

Title (en)  
STEP-UP CONVERTER

Title (de)  
HOCHSETZSTELLER

Title (fr)  
CONVERTISSEUR SURVOLTEUR

Publication  
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Application  
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Abstract (en)  
[origin: WO2012168338A2] The invention relates to a step-up converter (4) for stepping up an electrical input DC voltage (USG) to an electrical output DC voltage (UDC) comprising a voltage input having a positive and a negative input node (12, 16) for applying the input DC voltage (USG), a voltage output having a positive and a negative output node (22, 26) for providing the output DC voltage, a first and a second output capacitor means (27, 29) which are connected in series at the voltage output between the positive and negative output nodes (22, 26) and are connected to one another via a centre output node (24), and a first inductor (LP) connected between the positive input node (12) and the positive output node (22), a first switching means (SP), connected between the first inductor (LP) and the centre output node (24), prepared for the clocked switching for stepping up the input voltage (USG) in conjunction with the first inductor (LP), a second inductor (LN) connected between the negative output node (26) and the negative input node (16), a second switching means (SN), connected between the centre output node (24) and the second inductor (LN), for the clocked switching for stepping up the input voltage (USG) in conjunction with the second inductor (LN), and a total input capacitor means (18), connected at the voltage input between the positive and negative input voltage nodes (12, 16), for picking up and smoothing the input voltage (USG), wherein the first and second inductors (LP, LN) are inductively coupled to one another.

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