**NOMENCLATURE**

LP Total inductance of the primary winding.

LS Total inductance of the secondary winding.

M Mutual inductance.

CP Resonant capacitor on the primary side.

CS Resonant capacitor on the secondary side.

RP Total resistance of the primary winding.

RS Total resistance of the secondary winding.

RL Load resistance.

Re Equivalent resistance of load.

ZPKSelf-impedance of the kth-order harmonic component

on the primary side.

ZSK Self-impedance of the kth-order harmonic component

on the secondary side.

Zr Reflected impedance of the secondary circuit as seen

by the primary side.

S1 – S4 Switching components.

D1 – D4 Freewheeling diodes.

D5 – D8 Diodes.

Cf Filter capacitor.

Udc Voltage of dc input source.

Uinv Inverter output voltage.

Upk Root mean square value of the kth-order harmonic

component of uinv .

U rek Voltage of equivalent resistance of the kth-order harmonic

component.

URL Voltage of load resistance.

Ip Inverter output current.

Ipk Inverter output current of the kth-order harmonic

component.

ISK Secondary winding current of the kth-order harmonic

component.

fs Switching frequency.

fr Resonant frequency.

ωs Switching angular frequency.

ωr Resonant angular frequency.

α Phase-shifted angle.

td Dead time of inverter.

Pout Output power on load.

η Transfer efficiency.