

Title (en)
Buck converter

Title (de)
Abwärtswandler

Title (fr)
Convertisseur abaisseur

Publication
EP 1429222 A1 20040616 (EN)

Application
EP 02027400 A 20021209

Priority
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Abstract (en)
Buck converter for generating a regulated DC output voltage (Vout) from an unregulated DC input voltage (Vin) comprising: switch means (S1) for switching said unregulated DC input voltage (Vin) to provide a pulse train; output filtering means (Ls,Cs) for low pass filtering of said pulse train; a regenerative loop providing regenerative feed back of said pulse train through a switching control circuit (SC) to a switching control input of said switch means (S1). <??>To obtain ripple reduction in the output signal of the buck converter in accordance with the invention in particular when using low ESR ceramic output capacitors, said regenerative loop includes a loop filter circuit (Lx, Cx or Rx, Cx) coupled between an output of said switch means (S1) and said switching control circuit (SC) and provides a loop time constant substantially smaller than the time constant of said output filtering means (Ls, Cs). <IMAGE>

IPC 1-7
G05F 1/575

IPC 8 full level
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CPC (source: EP)
G05F 1/575 (2013.01)

Citation (search report)
• [A] EP 0650249 A1 19950426 - ST MICROELECTRONICS SRL [IT]
• [A] US 6313616 B1 20011106 - DELLER ROBERT W [US], et al
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