Title (en)

METHOD FOR BOOSTING THE OUTPUT VOLTAGE OF A VARIABLE FREQUENCY DRIVE

Title (de)

VERFAHREN ZUR ERHÖHUNG DER AUSGANGSSPANNUNG EINES FREQUENZVERÄNDERBAREN ANTRIEBES

Title (fr)

PROCEDE PERMETTANT D'ELEVER LA TENSION DE SORTIE D'UN MECANISME D'ENTRAINEMENT A FREQUENCE VARIABLE

Publication

EP 1290780 A2 20030312 (EN)

Application

EP 01935337 A 20010511

Priority

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- US 20379200 P 20000512
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Abstract (en)

[origin: WO0189068A2] A sine wave filter including an inductor for each phase (three inductors) and three delta- or Y-connected capacitors is employed within a borehole power system, coupled within a three phase power system at the surface between the output of a variable frequency drive and a three phase power cable transmitting power to a borehole location, and boosts the output voltage of the drive. The sine wave filter is designed to have a resonant frequency higher than the maximum operational frequency of the drive, and a Q such that, at the maximum operational frequency of the drive, the filter provides a voltage gain equal to the ratio of the desired voltage to the drive's maximum output power at the maximum operational frequency. The sine wave filter also smooths the voltage waveform of a pulse width modulated variable frequency drive.

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See references of WO 0189068A2

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