2. A method as claimed in claim 1 in which the parametric device includes a resonant circuit and in which energy is transferred to said resonant circuit by varying an inductive component thereof.

3. A voltage regulator comprising a parametric device having a resonant circuit oscillatable at a stable point, the regulator having input terminals for connection to a source of unregulated AC voltage, output terminals for delivering a regulated output voltage, and means for coupling the input terminals and output terminals to the resonant circuit for, respectively, transferring energy from the source to the circuit to maintain the oscillations at the stable point and transferring energy from the circuit to produce the regulated voltage.

4. A voltage regulator as claimed in claim 3 in which the resonant circuit comprises a variable inductor comprising a magnetic core having four common regions and two end regions magnetically joining said common regions, a load winding wound on said core and linking a magnetic circuit therein, the effective reluctance of said magnetic circuit controlling the inductance of the load winding, a control winding wound on said core, said control winding being responsive to current therein for generating magnetic flux in said core, said flux controlling the effective reluctance of said magnetic circuit whereby variations in said flux vary the inductance of said load winding, and a capacitor connected to said load winding to form a resonant circuit therewith, the input terminals being connected to the control winding, and the output terminals being connected to the resonant circuit.

5. A voltage regulator as claimed in claim 4 in which the resonant circuit is tuned to the frequency of the unregulated AC source.

6. A parametric device comprising a variable inductor having a magnetic core, a control winding and a load winding wound on said core a capacitor connected to the load winding to form a resonant circuit therewith resonant at a frequency f, the arrangement being such that an AC signal of frequency f applied to the control winding changes the inductance of the load winding at a frequency of 2f, and input terminals for applying the AC signal to said control winding.

7. A device as claimed in claim 6 in which the core has four common regions and two end regions magnetically joining the common regions.

8. A device as claimed in claim 7 in which the load winding is wound on the core substantially transversely of the control winding.

9. A device as claimed in claim 7 in which the arrangement is such that energisation of the control winding generates a magnetic flux in the core which controls the effective reluctance of a magnetic circuit encompassed by the load winding in such manner that variations in the flux cause the hysteresis loop of the magnetic circuit to rotate and the inductance of the load winding to change.

10. A device as claimed in claims 6, 7, 8 or 9 in which input terminals are connected to said control winding by which the control winding is energisable by an AC signal, and in which the resonant circuit resonates at the frequency of the AC signal.

11. A device as claimed in claim 7 or 8 in which the arrangement is such that, in use, the load winding generates a first magnetic flux in the core following a first flux path, through a first one of the end portions, a first region of the common regions, the other end portion and a fourth region of the common regions and a second path in the core through the first end portion, a second region of the common regions, the other end portion and a third region of the common regions, the control winding generating a second magnetic flux in the core following a third path therein through the first end portion, the first region, the other end portion and the second region, the second flux also following a fourth flux path through the first end portion, the third region, the other end portion and the fourth region, the first and second fluxes being in opposing relationship in two of the common regions and in additive relationship in the other two of the common regions, each of the first and second paths including one opposing flux common region and one additive flux common region.

12. A device as claimed in any one of claims 6—11 in which there is a capacitor connected across the control winding.

13. A device as claimed in any one of claims 6—12 in which there is a load connected across a portion of the load winding.

14. A device as claimed in any one of claims 6—13 in which there is at least one other winding wound on the core in such manner that the or each other winding is inductively coupled to the load winding.

15. A device as claimed in claim 14 in which there is one other winding and rectifier means connected across it.

16. A device as claimed in any one of claims 6—15 when connected to AC source of square waveform.

17. A device as claimed in claim 16 in which the AC source comprises a DC source and means for chopping the output of the DC source.

18. A device as claimed in claim 14 in which there is one other winding or as claimed in claim 14, in which there is a load resistor connected across the other winding, there being also input terminals connected to the load winding for applying an input signal across that winding.

19. A device as claimed in any one of