

**EPE-PEMC 2012: ECCE Europe
15th International Power Electronics and Motion
Control Conference
Novi Sad, Republic of Serbia**

**SPECIAL SESSION:
“Current source converter applications”**

organised by

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Call for Papers

In the 1980s the current source inverters were the commonly used alternating current electric machine feeding devices. Characteristic features of those drives were the motor electromagnetic moment pulsations and the voltage and current with large content of higher harmonics. The current source inverter was constructed of a thyristor bridge and a large inductance and large commutation capacitance. Serious problems in such a drive system were unavoidable overvoltage cases during the thyristor commutation, as the current source inverter current is supplied in a cycle from a DC link circuit to the machine phase winding. Now the thyristor current source inverters have been replaced by the transistor reverse blocking IGBT devices (RBIGBT), IGBT or SiC devices with series-connected diodes. The power transistors used in modern current source inverters guarantee good static and dynamic drive characteristics.

This Special Section on “Current source converter applications” is focused on the development and application of current source inverter/converter to:

- control of AC machines (squirrel-cage, double fed, synchronous: PMSM/IPMSM),
- modulation strategies for current source converter,
- current source rectifiers control,
- control of reactive power,
- active filtering with current source,
- new topologies of current source converter,
- multilevel current source converter,
- current source converter to wind turbines.

Submission procedure: The same as for regular papers.

Submission deadline: 19th December 2011

All the instructions for paper submission are included on the conference website:
<http://epe-pemc2012.com/>