so.

LOL? how the... can it be? Is the man heavily miscalculating or is there any explaination to this?

Baroutologos

hI GREETINGS!

the formula
T=L/R
WHERE T= FREQUENCY
L=INDUCTANCE
R=RESISTANCE

DOES THE TRICK

THE COIL IMPEDANCE CHANGES SO DOES THE T

REGARDS ZILANO ZEIS ZANE

Deleated (No Date)
Quote:

Originally Posted by **zilano** .

Hi greetings!

well this is the truth believe it or not wisdom lies not in the glass and steel chambered offices but in the garages and attics!

don is an old fella and has suffered attacks which paralised him so he is not in good form! we must respect his old age and the way hi talks. when we grow old we are gonna be more worst than don. age conquers all. but he is the guy who gave everything in his book. its just our wisdom is not much to see wots hidden in his text and graphics. **there are no methods in free energy devices producing mega watts of power but dons does.** all we need is wide eyes and see wot he is reffering to. if u read dons text n schematics carefully he told ya everything. the word is JUST REVERSE TESLA COIL AND THATS THE CLUE MEANS MAKE PRIMARY AS SECONDARY AND SECONDARY AS PRIMARY AND U GET IT.

REGARDS

ZILANO ZEIS ZANE

# Aug. 6, 2011 Zilano Quote:

Originally Posted by **baroutologos** .

What do you mean? pls elaborate...

LR circuits have not resonance. Not C component present... how to attain resonance in a signal with LR circuit? And how initial signal frequency can be altered to another output frquency.?

Baroutologos

Hi greetings!

well c (capacitance) is always associated with resitance or any conductor the capacity arises in L (indutcance) between its turns. more closer turns then more capacitance. far distant are turns lesser capacitance. see dons coils placed equidistant turns to avoid more capacitance. but every coil with turns have capacitance. be it resistance or copper coil.

regards

ZILANO ZEIS ZANE

in sense and sane!

### Aug. 6, 2011

#### Zilano

## Quote:

Originally Posted by **Joit**.

Hi.

You should connect a Load at the Output, like a Bulb, what match your Source.

Then measure the Amps. I had similar readings even on a Digital and a Analog Meter, up to 10 Amps, but it are only Spikes, what shortly appear.

My Opinion, you need to really look to, to have the Coils in Resonance, and the same Amount of Wire, even at different Thickness, and the right Capacitors tuned, that they catch the Pulses proper, and decharge equal to the Frequency.

A lot to tune around at it.

hi greetings!

to get proper voltage grounding is must. better earth ground with a lotta moisture helps to keep voltages in shape. since the appartus is not enclosed in a metal box coz its in experimental stage stray electromagnetic fields alter the frequency and this imbalance causes voltage spikes. use better ground and enclose ur resonating setup in a metal cage u will get good results. thats why varistors are used to stabilize output. moreover its radio frequency setup rf. its vulnerable in open. enclose it and get peace of mind!

regards zilano zeis zane

## Aug. 6, 2011 Zilano

# Quote:

Originally Posted by **webmug** .

In the demonstration <u>Video</u> Don demos the "ambient background" effect, that it's duplicating the input side of the capacitor plate.

He then says that with "proper grounding" usefull energy comes available on the secondairy plate.

Is there someone that also build and tested this setup?

Hi greetings!

this is true that a spark gap produces more power. a well known fact tesla described and has been verified by experiments. here is a link

**Spark Gap Experiments** 

see it urself and believe it.

#### ZILANO ZEIS ZANE

# Aug. 6, 2011 Zilano

Quote:

Originally Posted by **Kokomoj0**.

Hello everyone....

I just ran into the Smith videos and his pdf today and watched them through to the end.

pay particular attention to the "time" the lights are on, voltage level, camera damage, test methods, terminology, and his sentence construction, how he responds to and answers questions. (Then watch a borderland clip)

<u>&#x202a;Donald L. Smith 1996 Tesla Symposium Part 19&#x202c;&rlm; - YouTube</u>

On one of those videos you will see that larger toroid sitting on his bench that looks identical to the coil shown in the tpu videos below shown here:

<u>&#x202a;Steven Marks TPU video by Jack Durban DVD reliz Hi8 kassete DL version</u> 1‬‏ - YouTube

<u>&#x202a;Free energy TPU Demonstration (Steve Marks)&#x202c;&rlm; - YouTube</u>

<u>&#x202a;Free energy TPU (Steve Marks) part1&#x202c;&rlm; - YouTube</u>

‪Steve Marks TPU Clip5 - ZPE Zero Point Energy - Free energy‬‏ - YouTube

If you wish to review the success and failure stories of that big torroid you can see them on overunity.com under the TPU topic.

