

Title (en)  
Coupled multi-charge ignition system with an intelligent controlling circuit

Title (de)  
Gekoppeltes Mehrzündsystem mit einem intelligenten Steuerkreis

Title (fr)  
Système d'allumage couplé à charges multiples doté d'un circuit de contrôle intelligent

Publication  
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Application  
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Abstract (en)  
[origin: EP2325476A1] The invention relates to an ignition system for a combustion engine comprising a spark plug with a pair of gapped electrodes, a first transformer T1 including a first primary winding L1 inductively coupled to a first secondary winding L2 a second transformer T2 including a second primary winding L3 inductively coupled to a second secondary winding L4, secondary windings L2 and L4 being each coupled to the gapped electrodes of the spark plug and a control unit enabled to simultaneously energize and deenergize primary windings L1 and L3 by simultaneously switching on and off two switches Q1 and Q2 to establish an electrical arc across the gapped electrodes and to sequentially energize and deenergize primary windings L1 and L3 by sequentially switching on and off both switches Q1 and Q2 to maintain a continuous ignition fire.

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Cited by  
EP2876298A1; WO2013135907A1; DE102013102529B4; DE102012106158A1; DE102017216227B3; EP2873850A1; WO2015071245A1; WO2015071246A1; US2016298593A1; JP2016538460A; CN105705776A; KR20180084848A; CN104603450A; DE102012210198B4; CN104612878A; CN105705777A; CN104436433A; CN105790076A; EP2639446A1; CN104508294A; EP2410169A1; CN104436434A; CN104457416A; JP2016079958A; EP2930348A4; US2016312757A1; DE102015200019A1; CN105742962A; DE102015200019B4; EP2757248A4; CN105870782A; CN105870783A; CN105977791A; DE102012106207B3; CN104500306A; DE102013102529A8; GB2599420A; GB2599420B; EP3022437A4; KR20180084850A; US8813732B2; US9784230B2; US9850875B2; US9651016B2; CN105705773A; CN105705774A; JP2016536515A; JP2018109410A; CN105705775A; CN109196220A; US2019162155A1; EP3613979A4; US10844825B2; WO2015071047A1; WO2015071062A1; WO2017081007A1; WO2014041070A1; WO2015071046A1; US10788006B2; US9874194B2; US10859057B2; US9291142B2; US9341155B2; WO2022069753A1; DE102013102529A1; US9531165B2; US10190564B2; WO2017081005A1; WO2015009594A1; US10648444B2; US9945346B2; US10961972B2; WO2015071243A1

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