

For information only.

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Phil Darrington,
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Dear Phil Darrington,

The Two Turn Choke.

In Wireless World Dec 78, Catt et al. treated a capacitor as a transmission line and showed that if a capacitor was driven by a voltage step down a transmission line, its voltage took on a staircase appearance which was approximated to by a rising exponential. Years later in Proc.IEEE, Catt showed that if a "steady charged capacitor" was connected to an inductor, the resulting voltage took on a staircase appearance which was approximated to by a sin wave.

For ten years, the problem of the two turn choke when driven by a step (in a manner similar to the one turn choke or capacitor as per the Dec 78 article) was unsolved, and remained a great irritation. Then as you know, Gibson and Catt solved it early this year. The resulting article on the two turn choke has been accepted for publication by Proc IEEE.

Having solved the two turn choke, I noticed that by making a minor change to the far end of the choke, the problem turned into the problem of a one turn transformer. This was duly solved by Catt and Gibson and sent off as a paper to the English Proc. Phys. They have not yet accepted or rejected. I would expect them to accept, because it is full of fancy maths and obscurity.

In trying to find out why the result was so complex and obscure, I lighted upon a massive simplification of the one turn transformer problem, leading to a third paper which is elegant, virtually maths-less, and instructive. I plan to submit this third paper to a learned journal, and whereas the first Proc IEEE (already accepted) and second (Inst Phys) articles I expect to get accepted, I expect refusal of this third, simple, elegant paper.

All of this work is part of the new discipline, SCIENTIFIC INVESTIGATION OF (THE SCIENTIFIC RECEPTION SYSTEM - the mechanism by which new information is prevented from getting into the learned journals). When I get the accept/reject results of these first three papers, I plan to write about the whole experience in Electronics and Wireless World.

<http://www.ivorcatt.co.uk/x7171.htm>

Our seminars; <http://www.ivorcatt.co.uk/x64q.htm>

This is at <http://www.ivorcatt.co.uk/howie1.htm>

Also see <http://www.ivorcatt.co.uk/howie2.pdf> re cattq

<http://www.ivorcatt.co.uk/9101.htm>

<https://news.stanford.edu/news/2014/april/einstein-quantum-philosophy-040214.html>

29 June 2020

Dear Ivor,

I could not possibly improve on this most recent message of yours as an illustration of the justice of my description "absurd ego trip" to describe your activity!

On the one hand we have this absolutely outrageous fantasy about Maxwell and his bank <http://www.ivorcatt.co.uk/x18j184.pdf> followed immediately afterwards by the "no electric current" claim simply repeated despite numerous arguments to the contrary. <http://www.ivorcatt.co.uk/x8cbwash.htm> . I and others supplied detailed accounts e.g, for a coax cable that Maxwell's equations provide [provide] a solution where the energy is carried by the EM field between the conductors but is of necessity linked to an electric current within them. On connection to a standard hot filament lamp it is this current that will light it.

Archie Howie.

https://en.wikipedia.org/wiki/Archibald_Howie

<http://www.ivorcatt.co.uk/howie2.pdf>