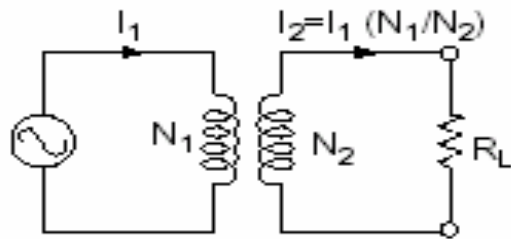


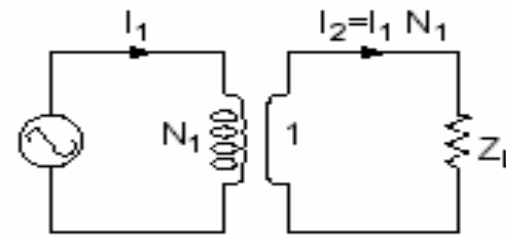


Inductive heating with High Power IGBTs

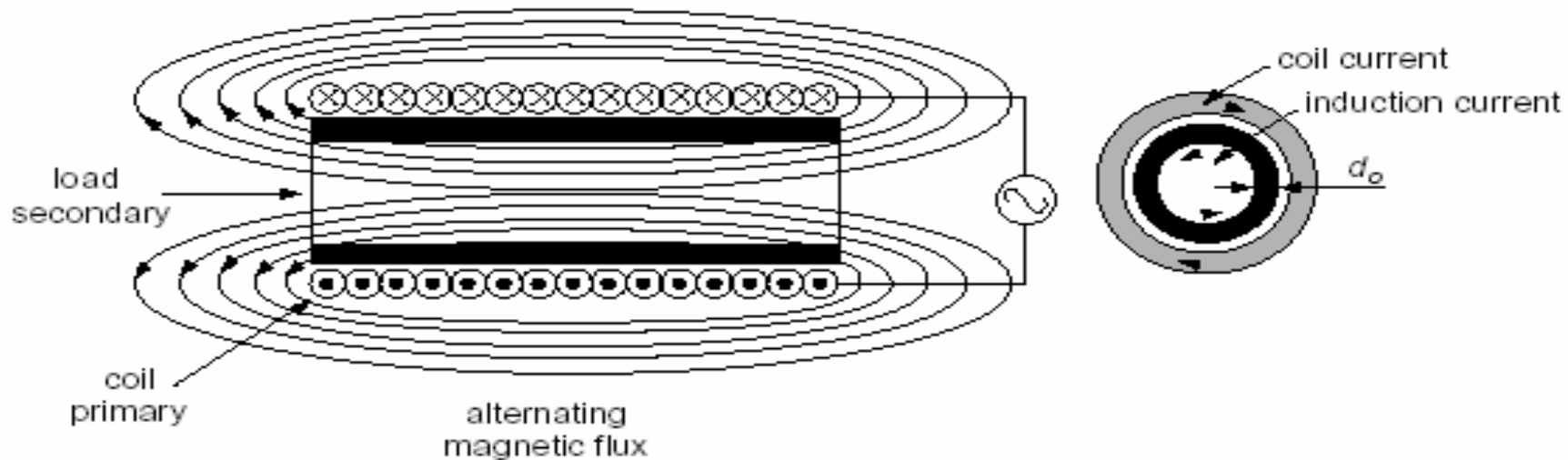
Basic of inductive heating



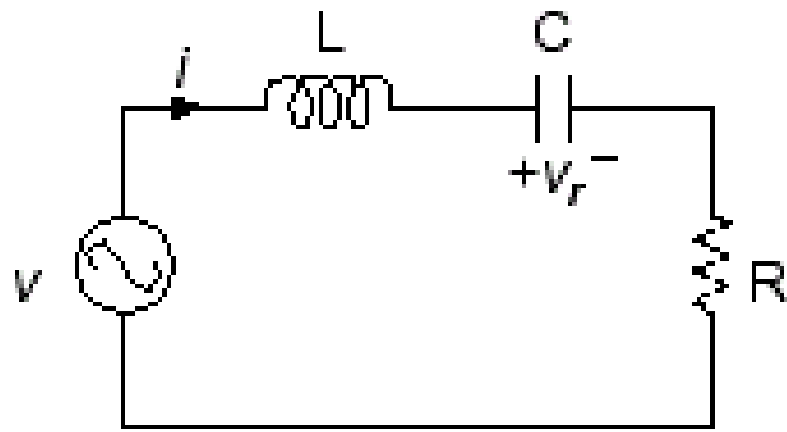
<figure 3-1a > equivalent circuit of transformer



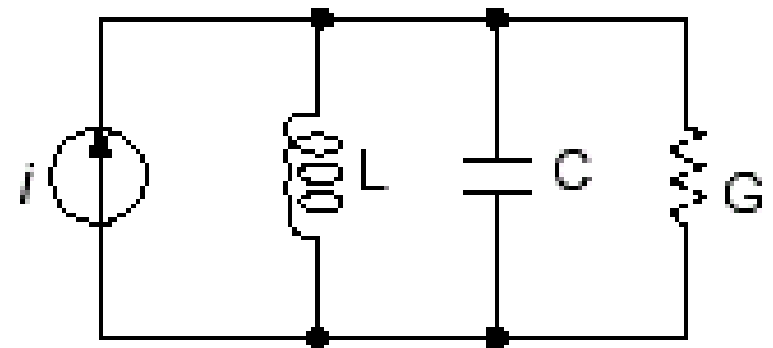
<figure 3-1b> secondary short



Resonant circuit

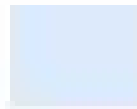
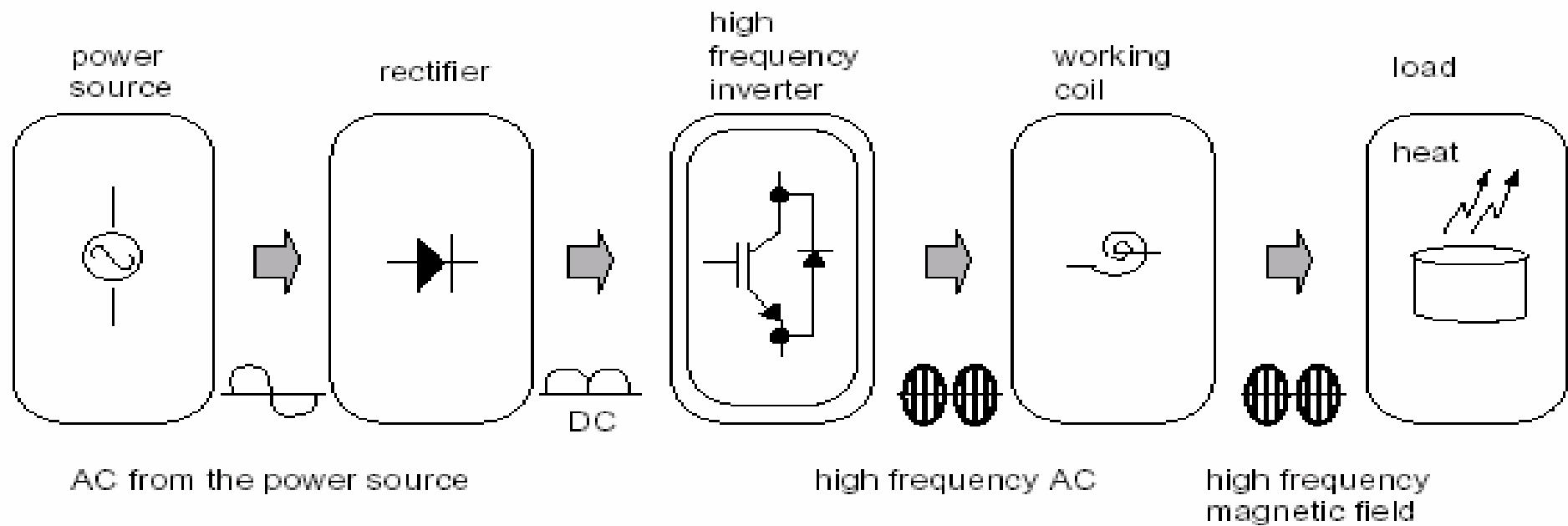


