

Title (en)  
TAP CHANGER

Title (de)  
STUFENSCHALTER

Title (fr)  
COMMUTATEUR À GRADINS

Publication  
**EP 2586049 B1 20160727 (DE)**

Application  
**EP 11717953 A 20110428**

Priority  
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Abstract (en)  
[origin: WO2011160743A1] The invention relates to a tap changer (10) for switching among at least two winding taps (12, 14) of a step transformer (16) without interruption, wherein a load branch having a path (18) comprising a series arrangement of at least one vacuum switching tube (MSV) and at least one mechanical switching element (MTF) is provided, and wherein two resistor branches (20, 22) are provided, each comprising a series arrangement of at least one vacuum switch tube (TTV1; TTV2), at least one mechanical switching element (TTF1; TTF2), and a resistor (R1; R2). The at least two winding taps (12, 14) can be variably coupled to each other and/or can be exposed to a load tap line (LA). The at least three vacuum switching tubes (TTV1; TTV2; MSV) and at least three mechanical switching elements (TTF1; TTF2; MTF) in total can be switched jointly in different switching directions at a defined time offset from each other. In addition, the mechanical switching element (MTF) in the load branch has a switch-over time between the two winding taps (12, 14) of the step transformer (16), at which switch-over time the contact of the vacuum switching tube (MSV) connected in series with the mechanical switching element (MTF) is opened.

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• EP 2569782 B1 20141210 - REINHAUSEN MASCHF SCHEUBECK [DE]  
• DE 102007004530 A1 20070906 - TOSHIBA KK [JP]

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