There are several thousand posts on the matter.

I wish everyone luck in their experiments.

Hi greetings!

well this is the truth believe it or not wisdom lies not in the glass and steel chambered offices but in the garages and attics!

don is an old fella and has suffered attacks which paralised him so he is not in good form! we must respect his old age and the way hi talks. when we grow old we are gonna be more worst than don. age conquers all. but he is the guy who gave everything in his book. its just our wisdom is not much to see wots hidden in his text and graphics. there are no methods in free energy devices producing mega watts of power but dons does. all we need is wide eyes and see wot he is

reffering to. if u read dons text n schematics carefully he told ya everything. the word is JUST REVERSE TESLA COIL AND THATS THE CLUE MEANS MAKE PRIMARY AS SECONDARY AND SECONDARY AS PRIMARY AND U GET IT.

**REGARDS** 

ZILANO ZEIS ZANE

Aug. 6, 2011 Zilano Quote:

### Originally Posted by **mr.clean** .

in my experience digital multi meters are unreliable around spark gaps or even exciters. The one's I have simply do not read any usefull information anywhere near a spark gap. If you really want a reliable reading you will need to use very expensive digital meters or analogue one's. The meters readings aren't as important as powering a load though so the approximate power levels can be determined that way....

...from the NST that is 300 watts and if there is 10 amps coming out at 120 volts then thats 1200 watts. So the benifit is obvious.

Anyway I like you're setup, good work, well done. Keep us posted, a lot of us are interested in this particular arrangement.

Thanks for posting Cheers

I appreciate that man! i'll definitely keep you guys posted [/quote]

Hi mr. clean! greetings!

you are doing great work. try doing what kapanadze did. get an empty ferrite core. and wind primary 8 turns and 4 turns independent coils of same gauge. and wind secondary about 4000 turns. measure L(8turns) of primary and use an online calculator to calculate capacitor to make it resonate at 30 khz.

here is link

### **Resonant Frequency Calculator**

use L(4 turns as feedback coil) and use any high hfe transistor as switch to make oscillator resonating at 30khz all sine wave circuit. so it will induce 4 kv 30 khz .THIS IS UR CUSTOM MADE NST. IT WILL WORK FOR 9-12 VOLTS DC. PRODUCING AC 4kv 30 khz. use diode to make dc. just half wave. since ur custom made nst oscillating at 30 khz u dont need to use resonating length of Lpt=length of primary tesla coil just use 80 turns of thin wire 4000/80=50 volt per turn as primary it will oscillate at 30 khz then wind secondary thick wire 5 turns giving u 5x50=250 volts output as primary induces 50 volt per turn into thick secondary. try resonating. if it fails hopefully not. even if it does fail. measure with lcr meter the primary(80 turns) and use Resonant Frequency Calculator

to calculate caps for 30 khz. use it.do same for secondary that is 5 turns tesla coil. match right

cap for it. now it will work. so ur output is 250 volts and ampere depend upon the wire u used i mean at which amps rating thats rated. suppose its rated 10 amps so u r having power ouput from this output coil=250x10=2500va=2.5kw. now voltage is in control. now to control frequency either convert it to dc using high amps low voltage diodes. and use class c amplifier with power transistors and produce ac of 50 hz or 60 hz. use 1:1 isolation transformer. use varistor at the output rated for 250 volts.

another method is to use 1:1 isolation transformer and measure the inductance L of the input side of transformer that is input side of ur setup to the input leads of the transformer put R across two input points R can be calculated from american radio relay league graph that is reactance chart. now u know the amperes so u can calculate the wattage of resistor, the sixth edition of howard and samson book "handbook of electronic tables n formulas" also contains the reactance charts. for 50 hz look for 100 hz entry in chart and for 60 hz look for 120 hz entry in chart with ur inductance value of the transformer primary input. plot the line and where it cuts the resistance line use that value. Now u have everything decently calculated and managed setup. use varistor at the output of isolation transformer. its better u make isolation transformer using an old empty bobbin iron cored unused transformer or use any robust ferrite core to keep it cool. thats it just make sure the wires u use for transformer are rated 20% higher ampearage rating of the ampeares u r gonna use. here u have 10 amps so calculate 20% plus of 10 amps-A SAFETY FEATURE. ISOLATION IS MUST. COZ WE DONT WANT ACCIDENTS AND WE WANT SAFE FREE POWER. when power is more in output looping back and closing the loop is as easy as a wink. feedback 12v 5 amps(mysetup) in ur case may be different. use AMERICAN -AWC RATINGS OR CANADIAN RATINGS FOR WIRE GAUGES WITH AMPS N FREQUECIES TABLES. SELECT RIGHT ONES FOR UR SETUP