(a) Series resonant

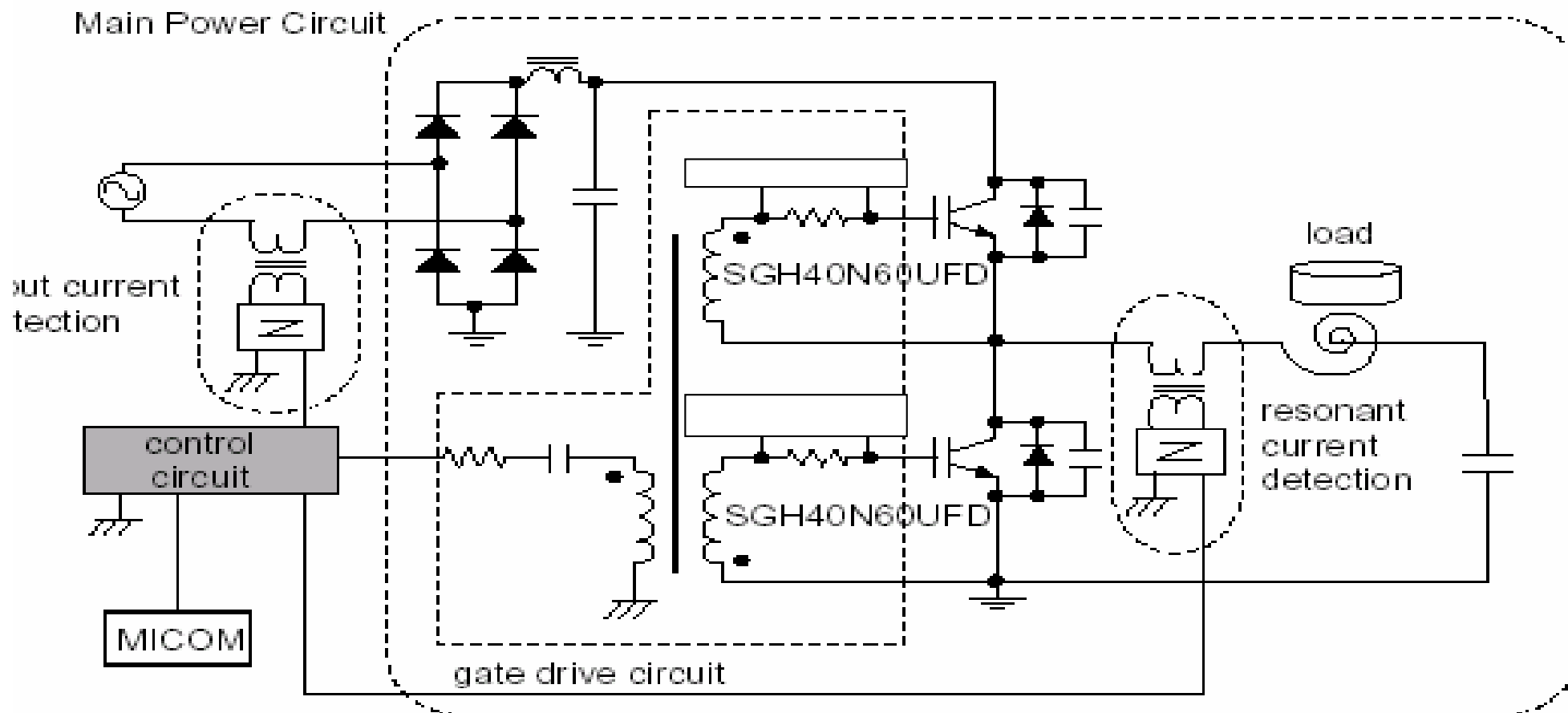


(b) Parallel resonant

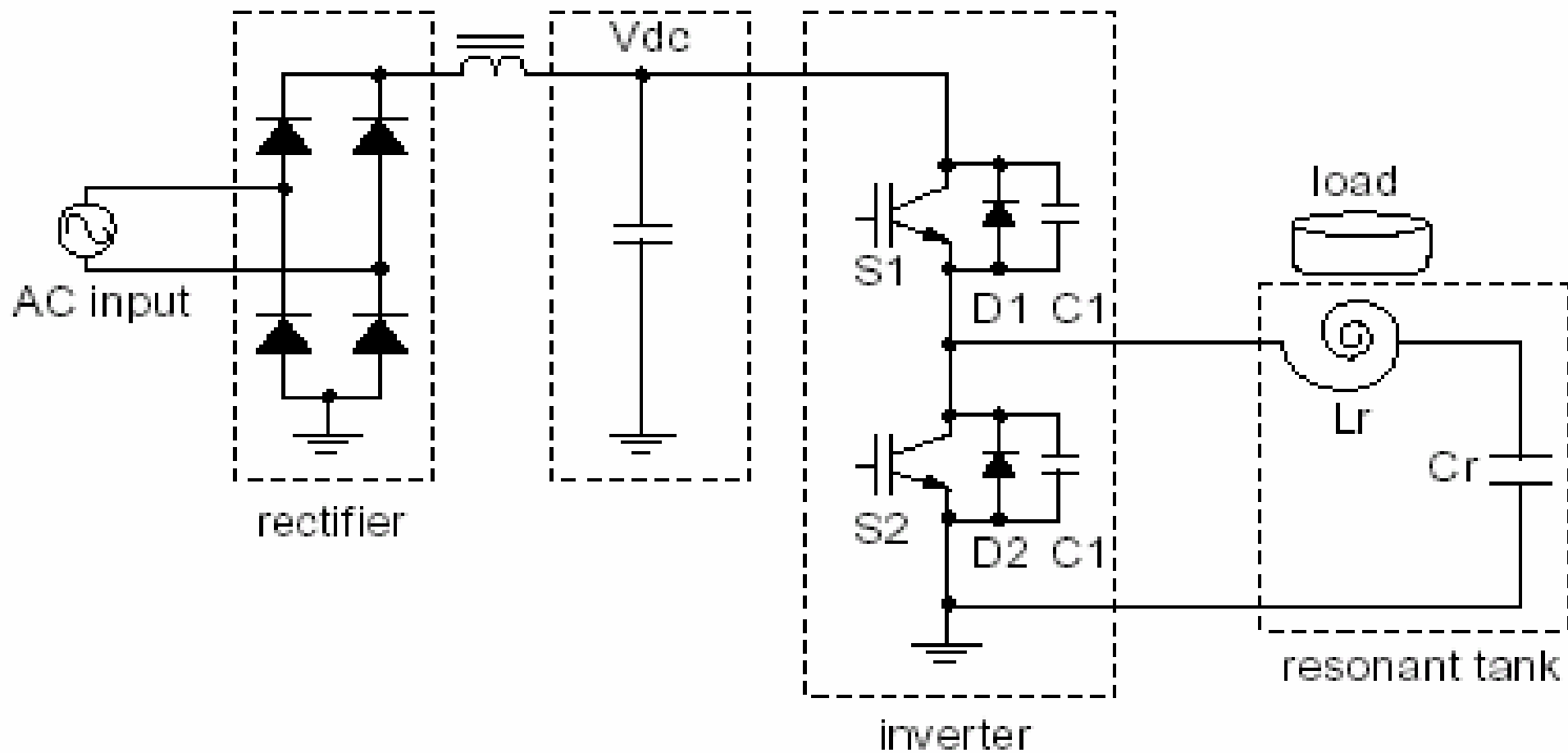
Operating Theory of Rice Cooker



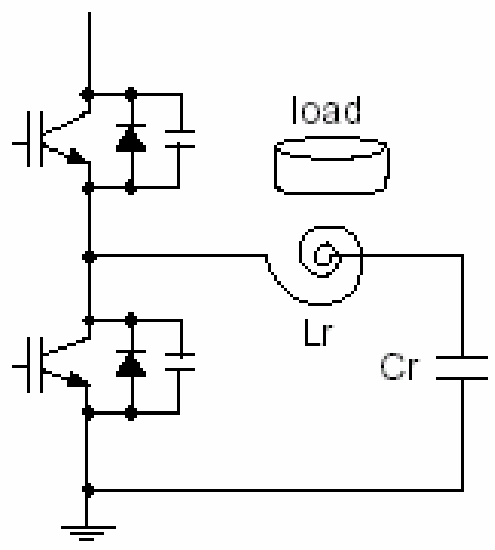
Half bridge series resonant converter



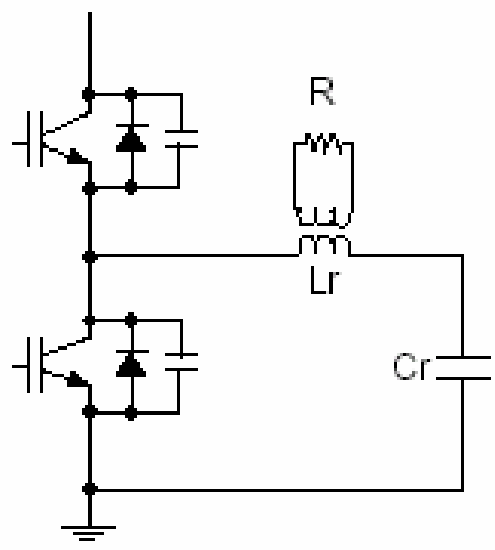
Main power circuit



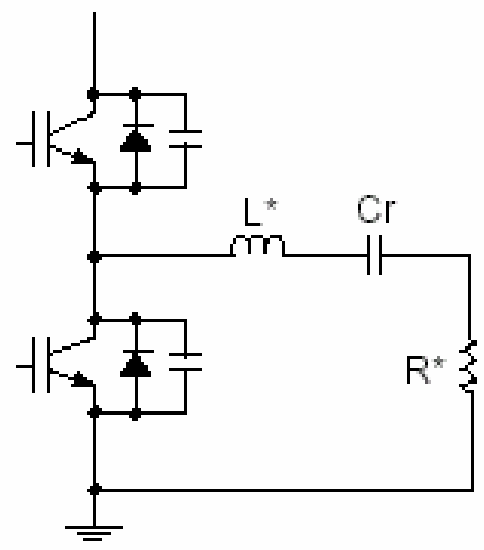
Equivalents of the resonant circuit



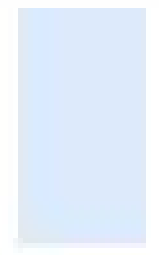
(a)



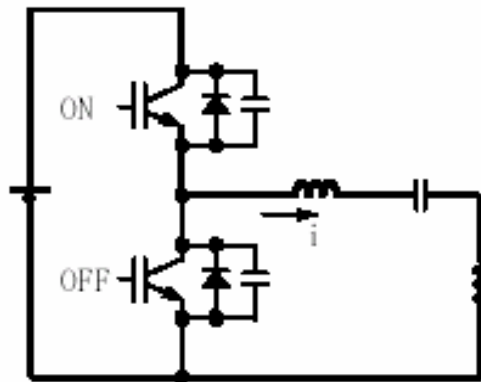
(b)



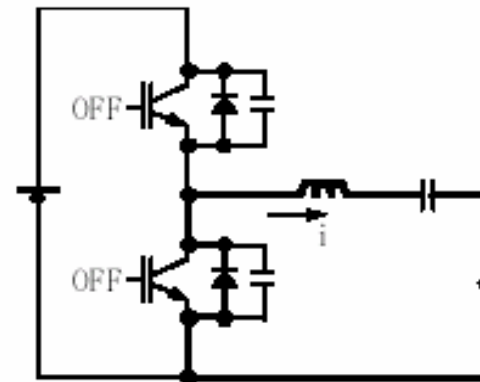
(c)



