

Title (en)
On-load tap changer

Title (de)
Unter Last Stufenschalter

Title (fr)
Commutateur d'échelons en charge

Publication
EP 1864305 B1 20110629 (EN)

Application
EP 06725430 A 20060330

Priority
• EP 2006061177 W 20060330
• GB 0506472 A 20050331

Abstract (en)
[origin: GB2424766A] A switch arrangement comprises a switch VS connected to a resonant circuit which is operable to establish a resonant current to commutate off an arcing switch element or a non-gated conducting switch element. The switches VS may be vacuum switches or semiconductor switches such as thyristors. The switches VS may be one or more pairs of opposed switch elements VS1/A, VS1/B where each switch of a pair of opposed switches relates to a respective tap connection on a winding of an on-load tap changer. During tap changing a first switch of a pair of opposed switches is opened from a closed state creating the arcing or non-gated conducting switch element, then a second of said switch pair is closed from an open state which activates the resonant circuit to commutate off the first switch. The resonant circuit may comprise inductor L, capacitor C and possibly resistor R and metal oxide varistor MOV elements. The commutating resonant circuit may be incorporated into a diverter switch arrangement for use with a conventional selector switch arrangement or may form part of a complete tap changer. The switch arrangement allows fast commutation and tap changing without interrupting a power supply. The switch arrangement may be used to interface between distributed power generation systems and localised power distribution systems.

IPC 8 full level
H01F 29/04 (2006.01); **H01H 9/00** (2006.01); **H01H 9/54** (2006.01)

CPC (source: EP GB)
H01F 29/04 (2013.01 - EP GB); **H01H 9/0005** (2013.01 - EP GB); **H01H 9/30** (2013.01 - GB); **H01H 9/54** (2013.01 - EP)

Cited by
CN104246948A; DE102012107080B3; DE102013110652A1; DE102013110652B4; WO2022003402A1; WO2020078599A1; WO2015028253A1

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