

Re: Inertial-dampening systems

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Timo Nieminen wrote:

<snip>

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> *If you were to put that circuit into an increasing electric field parallel to the two main wires, then the current along both wires would flow in the direction of the electric field (which is in opposite directions in the usual circuit sense). A little thought about receiving antennas might suggest that two straight wire antennas side-by-side will still work even if joined at the tips. A little further thought about transmitting antennas (eg centre-fed straight wire antennas) might suggest that not only is there no fundamental prohibition of currents being different in different parts of a circuit, there's also no problem with transient currents in open circuits.*

A little thought about antennas would suggest that instead of consisting of isolated loops (or rectangles, as in the case of my puzzle/query) they are attached by wires to circuits, thus providing configurations and current paths that do not exist in the scenario I provided, thus suggesting that your analogy is inapplicable and non-responsive. Two straight-wire antennas joined at the tips might continue to work — or might not if currents on the conductors are out of phase so that the far field cancels out — but this is irrelevant because the rectangle of wire in my scenario is not part of an antenna circuit. A little further thought about antennas would suggest that they use alternating currents, which again are inapplicable to the scenario I provided. Another interesting fact about transmitting antennas is the fact that the ability to transmit circular EMW from a wire does not necessarily indicate that current is flowing in that wire. Alternating current, of the right frequency range given a

sci.physics: Re: Inertial-dampening systems

particular power source, causes electrons in a conductor to vibrate back and forth without actually flowing as current. That increased lattice energy is radiated as radio-frequency EMW.

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