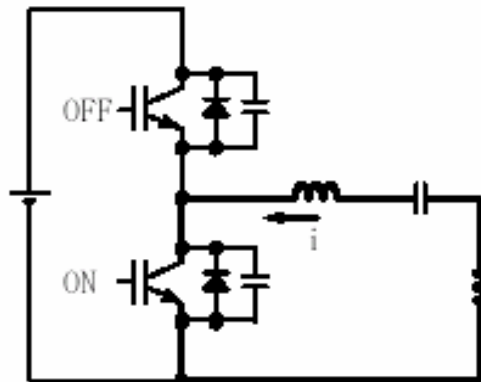
Operating mode



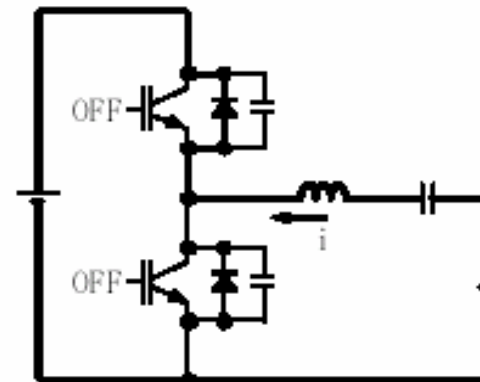
<MODE I>



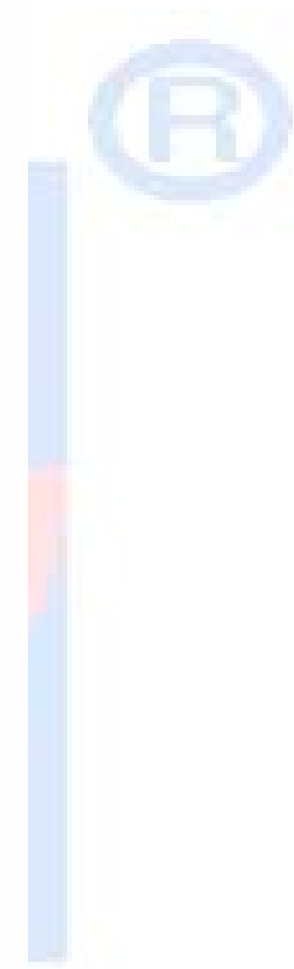
<MODE II>



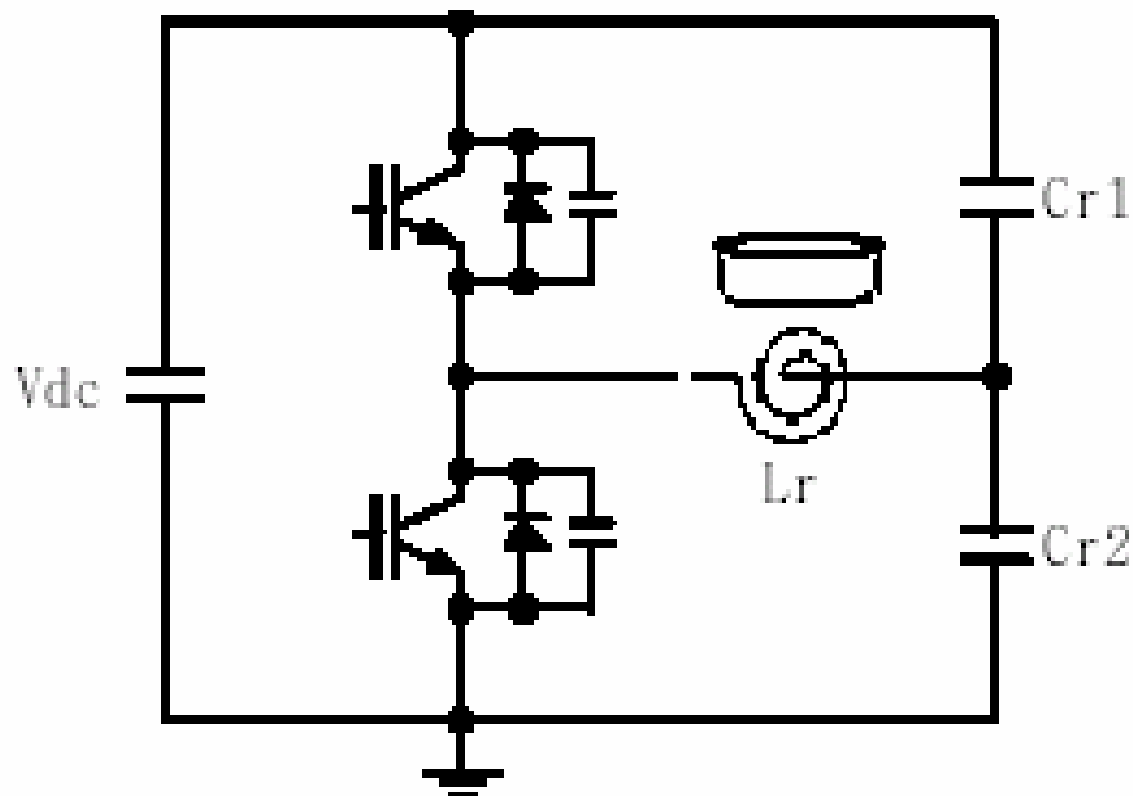
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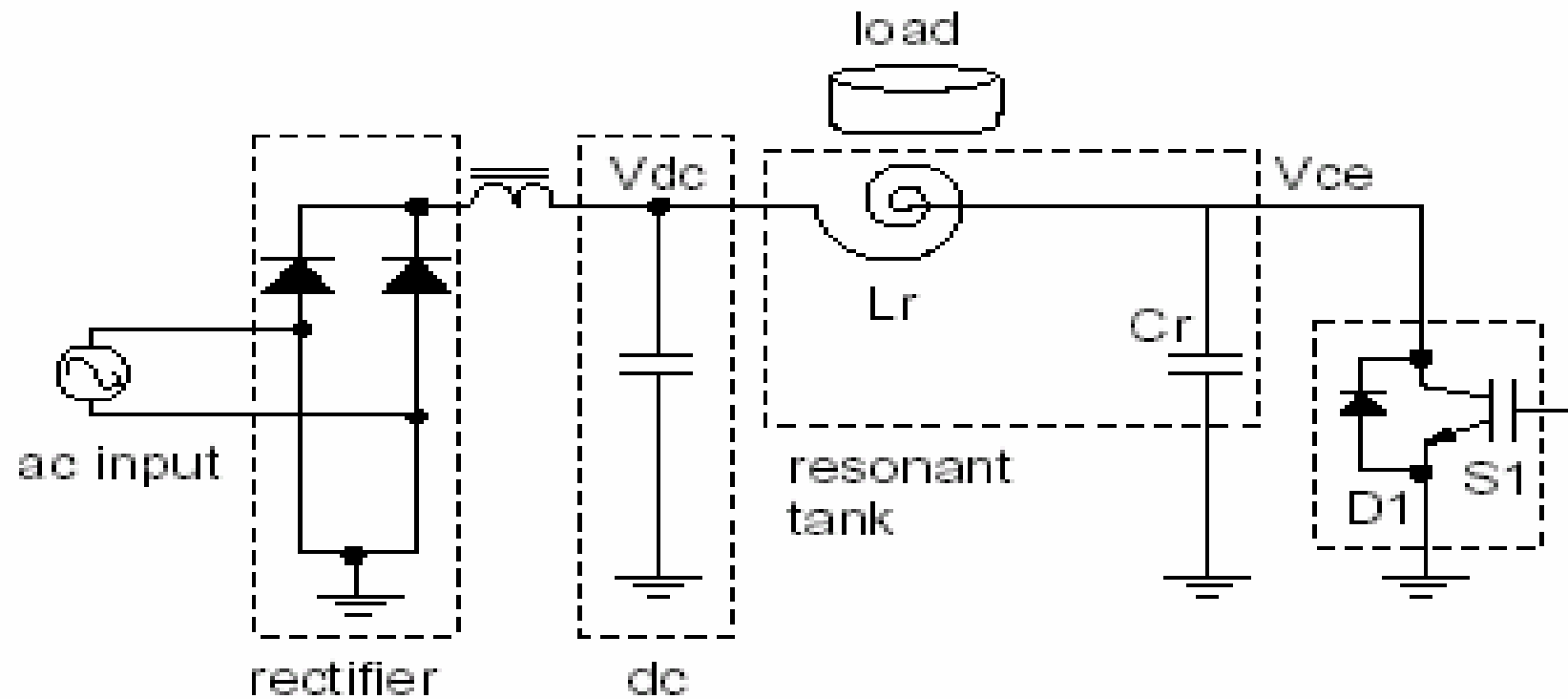
<MODE IV>



