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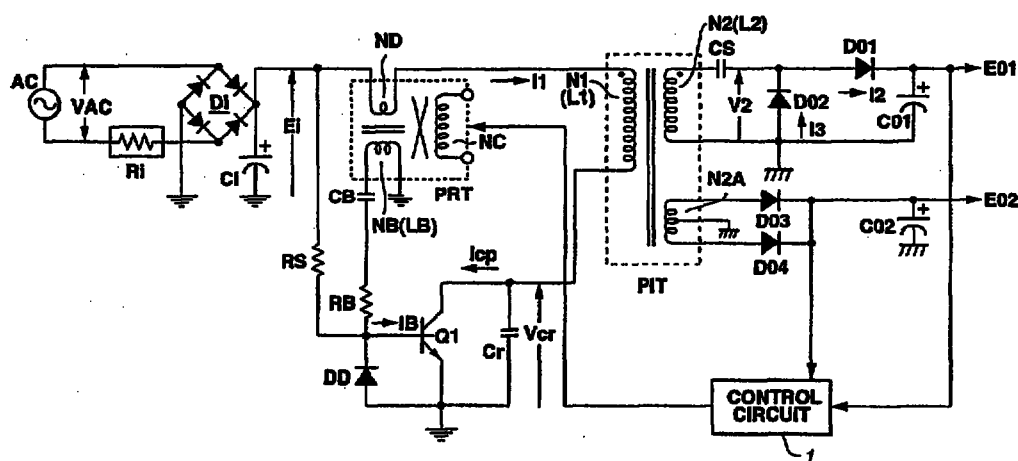
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(54) Title: RESONANT SWITCHING POWER SUPPLY CIRCUIT WITH VOLTAGE DOUBLER OUTPUT



(57) Abstract: A switching power supply circuit includes an insulating converter transformer where the insulating converter trans-
former has a gap formed therein so that a coupling which is efficient for a loose coupling is obtained; switching circuit, a primary side
parallel resonance circuit formed from a leakage inductance component from the primary winding of the insulating converter trans-
former and a capacitance of a parallel resonance capacitor and a secondary side series resonance circuit including a secondary side
series resonance capacitor and a secondary winding of the insulating converter transformer; a dc output voltage production means for
performing a voltage multiplying full-wave rectification operation to produce a secondary side dc output voltage substantially equal
to twice the input voltage level; and a constant voltage control means for varying a switching frequency of the switching element in
order to perform constant voltage control of the secondary side output voltage.

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