EMPOWER URSELF

FREEPOWER TO ALL

**REGARDS** 

ZILANO ZEIS ZANE

Aug. 6, 2011

Zilano

suggestions for the benefit of all memebers don smith devices

#### Quote:

Originally Posted by **mr.clean** .

hi guys, cant seem to get much response on this LOL jeeez

Here is my recent work on the Don Smith device

YouTube - & #x202a; Don Smith Device Project Part 9: SYSTEM ON LOW, Average 1.7 Amp In,

### 10+AMPS Out .‬‏

Just wondering if anyones workin on this, or any input from anyone. Im doing this with very little knowledge. Im pleased so far.

the basis of don smith power is on two factors voltage and frequency. the minimum voltage to make a spark gap work is 4kv ie 4000 volts and use the optimum frequency for the rest. if we r to make a device for home use we must fix one of two things its better we fix voltage and vary frequency. if we use both high voltage and high frequency it will make us produce power not controllable and with more hazardous voltages. so keep voltage just enuf to spark get going and use frequency by formula of resonant circuit. assume c=1 and calculate power in joules of resonant circuit. so keeping voltage 4k fixed n changing frequency and capacitance to minimum(capacitance associated with inductance only) power is

 $P=0.5 \times C \times (V \text{ squared})*(HZ \text{ squared})$ 

P=POWER IN JOULES or watt sec (1 joule = 1 watt sec)
C=CAPACITY IN FARADS
V=VOLTAGE
HZ=CYCLES PER SECOND
x= multiply sign

when we are using caps C as storing power of tesla coil or inductance L

the formulas for output power are caps formula-putput power Pc=0.5 x C x (V SQUARED) x HZ

Pc= power in joules= watt sec C=CAPACITY IN FARADS HZ= CYCLE PER SECOND

 $Pl=0.5 \times L \times (A SQUARED) \times HZ$ 

Pl=power in joules= watt sec C=CAPACITY IN FARADS HZ= CYCLE PER SECOND A=current in ampeares

if we r taking output from L ie inductance only use pl formula and if we r taking output from capacitor then use pc formula

its always better to use reverse tesla coils that is thin primary and many turns and thick secondary few turns many amps

resonance is a just a frequency and its a match if matched then number of turns and thickness dont matter.

all that matters is resonating circuit producing power at low voltage and high amps.

the secret of don smith revealed.

JUST REVERSE TESLA COIL

AND U GET THE GOLD AND THATS WOT THE STORY NEVER TOLD

GOOD LUCK AND ALL SUCCESS! TO ALL FELLOW MEN!

**REGARDS** 

ZILANO ZEIS ZANE

Aug. 6, 2011

Zilano

## great work mr. clean

HI there! you have done a wonderful work. if ur nst is 12kv and ur output coil is 15 turns then ur voltage might be 180000 volts that is 180kv and u r getting 10 amps means u r getting 1800kva power and its hard to make a transformer for that for a step down. try reversing tesla coil. make primary many turns and secondary thicker yet lesser turns so u get optimum voltage step down and in resonance with more amps. if u can get step up resonance then u can get step down resonance. try making coil so secondary gives 220 volts or 120 volts as the case maybe. and use 1:1 isolation transformer with amps in consideration. hope u have a reason to whistle and smile...... its just a suggestion and i hope u try it its gonna work. use bifilar coil in output for better ampearage.

isolation transformer is must coz we dont want any accidents at output.

am really glad and very happy seeing ur replications! great work keep it up! its an awesome attempt!

regards
ZILANO ZEIS ZANE
in sense n sane!

Aug. 6, 2011 Zilano

# All Kapanadze Replications R Based On Don Smith

its true all kapanadze circuits resemble with don smith circuits. truth always lie in heaps of dust. uncover it and u get golden truth. don gave us everything to start with and he is the only person with

maximum details to help us replicate.his devices are true in all respects.. try digging more here is a link <u>&#x202a;Don Smith Device Project Part 8: SYSTEM ON HIGH, STEADY 12-20 AMPS NO CAPACITORS&#x202c;&rlm; - YouTube</u>