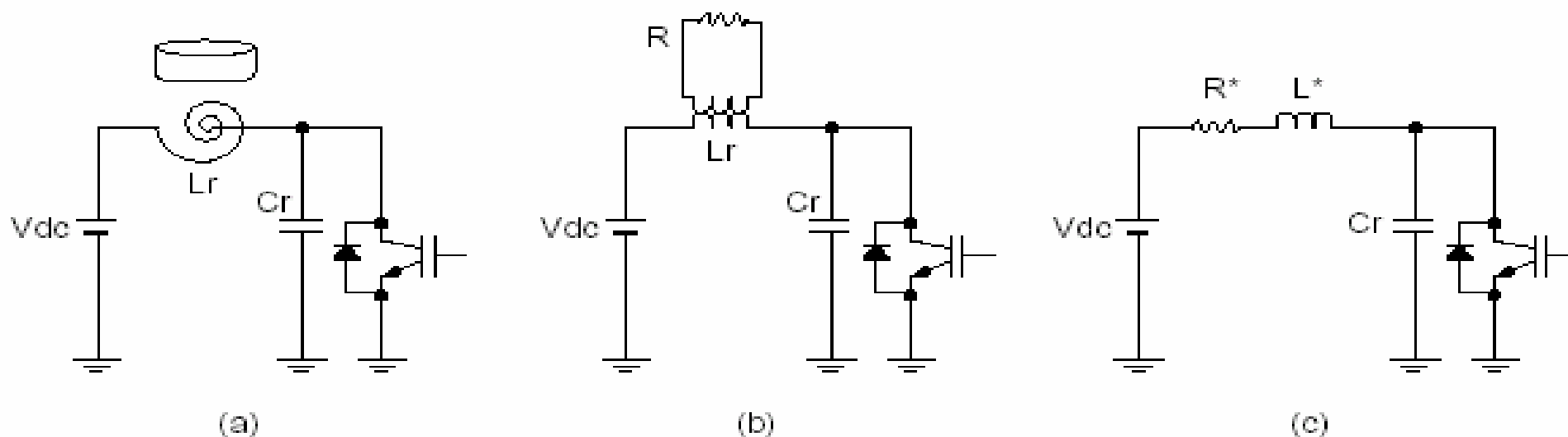
Common Mode of Main Power Circuit



Quasi resonant converter

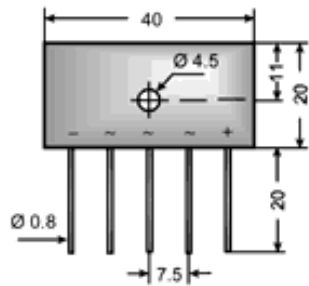


The equivalent of a resonant circuit

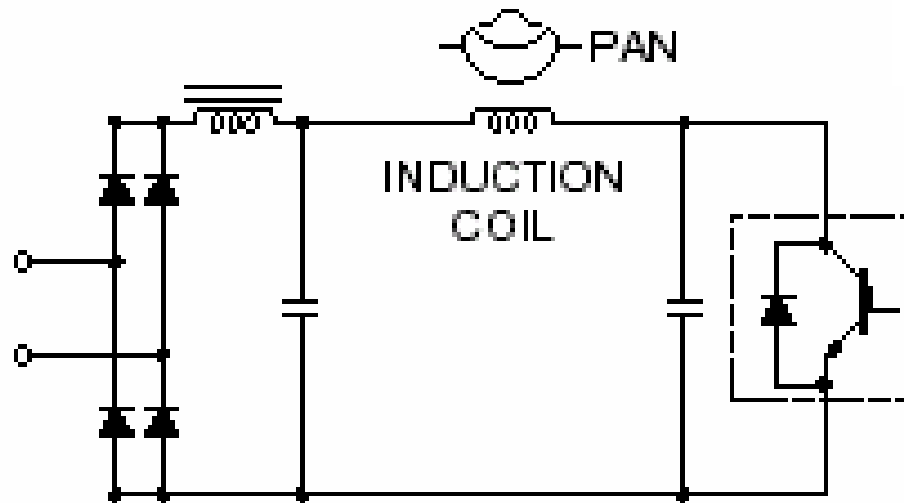
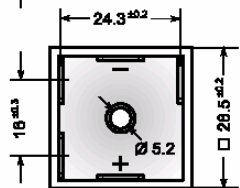
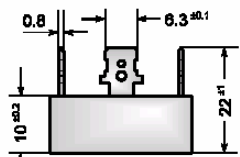


Heater

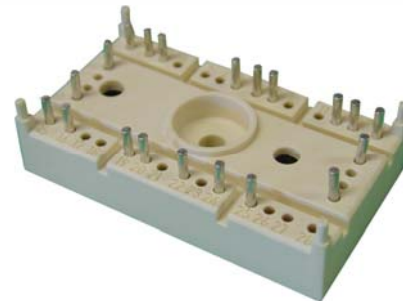
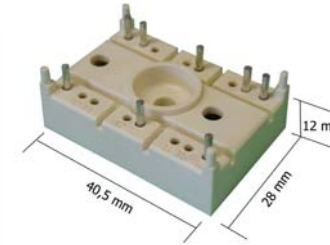
INDUCTION HEATER FOR COOKING



40 x 20 x 10

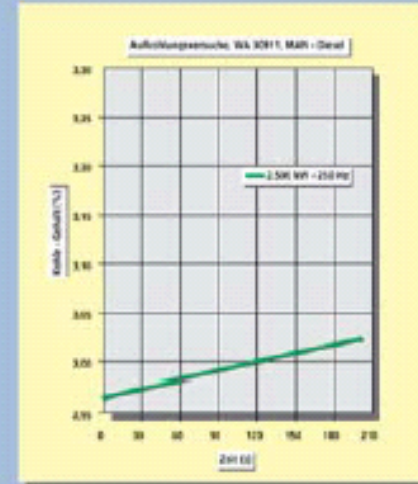
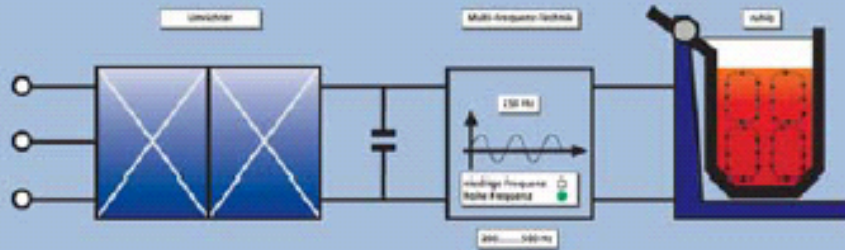


IGBT
MODULE

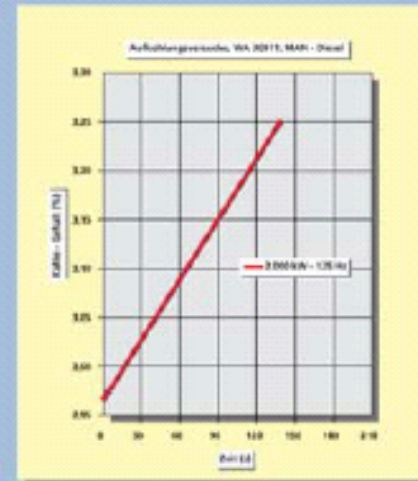
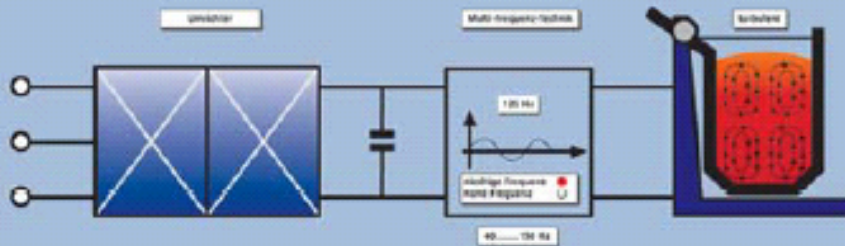


Focus “technology”

Melt with 250 Hz



alloy with 125 Hz



Inductive heating

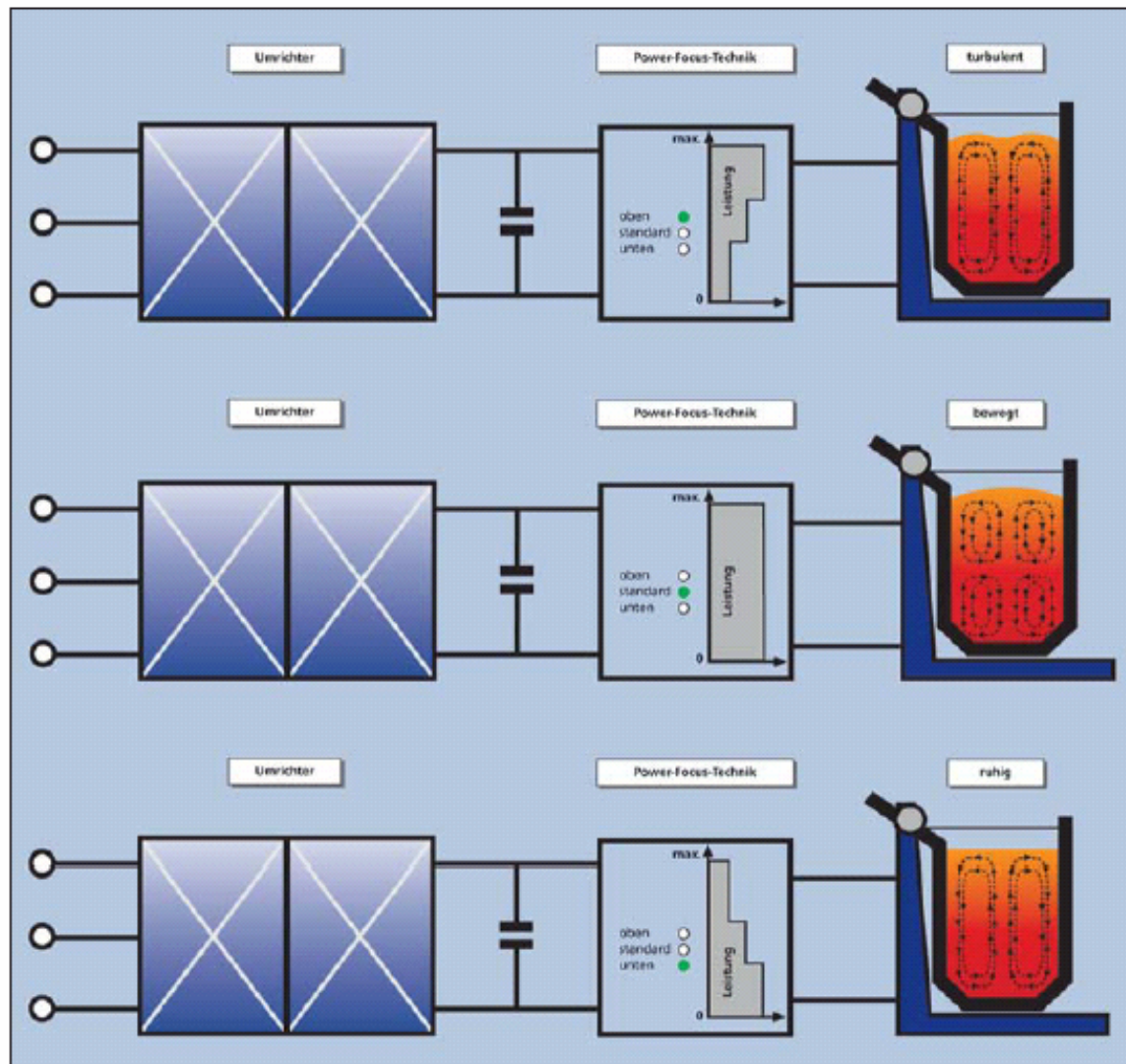


Bild 2: Power-Focus-Technik

Fig. 2: Power-focus technology

Inductive heating cell

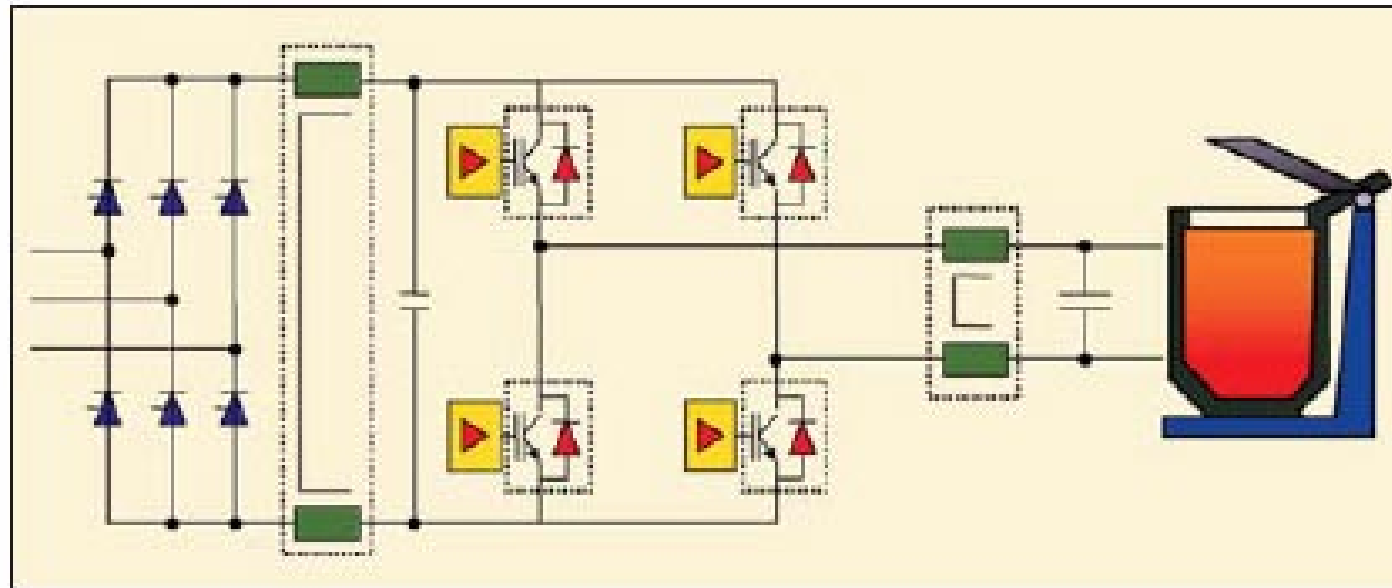
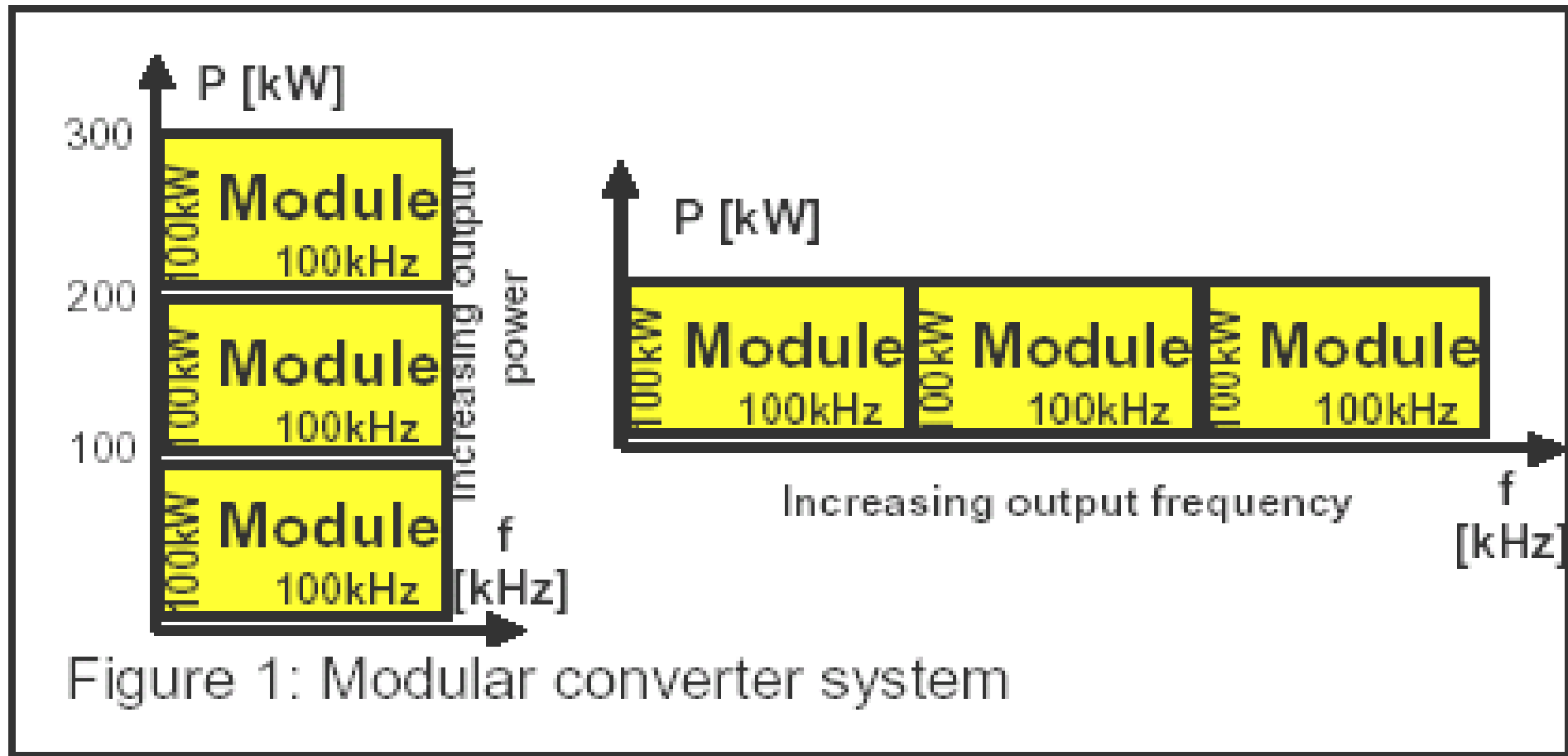
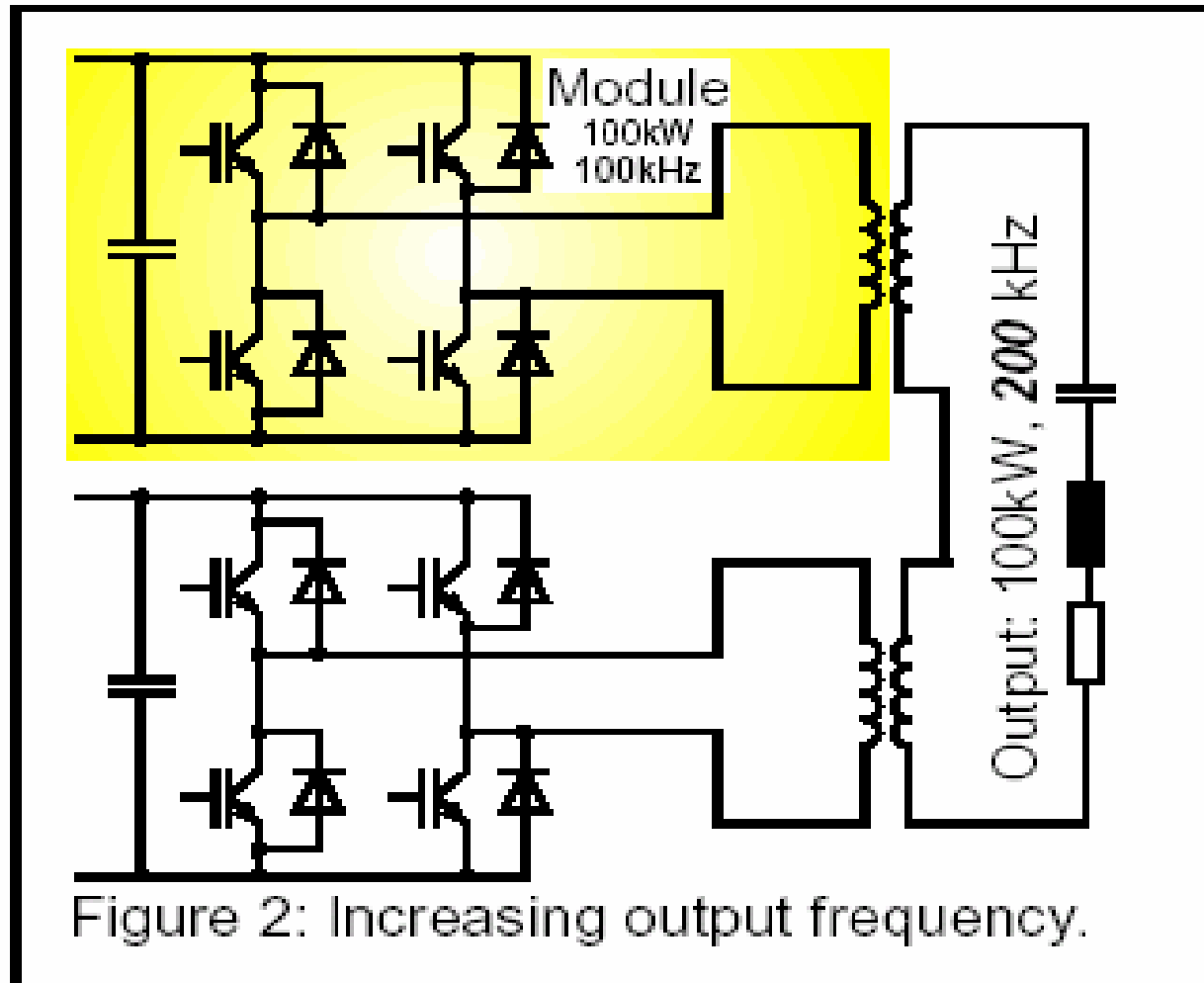


Fig. 3:
Power inverter
configuration as an
H-bridge circuit

Modular system



Increase the output frequency with modular inverter



Inductive heating with cells in series

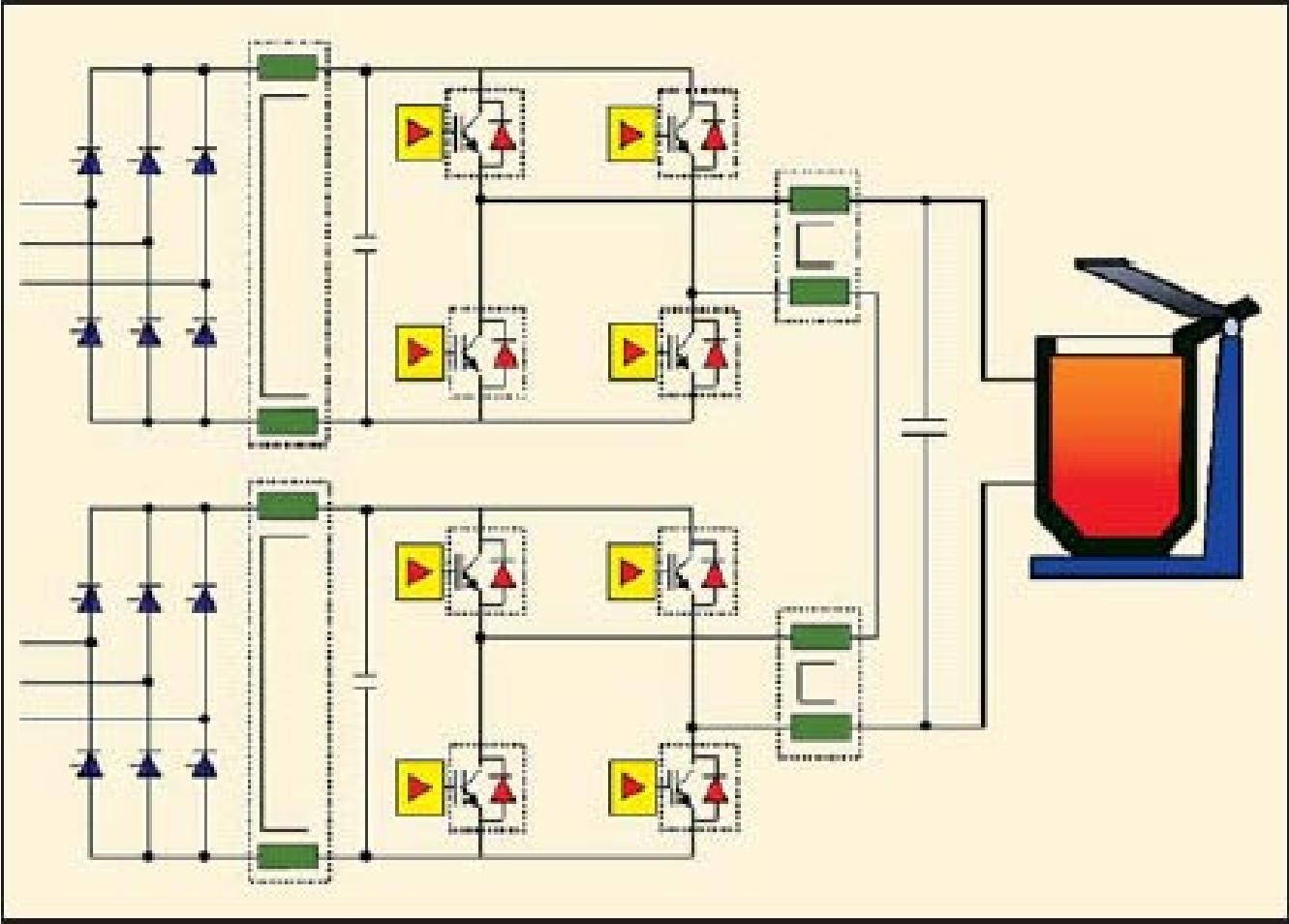


Fig. 4:
Series installation
of power inverters

A large, semi-transparent watermark of the 'PH' monogram is centered on the page, with a registered trademark symbol (®) to its upper right.

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